



December 16, 2014

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

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

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

Subject: **Soil Assessment and Remediation Work Plan**
Devon Energy Corporation
Snapping 2 State #6H
30-015-29157

Dear Mr. Bratcher,

HOBBS
318 East Taylor Street
Hobbs, New Mexico 88240
Phone 575.393.4261
Fax 575.393.4658

Devon Energy Corporation (Devon) 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.

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

Incident Date

December 8, 2014

Background Information

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

The Snapping 2 State #6H is located approximately fifty-eight (58) miles southeast of Carlsbad, New Mexico. The legal location for this site is Unit Letter O of Section 2, Township 26 South, and Range 31 East in Eddy County, New Mexico. More specifically the latitude and longitude for the location are 32.06576736 North and -103.747723 West. See site plan in [Appendix I](#).

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

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 Pajarito loamy fine sand with 0 to 3 percent slopes, eroded. Per the New Mexico Bureau of Geology and Mineral Resources, the local surface and shallow geology is Holocene to middle Pleistocene Eolian deposits. Drainage courses in this area are normally dry. Ground water in the project vicinity is greater than 335-feet below ground surface (bgs), according to the New Mexico office of the State Engineer. See [Appendix II](#) for the referenced groundwater data.

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

ENVIRONMENTAL CONSULTING
ENGINEERING
DRILLING
CONSTRUCTION
SPILL MANAGEMENT
GENERAL CONTRACTING

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

Incident Description

The pop off valve on the three phase separator released 30 barrels of fluid on the location due to a malfunction of the motor valve on the flare line. The fluid could not dump because the supply gas to the dump valve was frozen. The well was immediately shut in and the motor valve was repaired. A vac truck was called to the location and recovered 25 barrels of fluid. The area affected was the northeast corner of the location surrounding the heater treater and horizontal separator measuring approximately 130-feet long by 115-feet wide. The spill remained on location and the equipment was pressure washed. See site plan in [Appendix I](#).

Actions Taken

On December 8, 2014 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 hand auger to a depth of 1-foot below ground surface. Refusal was encountered at a depth of 1-foot deep. See [Table 1](#) for sampling results.

All soil samples were collected by Talon personnel wearing clean nitrile gloves. The soil samples were placed in laboratory provided sample containers, iced and transported to Cardinal Laboratories in Hobbs, New Mexico for analysis. The samples were tested for TPH (Total Petroleum Hydrocarbons) using EPA Method 8015M, and volatile organics (BTEX) using EPA Method 8021B. The chloride samples were analyzed per Method SM4500Cl-B.

Laboratory Results

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

Table 1

Sample ID	Depth (feet)	BTEX (mg/kg)	Chlorides (mg/kg)	TPH (mg/kg) GRO	TPH (mg/kg) DRO
S-1	0'	98.7	2680	2330	10900
	1'	3.07	304	22	96.4
S-2	0'	284	816	2890	23100
	1'	<0.300	64	<10	33
S-3	0'	82.8	12900	1180	14300
	0.5'	0.829	736	<10	<10
S-4	0'	59.2	11700	1290	17200
	0.5'	152	3760	3160	13700

Based upon the site ranking of 0, NMOCD Recommended Remedial Action Levels (RRAL) are 50 mg/kg for BTEX, 10 mg/kg for Benzene, 5,000 mg/kg for TPH.

Proposed Remedial Actions

- At the beginning of the project, a test pit will be excavated at sample location S-4 for further vertical delineation purposes in this area. The samples will be field tested using a PID meter and followed up with laboratory confirmation analysis. The test pit will be backfilled until lab results are obtained.
- Upon receipt of the lab analysis for the additional samples at S-4, the results will be immediately forwarded to the NMOCD and client. Excavation depths in this area will be determined from the results of the lab data.
- The impacted area in the vicinity of sample points S-1 and S-2 will be excavated to a depth of 1-foot deep. The impacted area at sample point S-3 will be excavated to a depth of 0.5-feet deep.
- All the contaminated soil will be transported to Lea Land, a NMOCD approved disposal facility.
- The excavated areas will be backfilled with locally obtained backfill from Lea Land 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,



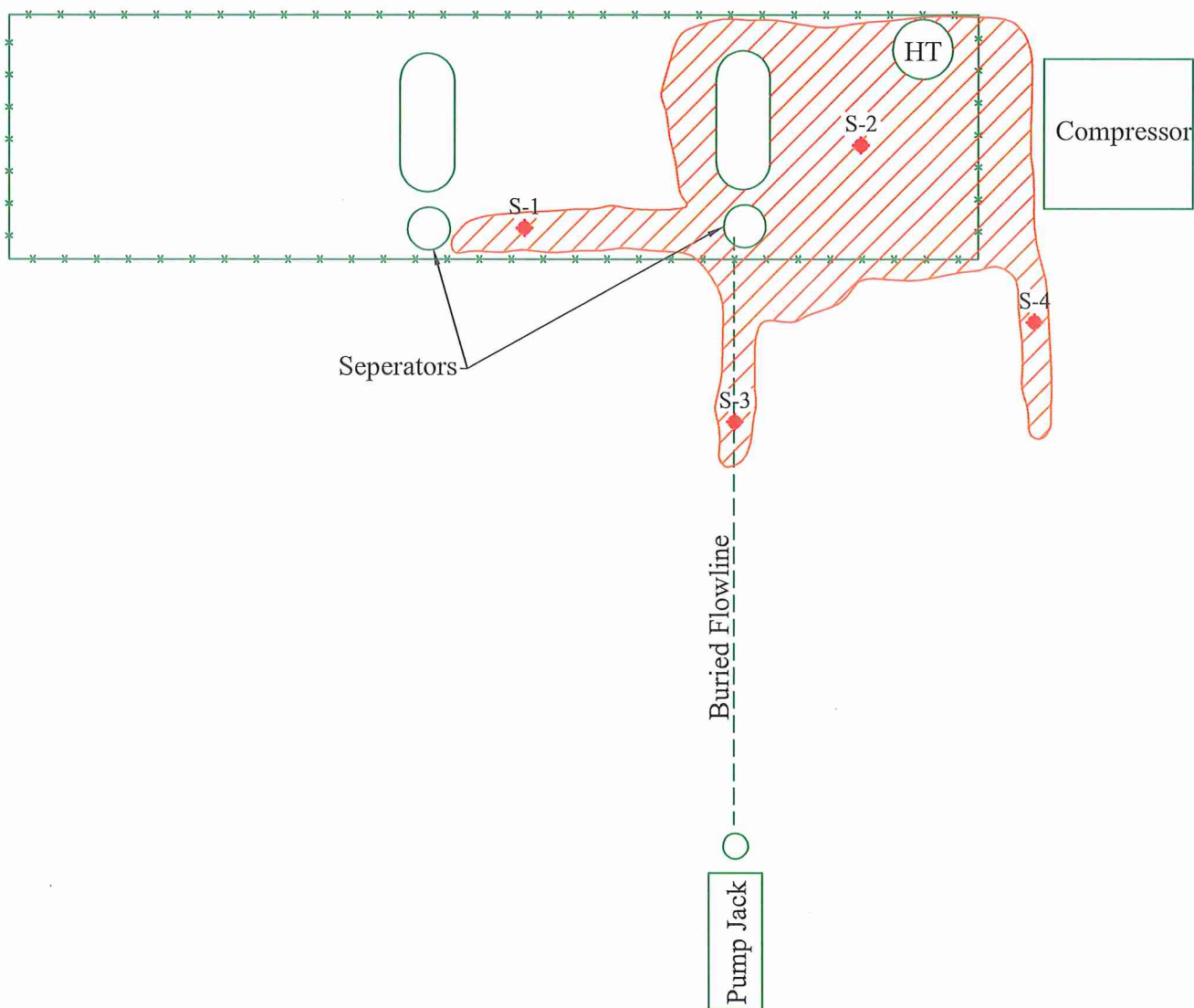
Kimberly M. Wilson
Project Manager



David J. Adkins
District Manager

APPENDIX I

SITE MAP



NTS



Scale in Feet

Legend	
	- Sample Location
	- Barb Wire Fence
	- Impacted Area



Date: 12/11/2014

Scale: NTS

Drawn By: TJS

Snapping 2-6H
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 02090			ED	4	4	01	26S	31E		620329	3548533*	1729	350	335	15
C 03639 POD1	CUB		ED	3	4	2	01	26S	31E	620168	3549279	1789	700	365	335
C 03554 POD1	CUB		ED	2	1	4	01	26S	31E	620547	3549148	2079	630	300	330

Average Depth to Water: **333 feet**

Minimum Depth: **300 feet**

Maximum Depth: **365 feet**

Record Count: 3

UTMNAD83 Radius Search (in meters):

Easting (X): 618604

Northing (Y): 3548410

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

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company Devon Energy Production	Contact Production Foreman; Joah Weidemann
Address 6488 Seven Rivers Hwy Artesia, NM 88220	Telephone No. 575-513-1528
Facility Name Snapping 2 State 6H	Facility Type Oil

Surface Owner: State	Mineral Owner: State	API No. 30-015-39162
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LOCATION OF RELEASE

Unit Letter O	Section 2	Township 26S	Range 31E	Feet from the 330	North/South Line South	Feet from the 2260	East/West Line East	County Eddy
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Latitude: 32.0657885N Longitude: 103.7475812W

NATURE OF RELEASE

Type of Release Spill	Volume of Release 30BBLS	Volume Recovered 25BBLS
Source of Release pop off on the 3 phase separator	Date and Hour of Occurrence 11-24-2014 5:00 AM	Date and Hour of Discovery 11-24-2014 5:00 AM
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 Heather Patterson; OCD	
By Whom? Lynn Smith; Assistant Production Foreman	Date and Hour 11-25-2014 @ 8:00 AM	
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.*

The pop off valve on the 3 phase separator released 30BBLS of fluid on location due to a malfunction of the motor valve on the flare line. The fluid could not dump because the supply gas to the dump valve was frozen. The well was immediately shut in and the motor valve has been repaired.

Describe Area Affected and Cleanup Action Taken.*

On the north central side of the location 30BBLS of oil was released affecting an area approximately 195' x 165'. The spill remained on location. 25BBLS were recovered via vacuum truck. The affected equipment has been pressure washed.

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: <i>Sandra Farley</i>	<u>OIL CONSERVATION DIVISION</u>		
Printed Name: Sandra Farley			
Title: Field Admin Support	Approved by Environmental Specialist:	Approval Date:	Expiration Date:
E-mail Address: Sandy.Farley@dmv.com	Conditions of Approval:		Attached <input type="checkbox"/>
Date: 11-26-2014	Phone: 575.746.5587		

* Attach Additional Sheets If Necessary

APPENDIX III

LABORATORY RESULTS



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

December 15, 2014

SHELDON HITCHCOCK

TALON LPE

408 W. TEXAS AVE.

ARTESIA, NM 88210

RE: SNAPPING 2 ST. #6H

Enclosed are the results of analyses for samples received by the laboratory on 12/09/14 14:14.

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
SHELDON HITCHCOCK
408 W. TEXAS AVE.
ARTESIA NM, 88210
Fax To: (575) 745-8905

Received: 12/09/2014
Reported: 12/15/2014
Project Name: SNAPPING 2 ST. #6H
Project Number: NONE GIVEN
Project Location: 2-T 26S - R31E

Sampling Date: 12/08/2014
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Kathy Perez

Sample ID: S -1 0' (H403756-01)

BTX 8021B		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<2.00	2.00	12/11/2014	ND	1.98	98.9	2.00	4.25	
Toluene*	20.7	2.00	12/11/2014	ND	1.97	98.7	2.00	4.01	
Ethylbenzene*	7.98	2.00	12/11/2014	ND	1.89	94.4	2.00	3.87	
Total Xylenes*	70.0	6.00	12/11/2014	ND	5.72	95.3	6.00	3.73	
Total BTEX	98.7	12.0	12/11/2014	ND					

Surrogate: 4-Bromofluorobenzene (PID) 104 % 61-154

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2680	16.0	12/10/2014	ND	400	100	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS						S-04
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	2330	10.0	12/10/2014	ND	188	93.9	200	0.211		
DRO >C10-C28	10900	10.0	12/10/2014	ND	201	100	200	0.909		

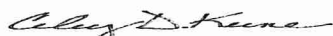
Surrogate: 1-Chlorooctane 193 % 47.2-157

Surrogate: 1-Chlorooctadecane 164 % 52.1-176

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

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

Received: 12/09/2014
Reported: 12/15/2014
Project Name: SNAPPING 2 ST. #6H
Project Number: NONE GIVEN
Project Location: 2-T 26S - R31E

Sampling Date: 12/08/2014
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Kathy Perez

Sample ID: S -1 1' (H403756-02)

BTEX 8021B		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	0.066	0.050	12/12/2014	ND	1.98	98.9	2.00	4.25	
Toluene*	0.920	0.050	12/12/2014	ND	1.97	98.7	2.00	4.01	
Ethylbenzene*	0.216	0.050	12/12/2014	ND	1.89	94.4	2.00	3.87	
Total Xylenes*	1.87	0.150	12/12/2014	ND	5.72	95.3	6.00	3.73	
Total BTEX	3.07	0.300	12/12/2014	ND					

Surrogate: 4-Bromofluorobenzene (PIL) 103 % 61-154

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	304	16.0	12/10/2014	ND	400	100	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	22.0	10.0	12/10/2014	ND	188	93.9	200	0.211	
DRO >C10-C28	96.4	10.0	12/10/2014	ND	201	100	200	0.909	

Surrogate: 1-Chlorooctane 85.9 % 47.2-157

Surrogate: 1-Chlorooctadecane 84.3 % 52.1-176

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*—Accredited Analyte

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

Received: 12/09/2014
Reported: 12/15/2014
Project Name: SNAPPING 2 ST. #6H
Project Number: NONE GIVEN
Project Location: 2-T 26S - R31E

Sampling Date: 12/08/2014
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Kathy Perez

Sample ID: S -2 0' (H403756-03)

BTX 8021B		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	5.15	5.00	12/12/2014	ND	1.98	98.9	2.00	4.25	
Toluene*	80.5	5.00	12/12/2014	ND	1.97	98.7	2.00	4.01	
Ethylbenzene*	21.0	5.00	12/12/2014	ND	1.89	94.4	2.00	3.87	
Total Xylenes*	178	15.0	12/12/2014	ND	5.72	95.3	6.00	3.73	
Total BTEX	284	30.0	12/12/2014	ND					

Surrogate: 4-Bromofluorobenzene (PIL) 103 % 61-154

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	816	16.0	12/10/2014	ND	400	100	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	5890	10.0	12/10/2014	ND	188	93.9	200	0.211		
DRO >C10-C28	23100	10.0	12/10/2014	ND	201	100	200	0.909		

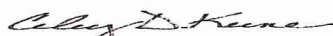
Surrogate: 1-Chlorooctane 278 % 47.2-157

Surrogate: 1-Chlorooctadecane 306 % 52.1-176

Cardinal Laboratories

*=Accredited Analyte

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SHELDON HITCHCOCK
408 W. TEXAS AVE.
ARTESIA NM, 88210
Fax To: (575) 745-8905

Received: 12/09/2014
Reported: 12/15/2014
Project Name: SNAPPING 2 ST. #6H
Project Number: NONE GIVEN
Project Location: 2-T 26S - R31E

Sampling Date: 12/08/2014
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Kathy Perez

Sample ID: S -2 1' (H403756-04)

BTEx 8021B			mg/kg		Analyzed By: CK				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/12/2014	ND	1.98	98.9	2.00	4.25	
Toluene*	0.068	0.050	12/12/2014	ND	1.97	98.7	2.00	4.01	
Ethylbenzene*	<0.050	0.050	12/12/2014	ND	1.89	94.4	2.00	3.87	
Total Xylenes*	<0.150	0.150	12/12/2014	ND	5.72	95.3	6.00	3.73	
Total BTEx	<0.300	0.300	12/12/2014	ND					

Surrogate: 4-Bromofluorobenzene (PIE) 102 % 61-154

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	64.0	16.0	12/10/2014	ND	400	100	400	0.00		

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	12/10/2014	ND	188	93.9	200	0.211	
DRO >C10-C28	33.0	10.0	12/10/2014	ND	201	100	200	0.909	

Surrogate: 1-Chlorooctane 90.1 % 47.2-157

Surrogate: 1-Chlorooctadecane 85.0 % 52.1-176

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

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

Received: 12/09/2014
Reported: 12/15/2014
Project Name: SNAPPING 2 ST. #6H
Project Number: NONE GIVEN
Project Location: 2-T 26S - R31E

Sampling Date: 12/08/2014
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Kathy Perez

Sample ID: S - 3 0' (H403756-05)

BTEX 8021B		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	2.01	1.00	12/12/2014	ND	1.98	98.9	2.00	4.25	
Toluene*	22.7	1.00	12/12/2014	ND	1.97	98.7	2.00	4.01	
Ethylbenzene*	6.18	1.00	12/12/2014	ND	1.89	94.4	2.00	3.87	
Total Xylenes*	51.9	3.00	12/12/2014	ND	5.72	95.3	6.00	3.73	
Total BTEX	82.8	6.00	12/12/2014	ND					

Surrogate: 4-Bromofluorobenzene (PID) 102 % 61-154

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	12900	16.0	12/10/2014	ND	400	100	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS						S-04
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	1180	10.0	12/10/2014	ND	188	93.9	200	0.211		
DRO >C10-C28	14300	10.0	12/10/2014	ND	201	100	200	0.909		


Surrogate: 1-Chlorooctane 159 % 47.2-157

Surrogate: 1-Chlorooctadecane 218 % 52.1-176

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

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

Received: 12/09/2014
Reported: 12/15/2014
Project Name: SNAPPING 2 ST. #6H
Project Number: NONE GIVEN
Project Location: 2-T 26S - R31E

Sampling Date: 12/08/2014
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Kathy Perez

Sample ID: S -3 0.5' (H403756-06)

BTX 8021B		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/12/2014	ND	1.98	98.9	2.00	4.25	
Toluene*	0.256	0.050	12/12/2014	ND	1.97	98.7	2.00	4.01	
Ethylbenzene*	0.053	0.050	12/12/2014	ND	1.89	94.4	2.00	3.87	
Total Xylenes*	0.520	0.150	12/12/2014	ND	5.72	95.3	6.00	3.73	
Total BTEX	0.829	0.300	12/12/2014	ND					

Surrogate: 4-Bromofluorobenzene (PIC) 103 % 61-154

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	736	16.0	12/10/2014	ND	400	100	400	0.00	

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	12/10/2014	ND	188	93.9	200	0.211	
DRO >C10-C28	<10.0	10.0	12/10/2014	ND	201	100	200	0.909	

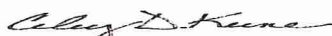
Surrogate: 1-Chlorooctane 86.2 % 47.2-157

Surrogate: 1-Chlorooctadecane 84.8 % 52.1-176

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

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

Received: 12/09/2014
Reported: 12/15/2014
Project Name: SNAPPING 2 ST. #6H
Project Number: NONE GIVEN
Project Location: 2-T 26S - R31E

Sampling Date: 12/08/2014
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Kathy Perez

Sample ID: S -4 0' (H403756-07)

BTX 8021B		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<1.00	1.00	12/12/2014	ND	1.98	98.9	2.00	4.25	
Toluene*	11.7	1.00	12/12/2014	ND	1.97	98.7	2.00	4.01	
Ethylbenzene*	4.63	1.00	12/12/2014	ND	1.89	94.4	2.00	3.87	
Total Xylenes*	42.8	3.00	12/12/2014	ND	5.72	95.3	6.00	3.73	
Total BTX	59.2	6.00	12/12/2014	ND					

Surrogate: 4-Bromofluorobenzene (PIL) 105 % 61-154

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	11700	16.0	12/10/2014	ND	400	100	400	0.00	

TPH 8015M		mg/kg		Analyzed By: CK						S-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	1290	50.0	12/11/2014	ND	197	98.4	200	1.87		
DRO >C10-C28	17200	50.0	12/11/2014	ND	209	105	200	1.93		

Surrogate: 1-Chlorooctane 205 % 47.2-157

Surrogate: 1-Chlorooctadecane 266 % 52.1-176

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Analytical Results For:

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

Received: 12/09/2014
Reported: 12/15/2014
Project Name: SNAPPING 2 ST. #6H
Project Number: NONE GIVEN
Project Location: 2-T 26S - R31E

Sampling Date: 12/08/2014
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Kathy Perez

Sample ID: S -4 0.5' (H403756-08)

BTX 8021B		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<2.00	2.00	12/12/2014	ND	1.98	98.9	2.00	4.25	
Toluene*	24.2	2.00	12/12/2014	ND	1.97	98.7	2.00	4.01	
Ethylbenzene*	12.4	2.00	12/12/2014	ND	1.89	94.4	2.00	3.87	
Total Xylenes*	115	6.00	12/12/2014	ND	5.72	95.3	6.00	3.73	
Total BTX	152	12.0	12/12/2014	ND					

Surrogate: 4-Bromofluorobenzene (PID) 105 % 61-154

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	3760	16.0	12/10/2014	ND	400	100	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS						S-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	3160	100	12/12/2014	ND	197	98.4	200	1.87		
DRO >C10-C28	13700	100	12/12/2014	ND	209	105	200	1.93		

Surrogate: 1-Chlorooctane 195 % 47.2-157

Surrogate: 1-Chlorooctadecane 208 % 52.1-176

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Celey D. Keene, Lab Director/Quality Manager

Notes and Definitions

- S-06 The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and/or matrix interference's.
- S-04 The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
- 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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