



October 9, 2014

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Amarillo, Texas 79107
Phone 806.467.0607
Fax 806.467.0622

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408 West Texas Ave.
Artesia, New Mexico 88210
Phone 575.746.8768
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Phone 405.486.7030
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13111 Lookout Way
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Phone 210.265.8025
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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
Cotton Draw Unit No. 65 SWD
API #: 30-015-10843 2RP-2452

Dear Mr. Bratcher:

Devon Energy has contracted Talon/LPE (Talon) to perform soil assessment and remediation services at the above referenced location. The results of our soil assessment and proposed remediation activities consist of the following.

Incident Date

August 15, 2014

Background Information

The Cotton Draw Unit No. 65 SWD is located approximately fifty-four (54) miles southeast of Carlsbad in Eddy County, New Mexico. The legal location for this site is Section 2, Township 25 South, and Range 31 East. More specifically the latitude and longitude for the release point are 32.16116 North and -103.74568 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 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 Quaternary in age and is comprised of eolian sands and piedmont deposits which include silty soils underlain with a sandy clay loam and hard caliche. Drainage courses in this area are normally dry. According to the New Mexico Office of the State Engineer there are 5 wells in the vicinity that 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'

Incident Description

At the Cotton Draw Unit No. 65 SWD, a section of a 4-inch steel pipe corroded at the threads on the header section on the east side of the battery causing a release of 30 barrels of produced water. A vac truck was immediately called to the location and recovered 10 barrels of produced water. The wells were shut-in and the pipe was replaced. The fluids were contained within the earthen berms surrounding the location. The impacted area measured approximately 200-feet by 15-feet on the location. The flow path headed south for approximately 30-feet then flowed west approximately 200-feet. The impacted area measured approximately 20-feet at the widest point. On September 9, 2014, Talon mobilized personnel to conduct a site assessment and soil sampling activities performed. The results of these sampling activities are summarized in the table below.

On May 5, 2014 a previous release occurred on this location. (2RP-2300) A check valve on the produced water header malfunctioned causing a release of 255 barrels of produced water and 250 barrels were recovered. The impacted area was remediated and lined per an NMOCD approved work plan and stipulations. The NMOCD stipulations for the previous incident and the site plan for the previous release are included in [Appendix III](#).

Laboratory Results

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

September 12, 2014

Sample ID	Depth (feet)	BTEX (mg/kg)	Chlorides (mg/kg)	TPH (mg/kg) GRO	TPH (mg/kg) DRO
S-1	0'	<0.300	18800	<10	<10
	1'	<0.300	1490	<10	<10
Refusal	1.5'	<0.300	896	<10	<10
S-2	0'	<0.300	14800	<10	<10
Refusal	1'	<0.300	12000	<10	<10

Based upon the site ranking of **0**, NMOCD Recommended Remedial Action Levels (RRAL's) are 50 mg/kg for BTEX, 10 mg for Benzene, and 5,000 mg/kg for TPH. The chloride remediation standard is considered to be 1,000 mg/kg based upon a water table depth greater than 100-feet deep.

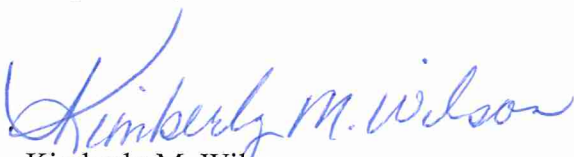
Proposed Remedial Actions

- At the beginning of the project, a test pit will be excavated at sample location S-2 for further vertical delineation purposes in this area. The samples will be field tested for chlorides and followed up with laboratory confirmation analysis. The test pit will be backfilled with soil that was excavated until lab results are obtained.

- Upon receipt of the lab analysis for the additional samples (S-2), the results will be immediately forwarded to the NMOCD and the client. Should the analytical results indicate the contamination extends to 4-feet deep or less, this area will be excavated and confirmed with lab analysis on the sidewalls. If the contamination in the vicinity of S-2 extends deeper than 4-feet deep, upon NMOCD approval a liner will be installed.
- Remediation activities will begin at the headers behind the battery following the test pit sampling event. A 20 mil liner was installed for the previous release in the area behind the battery and wrapping around to the west up to the control panel (as noted previously and shown on the site plan). The impacted area in this vicinity will be hand-excavated carefully to approximately 3-feet deep so as to not jeopardize the integrity of the liner.
- The area in the vicinity of sample location S-1 will be excavated to a depth of 1.5-feet deep. Soil samples will be collected and tested using the field titration method for chlorides for horizontal delineation purposes.
- All contaminated soil will be transported to an approved NMOCD disposal facility, Lea Land, LLC.
- The excavated areas will be backfilled with new caliche transported from Lea Land and the location will be re-contoured.
- A final report documenting all field activities and lab reports along with the final C-141 will be provided to the NMOCD District II Office.

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,

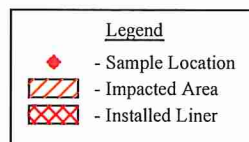
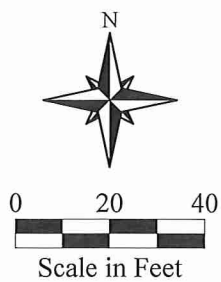
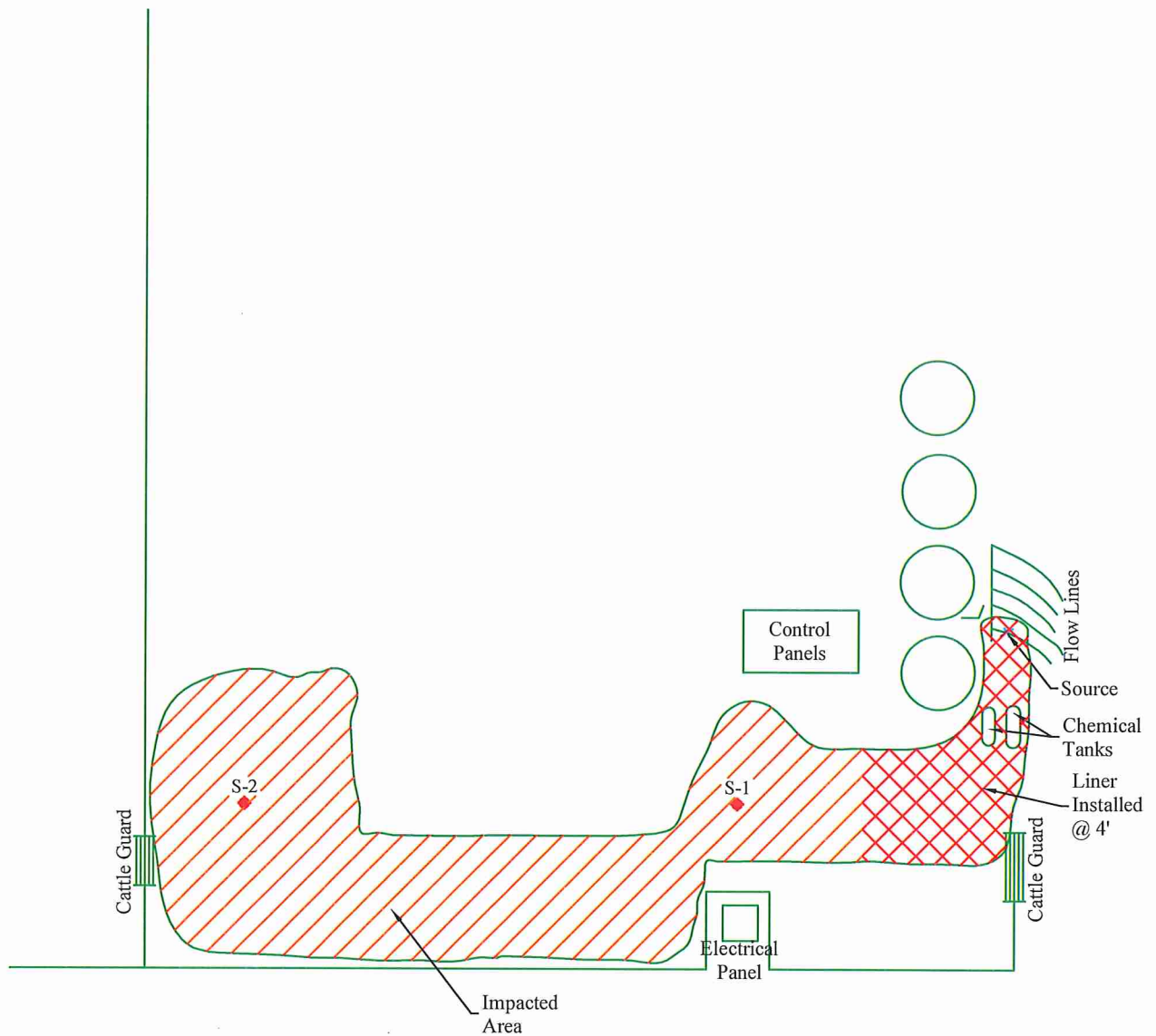


Kimberly M. Wilson
Project Manager



David J. Adkins
District Manager

APPENDIX I
SITE MAP



Date: 10/07/2014

Scale: 1" = 40'

Drawn By: TJS

Cotton Draw 65 SWD
 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	Depth Water	Water Column
C 02572			ED	4	2	2	02	25S	31E	618695	3559294*	200	852		
C 02571			ED	4	1	2	02	25S	31E	618292	3559294*	203	860		
C 02573			ED	1	4	2	02	25S	31E	618499	3559091*	203			
C 02574			ED	1	1	2	02	25S	31E	618092	3559494*	449			
C 02569			ED	4	4	2	02	25S	31E	618699	3558891*	451	1016		
C 02568			ED	4	3	1	01	25S	31E	619103	3558892*	728	1025		
C 02570			ED	4	2	4	02	25S	31E	618704	3558489*	831	895		

Average Depth to Water: --

Minimum Depth: --

Maximum Depth: --

Record Count: 7

UTMNAD83 Radius Search (in meters):

Easting (X): 618495

Northing (Y): 3559294

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.

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

NM OIL CONSERVATION
State of New Mexico
ARTESIA DISTRICT
Energy Minerals and Natural Resources
AUG 21 2014
Oil Conservation Division
1220 South St. Francis Dr.
RECEIVED 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

OPERATOR

☒ Initial Report ☐ Final Report

0 HMP 142 3354263
Name of Company **Devon Energy Production** *10/31* Contact **Tracy Kidd**
Address **6488 Seven Rivers Hwy Artesia, NM 88220** Telephone No. **575-513-0628**
Facility Name **Cotton Draw Unit 65 SWD** Facility Type **Salt Water Disposal**

Surface Owner **Federal** Mineral Owner **State** API No. **30-015-10843**

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
G	2	25S	31E	1980	N	1980	E	Eddy

Latitude: 32.161085918

Longitude: -103.746039442

NATURE OF RELEASE

Type of Release Spill	Volume of Release	Volume Recovered
produced water	30BBLS	10BBLS
Source of Release produced water line	Date and Hour of Occurrence 8/15/2014 4:30 PM	Date and Hour of Discovery 8/15/2014 4:30 PM
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? BLM- Jeff Robertson & OCD- Thomas 'Doc' Oberding	
By Whom? Joah Weidemann, Assistant Production Foreman	Date and Hour 8/18/2014 @ noon	
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.*

Leak was on the header section on the east side of Cotton Draw Unit 65 Salt Water Disposal battery where the Cotton Draw Unit 86 water ties in. The line had been isolated but was opened on 8-14-14 to perform flowback to the Cotton Draw Unit 86. The leak was on a 4" steel section of pipe where the exposed threads were corroded. ON 8-15-15 the line was isolated and a vacuum truck was called out to recover the spilled water. The corroded section of pipe has been replaced.

Describe Area Affected and Cleanup Action Taken.*

Vacuum truck recovered 10BBLS of produced water spilled. Area affected was approximately 200'x15' on the caliche pad. The produced water flow headed south about 30' and turned west approximately 200'. The leak appeared to be approximately 20' wide at the greatest area. Talon LPE will be collecting soil samples to determine the specific cleanup remedies necessary.

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: *Sandra Farley*

Printed Name: **Sandra Farley**

Title: **Field Admin Support**

E-mail Address: **Sandy.Farley@dvn.com**

Date: 8/18/14

Phone: **575.746.5587**

OIL CONSERVATION DIVISION

Signed By: *Mike Brannon*
Approved by Environmental Specialist:

Approval Date: *8/21/14*

Expiration Date: *N/A*

Conditions of Approval:
Remediation per OCD Rule &
Guidelines. **SUBMIT REMEDIATION**

Attached ☐

* Attach Additional Sheets If Necessary

PROPOSED NO LATER THAN:

9/21/14

2RPA452

APPENDIX III
NMOCD STIPULATIONS
PREVIOUS SITE PLAN FOR
DOR: 5/5/2014 2RP-2300

Kimberly M. Wilson

From: Patterson, Heather, EMNRD [Heather.Patterson@state.nm.us]
Sent: Wednesday, July 30, 2014 7:36 AM
To: Kimberly M. Wilson
Cc: Sheldon Hitchcock; Bratcher, Mike, EMNRD; David Adkins
Subject: Cotton Draw 65

RE: Devon * Cotton Draw Unit 65 SWD * 30-015-10843 * 2RP-2300

Kimberly,

As per our conversation on 7/29/2014 concerning the above referenced site, the OCD would like to see a liner used in both the areas of S1 and S2.

In addition, we would like to ask for a final C-141 be submitted on a previous release on this site. Devon had a release on 6/18/2012 that was fully contained in the lined facility and fully recovered. The OCD reference number is 2RP-1169. If you can send a signed Final C-141 for this release, we can close it at the same time.

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.

Thank you, and if you have any questions or concerns, and for notification, please contact me.

Heather Patterson
Environmental Specialist
NMOCD District II
(575)748-1283 ext.101

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Kimberly M. Wilson

From: Bratcher, Mike, EMNRD [mike.bratcher@state.nm.us]
Sent: Tuesday, July 08, 2014 4:46 PM
To: Kimberly M. Wilson; David Adkins; tracy.kidd@dmv.com
Subject: Devon Cotton Draw Ut. 065

RE: Devon Energy Production * Cotton Draw Unit 065 * 30-015-10843 * G-2-25s-31e * Eddy County, New Mexico
NMOCD Tracking Number: 2RP-2300 * Date of release: 5/5/2014

Ms. Wilson,

Your proposal for remediation of the above referenced produced fluid release is approved with the following conditions:

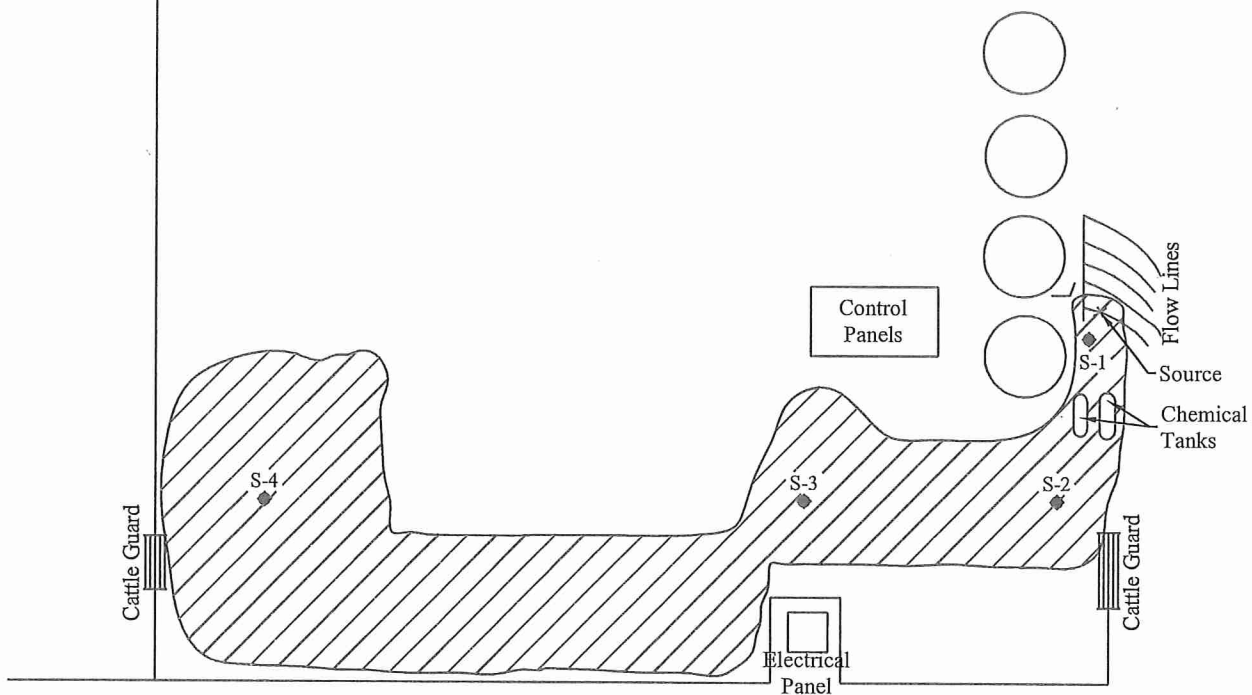
- Notify the OCD District 2 Office prior to commencement of remedial activities.
- OCD will require the area identified as S-1 to be excavated and delineated to the maximum extent practicable.
- The area identified as S-2 will be evaluated once delineation sample results are received.
- Vertical extent of contamination to be determined during excavation process.
- Federal sites will require like approval by BLM.

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.

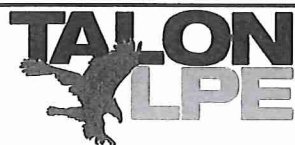
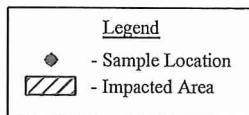
If you have any questions or concerns, and for notification, please contact me.

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

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0 20 40
Scale in Feet



Date: 05/27/2014

Scale: 1" = 40'

Drawn By: TJS

Cotton Draw 65 SWD
Devon Energy Corporation
Eddy County, New Mexico
Figure 1 - Site Plan

APPENDIX IV
LABORATORY RESULTS

September 12, 2014

KIMBERLY WILSON

TALON LPE

408 W. TEXAS AVE.

ARTESIA, NM 88210

RE: COTTON DRAW #65 SWD

Enclosed are the results of analyses for samples received by the laboratory on 09/08/14 14:50.

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: 09/08/2014
 Reported: 09/12/2014
 Project Name: COTTON DRAW #65 SWD
 Project Number: 700794.104.02
 Project Location: 6-2-25-31

 Sampling Date: 09/08/2014
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: S-1 0' (H402783-01)

BTEx 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	09/11/2014	ND	1.82	91.1	2.00	6.49	
Toluene*	<0.050	0.050	09/11/2014	ND	1.68	83.8	2.00	5.95	
Ethylbenzene*	<0.050	0.050	09/11/2014	ND	1.75	87.5	2.00	6.27	
Total Xylenes*	<0.150	0.150	09/11/2014	ND	5.34	89.0	6.00	6.76	
Total BTEX	<0.300	0.300	09/11/2014	ND					

Surrogate: 4-Bromofluorobenzene (PID) 102 % 89.4-126

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	18800	16.0	09/11/2014	ND	416	104	400	3.92	

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	09/10/2014	ND	171	85.7	200	3.50	
DRO >C10-C28	<10.0	10.0	09/10/2014	ND	194	96.8	200	2.80	

Surrogate: 1-Chlorooctane 94.4 % 65.2-140

Surrogate: 1-Chlorooctadecane 102 % 63.6-154

Cardinal Laboratories

*=Accredited Analyte

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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: 09/08/2014
Reported: 09/12/2014
Project Name: COTTON DRAW #65 SWD
Project Number: 700794.104.02
Project Location: 6-2-25-31

Sampling Date: 09/08/2014
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: S-1 1' (H402783-02)

BTEx 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	09/11/2014	ND	2.01	100	2.00	5.47	
Toluene*	<0.050	0.050	09/11/2014	ND	1.81	90.3	2.00	5.66	
Ethylbenzene*	<0.050	0.050	09/11/2014	ND	1.66	83.0	2.00	5.76	
Total Xylenes*	<0.150	0.150	09/11/2014	ND	5.04	84.0	6.00	5.90	
Total BTEx	<0.300	0.300	09/11/2014	ND					

Surrogate: 4-Bromofluorobenzene (PIE) 107 % 89.4-126

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1490	16.0	09/11/2014	ND	416	104	400	3.92	

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	09/10/2014	ND	171	85.7	200	3.50	
DRO >C10-C28	<10.0	10.0	09/10/2014	ND	194	96.8	200	2.80	

Surrogate: 1-Chlorooctane 103 % 65.2-140

Surrogate: 1-Chlorooctadecane 115 % 63.6-154

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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: 09/08/2014
Reported: 09/12/2014
Project Name: COTTON DRAW #65 SWD
Project Number: 700794.104.02
Project Location: 6-2-25-31

Sampling Date: 09/08/2014
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: S-1 1.5' REFUSAL (H402783-03)

BTEx 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	09/11/2014	ND	2.01	100	2.00	5.47	
Toluene*	<0.050	0.050	09/11/2014	ND	1.81	90.3	2.00	5.66	
Ethylbenzene*	<0.050	0.050	09/11/2014	ND	1.66	83.0	2.00	5.76	
Total Xylenes*	<0.150	0.150	09/11/2014	ND	5.04	84.0	6.00	5.90	
Total BTEx	<0.300	0.300	09/11/2014	ND					

Surrogate: 4-Bromofluorobenzene (PIE) 107 % 89.4-126

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	896	16.0	09/11/2014	ND	416	104	400	3.92	

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	09/10/2014	ND	171	85.7	200	3.50	
DRO >C10-C28	<10.0	10.0	09/10/2014	ND	194	96.8	200	2.80	

Surrogate: 1-Chlorooctane 99.8 % 65.2-140

Surrogate: 1-Chlorooctadecane 113 % 63.6-154

Cardinal Laboratories

*=Accredited Analyte

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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: 09/08/2014
 Reported: 09/12/2014
 Project Name: COTTON DRAW #65 SWD
 Project Number: 700794.104.02
 Project Location: 6-2-25-31

 Sampling Date: 09/08/2014
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: S-2 0' (H402783-04)

BTEx 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	09/11/2014	ND	2.01	100	2.00	5.47	
Toluene*	<0.050	0.050	09/11/2014	ND	1.81	90.3	2.00	5.66	
Ethylbenzene*	<0.050	0.050	09/11/2014	ND	1.66	83.0	2.00	5.76	
Total Xylenes*	<0.150	0.150	09/11/2014	ND	5.04	84.0	6.00	5.90	
Total BTEx	<0.300	0.300	09/11/2014	ND					

Surrogate: 4-Bromofluorobenzene (PID) 106 % 89.4-126

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	14800	16.0	09/11/2014	ND	416	104	400	3.92	

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	09/10/2014	ND	171	85.7	200	3.50	
DRO >C10-C28	<10.0	10.0	09/10/2014	ND	194	96.8	200	2.80	

Surrogate: 1-Chlorooctane 102 % 65.2-140

Surrogate: 1-Chlorooctadecane 110 % 63.6-154

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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: 09/08/2014
 Reported: 09/12/2014
 Project Name: COTTON DRAW #65 SWD
 Project Number: 700794.104.02
 Project Location: 6-2-25-31

 Sampling Date: 09/08/2014
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: S-2 1' REFUSAL (H402783-05)

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	09/11/2014	ND	2.01	100	2.00	5.47	
Toluene*	<0.050	0.050	09/11/2014	ND	1.81	90.3	2.00	5.66	
Ethylbenzene*	<0.050	0.050	09/11/2014	ND	1.66	83.0	2.00	5.76	
Total Xylenes*	<0.150	0.150	09/11/2014	ND	5.04	84.0	6.00	5.90	
Total BTX	<0.300	0.300	09/11/2014	ND					

Surrogate: 4-Bromofluorobenzene (PID) 107 % 89.4-126

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	12000	16.0	09/11/2014	ND	416	104	400	3.92	

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	09/10/2014	ND	171	85.7	200	3.50	
DRO >C10-C28	<10.0	10.0	09/10/2014	ND	194	96.8	200	2.80	

Surrogate: 1-Chlorooctane 102 % 65.2-140

Surrogate: 1-Chlorooctadecane 106 % 63.6-154

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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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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

Company Name: Talon/LPE

Project Manager: K. Wilson

Address: 408 W. Texas Ave.

City: Artesia

State: NM zip: 88210

Phone #: 575-746-8768

Fax #: 575-746-8905

Project #: 700794.104.02

Project Owner: Devon

Project Name: Cotton Draw #65

Project Location:

Sampler Name: S. Hitchcock

FOR LAB USE ONLY

Lab I.D.

Sample I.D.

H402763

1 5-1 0' G
2 5-1 1' G
3 5-1 1.5 Re Fessal G
4 5-2 0' G
5 5-2 1' Refusal G

(G)RAB OR (C)OMP.
CONTAINERS
GROUNDWATER
WASTEWATER
SOIL
OIL
SLUDGE
OTHER :
ACID/BASE:
ICE / COOL
OTHER :

DATE

TIME

TPH
BTEX
Chlorides

BILL TO

ANALYSIS REQUEST

P.O. #:

Company: Talon/LPE

Attn:

Address:

City:

State: Zip:

Phone #:

Fax #:

PRESERV

SAMPLING

Relinquished By:

Sheldon H. Wilson

Date: 9/8/14

Received By:

Sheldon H. Wilson

Time:

Delivered By: (Circle One)

Sampler - UPS - Bus - Other:

Sample Condition

Coat Intact

Yes Yes No No

CHECKED BY:

(Initials)

4.60

REMARKS:
Phone Result: ☐ Yes ☐ No Add'l Phone #:
Fax Result: ☐ Yes ☐ No Add'l Fax #:

* Cardinal cannot accept verbal changes. Please fax written changes to (575) 393-2326