



NM OIL CONSERVATION
ARTESIA DISTRICT

JUN 17 2014

RECEIVED

June 13, 2014

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

Subject: **Remediation and Closure Report**
Devon Energy
Remuda Basin SWD #1
30-015-29549 2RP-2195

Dear Mr. Bratcher:

Devon Energy had contracted Talon/LPE (Talon) to perform soil assessment and remediation services at the above referenced location. The results of our soil assessment, completed remediation activities and closure request are submitted herein.

Incident Date

February 11, 2014

Background Information

The Remuda Basin SWD No. 1 is located approximately twenty-eight (28) miles southwest of Carlsbad, New Mexico. The legal location for this site is Section 20, Township 23 South, and Range 30 East. More specifically the latitude and longitude for the release are 32.2966716 North and -103.90964 West. A site plan is presented 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 Reeves-Gypsum land complex soils with 0 to 3 percent slopes. The local surface and shallow geology, Quaternary Age sedimentary deposits, is comprised of alluvium and eolian sands which includes silty soils under lain by gypsum and hard caliches. Drainage courses in this area are normally dry. According to the New Mexico Office of the State Engineer there are two wells in the vicinity and both appear to be dry wells. See Appendix II for the referenced groundwater data.

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
DRILLING
CONSTRUCTION
SPILL MANAGEMENT
GENERAL CONTRACTING

AMARILLO
921 North Bivins
Amarillo, Texas 79107
Phone 806.467.0607
Fax 806.467.0622

ARTESIA
408 West Texas Ave.
Artesia, New Mexico 88210
Phone 575.746.8768
Fax 575.748.8905

HOBBS
318 East Taylor Street
Hobbs, New Mexico 88241
Phone 505.393.4261
Fax 505.393.4658

MIDLAND
2901 State Highway 349
Midland, Texas 79706
Phone 432.522.2133
Fax 432.522.2180

OKLAHOMA CITY
7700 North Hudson Ave
Suite 10
Oklahoma City, Oklahoma 73116
Phone 405.486.7030
Fax 806.467.0622

SAN ANTONIO
13111 Lookout Way
San Antonio, TX 78233
Phone 210.265.8025
Fax 210.568.2191

Incident Description

Due to internal corrosion, a nipple inside the pump caused it to break off the suction line to the H pump releasing 10 barrels of produced water on the west end of the facility under the H pump and off the location into the pasture. The affected area measured approximately 42-feet wide by 120-feet long. A vacuum truck was immediately called to the location and recovered 4 barrels of fluid. Talon mobilized personnel to conduct soil sampling within the facility and along the flow path. The results of these sampling activities are summarized in the table below.

Remedial Actions

On May 22, 2014 Talon personnel mobilized to the site to begin excavation of the impacted areas in accordance with the New Mexico Oil Conservation Division (NMOCD) approved work plan with stipulation. See Appendix II.

Per BLM request, the impacted area on the location was excavated to a depth of 0.5-feet deep. The excavated area was backfilled with new caliche, the location was re-constructed and the berm on the west side of location was replaced. Further delineation on location will be deferred until the closure of the facility.

The impacted area between the location and lease road, in the vicinity of S-5, was excavated to a depth of 0.5-feet. The flow path from the lease road to S-6 was excavated to a depth of 0.5-feet deep and the area in the vicinity of S-6 was excavated to a depth of 4-feet. Grab samples were tested using the field titration method for chlorides for horizontal delineation purposes. A confirmation sample was obtained at S-6 and is presented below.

All impacted soil was transported to a NMOCD approved solid waste disposal facility, Lea Land, LLC.

The excavation off location was backfilled with new topsoil, re-contoured to match the surrounding terrain and seeded with a mix of BLM #2 and #3 seed mix on June 12, 2014. The seeding label is attached.

Laboratory Results

See Appendix III for complete report of laboratory results.

June 12, 2014

Sample ID	Depth (feet)	BTEX (mg/kg)	Chlorides (mg/kg)	TPH (mg/kg) GRO	TPH (mg/kg) DRO
S-6	4'	--	704	--	--

--Analyte Not Tested

For this site's ranking, New Mexico Oil Conservation District action level criterion for BTEX is 50 mg/kg, Benzene is 10 mg/kg and TPH is 5,000 mg/kg. The chloride remediation standard is considered to be 1,000 mg/kg.

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.

If we can provide additional information or be of further assistance please contact our office at 575.746.8768.

Respectfully submitted,

TALON/LPE


Kimberly M. Wilson
Project Manager


David Adkins
Project Manager

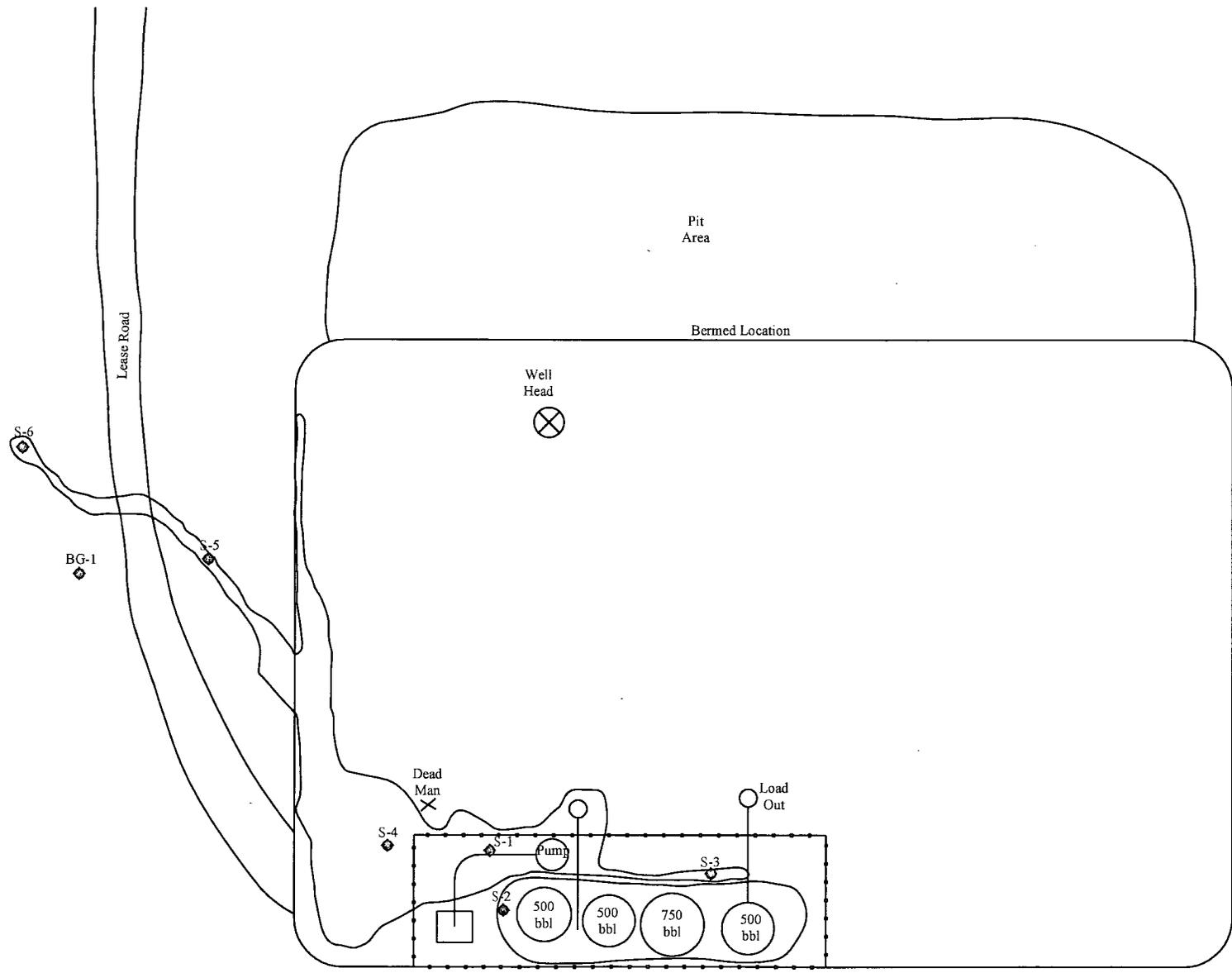
APPENDIX I

SITE MAP



NTS
Scale in Feet

Legend
◆ - Sample Location
— - Fence Line



Date: 03/12/2014
Scale: NTS
Drawn By: TJS

Remuda Basin SWD #1
Devon Energy Corporation
Eddy County, New Mexico
Figure 1 - Site Plan

APPENDIX II
GROUNDWATER DATA
NMOCD STIPULATIONS



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	Q	Q	Sec	Tws	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
C 02486	C	ED	3	2	3	19	23S	30E	601304	3572832*	1583	350				
C 03478 POD1	C	ED	2	2	1	21	23S	30E	604825	3573894	2309	300				

Average Depth to Water: --
Minimum Depth: --
Maximum Depth: --

Record Count: 2

UTMNAD83 Radius Search (in meters):

Easting (X): 602516

Northing (Y): 3573851

Radius: 5000

*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.

Kimberly M. Wilson

From: Bratcher, Mike, EMNRD [mike.bratcher@state.nm.us]
Sent: Monday, June 02, 2014 3:53 PM
To: Kimberly M. Wilson
Subject: RE: Remuda Basin SWD

RE: Devon Energy * Remuda Basin SWD 001 * 30-015-29549
NMOCD Tracking Number: 2RP-2195 * Date of release: 2/11/14

Ms. Wilson,

You may proceed per the remediation proposal. It is OCD's understanding that BLM has approved deferral of further remedial actions on the well pad and battery area for a future date.

OCD approval does not relieve the operator of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment. In addition, OCD approval does not relieve the operator of responsibility for compliance with any other federal, state, local laws and/or regulations.

Sincerely,

Mike Bratcher
NMOCD District 2
811 S. First Street
Artesia, NM 88210
O: 575-748-1283 X108
C: 575-626-0857
F: 575-748-9720

-----Original Message-----

From: Kimberly M. Wilson [<mailto:kwilson@talonlpe.com>]
Sent: Friday, May 30, 2014 9:30 AM
To: Bratcher, Mike, EMNRD
Subject: FW: Remuda Basin SWD

Mike please find attached the pictures taken during the delineation of sample location S-4. We were unable to get through the rock shelf, which I spoke to you about last week. Can we defer clean-up on location until close of this facility? Per the work plan (and BLM approval) we are going to scrape the impacted area on location 0.5-feet deep. Also attached is the lab results and site map. We have already started the clean-up out there. At sample location S-6 we excavated to 4-feet and S-5 was excavated to 0.5-feet deep. There is no groundwater in the area, attached is the water data.

Thank you.

Respectfully,

Kimberly M. Wilson
Project Manager
Talon/LPE
408 West Texas Avenue
Artesia, New Mexico 88210
Office: 575.746.8768

APPENDIX III
LABORATORY RESULTS



June 12, 2014

KIMBERLY WILSON
TALON LPE
408 W. TEXAS AVE.
ARTESIA, NM 88210

RE: REMUDA BASIN SWD #1

Enclosed are the results of analyses for samples received by the laboratory on 06/06/14 14:20.

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,

A handwritten signature in cursive script that reads "Celey D. Keene".

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:	06/06/2014	Sampling Date:	05/29/2014
Reported:	06/12/2014	Sampling Type:	Soil
Project Name:	REMUDA BASIN SWD #1	Sampling Condition:	Cool & Intact
Project Number:	700794.095.01	Sample Received By:	Kathy Perez
Project Location:	D-20-23-30		

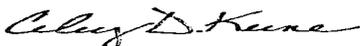
Sample ID: S-6 4' (H401734-01)

Chloride, SM4500Cl-B	mg/kg	Analyzed By: AP							
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	704	16.0	06/12/2014	ND	400	100	400	3.92	

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

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

SEEDING LABEL

Curtis & Curtis, Inc
 4500 North Prince
 Clovis, NM 88130
 Phone: (505) 762-4759

6/12/14

Talon / LPE, LTD
 1 Acre 75% BLM #2 and 25% BLM #3, Broadcast
 1 1/2 Acre Bags @ 34.38 Bulk Pounds
 Job: Devon Remuda Basin SWD #1
 30-015-29549
 700794095.01

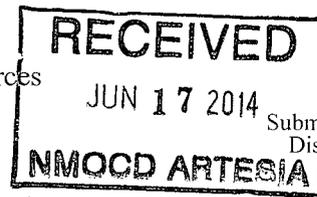
Lot: M-12313

Item	Origin	Purity	Germ	Dormant	Germ & Dormant	Test Date	Total PLS Pounds	
Sand Dropseed	Colorado	9.09%	22.00%	74.00%	96.00%	12/13	3.00	
VNS								
Little Bluestem	Nebraska	13.77%	95.00%	0.00%	95.00% (TZ)	02/14	4.50	
Carper								
Coveopsis	Oregon	10.51%	83.00%	0.00%	83.00%	11/13	3.00	
Plains								
Plains Bristlegrass	Oklahoma	22.96%	20.00%	75.00%	95.00%	10/13	7.50	
VNS								
Sideoats Grama	Texas	29.08%	48.00%	32.00%	80.00%	03/14	8.00	
Niner								
Blue Grama	Texas	2.25%	97.00%	0.00%	97.00%	12/13	0.75	
Hachita								
Other Crop:	0.09%	These Are 1 Bag For This Mix					Total Bulk Pounds:	34
Weed Seed:	0.28%	This Bag Weighs 34.38 Bulk Pounds						
Inert Matter:	11.97%	Use This Bag For 1 Acres						

FINAL C-141

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, 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 March 17, 1999
Submit 2 Copies to appropriate
District Office in accordance
with Rule 116 on back
side of form

Release Notification and Corrective Action

OPERATOR

Initial Report Final Report

Name of Company: Devon Energy	Contact: Tracy Kidd
Address: P. O. Box 250 Artesia, NM 88211	Telephone No.: 575-513-0628
Facility Name: REMUDA BASIN SWD #1	Facility Type: Oil Well
Surface Owner: Federal	Mineral Owner: Federal
API #: 30-015-29549 2RP-2195	

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
D	20	23S	30E	330'	North	600'	West	EDDY

NATURE OF RELEASE

Type of Release: Produced Water	Volume of Release – 10 bbls Oil	Volume Recovered – 4 bbls
Source of Release : Mechanical failure: Load line valve left open	Date and Hour of Occurrence 2/11/14; 11:30 Am	Date and Hour of Discovery 2/11/2/14; 11:30 Am
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom?	
By Whom?	Date and Hour:	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.* On February 11, 2014 internal corrosion on a nipple inside the pump caused it to break off the suction line to the H pump releasing 10 barrels of produced water on the west end of the facility and off the location into the pasture. The affected area measured approximately 42-feet wide on location and 2-4 feet wide off location by 120-feet long. A vacuum truck was immediately called to the location and recovered 4 barrels of fluid. Talon mobilized personnel to conduct soil sampling within the facility and along the flow path.

Describe Area Affected and Cleanup Action Taken.* On May 22, 2014 Talon personnel mobilized to the site to begin excavation of the impacted areas in accordance with the New Mexico Oil Conservation Division (NMOCD) approved work plan with stipulation. Per BLM request, the impacted area on the location was excavated to a depth of 0.5-feet deep, the excavated area was backfilled with new caliche, the location was re-constructed and the berm on the west side of location was replaced. Further delineation on location will be deferred until the closure of the facility. The impacted area between the location and lease road, in the vicinity of S-5 was excavated to a depth of 0.5-feet. The flow path from the lease road to S-6 was excavated to a depth of 0.5-feet deep and the area in the vicinity of S-6 was excavated to a depth of 4-feet. Grab samples were tested using the field titration method for chlorides for horizontal delineation purposes. A confirmation sample was obtained at S-6. All impacted soil was transported to a NMOCD approved solid waste disposal facility, Lea Land, LLC. The excavation off location was backfilled with new topsoil, re-contoured to match the surrounding terrain and seeded with a mix of BLM #2 and #3 seed mix on June 12, 2014.

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:	Approved by District Supervisor:
Printed Name: Sandra Farley	Approval Date:
Title: Admin Field Support	Expiration Date:
Date: 6/13/2014 Phone: 575-746-5587	Attached <input type="checkbox"/>

* Attach Additional Sheets If Necessary

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Bunzoz 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 March 17, 1999
Submit 2 Copies to appropriate
District Office in accordance
with Rule 116 on back
side of form

Release Notification and Corrective Action

OPERATOR

Initial Report Final Report

Name of Company: Devon Energy	Contact: Tracy Kidd
Address: P. O. Box 250 Artesia, NM 88211	Telephone No.: 575-513-0628
Facility Name: REMUDA BASIN SWD #1	Facility Type: Oil Well
Surface Owner: Federal	Mineral Owner: Federal
API #: 30-015-29549 2RP-2195	

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
JJ	20	23S	30E	330'	North	600'	West	EDDY

NATURE OF RELEASE

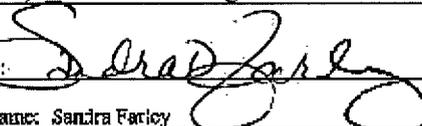
Type of Release: Produced Water	Volume of Release - 10 bbls Oil	Volume Recovered - 4 bbls
Source of Release: Mechanical failure; Land line valve left open	Date and Hour of Occurrence 2/11/14, 11:30 Am	Date and Hour of Discovery 2/11/14, 11:30 Am
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom?	
By Whom?	Date and How	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.* On February 11, 2014 internal corrosion on a nipple inside the pump caused it to break off the suction line to the H pump releasing 10 barrels of produced water on the west end of the facility and off the location into the pasture. The affected area measured approximately 42-feet wide on location and 2-4 feet wide off location by 120-feet long. A vacuum truck was immediately called to the location and recovered 4 barrels of fluid. Talon mobilized personnel to conduct soil sampling within the facility and along the flow path.

Describe Area Affected and Cleanup Action Taken.* On May 22, 2014 Talon personnel mobilized to the site to begin excavation of the impacted area in accordance with the New Mexico Oil Conservation Division (NMCCD) approved work plan with stipulation. Per BLM request, the impacted area on the location was excavated to a depth of 0.5-feet deep, the excavated area was backfilled with new caliche, the location was re-constructed and the berm on the west side of location was replaced. Further delineation on location will be deferred until the closure of the facility. The impacted area between the location and lease road, in the vicinity of S-5 was excavated to a depth of 0.5-feet. The flow path from the lease road to S-6 was excavated to a depth of 0.5-feet deep and the area in the vicinity of S-6 was excavated to a depth of 4-feet. Grab samples were tested using the field titration method for chlorides for horizontal delineation purposes. A confirmation sample was obtained at S-6. All impacted soil was transported to a NMCCD approved solid waste disposal facility, Lea Land, LLC. The excavation off location was backfilled with new topsoil, re-contoured to match the surrounding terrain and seeded with a mix of BLM #2 and #3 seed mix on June 12, 2014.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMCCD 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 NMCCD 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, NMCCD 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: 	OIL CONSERVATION DIVISION	
Printed Name: Sandra Farley	Approved by District Supervisor:	
Title: Admin Field Support	Approval Date:	Expiration Date:
Date: 6/13/2014 Phone: 575-746-5587	Conditions of Approval:	Attached <input type="checkbox"/>

* Attach Additional Sheets If Necessary