

Note: Drawing is not to scale, only to be used as a representation.

**Bratcher, Mike, EMNRD**

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**From:** Vernon Black [vernon@hungry-horse.com]  
**Sent:** Wednesday, June 22, 2011 7:58 AM  
**To:** Terry\_gregston@nm.blm.gov; Bratcher, Mike, EMNRD  
**Cc:** dpotter@linenergy.com  
**Subject:** Closure Request Turner B #118  
**Attachments:** H101260 HHE.pdf

**Categories:** Orange Category

Good morning,

Please see the attached lab results from the confirmation sampling at Linn's Turner B #118. All contaminant levels appear to be at or below closure levels. I request permission to to line the pit area and back fill the all open excavations with clean material and re-seed the area.

Thanks,  
Vernon

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**From:** Celey Keene [<mailto:celey.keene@cardinallabsnm.com>]  
**Sent:** Tuesday, June 21, 2011 3:28 PM  
**To:** 'Vernon Black'; Terry Gregston  
**Subject:** TURNER B 118

THANK YOU,

**Celey Keene**  
**Lab Director**  
**Cardinal Laboratories**  
101 East Marland  
Hobbs, NM 88240  
T: (575) 393-2326  
F: (575) 393-2476  
e-mail: [celey.keene@cardinallabsnm.com](mailto:celey.keene@cardinallabsnm.com)

June 21, 2011

VERNON BLACK

Hungry Horse Environmental

P.O. Box 1058

Hobbs, NM 88240

RE: TURNER B #118

Enclosed are the results of analyses for samples received by the laboratory on 06/16/11 16:16.

Cardinal Laboratories is accredited through Texas NELAP for:

Method SW-846 8021	Benzene, Toluene, Ethyl Benzene, and Total Xylenes
Method SW-846 8260	Benzene, Toluene, Ethyl Benzene, and Total Xylenes
Method TX 1005	Total Petroleum Hydrocarbons

Certificate number T104704398-08-TX. Accreditation applies to solid and chemical materials and non-potable water matrices.


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 (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:**

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

Received: 06/16/2011  
Reported: 06/21/2011  
Project Name: TURNER B #118  
Project Number: NONE GIVEN  
Project Location: EDDY COUNTY, NM

Sampling Date: 06/16/2011  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: TRENCH EAST POINT (H101260-01)**
**BTEX 8021B**

mg/kg

Analyzed By: CMS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/20/2011	ND	1.89	94.5	2.00	3.65	
Toluene*	<0.050	0.050	06/20/2011	ND	2.00	100	2.00	4.10	
Ethylbenzene*	<0.050	0.050	06/20/2011	ND	2.02	101	2.00	3.90	
Total Xylenes*	<0.150	0.150	06/20/2011	ND	6.00	100	6.00	4.06	

Surrogate: 4-Bromofluorobenzene (PIL) 98.2 % 70-130

**Chloride, SM4500Cl-B**

mg/kg

Analyzed By: HM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	352	16.0	06/20/2011	ND	416	104	400	0.00	

**TPH 8015M**

mg/kg

Analyzed By: CK

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	06/21/2011	ND	186	93.0	200	4.08	
DRO >C10-C28	<10.0	10.0	06/21/2011	ND	163	81.7	200	3.24	

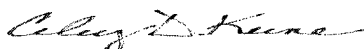
Surrogate: 1-Chlorooctane 106 % 70-130

Surrogate: 1-Chlorooctadecane 118 % 70-130

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: 06/16/2011  
Reported: 06/21/2011  
Project Name: TURNER B #118  
Project Number: NONE GIVEN  
Project Location: EDDY COUNTY, NM

Sampling Date: 06/16/2011  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: TRENCH WEST POINT (H101260-02)**
**BTEX 8021B**

mg/kg

Analyzed By: CMS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/20/2011	ND	1.89	94.5	2.00	3.65	
Toluene*	<0.050	0.050	06/20/2011	ND	2.00	100	2.00	4.10	
Ethylbenzene*	<0.050	0.050	06/20/2011	ND	2.02	101	2.00	3.90	
Total Xylenes*	<0.150	0.150	06/20/2011	ND	6.00	100	6.00	4.06	

Surrogate: 4-Bromofluorobenzene (PIL) 102 % 70-130

**Chloride, SM4500Cl-B**

mg/kg

Analyzed By: HM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	208	16.0	06/20/2011	ND	416	104	400	0.00	

**TPH 8015M**

mg/kg

Analyzed By: CK

S-04

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	06/21/2011	ND	186	93.0	200	4.08	
DRO >C10-C28	<10.0	10.0	06/21/2011	ND	163	81.7	200	3.24	

Surrogate: 1-Chlorooctane 135 % 70-130

Surrogate: 1-Chlorooctadecane 152 % 70-130

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

Received: 06/16/2011  
Reported: 06/21/2011  
Project Name: TURNER B #118  
Project Number: NONE GIVEN  
Project Location: EDDY COUNTY, NM

Sampling Date: 06/16/2011  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: HOLE 1 (H101260-03)**

BTX 8021B		mg/kg		Analyzed By: CMS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/20/2011	ND	1.89	94.5	2.00	3.65	
Toluene*	<0.050	0.050	06/20/2011	ND	2.00	100	2.00	4.10	
Ethylbenzene*	<0.050	0.050	06/20/2011	ND	2.02	101	2.00	3.90	
Total Xylenes*	<0.150	0.150	06/20/2011	ND	6.00	100	6.00	4.06	

Surrogate: 4-Bromofluorobenzene (PIL) 99.1 % 70-130

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1020	16.0	06/20/2011	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	06/21/2011	ND	186	93.0	200	4.08	
DRO >C10-C28	<10.0	10.0	06/21/2011	ND	163	81.7	200	3.24	

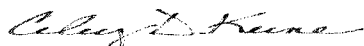
Surrogate: 1-Chlorooctane 111 % 70-130

Surrogate: 1-Chlorooctadecane 128 % 70-130

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Celey D. Keene, Lab Director/Quality Manager

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

Received: 06/16/2011  
Reported: 06/21/2011  
Project Name: TURNER B #118  
Project Number: NONE GIVEN  
Project Location: EDDY COUNTY, NM

Sampling Date: 06/16/2011  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: HOLE 2 (H101260-04)**

BTEX 8021B		mg/kg		Analyzed By: CMS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/20/2011	ND	1.89	94.5	2.00	3.65	
Toluene*	<0.050	0.050	06/20/2011	ND	2.00	100	2.00	4.10	
Ethylbenzene*	<0.050	0.050	06/20/2011	ND	2.02	101	2.00	3.90	
Total Xylenes*	<0.150	0.150	06/20/2011	ND	6.00	100	6.00	4.06	

Surrogate: 4-Bromofluorobenzene (PIL) 101 % 70-130

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	448	16.0	06/20/2011	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	06/21/2011	ND	186	93.0	200	4.08	
DRO >C10-C28	<10.0	10.0	06/21/2011	ND	163	81.7	200	3.24	

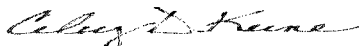
Surrogate: 1-Chlorooctane 97.3 % 70-130

Surrogate: 1-Chlorooctadecane 105 % 70-130

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

 Received: 06/16/2011  
 Reported: 06/21/2011  
 Project Name: TURNER B #118  
 Project Number: NONE GIVEN  
 Project Location: EDDY COUNTY, NM

 Sampling Date: 06/16/2011  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: WEST TRENCH MID POINT (H101260-05)**

BTX 8021B		mg/kg		Analyzed By: CMS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/20/2011	ND	1.89	94.5	2.00	3.65	
Toluene*	<0.050	0.050	06/20/2011	ND	2.00	100	2.00	4.10	
Ethylbenzene*	<0.050	0.050	06/20/2011	ND	2.02	101	2.00	3.90	
Total Xylenes*	<0.150	0.150	06/20/2011	ND	6.00	100	6.00	4.06	

Surrogate: 4-Bromofluorobenzene (PIL) 100 % 70-130

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	06/20/2011	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	06/21/2011	ND	186	93.0	200	4.08	
DRO >C10-C28	<10.0	10.0	06/21/2011	ND	163	81.7	200	3.24	

Surrogate: 1-Chlorooctane 112 % 70-130

Surrogate: 1-Chlorooctadecane 126 % 70-130

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Celey D. Keene, Lab Director/Quality Manager



### Notes and Definitions


- S-04            The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
- A-01            Matrix spike was not spiked, use LCS/LCSD for precision and accuracy data.
- 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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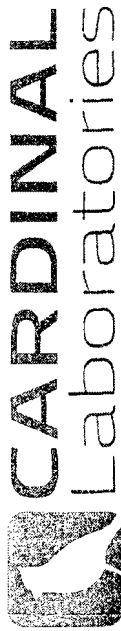
\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name: <u>Huangy Hare</u>		P.O. #:		BILL TO												ANALYSIS REQUEST																			
Project Manager:		Company:																																	
Address:		Attn:																																	
City:		State:																																	
Phone #:		Fax #:																																	
Project #:		Project Owner:																																	
Project Name:		License B 118																																	
Project Location:		Eddy Co.																																	
Sampler Name:		Project Name:																																	
FOR LAB USE ONLY		MATRIX		PRESERV		SAMPLING																													
		GROUNDWATER		ACID/BASE		OTHER:		DATE		TIME																									
		WASTEWATER		ICE / COOL		OTHER:		6-16-11		11:00																									
		OIL																																	
		SLUDGE																																	
		# CONTAINERS																																	
		(G) RAB OR (C) CMP																																	
		Sample I.D.																																	
Lab I.D.		1 Ranch East Pond																																	
4101200		2 Ranch West Pond																																	
		3 Hole 1																																	
		4 Hole 2																																	
		5 West trench and Pond																																	

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Relinquished By:		Date:	Received By:	Phone Result:	<input type="checkbox"/> Yes	<input type="checkbox"/> No	Add'l Phone #:
Relinquished By:		Time:	Received By:	Fax Result:	<input type="checkbox"/> Yes	<input type="checkbox"/> No	Add'l Fax #:
Relinquished By:		Date:	Received By:	REMARKS:			
Relinquished By:		Time:	Received By:	email to Terry G @ BLM			
Delivered By: (Circle One)		Date:	Sample Condition	CHECKED BY:			
Delivered By: (Circle One)		Time:	Cool <input type="checkbox"/> Intact <input type="checkbox"/>	Initials			
Sampler - UPS - Bus - Other:			<input type="checkbox"/> Yes <input type="checkbox"/> No				