

**Mas Operating Company
Rose Eaves #2
Section 35 Township 16S Range 38E
Lea County, New Mexico
Closure Proposal**

April 8, 2014

Prepared for:

***Mas Operating Company
3300 North A Street
Midland, TX 79705***

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I. Background

This location is an old drilling pit from the Mas Operating Company Rose Eaves #2 in Lea County, NM with drilling mud from a Plugged and Abandon location.

II. Surface and Ground Water

According to the New Mexico ODC-District Trend Map the approximate depth to ground water is 68' with water column of 82'

III. Soils

The surface soils in the area are predominantly sand and sandy loam.

IV. Characterization

The target cleanup levels are reached by the application of the "Unlined Surface Impoundment Closure Guidelines New Mexico Oil Conservation Division (NMOCD) – February, 1993 to this site is 1000 parts per million (ppm) Total Petroleum Hydrocarbons (TPH GRO and DRO combined). Application of the New Mexico Oil Conservation Division's ranking criteria for contaminated soils at this site is presented below:

Depth to Ground Water:			
(Vertical distance from contaminants to seasonal high water elevation of groundwater)	Less than 50 feet	20 points	
	50 feet to 99 feet	10 points	X
	>100 feet	0 points	
Wellhead Protection Area:			
(Less than 200 feet from a private domestic water source; or less than 1000 feet from all other water sources)	Yes	20 points	
	No	0 points	X
Distance to Surface Water:			
(Horizontal distance to perennial lakes, ponds, rivers, streams, creeks, irrigation canals and ditches)	Less than 200 feet	20 points	
	200 feet to 1000 feet	10 points	
	>1000 feet	0 points	X
RANKING SCORE (TOTAL POINTS)			10

Table I Closure Criteria for Soils Beneath Below-Grade Tanks, Drying Pads Associated			
Depth below bottom of pit to groundwater less than 10,000 mg/l	Constituent	Method*	Limit**
≤50 feet	Chloride	EPA 300.0	600 mg/kg
	TPH	EPA SW-846 Method 418.1	100 mg/kg
	BTEX	EPA SW-846 Method 8021B or 8260B	50 mg/kg
	Benzene	EPA SW-846 Method 8021B or 8015M	10 mg/kg
51 feet-100 feet	Chloride	EPA 300.0	10,000 mg/kg
	TPH	EPA SW-846 Method 418.1	2,500 mg/kg
	GRO+DRO	EPA SW-846 Method 8015M	1,000 mg/kg
	BTEX	EPA SW-846 Method 8021B or 8260B	50 mg/kg
	Benzene	EPA SW-846 Method 8021B or 8015M	10 mg/kg
> 100 feet	Chloride	EPA 300.0	20,000 mg/kg
	TPH	EPA SW-846 Method 418.1	2,500 mg/kg
	GRO+DRO	EPA SW-846 Method 8015M	1,000 mg/kg
	BTEX	EPA SW-846 Method 8021B or 8260B	50 mg/kg
	Benzene	EPA SW-846 Method 8021B or 8015M	10 mg/kg

V. Work Performed

Drilling mud was excavated and approximately three (3) feet below bottom of liner from pit. Approximately 200 yards was excavated and transported to Sundance Services in Eunice, NM for proper disposal.

On April 7, 2014 a 5-point composite sample was obtained at bottom of excavated drilling pit. Sample was transported to Cardinal Laboratories to be analyzed for Chlorides (EPA method 300.0) Total Petroleum Hydrocarbons (TPH GRO+DRO EPA method 8015) Benzene, Toluene, Ethyl Benzene, and Xylenes (BTEX EPA 8021B).

<u>Samples</u>	<u>Benzene</u>	<u>Toluene</u>	<u>Ethyl Benzene</u>	<u>Xylenes</u>	<u>Chlorides</u>	<u>GRO</u>	<u>DRO</u>	<u>TPH</u>
Sample #1 (5-pt Composite)	<0.050	<0.050	<0.050	<0.150	544	<10.0	<10.0	<10.0

VI. Closure Proposal

It is requested that the area be backfilled with soils on site from excavation from building drilling pit and area will be contoured to surrounding area and re-seeded for vegetation.

Site Photos



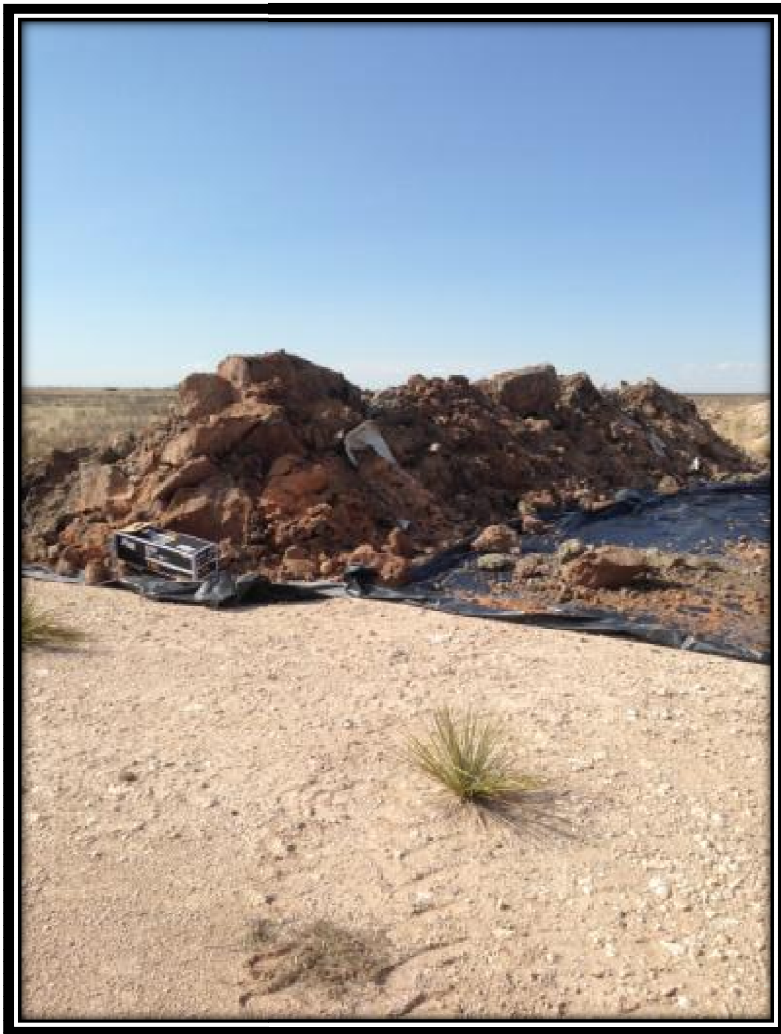












Lab Results

April 07, 2014

STEVE NAVARRETTE
BLADE SERVICES, LLC
P. O. BOX 5723
HOBBS, NM 88241

RE: ROSE EAVES #2

Enclosed are the results of analyses for samples received by the laboratory on 04/01/14 10:37.

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/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,



Celey D. Keene
Lab Director/Quality Manager

Analytical Results For:

 BLADE SERVICES, LLC
 STEVE NAVARRETTE
 P. O. BOX 5723
 HOBBS NM, 88241
 Fax To: NONE

 Received: 04/01/2014
 Reported: 04/07/2014
 Project Name: ROSE EAVES #2
 Project Number: NONE GIVEN
 Project Location: LEA COUNTY, NM

 Sampling Date: 04/01/2014
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: 5 PT. COMP (H400963-01)

BTX 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	04/02/2014	ND	2.64	132	2.00	4.76	
Toluene*	<0.050	0.050	04/02/2014	ND	2.55	128	2.00	5.08	
Ethylbenzene*	<0.050	0.050	04/02/2014	ND	2.51	126	2.00	4.96	
Total Xylenes*	<0.150	0.150	04/02/2014	ND	7.31	122	6.00	5.65	
Total BTX	<0.300	0.300	04/02/2014	ND					

Surrogate: 4-Bromofluorobenzene (PID) 110 % 89.4-126

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	544	16.0	04/03/2014	ND	416	104	400	0.00		

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	04/02/2014	ND	187	93.4	200	1.94	
DRO >C10-C28	<10.0	10.0	04/02/2014	ND	216	108	200	2.56	

Surrogate: 1-Chlorooctane 108 % 65.2-140

Surrogate: 1-Chlorooctadecane 105 % 63.6-154

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Notes and Definitions

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

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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: Blade Services		P.O. #:		BILL TO										ANALYSIS REQUEST																									
Project Manager:		P.O. Box 5723		Company: Mas Operating Co.																																			
Address:		State: NM Zip: 88241		Attn:																																			
City: Hobbs		Phone #: 390-5004 Fax #:		Address:																																			
Project #:		Project Owner:		City:																																			
Project Name: Rose Eaves #2		State:		Zip:																																			
Project Location: Lee County NM		Phone #:		Fax #:																																			
Sample Name: Kick Nardrette		FOR LAB USE ONLY		MATRIX		PRESERV		SAMPLING																															
Lab I.D.		Sample I.D.		(G)RAB OR (C)OMP.		# CONTAINERS		GROUNDWATER		WASTEWATER		SOIL		OIL		SLUDGE		OTHER :		ACID/BASE:		ICE / COOL		OTHER :		DATE		TIME											
H4009163		1 5 Pt. Comp.		6.1		1		✓		✓		✓		✓		✓		✓		✓		✓		✓		4/1/14 9:30		TPH 8015											