

July 7, 2015

Mrs. Heather Patterson

NMOCD District 2

AMARILLO 921 North Bivins Amarillo. Texas 79107 Phone 806,467.0607 Fax 806,467.0622

811 S. 1st Street Artesia, NM 88210

Subject:

Soil Assessment and Remediation Work Plan

Devon Energy

Cotton Draw Unit No. 113H API # 30-015-39517 2RP-2774

ARTESIA 408 West Texas Ave. Artesia, New Mexico 882I0 Phone 575.746.8768 Fax 575.746.8905

Dear Heather and Mike,

HOBBS 318 East Taylor Street Hobbs, New Mexico 88240 Phone 575.393.4261 Devon Energy has contracted Talon/LPE (Talon) to perform soil assessment and remediation services for the Cotton Draw Unit No. 113H release. The results of our soil assessment and proposed remediation activities consist of the following.

Incident Date

MIDLAND 290I State Hwy 349 Midland, Texas 79706 Phone 432.522.2I33 Fax 432.522.2I80

Fax 575.393.4658

The release occurred on January 27, 2015.

Background Information

OKLAHOMA CITY 7700 North Hudson Avenue Suite IO Oklahoma City, Oklahoma 73II6 Phone 405.486.7030 Fax 806.467.0622 The Cotton Draw Unit No. 113H is located approximately fifty-five (55) miles southeast of Carlsbad, New Mexico. The legal location for the site is specifically Section 36, Township 24 South and Range 31 East in Eddy County, New Mexico. More specifically, the latitude and longitude for the release are 32.1672814 North and -103.7379624 West. See site map attached 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 Services, 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 under lain with sandy clay loam and hard caliche. Drainage courses in this area are normally dry. Ground water in the project vicinity is approximately greater than 300' 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 as following:

ENVIRONMENTAL CONSULTING

Depth to ground water Wellhead Protection Area >100'

ENGINEERING DRILLING CONSTRUCTION >1000'

Distance to surface water body

>1000'

SPILL MANAGEMENT GENERAL CONTRACTING

Page 1 of 3

Toll Free: 866.742.0742 www.talonlpe.com 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 5000 mg/kg. The chloride standard is considered to be 1,000 mg/kg.

Incident Description

A poly line was run over and punctured causing a release of 4 barrels of oil into the pasture. A vac truck was called to the location and recovered 1.5 barrels of fluid. The line was repaired. The impacted area measured approximately 100-feet long by 45-feet wide. Talon mobilized personnel to conduct a site assessment and perform soil sampling at the location. Laboratory results from the soil sampling event are summarized in the table below.

Remedial Actions Taken

On July 7, 2015 Talon mobilized personnel and equipment to treat the impacted area with Mircoblaze (a bioremediation agent) at the client's request.

Laboratory Results

See Appendix III for complete report of laboratory results.

June 1, 2015

Sample ID	Depth (feet)	BTEX (mg/kg)	Chlorides (mg/kg)	TPH (mg/kg) GRO	TPH (mg/kg) DRO
S-1	0'	< 0.300	832	<50	4720
	1'	< 0.300	48	<10	<10
	2'	< 0.300	64	<10	<10
	3'	< 0.300	800	<10	<10
S-2	0'	< 0.300	<16	< 50	12400
	1'	< 0.300	<16	<10	53.7
	2'	< 0.300	<16	<10	<10
	3'	< 0.300	<16	<10	<10

Proposed Remedial Actions

- The impacted area will be treated with Mircoblaze (a bioremediation agent). Confirmation samples will be collected after 60 to 90 days to verify effectiveness of treatment. Multiple applications may be needed depending on the analytical results.
- Upon NMOCD approval of the confirmation samples, the impacted area will be seeded with the recommended seed mix for the area.
- 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

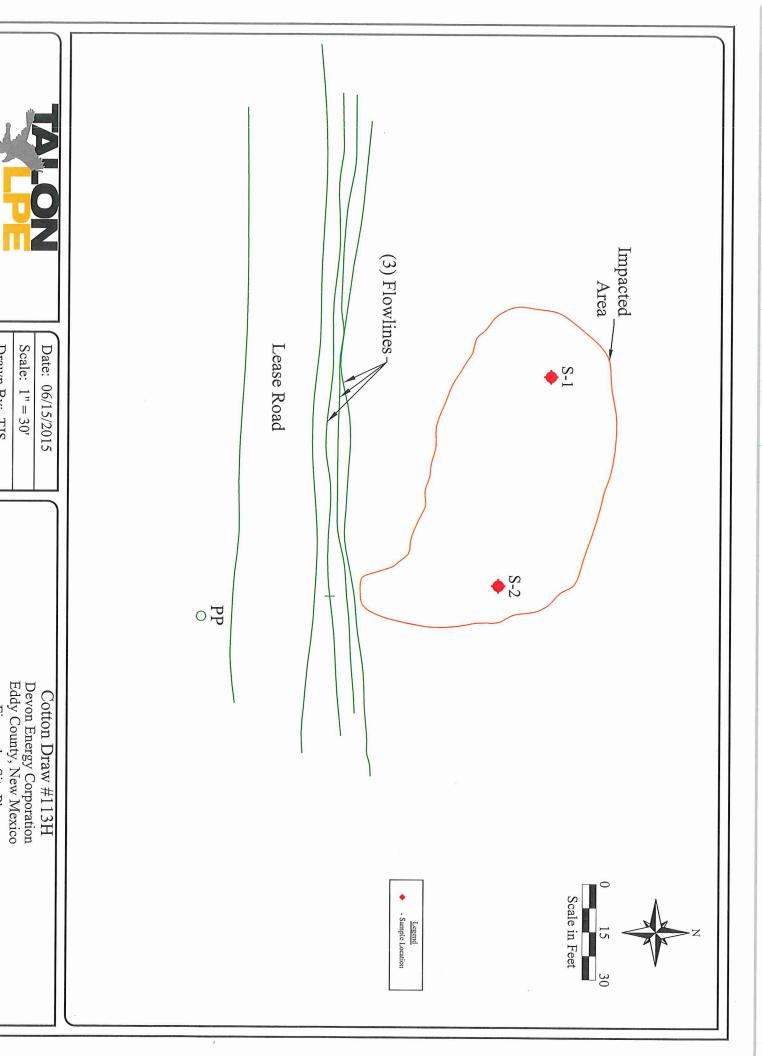
Kimberly M. Wilson

Project Manager

David J. Adkins District Manager

APPENDIX I

SITE MAP



Drawn By: TJS

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)

,	,							3 -	/		010.0)	1.	11 1001)	
	POD Sub-		0	Q	0								D (1	
POD Number	Code basin Co	ounty				ec T	ws	Rna	х	Y	Distance	The state of the s	Depth Water (Column
C 02572		ED						31E	618695	3559294*	453	852	valor	Joidinii
C 02571		ED	4	1	2	02 2	5S	31E	618292	3559294* 🌎	726	860		
C 02573		ED	1	4	2 (02 2	5S	31E	618499	3559091* 🌍	726			
C 02574		ED	1	1	2 (02 2	5S	31E	618092	3559494* 🎒	828			
C 02569		ED	4	4	2 (02 2	5S	31E	618699	3558891* 🌍	833	1016		
C 02568		ED	4	3	1 (01 2	5S	31E	619103	3558892*	835	1025		
C 02570		ED	4	2	4 (02 2	5S	31E	618704	3558489*	1226	895		
C 03830 POD1	CUB	ED	4	2	4 (02 2	5S	31E	618632	3558432 🌑	1294	450		

Average Depth to Water:

Minimum Depth:

Maximum Depth:

Record Count: 8

UTMNAD83 Radius Search (in meters):

Easting (X): 618894

Northing (Y): 3559701

Radius: 4000

^{*}UTM location was derived from PLSS - see Help

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

NM OIL CONSERVATION

ARTESIA DISTRICT

Form C-141 Revised August 8, 2011

Submit 3 dop 2015 ppropriate District Office in accordance with 19.15.29 NMAC.

RECEIVED

			Rele	ease Notific	cation	and Co	orrective A	ction			
MABIS	50305	8380				OPERA'	ГOR	⊠ Ini	tial Report	П	Final Report
Name of Co	ompany D	evon Energy	Product	ion Company 💪	0/37	Contact Jo	oah Weidemann				
Address 64	88 Seven I	Rivers Hwy	Artesia, 1	VM 88210			No. 575-513-15	28			
Facility Na	me Cotton	Draw Unit	113			Facility Ty	pe Oil				
Surface Ov	vner State)		Mineral	Owner	State		API N	To 30-015-3	9517	
				LOCA	ATION	OF RE	LEASE				
Unit Letter	Section	Township	Range	Feet from the		South Line	Feet from the	East/West Line	County		
М	36	24S	31E	220		South	660	West_	Eddy		
			Lat	t itude: N 32.16	72814	Longitue	de: W 103.737	9624			
				NAT	URE	OF RELI	EASE				
Type of Rele		Oil				Volume of	Release 4 bbls	Volume	Recovered	l.5 bbl	s
Source of Re							Hour of Occurre		d Hour of D		
Poly Flow Li Was Immedi		Given?				If YES, To	, 2015 @ 2:30 am) January	27, 2015 @ 2	2:30 an	n
	are i volice		Yes	No 🗌 Not Re	equired	BLM Jim	Amos				
By Whom? I	lubert Perry	,				OCD Thon	nas H <mark>our</mark> January 27,	2015 @ 1.25 am	and 4:32		
Was a Water							olume Impacting				
		. 🗆	Yes 🛚	No							
If a Waterco	urse was Ir	npacted, Des	cribe Full	y,*		· · · · · · · · · · · · · · · · · · ·				•	
Describe Car Ploy line from oil on to the p	n the Cottor	Draw Unit 1	13 to the 0	Cotton Draw 153	H was ra Clean w	an over by un vas called out	known subject an to recover the sp	d rocks puncture	d the flow line to recover	e causi	ing it to spew s of oil.
Describe Are	a Affected	and Cleanup	Action T	'aken.*				· · · · · · · · · · · · · · · · · · ·			
Lhereby certi	fy that the in	formation ai	uan ahova	is true and comp	lata to th	a bast of	knowledge and u			000	
public health should their o	I operators a or the envir operations ha oment. In ac	are required to conment. The ave failed to a Idition, NMO	report an acceptanc dequately CD accep	d/or file certain re e of a C-141 repo investigate and re	elease no ort by the emediate	otifications and NMOCD made contaminati	nd perform correct arked as "Final Roon that pose a three the operator of the correct arked as "Final Roon that pose a three the operator of the correct arked ark	tive actions for re eport" does not re eat to ground wat	leases which lieve the oper er surface wa	may e rator o	ndanger f liability man health
Signature: Co	orina M	oya					OIL CONS	SERVATION	<u> DIVISIC</u>	\mathbb{H}	
Printed Name	: Corina Mo	oya				Approved by	Environmental S _I	pecialist:	1/2		
Title: Field A	dmin Supp	ort				Approval Dat	Unalle	Expiration	Date:	14	
E-mail Addre	ss: <u>cori</u> na.n	noya@dvn.co	m			onditions of	Annroval				
				746 5550	R	emediatio	n per O.C.D. I	Rules & Guld	elines Attached		
Date: Attach Addit	1-30-2015 ional Shee		none: 575.	/40.5559		UBMIT RE	MEDIATION,	PROPOSAL N	0		
Amon Audit	ional once	11 1100035	y		L	ATER THA	in: <u>atadit</u>	5	ZKP	?. 2'	174

APPENDIX III LABORATORY RESULTS



June 30, 2015

KIMBERLY WILSON

TALON LPE

408 W. TEXAS AVE.

ARTESIA, NM 88210

RE: COTTON DRAW #113 H

Enclosed are the results of analyses for samples received by the laboratory on 06/02/15 13:25.

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/ga/lab accredited certif.html.

Cardinal Laboratories is accreditated 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.

Celey D. Keine

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



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

Received:

06/02/2015

Reported:

06/30/2015

Project Name:

COTTON DRAW #113 H

Project Number:

NONE GIVEN

Project Location:

M-36-24-31

Sampling Date:

06/01/2015

Sampling Type:

Soil

Sampling Condition: Sample Received By:

Cool & Intact

Jodi Henson

Sample ID: S-1 0' (H501407-01)

BTEX 8021B	mg,	'kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/04/2015	ND	2.28	114	2.00	2.00	
Toluene*	<0.050	0.050	06/04/2015	ND	2.04	102	2.00	2.19	
Ethylbenzene*	<0.050	0.050	06/04/2015	ND	2.00	100	2.00	2.25	
Total Xylenes*	<0.150	0.150	06/04/2015	ND	5.85	97.5	6.00	2.69	
Total BTEX	<0.300	0.300	06/04/2015	ND					
Surrogate: 4-Bromofluorobenzene (PIL	106 9	61-154							
Chloride, SM4500CI-B	mg/	kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	832	16.0	06/08/2015	ND	416	104	400	0.00	
TPH 8015M	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<50.0	50.0	06/03/2015	ND	189	94.4	200	6.65	
DRO >C10-C28	4720	50.0	06/03/2015	ND	182	91.2	200	7.06	
Surrogate: 1-Chlorooctane	75.3	% 47.2-15	7						
Surrogate: 1-Chlorooctadecane	163 %	6 52.1-176	6						

Cardinal Laboratories

*=Accredited Analyte





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

Received:

06/02/2015

Reported:

06/30/2015

Project Name:

COTTON DRAW #113 H

Project Number:

NONE GIVEN Project Location: M-36-24-31

Sampling Date:

06/01/2015

Sampling Type:

Soil

Sampling Condition: Sample Received By: Cool & Intact

Jodi Henson

Sample ID: S-1 1' (H501407-02)

BTEX 8021B	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/04/2015	ND	2.28	114	2.00	2.00	
Toluene*	<0.050	0.050	06/04/2015	ND	2.04	102	2.00	2.19	
Ethylbenzene*	<0.050	0.050	06/04/2015	ND	2.00	100	2.00	2.25	
Total Xylenes*	<0.150	0.150	06/04/2015	ND	5.85	97.5	6.00	2.69	
Total BTEX	<0.300	0.300	06/04/2015	ND					
Surrogate: 4-Bromofluorobenzene (PID	106%	61-154	:						
Chloride, SM4500CI-B	mg/	kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	06/08/2015	ND	432	108	400	3.77	
TPH 8015M	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	06/03/2015	ND	189	94.4	200	6.65	
DRO >C10-C28	<10.0	10.0	06/03/2015	ND	182	91.2	200	7.06	
Surrogate: 1-Chlorooctane	83.3 9	6 47.2-152	7	7		,			
Surrogate: 1-Chlorooctadecane	86.9 %	6 52.1-176	5						

Cardinal Laboratories

*=Accredited Analyte





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

Received: Reported: 06/02/2015

06/30/2015

Project Name: Project Number:

Project Location:

COTTON DRAW #113 H

NONE GIVEN M-36-24-31

Sampling Date: Sampling Type:

Sampling Condition: Sample Received By: Soil Cool & Intact

06/01/2015

Jodi Henson

Sample ID: S-1 2' (H501407-03)

BTEX 8021B	mg/	kg	Analyze	ed By: MS					
Analyte .	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/04/2015	ND	2.28	114	2.00	2.00	
Toluene*	<0.050	0.050	06/04/2015	ND	2.04	102	2.00	2.19	
Ethylbenzene*	<0.050	0.050	06/04/2015	ND	2.00	100	2.00	2.25	
Total Xylenes*	<0.150	0.150	06/04/2015	ND	5.85	97.5	6.00	2.69	
Total BTEX	<0.300	0.300	06/04/2015	ND					
Surrogate: 4-Bromofluorobenzene (PID	108 %	6 61-154							
Chloride, SM4500CI-B	mg/l	kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	06/08/2015	ND	432	108	400	3.77	
TPH 8015M	mg/l	кg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	06/03/2015	ND	189	94.4	200	6.65	
DRO >C10-C28	<10.0	10.0	06/03/2015	ND	182	91.2	200	7.06	
Surrogate: 1-Chlorooctane	82.6 %	6 47.2-157	7						
Surrogate: 1-Chlorooctadecane	86.2 %	6 52.1-170	5						

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Celeg & Keine



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

06/02/2015 Reported: 06/30/2015

Project Name: COTTON DRAW #113 H

Project Number: NONE GIVEN Project Location: M-36-24-31

Sampling Date:

06/01/2015 Soil

Sampling Type: Sampling Condition:

Cool & Intact

Sample Received By:

Jodi Henson

Sample ID: S-1 3' (H501407-04)

Received:

BTEX 8021B	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/04/2015	ND	2.28	114	2.00	2.00	
Toluene*	<0.050	0.050	06/04/2015	ND	2.04	102	2.00	2.19	
Ethylbenzene*	<0.050	0.050	06/04/2015	ND	2.00	100	2.00	2.25	.47
Total Xylenes*	<0.150	0.150	06/04/2015	ND	5.85	97.5	6.00	2.69	
Total BTEX	<0.300	0.300	06/04/2015	ND					
Surrogate: 4-Bromofluorobenzene (PIL	109 %	61-154							
Chloride, SM4500CI-B	mg/	kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	800	16.0	06/08/2015	ND	432	108	400	3.77	
TPH 8015M	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	06/03/2015	ND	189	94.4	200	6.65	
DRO >C10-C28	<10.0	10.0	06/03/2015	ND	182	91.2	200	7.06	
Surrogate: 1-Chlorooctane	85.4 %	6 47.2-152	7						
Surrogate: 1-Chlorooctadecane	88.8 9	6 52.1-176	5						

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

Received:

06/02/2015

Reported:

DTEV 0034 B

06/30/2015

Project Name:

COTTON DRAW #113 H

Project Number:

NONE GIVEN

Project Location:

M-36-24-31

Sampling Date:

06/01/2015

Sampling Type:

Soil

Sampling Condition:

Cool & Intact

Sample Received By:

Jodi Henson

Sample ID: S-2 0' (H501407-06)

BTEX 8021B	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/04/2015	ND	2.28	114	2.00	2.00	
Toluene*	<0.050	0.050	06/04/2015	ND	2.04	102	2.00	2.19	
Ethylbenzene*	<0.050	0.050	06/04/2015	ND	2.00	100	2.00	2.25	
Total Xylenes*	<0.150	0.150	06/04/2015	ND	5.85	97.5	6.00	2.69	
Total BTEX	<0.300	0.300	06/04/2015	ND					
Surrogate: 4-Bromofluorobenzene (PIL	110 %	61-154							
Chloride, SM4500CI-B	mg/	kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	06/08/2015	ND	432	108	400	3.77	
TPH 8015M	mg/	kg	Analyze	d By: MS					S-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<50.0	50.0	06/03/2015	ND	172	86.2	200	5.38	
DRO >C10-C28	12400	50.0	06/03/2015	ND	165	82.6	200	8.14	
Surrogate: 1-Chlorooctane	89.9 9	6 47.2-15	7				9.		
Surrogate: 1-Chlorooctadecane	291 %	6 52.1-176	5						

Cardinal Laboratories

*=Accredited Analyte





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

06/02/2015 Reported: 06/30/2015

Project Name: COTTON DRAW #113 H

Project Number: NONE GIVEN

Project Location: M-36-24-31 Sampling Date:

06/01/2015 Soil

Sampling Type: Sampling Condition:

Cool & Intact

Sample Received By:

Jodi Henson

Sample ID: S-2 1' (H501407-07)

Received:

BTEX 8021B	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/04/2015	ND	2.28	114	2.00	2.00	
Toluene*	<0.050	0.050	06/04/2015	ND	2.04	102	2.00	2.19	
Ethylbenzene*	<0.050	0.050	06/04/2015	ND	2.00	100	2.00	2.25	
Total Xylenes*	<0.150	0.150	06/04/2015	ND	5.85	97.5	6.00	2.69	
Total BTEX	<0.300	0.300	06/04/2015	ND					
Surrogate: 4-Bromofluorobenzene (PIL	109 %	61-154							
Chloride, SM4500CI-B	mg/	kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	06/08/2015	ND	432	108	400	3.77	
TPH 8015M	mg/l	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	06/03/2015	ND	172	86.2	200	5.38	
DRO >C10-C28	53.7	10.0	06/03/2015	ND	165	82.6	200	8.14	
Surrogate: 1-Chlorooctane	98.3 %	6 47.2-15	7						
Surrogate: 1-Chlorooctadecane	105 %	52.1-176	5						

Cardinal Laboratories

*=Accredited Analyte





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

Received:

06/02/2015

Reported:

06/30/2015

Project Name:

COTTON DRAW #113 H

Project Number:

NONE GIVEN

Project Location:

M-36-24-31

Sampling Date:

06/01/2015

Sampling Type:

Soil

Sampling Condition:

Cool & Intact

Sample Received By:

Jodi Henson

Sample ID: S-2 2' (H501407-08)

BTEX 8021B	mg/	kg	Analyze	ed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/04/2015	ND	2.28	114	2.00	2.00	
Toluene*	<0.050	0.050	06/04/2015	ND	2.04	102	2.00	2.19	
Ethylbenzene*	<0.050	0.050	06/04/2015	ND	2.00	100	2.00	2.25	
Total Xylenes*	<0.150	0.150	06/04/2015	ND	5.85	97.5	6.00	2.69	
Total BTEX	<0.300	0.300	06/04/2015	ND					
Surrogate: 4-Bromofluorobenzene (PIL	110 %	61-154							
Chloride, SM4500CI-B	mg/	kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	06/08/2015	ND	432	108	400	3.77	
TPH 8015M	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	06/03/2015	ND	172	86.2	200	5.38	
DRO >C10-C28	<10.0	10.0	06/03/2015	ND	165	82.6	200	8.14	
Surrogate: 1-Chlorooctane	87.3 9	% 47.2-15	7						
Surrogate: 1-Chlorooctadecane	90.8 9	% 52.1-170	6						

Cardinal Laboratories

*=Accredited Analyte





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

Received:

06/02/2015

Reported:

06/30/2015

Project Name:

COTTON DRAW #113 H

Project Number:

NONE GIVEN

Project Location:

M-36-24-31

Sampling Date:

06/01/2015

Sampling Type:

Soil

Sampling Condition: Sample Received By: Cool & Intact

Jodi Henson

Sample ID: S-2 3' (H501407-09)

BTEX 8021B	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/04/2015	ND	2.28	114	2.00	2.00	
Toluene*	<0.050	0.050	06/04/2015	ND	2.04	102	2.00	2.19	
Ethylbenzene*	<0.050	0.050	06/04/2015	ND	2.00	100	2.00	2.25	
Total Xylenes*	<0.150	0.150	06/04/2015	ND	5.85	97.5	6.00	2.69	
Total BTEX	<0.300	0.300	06/04/2015	ND					
Surrogate: 4-Bromofluorobenzene (PIL	107 9	61-154							
Chloride, SM4500CI-B	mg/	kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	06/08/2015	ND	432	108	400	3.77	
TPH 8015M	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	06/03/2015	ND	172	86.2	200	5.38	
DRO >C10-C28	<10.0	10.0	06/03/2015	ND	165	82.6	200	8.14	
Surrogate: 1-Chlorooctane	79.9	% 47.2-15	7						
Surrogate: 1-Chlorooctadecane	84.15	% 52.1-17	6						

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Notes and Definitions

The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and/or S-06 matrix interference's. 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 SM4500CI-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

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Celeg & Keine



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240 (575) 393-2326, FAX (575) 393-2476

Company Name: Talonica		1			ANALYSIS REQUEST	TA
ibes		P.O. #:				
		Company: Talon				
State:	N/M Zip: 88210					
Phone #: 575-746-8768 Fax #:		Address:				
Project #: Project Owner:	DEMOS	City:				
Project Name: Lotten Draw #113 H		State: Zip:				
Project Location: M-36-24-31		#				
Sampler Name: K. Wilson		Fax #:				
FOR LAB USE ONLY	MATRIX	PRESERV. SAMPLING	K			
	RS		E,			
Lab I.D. Sample I.D.	OGE	/BASE: COOL	BI	Z		
H501407	# CO GRO WAS SOIL OIL SLUE	_	TIME			
1 5-1 0'	-	1 6/1/15	12:20//	`		
	6	1	1 47:2)		
3 3-1 2	7	1	12:24 /	1		
10-1	7		2:26 / /	1		
7 5	6	/	12:28 /	\		
6 5.2 0'	6		12:30 / 1	\		
7 5.2 1'	6		12:32	1		
	6		12:34	1		
9 5-2 3'	9		12:36 //	\		_
10 5-2 4'	6	•	12:38 //	1		
analyses. All claims discussing the second and any other causes entered you farry cause arrange weetner based in contract or for, shall be limited to the amount paid by the client for the analyses. All claims discussing these for repligences and any other causes whatsaver shall be deemed where durings made in writing and received by Cardinal within 30 days after completion of the applicable services. In no event shall Cardinal be liable for incidental or consequental damages, including without limitation, business interruptions, loss of trap, or loss of profits incurred by client, its subsidiaries.	my claim arising whether based in contract or deemed waived unless made in writing and re demed waived unless made in writing and re j without limitation, business interruptions, loss	tort, shall be limited to the amount paid by seelved by Cardinal within 30 days after considered by client s of use, or loss of profits incurred by client	the client for the mpletion of the applicable tils subsidiaries.			
Relinquished By: Phone Resi	Received By:	<u> </u>	Ħ	□ Yes □ No	Add'I Phone #:	
Timberly Wood Time!	100 miles	2 2	REMARKS:	□ TeS □ No	Add'I Fax #:	
Refinquished By:	Received By: 5					
H/I	Sunde	9				
1	Sample Condition Cook Intact	CHECKED BY:				
J. ()	□ No □ No					