



August 30, 2016

VERNON BLACK

Hungry Horse Environmental

P.O. Box 1058

Hobbs, NM 88240

RE: SNAPPING 2 STATE #1HY

Enclosed are the results of analyses for samples received by the laboratory on 08/23/16 15:10.

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 [www.tceq.texas.gov/field/qa/lab\\_accred\\_certif.html](http://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,

A handwritten signature in black ink that reads "Celey D. Keene".

Celey D. Keene

Lab Director/Quality Manager

**Analytical Results For:**

 Hungry Horse Environmental  
 VERNON BLACK  
 P.O. Box 1058  
 Hobbs NM, 88240  
 Fax To: (505) 391-4585

Received:	08/23/2016	Sampling Date:	08/23/2016
Reported:	08/30/2016	Sampling Type:	Soil
Project Name:	SNAPPING 2 STATE #1HY	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	EDDY COUNTY, NM		

**Sample ID: SP 1 @ SURFACE (H601890-01)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>7040</b>	16.0	08/24/2016	ND	416	104	400	3.92	QM-07

**Sample ID: SP 2 @ SURFACE (H601890-02)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>2040</b>	16.0	08/24/2016	ND	416	104	400	3.92	

**Sample ID: SP 3 @ SURFACE (H601890-03)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>1410</b>	16.0	08/24/2016	ND	416	104	400	3.92	

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

 Hungry Horse Environmental  
 VERNON BLACK  
 P.O. Box 1058  
 Hobbs NM, 88240  
 Fax To: (505) 391-4585

Received:	08/23/2016	Sampling Date:	08/23/2016
Reported:	08/30/2016	Sampling Type:	Soil
Project Name:	SNAPPING 2 STATE #1HY	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	EDDY COUNTY, NM		

**Sample ID: SP 1 @ 1' (H601890-04)**

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/25/2016	ND	2.29	115	2.00	0.411	
Toluene*	<0.050	0.050	08/25/2016	ND	2.34	117	2.00	0.253	
Ethylbenzene*	<0.050	0.050	08/25/2016	ND	2.24	112	2.00	0.280	
Total Xylenes*	<0.150	0.150	08/25/2016	ND	6.80	113	6.00	0.295	
Total BTEX	<0.300	0.300	08/25/2016	ND					

*Surrogate: 4-Bromofluorobenzene (PID) 104 % 73.6-140*

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>96.0</b>	16.0	08/24/2016	ND	416	104	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	08/25/2016	ND	195	97.5	200	0.460	
DRO >C10-C28	<10.0	10.0	08/25/2016	ND	210	105	200	1.75	

*Surrogate: 1-Chlorooctane 91.1 % 35-147*
*Surrogate: 1-Chlorooctadecane 99.7 % 28-171*

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 P.O. Box 1058  
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 Fax To: (505) 391-4585

Received:	08/23/2016	Sampling Date:	08/23/2016
Reported:	08/30/2016	Sampling Type:	Soil
Project Name:	SNAPPING 2 STATE #1HY	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	EDDY COUNTY, NM		

**Sample ID: SP 2 @ 1' (H601890-05)**

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/25/2016	ND	2.29	115	2.00	0.411	
Toluene*	<0.050	0.050	08/25/2016	ND	2.34	117	2.00	0.253	
Ethylbenzene*	<0.050	0.050	08/25/2016	ND	2.24	112	2.00	0.280	
Total Xylenes*	<0.150	0.150	08/25/2016	ND	6.80	113	6.00	0.295	
Total BTEX	<0.300	0.300	08/25/2016	ND					

Surrogate: 4-Bromofluorobenzene (PID) 106 % 73.6-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>128</b>	16.0	08/24/2016	ND	416	104	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	08/25/2016	ND	195	97.5	200	0.460	
DRO >C10-C28	<10.0	10.0	08/25/2016	ND	210	105	200	1.75	

Surrogate: 1-Chlorooctane 92.3 % 35-147

Surrogate: 1-Chlorooctadecane 95.7 % 28-171

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 Fax To: (505) 391-4585

Received:	08/23/2016	Sampling Date:	08/23/2016
Reported:	08/30/2016	Sampling Type:	Soil
Project Name:	SNAPPING 2 STATE #1HY	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	EDDY COUNTY, NM		

**Sample ID: SP 3 @ 1' (H601890-06)**

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/25/2016	ND	2.29	115	2.00	0.411	
Toluene*	<0.050	0.050	08/25/2016	ND	2.34	117	2.00	0.253	
Ethylbenzene*	<0.050	0.050	08/25/2016	ND	2.24	112	2.00	0.280	
Total Xylenes*	<0.150	0.150	08/25/2016	ND	6.80	113	6.00	0.295	
Total BTEX	<0.300	0.300	08/25/2016	ND					

*Surrogate: 4-Bromofluorobenzene (PID) 107 % 73.6-140*

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>48.0</b>	16.0	08/24/2016	ND	416	104	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	08/25/2016	ND	195	97.5	200	0.460	
DRO >C10-C28	<10.0	10.0	08/25/2016	ND	210	105	200	1.75	

*Surrogate: 1-Chlorooctane 95.9 % 35-147*
*Surrogate: 1-Chlorooctadecane 101 % 28-171*

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Celey D. Keene, Lab Director/Quality Manager

**Notes and Definitions**

- 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



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Celey D. Keene, Lab Director/Quality Manager



# CARDINAL Laboratories

## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

### BILL TO

### ANALYSIS REQUEST

Company Name: Hungry Horse, LLC  
 Project Manager: Vernon K. Black  
 Address: PO Box 1058  
 City: Hobbs State: NM Zip: 88241  
 Phone #: 575-631-2253 Fax #: 575-391-4585  
 Project #: \_\_\_\_\_  
 Project Name: Snapping 2 state #1HY  
 Project Location: Eddie  
 Sampler Name: Vernon K. Black

P.O. #:	Company:	Attn:	Address:	City:	State:	Zip:

Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX						DATE	TIME	ANALYSIS REQUEST		
				GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :					
<u>H001890</u>	<u>SP15 SURF.</u>	<u>6</u>				<u>X</u>				<u>8-23-16</u>	<u>10:00</u>	<u>CD</u>	<u>BTEX</u>	<u>TPH</u>
	<u>SP25 SURF.</u>											<u>X</u>	<u>X</u>	<u>X</u>
	<u>SP3 SURF.</u>											<u>X</u>	<u>X</u>	<u>X</u>
	<u>SP1 1'</u>											<u>X</u>	<u>X</u>	<u>X</u>
	<u>SP2 1'</u>											<u>X</u>	<u>X</u>	<u>X</u>
	<u>SP3 1'</u>											<u>X</u>	<u>X</u>	<u>X</u>

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Relinquished By: [Signature]  
 Date: 8-23-16  
 Time: 3:10  
 Received By: [Signature]

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

Delivered By: (Circle One)  
 Sampler - UPS - Bus - Other: 23.80  
 Sample Condition:  Cool  Intact  
 Yes  No

CHECKED BY: [Signature]  
 Date: 8-23-16

† Cardinal cannot accept verbal changes. Please fax written changes to 505-393-2476