HUNGRY HORSE, LLC

3709 S. Eunice HWY
P.O. Box 1058
Hobbs, NM 88241
Office: 575-393-3386
Fax: 575-391-4585
info@hungry-horse.com

DIRT WORK * ON-SITE REMEDIATION
SOIL TESTING * EXCAVATION * ELECTRICAL

10Mar16

To: Heather Patterson, New Mexico Oil Conservation Division, District II

Amber Groves, New Mexico State Land Office

Reference: Remediation Work Plan

Operator: Devon Energy Production Company

Location: Cottontail 16 St Com #1H

API: 30-015-42321

Legals: UL. O. Sec. 16, T25S, R29E

GPS: 32.1230 -103.9866

2RP-3554

Site Information

This site is located in rural Eddy County, New Mexico approximately 8.6 miles southeast of Malaga, New Mexico and five miles east of New Mexico Highway 285. The area is sparsely vegetated, very rocky, and hilly ground. The Eddy County Depth to groundwater Map indicates depth to groundwater to be 150'-175'. The New Mexico Office of the State Engineer's website list no groundwater data for this area. There are no know water wells or surface bodies of water within 1,000' of this location. This location has a site ranking score of "0".

This release of produced water and oil was due to a flow line rupture. The release was on a hillside and was contained by a "berm/wall" of the adjacent location to the east and to the south. The impacted area is an "L" shaped area off the edge of the caliche pad. The impacted area is roughly 80'x60'. A vacuum truck was used at the time of discovery to recover the free standing fluid.

Work Conducted to Date

A delineation was conducted using a backhoe. Soil samples were obtained from four sample points. Laboratory analysis was conducted for Chlorides, TPH, and BTEX. (See attached spread sheet and lab report.) Both hydrocarbons and chlorides are contaminants of concern for this release. However, lab results and field test indicate the impact to be limited to the top three feet of soil.

Remediation Proposal

With Chlorides being the primary contaminant of concern for this release, I propose to use the dig and haul method for the remediation. The impacted area at sample points #1 and #3 will be excavated to a depth of 1' BGS. The impacted area at sample point #4 will be excavated to a depth of 3' BGS. No work is required at sample point #2. Upon completion of the excavation, all impacted soil will be transported to a division approved facility for disposal. Fresh material will be used for backfill. The area will be brought back to grade and contoured to match the surrounding area.

Vernon K. Black, Hungry Horse, LLC

NM OIL CONSERVATION

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

ARTESIA DISTRICT

Form C-141 Revised August 8, 2011

FEB 1 5 2016 Submit I Copy to appropriate District Office in accordance with 19.15.29 NMAC.

RECEIVED

			Rele	ase Notific	ation	and Co	rrective Ac	ction				
NABIL	11/12	1873			(OPERAT	OR		l Report Final Report			
THOID CO	mnany D	evon Energy	Producti	on 0/37	/ C	ontact Le	onard Aguilar I	Production Assist	ant Foreman			
Address 649	88 Seven I	Rivers Hwy	Artesia, N	IM 88220	T	elephone N	io. 575.513.193	0				
Facility Nat	me Cotton	tail 16 State	Com 1H		F	acility Typ	ie Oil	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				
				Mineral	Owner	State		API No	. 30-015-42321			
Surface Ow	ner State						EACE					
					ATION	OF REI	Čounty					
Unit Letter O	Section 16	Township 25S	Range 29E	Feet from the 150		FSL	Feet from the 1950	East/West Line FEL	Eddy			
			L	atitude: 32.123	0205	Longitu	de: -103.9866	708				
				NAT	TURE (OF REL	EASE					
m cn-l	ess Caill	Produced wa	ter & oil	1112		Volume of	Release	Volume	Recovered			
Type of Release Spill Produced water & oil						The second secon	oduced water	5 BBL o	produced water			
						5 BBL oil	Hour of Occurre	nce Date and	d Hour of Discovery			
Source of R	elease Flov	v line ruptured	i			2/11/16 @	2:30 pm	2/11/16	@2:30 pm			
Was Immediate Notice Given?						If YES, T	o Whom?					
was innice	nate Ivotro		Yes [] No ☐ Not F	Required	N. STORMS	cher -OCD					
By Whom? Leonard Aguilar Production Assistant Foreman						Date and Hour 2/11/16 @ 7:58 pm						
Was a Wate	arcourse R	eached?					olume Impactin	g the Watercours	e			
was a wan	ereourse re		Yes 2	⊠ No		N/A						
If a Watero	ourse was	Impacted, De	escribe Fu	illy.* N/ A								
Describe C	ause of Pro	oblem and Re	emedial A	ction Taken.*	ctronic sul	bmersible pu	mp and closed va	lves to prevent fur	ther release. The flow line has			
A flow line been repaire	rupturea ca	tusing a spin.	Lease ope									
Describe A	rea Affect	ed and Clean	up Action	Taken.*	of produ	iced water ar	d 5 BBL of oil. T	he spill occurred	off pad in a 60' x 15' area on the ater and 5 BBL of oil. An			
A flow line	ruptured ca	ooter 16 State	Com 5H	well pad. A vacuu	um truck r	recovered ap	proximately 45 B	BL of produced w	ater and 5 BBL of oil. An			
environmen	ital agency	will be called	out for rea	nediation.								
									NAOCD rules and			
I hereby cer	rify that the	e information	given abo	ve is true and cor	nplete to t	the best of m	y knowledge and	understand that pr	rsuant to NMOCD rules and eleases which may endanger			
magulations	all operato	rs are required	1 to report	and/or the certain	II I DICE.		1 1 1177 1	Descript done not !	elieve the operator of Hability			
aublic healt	h or the en	vironment. L	he accepta	nce of a C-141 fc	port by ti	10 11111000		and to around we	ter surface water, human health			
should then	r operations	addition. NN	OCD acc	eptance of a C-14	41 report	does not relie	eve the operator of	of responsibility to	r compliance with any other			
federal, stat	te, or local	laws and/or re	gulations.				OIL CO	NSERVATIO	N DIVISION			
					=		OIL CO	/ ASER VILIO				
Signature:	Jeanet	te Barror	ν					<i>iL</i>	16			
Printed Na	me: Leanet	te Barron	8			Approved b	y Environmental	Specialist: 12	p co			
						Approval F	Date: 2 16	6 Expiration	on Date: NA			
Title: Field	d Admin Si	upport				Approval L	aic.					
F 11 A J	drace: Icen	ette.barron@	dvn.com			Conditions	of Approval:		Attached			
E-mail Ad	uress. Jean	icheman i on c										
Date:	2/15/16			575.748.1813					200-3554			
* Attach Ad	Iditional S	heets If Nec	essary						LKFJJJ			

Devon Energy Production Company-Cottontail 16 St Comm #1H















Overhead with Sample Points

Analytical Summary

Operator: Devon Energy Production Company

Location: Coattontail 16 St Com 1H

Summary of Remediation Sampling Analytical Results as Parts Per Million (PPM)

BTEX

Depth	LAB		
Surface	1,520		
3'BGS	0.868		
5' BGS	ND		
Surface	ND		
2' BGS	ND		
Surface	49		
2' BGS	1.7		
Surface	767		
2' BGS	258		
4' BGS	ND		
	Surface 3'BGS 5'BGS Surface 2'BGS Surface 2'BGS Surface 2'BGS		

Chlorides

Sample Point	Depth	LAB	Field Test	
SP #1	Surface	8,530	11,371	
	3' BGS	32	ND	
	5'BGS	64	ND	
SP #2	Surface	ND	ND	
	2' BGS	ND	ND	
SP #3	Surface	23,200	12,898	
	2' BGS	736	775	
SP #4	Surface	12,500	9,200	
	2' BGS	6,660	4,034	
	4' BGS	32	ND	

TPH

Depth	LAB
Surface	9,200/21,100
3' BGS	ND
5' BGS	ND/38
Surface	ND
2' BGS	ND
Surface	874/15,100
2' BGS	ND/156
Surface	7,490/13,500
2' BGS	4,070/12,400
4' BGS	ND
	Surface 3' BGS 5' BGS Surface 2' BGS Surface 2' BGS Surface 2' BGS



March 01, 2016

VERNON BLACK Hungry Horse Environmental P.O. Box 1058

RE: COTTONTAIL

Hobbs, NM 88240

Enclosed are the results of analyses for samples received by the laboratory on 02/24/16 8:30.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-15-7. 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 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.

Celes D. Keens

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



Hungry Horse Environmental VERNON BLACK P.O. Box 1058 Hobbs NM, 88240

Fax To:

(505) 391-4585

Received:

02/24/2016

Reported:

03/01/2016 COTTONTAIL

Project Name: Project Number:

NONE GIVEN

Project Location:

EDDY COUNTY, NM

Sampling Date:

02/23/2016

Sampling Type:

Soil

Sampling Condition: Sample Received By: ** (See Notes)

Jodi Henson

Sample ID: SP 1 SURFACE (H600409-01)

Sample ID: SP 1 SORFACE (1100 BTEX 8021B	mg/		Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
•	58.3	5.00	03/01/2016	ND	1.97	98.4	2.00	5.85	
Benzene*	501	5.00	03/01/2016	ND	1.93	96.5	2.00	6.07	
Toluene*	125	5.00	03/01/2016	ND	1.76	88.1	2.00	5.87	
Ethylbenzene*	839	15.0	03/01/2016	ND	5.37	89.5	6.00	5.48	
Total Xylenes* Total BTEX	1520	30.0	03/01/2016	ND					
Surrogate: 4-Bromofluorobenzene (PIL	109	% 73.6-14	10						
Chloride, SM4500Cl-B			Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
,	8530	16.0	02/25/2016	ND	416	104	400	7.41	
Chloride		/kg	Analyzed By: MS						S-06
TPH 8015M	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Analyte	9200	50.0	02/24/2016	ND	200	99.9	200	3.16	
GRO C6-C10			02/24/2016	ND	213	106	200	4.56	
DRO >C10-C28	21100	50.0	02/27/2010	115			-		
Surrogate: 1-Chlorooctane	286	% 35-14	7						
Surrogate: 1-Chlorooctadecane	413	% 28-17	7						

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Hungry Horse Environmental VERNON BLACK P.O. Box 1058 Hobbs NM, 88240

Fax To:

(505) 391-4585

Received:

02/24/2016

Reported:

03/01/2016 COTTONTAIL

Project Name: Project Number:

NONE GIVEN

Project Location:

EDDY COUNTY, NM

Sampling Date:

02/23/2016

Sampling Type:

Soil

Sampling Condition:

** (See Notes)

Sample Received By:

Jodi Henson

Sample ID: SP 1 3' (H600409-02)

BTEX 8021B	mg/	'kg	Analyzed	By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
	< 0.050	0.050	02/25/2016	ND	1.97	98.4	2.00	5.85	
Benzene*	0.223	0.050	02/25/2016	ND	1.93	96.5	2.00	6.07	
Toluene*		0.050	02/25/2016	ND	1.76	88.1	2.00	5.87	
Ethylbenzene*	0.151 0.493	0.150	02/25/2016	ND	5.37	89.5	6.00	5.48	
Total Xylenes* Total BTEX	0.868	0.300	02/25/2016	ND					
Surrogate: 4-Bromofluorobenzene (PIL	98.9	% 73.6-14	10						
hloride, SM4500Cl-B mg/kg			Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	02/25/2016	ND	416	104	400	7.41	
TPH 8015M	mg	/kg	Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
	<10.0	10.0	02/24/2016	ND	200	99.9	200	3.16	
GRO C6-C10 DRO >C10-C28	<10.0	10.0	02/24/2016	ND	213	106	200	4.56	
Surrogate: 1-Chlorooctane	90.3	35-14	7	-					
Surrogate: 1-Chlorooctadecane	98.4	1% 28-17	1						

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Surrogate: 1-Chlorooctadecane

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Hungry Horse Environmental VERNON BLACK P.O. Box 1058 Hobbs NM, 88240

Fax To:

(505) 391-4585

Received:

02/24/2016

Reported:

03/01/2016

Project Name: Project Number: COTTONTAIL NONE GIVEN

Project Location:

EDDY COUNTY, NM

Sampling Date:

02/23/2016

Sampling Type:

Soil

Sampling Condition:

** (See Notes)

Sample Received By:

Jodi Henson

Sample ID: SP 1 5' (H600409-03)

0 3) mg/	kg	Analyzed	By: MS						
Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
< 0.050	0.050	02/25/2016	ND	1.97	98.4	2.00	5.85		
	0.050	02/25/2016	ND	1.93	96.5	2.00	6.07		
		02/25/2016	ND	1.76	88.1	2.00	5.87		
	0.150	02/25/2016	ND	5.37	89.5	6.00	5.48		
<0.300	0.300	02/25/2016	ND						
98.7	% 73.6-14	0							
hloride, SM4500Cl-B mg/kg			Analyzed By: AP						
Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifie	
64.0	16.0	02/25/2016	ND	416	104	400	7.41		
mg,	/kg	Analyze	d By: MS						
	Reporting Limit	Analyze Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifie	
Result				BS 200	% Recovery	True Value QC 200	RPD 3.16	Qualifie	
	Result <0.050 <0.050 <0.050 <0.150 <0.300 <0.300 Result	<0.050 0.050 <0.050 0.050 <0.050 0.050 <0.150 0.150 <0.300 0.300 98.7 % 73.6-14 mg/kg Result Reporting Limit	Result Reporting Limit Analyzed <0.050	Result Reporting Limit Analyzed Method Blank <0.050	Result Reporting Limit Analyzed Method Blank BS <0.050	Result Reporting Limit Analyzed Method Blank BS % Recovery <0.050	Result Reporting Limit Analyzed Method Blank BS % Recovery True Value QC <0.050	<td>Result Reporting Limit Analyzed Method Blank BS % Recovery True Value QC RPD <0.050</td> 0.050 02/25/2016 ND 1.97 98.4 2.00 5.85 <0.050	Result Reporting Limit Analyzed Method Blank BS % Recovery True Value QC RPD <0.050

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Hungry Horse Environmental VERNON BLACK P.O. Box 1058 Hobbs NM, 88240

Fax To:

(505) 391-4585

Received:

02/24/2016

Reported:

03/01/2016

Project Name: Project Number: COTTONTAIL NONE GIVEN

Project Location:

EDDY COUNTY, NM

Sampling Date:

02/23/2016

Sampling Type:

Soil

Sampling Condition:

** (See Notes)

Sample Received By:

Jodi Henson

Sample ID: SP 2 SURFACE (H600409-04)

Sample ID: SP 2 SURFACE (Hot BTEX 8021B	mg/		Analyze	By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
,	< 0.050	0.050	02/25/2016	ND	1.97	98.4	2.00	5.85	
Benzene*	0.112	0.050	02/25/2016	ND	1.93	96.5	2.00	6.07	
Toluene*	< 0.050	0.050	02/25/2016	ND	1.76	88.1	2.00	5.87	
Ethylbenzene*	<0.150	0.150	02/25/2016	ND	5.37	89.5	6.00	5.48	
Total Xylenes* Total BTEX	<0.300	0.300	02/25/2016	ND					
Surrogate: 4-Bromofluorobenzene (PIL	98.2	% 73.6-14							
Chloride, SM4500Cl-B mg/kg		kg	Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifie
,	<16.0	16.0	02/25/2016	ND	416	104	400	7.41	
Chloride	mg,	/ka	Analyze	ed By: MS					
TPH 8015M	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifie
Analyte		10.0	02/24/2016	ND	200	99.9	200	3.16	
GRO C6-C10	<10.0		02/24/2016	ND	213	106	200	4.56	
DRO >C10-C28	<10.0	10.0	02/24/2010	,,,,					
Surrogate: 1-Chlorooctane	102	% 35-14	7						
Surrogate: 1-Chlorooctadecane	95.8	% 28-17	1						

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Hungry Horse Environmental **VERNON BLACK** P.O. Box 1058 Hobbs NM, 88240

Fax To:

(505) 391-4585

Received: Reported: 02/24/2016

03/01/2016

Project Name: Project Number: COTTONTAIL NONE GIVEN

Project Location:

EDDY COUNTY, NM

Sampling Date:

02/23/2016

Sampling Type:

Soil

Sampling Condition: Sample Received By: ** (See Notes)

Jodi Henson

Sample ID: SP 2 2' (H600409-05)

STEX 8021B	mg/	kg	Analyzed	By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
*	< 0.050	0.050	02/25/2016	ND	1.97	98.4	2.00	5.85	
Benzene* Toluene*	0.066	0.050	02/25/2016	ND	1.93	96.5	2.00	6.07	
Ethylbenzene*	< 0.050	0.050	02/25/2016	ND	1.76	88.1	2.00	5.87	
Total Xylenes*	<0.150	0.150	02/25/2016	ND	5.37	89.5	6.00	5.48	
Total BTEX	<0.300	0.300	02/25/2016	ND					
Surrogate: 4-Bromofluorobenzene (PIL	98.5	% 73.6-14	10						
Chloride, SM4500CI-B	mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	02/25/2016	ND	416	104	400	7.41	
	mg	/ka	Analyze	ed By: MS					
TPH 8015M Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
,	<10.0	10.0	02/24/2016	ND	200	99.9	200	3.16	
GRO C6-C10 DRO >C10-C28	<10.0	10.0	02/24/2016	ND	213	106	200	4.56	
Surrogate: 1-Chlorooctane	92.5	% 35-14	7						
Surrogate: 1-Chlorooctadecane	103	% 28-17	1						

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Hungry Horse Environmental VERNON BLACK P.O. Box 1058 Hobbs NM, 88240

Fax To:

(505) 391-4585

Received: Reported: 02/24/2016

03/01/2016

Project Name: Project Number: COTTONTAIL NONE GIVEN

Project Location:

EDDY COUNTY, NM

Sampling Date:

02/23/2016

Sampling Type:

Sampling Condition: Sample Received By: ** (See Notes)

Jodi Henson

Sample ID: SP 3 SURFACE (H600409-06)

Sample ID: SP 3 SURFAC BTEX 8021B	mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Anaiyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifie
Benzene*	0.857	0.500	02/25/2016	ND	1.97	98.4	2.00	5.85	
Toluene*	9.94	0.500	02/25/2016	ND	1.93	96.5	2.00	6.07	
The state of the s	4,36	0.500	02/25/2016	ND	1.76	88.1	2.00	5.87	
Ethylbenzene* Total Xylenes*	33.4	1.50	02/25/2016	ND	5.37	89.5	6.00	5.48	
Total BTEX	48.6	3.00	02/25/2016	ND					

Surrogate: 4-Bromofluorobenzene (PIL	103 9	% 73.6-140)						
Chloride, SM4500Cl-B	mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
	23200	16.0	02/25/2016	ND	416	104	400	7.41	
Chloride				d By: MS					S-06
TPH 8015M	mg/kg		Allalyzed Byl 110						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
	874	50.0	02/24/2016	ND	200	99.9	200	3.16	
GRO C6-C10	J	= 0.15	(2) A		242	106	200	4.56	
DRO >C10-C28	15100	50.0	02/24/2016	ND	213	106	200	1.50	

Surrogate: 1-Chlorooctane	203 %	35-147
Surrogate: 1-Chlorooctadecane	381 %	28-171

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Celly theme



Hungry Horse Environmental VERNON BLACK P.O. Box 1058 Hobbs NM, 88240

Fax To:

(505) 391-4585

Received:

02/24/2016

Reported:

03/01/2016

Project Name: Project Number: COTTONTAIL NONE GIVEN

Project Location:

EDDY COUNTY, NM

Sampling Date:

02/23/2016

Sampling Type:

Soil

Sampling Condition: Sample Received By: ** (See Notes)

Jodi Henson

Sample ID: SP 3 2' (H600409-07)

Sample 1D: 5P 3 2 (11000405-0	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	0.180	0.050	02/25/2016	ND	1.94	97.1	2.00	1.27	
Toluene*	0.643	0.050	02/25/2016	ND	1.90	95.2	2.00	1.75	
Ethylbenzene*	0.113	0.050	02/25/2016	ND	1.74	87.0	2.00	1.71	
Total Xylenes*	0.748	0.150	02/25/2016	ND	5.33	88.8	6.00	1.06	
Total BTEX	1.68	0.300	02/25/2016	ND					
Surrogate: 4-Bromofluorobenzene (PIC	98.6	% 73.6-14	70						
Chloride, SM4500Cl-B	mg/	kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	736	16.0	02/25/2016	ND	416	104	400	7.41	
TPH 8015M	mg,	/kg	Analyze	ed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifie
Posterior Visionia	<10.0	10.0	02/24/2016	ND	200	99.9	200	3.16	
GRO C6-C10 DRO >C10-C28	156	10.0	02/24/2016	ND	213	106	200	4.56	
Surrogate 1-Chlorooctane	101	% 35-14	7						
Surrogate: 1-Chlorooctadecane	109	% 28-17	I						

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Hungry Horse Environmental **VERNON BLACK** P.O. Box 1058 Hobbs NM, 88240

Fax To:

(505) 391-4585

Received:

02/24/2016

03/01/2016

Reported: Project Name:

COTTONTAIL

Project Number: Project Location: NONE GIVEN

EDDY COUNTY, NM

Sampling Date:

02/23/2016

Sampling Type:

Soil

200

106

4.56

Sampling Condition: Sample Received By: ** (See Notes)

Jodi Henson

Sample ID: SP 4 SURFACE (H600409-08)

BTEX 8021B	mg/		Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
	30.8	5.00	02/25/2016	ND	1.94	97.1	2.00	1.27	
Benzene*	273	5.00	02/25/2016	ND	1.90	95.2	2.00	1.75	
Toluene*	59.1	5.00	02/25/2016	ND	1.74	87.0	2.00	1.71	
Ethylbenzene* Total Xylenes*	404	15.0	02/25/2016	ND	5.33	88.8	6.00	1.06	
Total BTEX	767	30.0	02/25/2016	ND					
Surrogate: 4-Bromofluorobenzene (PIE	102	% 73.6-14	10						
Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	12500	16.0	02/25/2016	ND	416	104	400	7.41	
		/kg	Analyze	ed By: MS		17			S-06
TPH 8015M Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
·	7490	50.0	02/24/2016	ND	200	99.9	200	3.16	
GRO C6-C10	, 450	2010				106	200	4 56	

02/24/2016

50.0

ND

213

35-147 Surrogate: 1-Chlorooctane 231 % 283 % 28-171 Surrogate: 1-Chlorooctadecane

13500

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DRO >C10-C28

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Celego Freeno



Hungry Horse Environmental VERNON BLACK P.O. Box 1058 Hobbs NM, 88240

Fax To:

(505) 391-4585

Received:

02/24/2016

Reported:

03/01/2016 COTTONTAIL

Project Name: Project Number:

NONE GIVEN

Project Location:

EDDY COUNTY, NM

Sampling Date:

02/23/2016

Sampling Type:

Soil

Sampling Condition: Sample Received By: ** (See Notes)

Jodi Henson

Sample ID: SP 4 2' (H600409-09)

Sample ID: SP 4 2' (H6004' BTEX 8021B	mg	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifie
	6.96	2.00	02/25/2016	ND	1.94	97.1	2.00	1.27	
Benzene*		2.00	02/25/2016	ND	1.90	95.2	2.00	1.75	
Toluene*	78.6			ND	1.74	87.0	2,00	1.71	
Ethylbenzene*	21.7	2.00	02/25/2016	ND			5.00	1.06	
Total Xylenes*	151	6.00	02/25/2016	ND	5.33	88.8	6.00	1.06	
Total BTEX	258	12.0	02/25/2016	ND					

Cagata:	4-Bromofluorobenzene	(PIL
Surrognie	4-1)101110111101000112011	1 1 1

104%

73.6-140

Surrogate: 4-Bromofinorobenzene (1 112	107	,2.0							
Chloride, SM4500CI-B	mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
,	6660	16.0	02/25/2016	ND	416	104	400	7.41	
Chloride	mg/kg		Analyzed By: MS			10 marks		S-06	
TPH 8015M	mg	/ kg	Andryze						0 1:6:
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifie
5. 300	4070	50.0	02/24/2016	ND	200	99.9	200	3.16	
GRO C6-C10	10.0			ND	213	106	200	4.56	
DRO >C10-C28	12400	50.0	02/24/2016	ND	213	100	200		

Surrogate: 1-Chlorooctane

203 %

35-147

Surrogate: 1-Chlorooctadecane

284 %

28-171

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Hungry Horse Environmental VERNON BLACK P.O. Box 1058 Hobbs NM, 88240

Fax To:

(505) 391-4585

Received:

02/24/2016

Reported:

03/01/2016

Project Name: Project Number: COTTONTAIL NONE GIVEN

Project Location:

EDDY COUNTY, NM

Sampling Date:

02/23/2016

Sampling Type:

Soil

Sampling Condition: Sample Received By: ** (See Notes)

Jodi Henson

Sample ID: SP 4 4' (H600409-10)

Sample ID: SP 4 4' (H600409-1 BTEX 8021B	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
	<0.050	0.050	02/25/2016	ND	1.94	97.1	2.00	1.27	
Benzene* Toluene*	0.215	0.050	02/25/2016	ND	1.90	95.2	2.00	1.75	
Ethylbenzene*	< 0.050	0.050	02/25/2016	ND	1.74	87.0	2.00	1.71	
Total Xylenes*	<0.150	0.150	02/25/2016	ND	5.33	88.8	6.00	1.06	
Total BTEX	<0.300	0.300	02/25/2016	ND					
Surrogate: 4-Bromofluorobenzene (PIE	98.8	% 73.6-14	0						
Chloride, SM4500Cl-B	mg,	′kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifie
Chloride	32.0	16.0	02/25/2016	ND	416	104	400	7.41	
TPH 8015M	mg	/kg	Analyze	ed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifie
	<10.0	10.0	02/25/2016	ND	208	104	200	3.32	
GRO C6-C10 DRO >C10-C28	<10.0	10.0	02/25/2016	ND	224	112	200	3.37	
Surrogate: 1-Chlorooctane	97.3	% 35-14	7						
Surrogate: 1-Chlorooctadecane	80.3	% 28-17	I						

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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.
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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CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

ANALYSIS REQUEST			SS No Add'l Phone #:
02.7.1.10	P.O. #: Company: Attn: Address: City: State: City: Phone #: Fax #: Fax #: Fax #:		weather innered in South and the state and the state of the special stat
101 East Marland, Hobbs, NM 88240	Company Name: Hunger Hose LLC Address: State: Williams: 8834 City: Holbs Fax#: 575 391 45 85 Phone #: Froject Owner: Devow Project Location: Cotton to Project Owner: Devow Project Location: Cotton to Project Owner: Devow Project Location: Cotton to Project Owner: Devow Project Name: Cotton	9	equates by we also there are start as the content convert conv