HUNGRY HORSE, LLC

**DIRT WORK \* ON-SITE REMEDIATION** 

SOIL TESTING \* EXCAVATION \* ELECTRICAL

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

Per NMOCD Jamie Keyes APPROVED 9/9/2016

To: Jamie Keyes, New Mexico Oil Conservation Division, District 1 Amber Groves, New Mexico State Land Office
Reference: Remediation Work Plan
Operator: Cambrian Management (Grand Banks Energy)
Location: Anderson Ranch Unit #16
API: 30-025-00368
Legals: UL. T, Sec. 2, T16S, R32E, Lea County, New Mexico
GPS: 32.94874, -103.74364

# Site Information

26Aug16

This site is located in rural Lea County, New Mexico approximately .9 miles northeast of the intersection of Mendel and Patterson Roads and approximately 5 miles north of Highway 82. The area consist of gentle rolling hills and is vegetated with various range grasses and mesquite bushes. Based upon information from the New Mexico's Office of the State Engineer, depth to ground water is 250'. There are no know water wells and no surface bodies of water within 1000' of this location. Thus, this site is assigned a Site Ranking Score of "0".

# Work Conducted to Date

Immediate upon discovery of the release, vacuum trucks were summoned to begin recovery of all free standing fluids along with roustabouts to steam clean the tanks and liner of the battery. Simultaneously, earth moving equipment was dispatched to the site to start remedial action. Due to the threat of incoming rains, excavation work of the impacted areas continued for the next three days. All impacted soils was transported to a division approved disposal facility.

Soil samples were obtained from three sample points on the pad and from four sample points in the pasture. (See attached lab analysis and corresponding sketch.) Lab results indicate closure limits have been reached for all sample points except for Sample Points #1 and #2 in the pasture. These two sample points are adjacent to the east wall of the battery which is the point of release into the pasture from the bermed location.

# **Remediation Proposal**

I propose to continue the dig and haul operation at Sample Points 1-2 (in the pasture) until lab analysis indicates TPH levels have dropped to 5000ppm or less. At which point the lab analysis will be presented to NM OCD seeking closure. All impacted soil will be transported to a division approved facility for disposal. Please see the attached Revegetation Plan for proposed surface restoration.

Venon K. Black, Hungry Horse, LLC

State of New Mexico Energy Minerals and Natural Resources

Form C-141 Revised August 8, 2011

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe. NM 87505 Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

1220 S. St. Fra	ncis Dr., Santa	a Fe, NM 8750	5	S	anta F	Fe, NM 875	505						
			Rele	ease Notifi	catio	n and Co	orrective A	ction	New York New York				
						OPERA	TOR		X Initi	al Report		Final Report	
Name of C	ompany C	irand Banks	Energy				Denise Jones					<u>r indi riciport</u>	
				and, TX 79705		Telephone No. 432-620-9181							
Facility Na	me Anders	son Ranach	Unit # 16			Facility Type Disposal							
							•						
Surface Ov	vner			Mineral (	Owner	API No. 30-025-00368							
1				IOC	ATIO	N OF RE	FASE						
Unit Letter T	Section 2	Township 16S	Range 32E	Feet from the 1980	North	h/South Line uth	Feet from the 660	East/W West	Vest Line	County Lea			
L			La	titude 32.9489	9403	Longitue	le -103.74353	79		I			
				_		OF REL							
Type of Rele	ease Spill o	of oil and wate	er	IVIKE	UIN		Release 2000 bi	bls	Volume F	Recovered	10 bb	ls oil	
		Water Tank	1999 A.			Date and F	lour of Occurrenc	and the second se		Hour of Dis			
Was Immedi	inte Notina G	ivan <sup>9</sup>				8/10/16			8/10/16	2:00PM			
was minicul	late Notice C		Yes 🗌	No 🗌 Not Re	quired	If YES, To Jamie Key							
By Whom?	Denise Jon	es				Date and Hour 08/10/16 3:00PM							
Was a Water							lume Impacting t						
			Yes X	No									
li a Waterco	urse was Imp	bacted, Descr	be Fully.*										
		m and Reme he pump off		Taken.*	on thus	causing the ta	anks to overflow	T (Trees					
		nd Cleanup A Oil was reco			contan	ninated soil. H	lungry Horse Env	/ironmen	atal is work	ing on the c	lean-u	ıp.	
regulations a public health should their of	Il operators a or the enviro operations ha nment. In ad	are required to conment. The twe failed to a ldition, NMO	o report an acceptance dequately CD accept	d/or file certain re e of a C-141 repo investigate and re	elease r ort by th emediat	notifications ar ne NMOCD mate contamination	knowledge and un ad perform correct arked as "Final Re on that pose a thre e the operator of r	tive action eport" do eat to gro	ons for rele bes not relia ound water.	eases which a eve the opera , surface wat	may er ator of ter, hu	ndanger f liability Iman health	
		~		- Annuel Surgers and			OIL CONS	SERV	ATION	DIVISIO	N		
Signature:	Denie	u Jon	2			Approved by	Environmental Sp	pecialist:					
Printed Name	e: Denise Jo	ones	- 14 vic. 4							*****			
Title: Regu	latory Analy	st		****		Approval Dat	e:	E	xpiration I	Date:			
E-mail Addre	ess: djones/d	cambrianmg	mt.com			Conditions of	Approval:			Attached			
Date: 08/10/	16	Ph	one: 432-0	520-9181									

\* Attach Additional Sheets If Necessary



# 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)	(quar					IE 3=SW	,	3 UTM in meters)		(In fee	t)
POD Number	POD Sub- Code basin C	County	Q Q 64 16			Tws	Rng	х	Y			Water Column
L 02467	L	LE	1	4	02	16S	32E	618250	3646322* 🌍	328	275	53
L 02617	L	LE	4	4	02	16S	32E	618656	3645924* 🌍	322	270	52
L 03631	L	LE	1	2	02	16S	32E	618240	3647126* 🌍	315	250	65
L 08241	L	LE	4	4	02	16S	32E	618656	3645924* 🍚	316		
									Average Depth to	Water:	265 f	eet
									Minimun	Depth:	250 f	eet
									Maximum	Depth:	275 f	eet
Record Count: 4												

# PLSS Search:

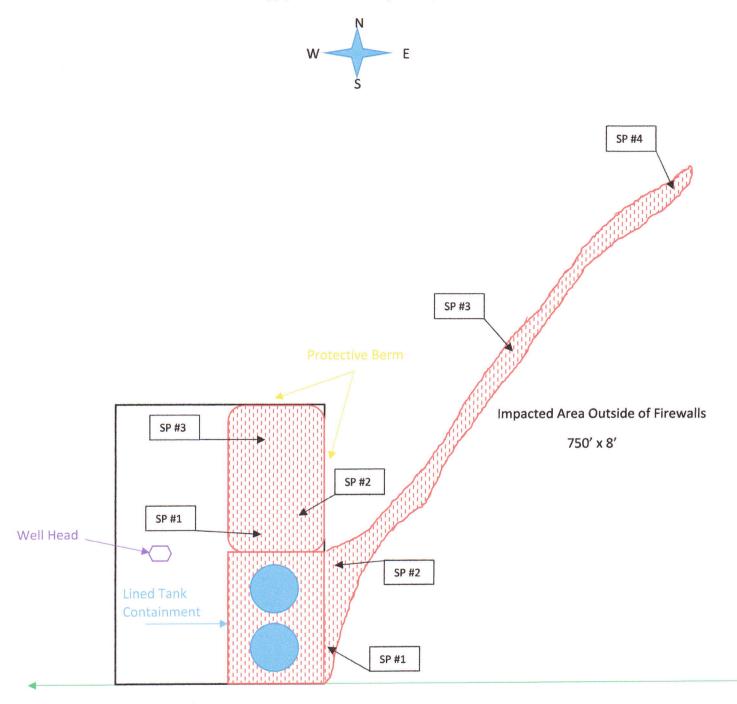
Section(s): 2

Township: 16S

Range: 32E

\*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.



Indicates Impacted AreaNote: Drawing is Not to Scale













# Cambrian Management (Grand Banks Energy) – Anderson Ranch Unit #16









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

Date: 26Aug16

To: Amber Groves, New Mexico State Land Office Reference: Revegetation Plan Operator: Cambrian Management (Grand Banks Energy) Location: Anderson Ranch Unit #16 API: 30-025-00368 Legals: UL. T, Sec. 2, T16S, R32E, Lea County New Mexico GPS: 32.94874, -103.74364

Upon completion of the remediation activities, the following plan to revegetate the impacted area is proposed.

Seed Mix - BLM #3

Seeding Rate/Acre - 7 lbs per acre

Method of Dispersal - Broadcast

Timing of Dispersal - September

Follow-up Monitoring-1 year

**Re-Seeding Plan**-If the initial seeding of the impacted areas does not achieve acceptable native plant cover and diversity, the areas will be disked/tilled and re-seeded.

**Noxious Weed Control-**If, in the event of monitoring, noxious weeds are determined to be present, the identified species will be target sprayed with an approved environmentally friendly herbicide. If practical, the identified species will be removed by hand and properly disposed of.

Vernon K. Black, Hungry Horse, LLC



August 25, 2016

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

RE: ANDERSON RANCH UNIT #16

Enclosed are the results of analyses for samples received by the laboratory on 08/18/16 13:40.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-16-8. 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 <a href="https://www.tceq.texas.gov/field/ga/lab\_accred\_certif.html">www.tceq.texas.gov/field/ga/lab\_accred\_certif.html</a>.

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.

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. Keine

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:	08/18/2016	Sampling Date:	08/18/2016
Reported:	08/25/2016	Sampling Type:	Soil
Project Name:	ANDERSON RANCH UNIT #16	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	LEA COUNTY, NM		

#### Sample ID: SP #1 1' BGS ON PAD (H601864-01)

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	08/20/2016	ND	2.34	117	2.00	0.544	
Toluene*	0.075	0.050	08/20/2016	ND	2.38	119	2.00	0.515	
Ethylbenzene*	0.289	0.050	08/20/2016	ND	2.27	113	2.00	0.249	
Total Xylenes*	0.350	0.150	08/20/2016	ND	6.88	115	6.00	0.246	
Total BTEX	0.714	0.300	08/20/2016	ND					
Surrogate: 4-Bromofluorobenzene (PID	108 9	% 73.6-14	0						
Chloride, SM4500Cl-B	mg/	′kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	112	16.0	08/23/2016	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	08/19/2016	ND	218	109	200	1.61	
DRO >C10-C28	71.0	50.0	08/19/2016	ND	234	117	200	1.50	
Surrogate: 1-Chlorooctane	78.1	% 35-147	7						
Surrogate: 1-Chlorooctadecane	105 9	28-171	!						

#### Cardinal Laboratories

\*=Accredited Analyte

Celeg D. Keine

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:	08/18/2016	Sampling Date:	08/18/2016
Reported:	08/25/2016	Sampling Type:	Soil
Project Name:	ANDERSON RANCH UNIT #16	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	LEA COUNTY, NM		

#### Sample ID: SP #2 1' BGS ON PAD (H601864-02)

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	08/20/2016	ND	2.34	117	2.00	0.544	
Toluene*	<0.050	0.050	08/20/2016	ND	2.38	119	2.00	0.515	
Ethylbenzene*	0.099	0.050	08/20/2016	ND	2.27	113	2.00	0.249	
Total Xylenes*	0.362	0.150	08/20/2016	ND	6.88	115	6.00	0.246	
Total BTEX	0.461	0.300	08/20/2016	ND					
Surrogate: 4-Bromofluorobenzene (PID	112 9	% 73.6-14	0						
Chloride, SM4500Cl-B	mg/	′kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	592	16.0	08/19/2016	ND	448	112	400	3.64	
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	08/19/2016	ND	214	107	200	2.60	
DRO >C10-C28	1120	50.0	08/19/2016	ND	230	115	200	4.12	
Surrogate: 1-Chlorooctane	76.9	% 35-147	7						
Surrogate: 1-Chlorooctadecane	97.0	% 28-171							

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Received:	08/18/2016	Sampling Date:	08/18/2016
Reported:	08/25/2016	Sampling Type:	Soil
Project Name:	ANDERSON RANCH UNIT #16	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	LEA COUNTY, NM		

#### Sample ID: SP #3 1' BGS ON PAD (H601864-03)

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	08/20/2016	ND	2.34	117	2.00	0.544	
Toluene*	0.264	0.050	08/20/2016	ND	2.38	119	2.00	0.515	
Ethylbenzene*	1.03	0.050	08/20/2016	ND	2.27	113	2.00	0.249	
Total Xylenes*	1.87	0.150	08/20/2016	ND	6.88	115	6.00	0.246	
Total BTEX	3.16	0.300	08/20/2016	ND					
Surrogate: 4-Bromofluorobenzene (PID	128	% 73.6-14	0						
Chloride, SM4500Cl-B	mg/	′kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	832	16.0	08/19/2016	ND	448	112	400	3.64	
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	61.9	50.0	08/19/2016	ND	214	107	200	2.60	
DRO >C10-C28	1790	50.0	08/19/2016	ND	230	115	200	4.12	
Surrogate: 1-Chlorooctane	81.1	% 35-147	7						
Surrogate: 1-Chlorooctadecane	108	28-171							

#### **Cardinal Laboratories**

#### \*=Accredited Analyte

Celeg D. Keine

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:	08/18/2016	Sampling Date:	08/18/2016
Reported:	08/25/2016	Sampling Type:	Soil
Project Name:	ANDERSON RANCH UNIT #16	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	LEA COUNTY, NM		

#### Sample ID: SP #1 1.5' BGS RUNOFF IN PASTURE (H601864-04)

BTEX 8021B	mg	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<1.00	1.00	08/20/2016	ND	2.34	117	2.00	0.544	
Toluene*	6.72	1.00	08/20/2016	ND	2.38	119	2.00	0.515	
Ethylbenzene*	41.8	1.00	08/20/2016	ND	2.27	113	2.00	0.249	
Total Xylenes*	57.0	3.00	08/20/2016	ND	6.88	115	6.00	0.246	
Total BTEX	106	6.00	08/20/2016	ND					
Surrogate: 4-Bromofluorobenzene (PID	119	% 73.6-14	0						
Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	544	16.0	08/19/2016	ND	448	112	400	3.64	
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	1690	100	08/19/2016	ND	214	107	200	2.60	
DRO >C10-C28	12400	100	08/19/2016	ND	230	115	200	4.12	
Surrogate: 1-Chlorooctane	362	% 35-147	7						
Surrogate: 1-Chlorooctadecane	250	% 28-171							

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Celey D. Keene, Lab Director/Quality Manager



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Received:	08/18/2016	Sampling Date:	08/18/2016
Reported:	08/25/2016	Sampling Type:	Soil
Project Name:	ANDERSON RANCH UNIT #16	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	LEA COUNTY, NM		

#### Sample ID: SP #2 1.5' BGS RUNOFF IN PASTURE (H601864-05)

BTEX 8021B	mg/	/kg	Analyze	d By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.500	0.500	08/20/2016	ND	2.34	117	2.00	0.544		
Toluene*	8.89	0.500	08/20/2016	ND	2.38	119	2.00	0.515		
Ethylbenzene*	29.0	0.500	08/20/2016	ND	2.27	113	2.00	0.249		
Total Xylenes*	31.1	1.50	08/20/2016	ND	6.88	115	6.00	0.246		
Total BTEX	68.9	3.00	08/20/2016	ND						
Surrogate: 4-Bromofluorobenzene (PID	126	% 73.6-14	0							
Chloride, SM4500Cl-B	mg,	/kg	Analyzed By: AC							
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	496	16.0	08/19/2016	ND	448	112	400	3.64		
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	823	100	08/19/2016	ND	214	107	200	2.60	2.60	
DRO >C10-C28	<b>6720</b> 100		08/19/2016	ND	230	115	200	4.12		
Surrogate: 1-Chlorooctane 177 % 35-147		,								
Surrogate: 1-Chlorooctadecane	176	% 28-171								

#### **Cardinal Laboratories**

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Celey D. Keene, Lab Director/Quality Manager



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Received:	08/18/2016	Sampling Date:	08/18/2016
Reported:	08/25/2016	Sampling Type:	Soil
Project Name:	ANDERSON RANCH UNIT #16	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	LEA COUNTY, NM		

#### Sample ID: SP #3 1' BGS RUNOFF IN PASTURE (H601864-06)

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	08/20/2016	ND	2.34	117	2.00	0.544	
Toluene*	<0.050	0.050	08/20/2016	ND	2.38	119	2.00	0.515	
Ethylbenzene*	0.098	0.050	08/20/2016	ND	2.27	113	2.00	0.249	
Total Xylenes*	<0.150	0.150	08/20/2016	ND	6.88	115	6.00	0.246	
Total BTEX	<0.300	0.300	08/20/2016	ND					
Surrogate: 4-Bromofluorobenzene (PID	107 9	% 73.6-14	0						
Chloride, SM4500Cl-B	mg/kg		Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	208	16.0	08/19/2016	ND	448	112	400	3.64	
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	08/19/2016	ND	214	107	200	2.60	
DRO >C10-C28	150	10.0	08/19/2016	ND	230	115	200	4.12	
Surrogate: 1-Chlorooctane 94.8 % 35-147			,						
Surrogate: 1-Chlorooctadecane	101 9	% 28-171							

#### Cardinal Laboratories

\*=Accredited Analyte

Celeg D. Keine

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:	08/18/2016	Sampling Date:	08/18/2016
Reported:	08/25/2016	Sampling Type:	Soil
Project Name:	ANDERSON RANCH UNIT #16	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	LEA COUNTY, NM		

#### Sample ID: SP #4 1' BGS RUNOFF IN PASTURE (H601864-07)

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	08/21/2016	ND	2.34	117	2.00	0.544	
Toluene*	<0.050	0.050	08/21/2016	ND	2.38	119	2.00	0.515	
Ethylbenzene*	<0.050	0.050	08/21/2016	ND	2.27	113	2.00	0.249	
Total Xylenes*	<0.150	0.150	08/21/2016	ND	6.88	115	6.00	0.246	
Total BTEX	<0.300	0.300	08/21/2016	ND					
Surrogate: 4-Bromofluorobenzene (PID	109 9	73.6-14	0						
Chloride, SM4500Cl-B	mg/	kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	08/19/2016	ND	448	112	400	3.64	
TPH 8015M									
	mg/	kg	Analyze	d By: MS					
Analyte	mg/ Result	kg Reporting Limit	Analyze Analyzed	d By: MS Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
		-	-	-	BS 214	% Recovery 107	True Value QC 200	RPD 2.60	Qualifier
Analyte	Result	Reporting Limit	Analyzed	Method Blank		,	c		Qualifier
Analyte GRO C6-C10	Result	Reporting Limit 50.0 50.0	Analyzed 08/19/2016 08/19/2016	Method Blank	214	107	200	2.60	Qualifier

#### **Cardinal Laboratories**

\*=Accredited Analyte

Celeg D. Keine

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.
QR-03	The RPD value for the sample duplicate or MS/MSD was outside if QC acceptance limits due to matrix interference. QC batch accepted based on LCS and/or LCSD recovery and/or RPD values.
QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

#### **Cardinal Laboratories**

#### \*=Accredited Analyte

Celey D. Keine

Celey D. Keene, Lab Director/Quality Manager

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vitten changes to 505-393 2476	Sample Condition CHECKER BY: Cool Intact: Yes PYes No No No	Received By:	JULIAR Phone Result: Yes No Fax Result: Yes No REMARKS: Yes No	anising whether based in contract or tort, shall be limited to the annount paid by the client for the www.ord unless mode in writing and received by Cardinal within 30 days after completion of the applicable limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, regardless of whether such claim is based recorn or it.	X istayle 1045 / / /		# CON GROUN WASTE SOIL OIL SLUDGI OTHER ACID/BA ICE / CC OTHER Not Not UCE / CC	TAINERS NDWATER WATER E SE: DOL	MATRIX PRESERV. SAMPLING	Phone #: Fax #:	State: Zip:	585h-1	Zip: 8824 Attn:	P.O. #:	BILL TO		S	F
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