District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, 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

Form C-141
Revised October 10, 2003

Submit 2 Copies to appropriate District Office in accordance with Rule 116 on back side of form

Release Notification and Corrective Action

OPERATOR

☐ Initial Report ☒ Final Report

Name of Company	Burgundy Oil & Gas, Inc.	Contact	Ben Taylor
Address	401 W. Texas, Suite 1003, Midland, TX 79701	Telephone No.	(432) 684-4033
Facility Name	Eunice Monument Unit #28 (IRP #1277)	Facility Type	Well / Flow Line

Surface Owner: State	Mineral Owner: State	Lease No. 015823 API No. 30-025-06170

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
M	19	20S	37E	330	South	330	West	Lea

Latitude N 32 deg. 33.311' **Longitude** W 103 deg. 17.455'

NATURE OF RELEASE

Type of Release: Oil and Water	Volume of Release: 5 bbl	Volume Recovered: None
Source of Release: Flow Line	Date and Hour of Occurrence: Unknown	Date and Hour of Discovery: 3/13/07
Was Immediate Notice Given? ☐ Yes ☒ No ☐ Not Required	If YES, To Whom? Leak discovered by OCD (Gary Wink)	
By Whom?	Date and Hour	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

OCT 2007
Received
Hobbs
OCD

Describe Cause of Problem and Remedial Action Taken.*

Oil and water were released from a flow line. Excavation of impacted soil was conducted. Impacted soil was hauled to an NMOCD approved disposal Facility. The excavation was backfilled with clean soil.

Describe Area Affected and Cleanup Action Taken.*

Soil was excavated in a 36' x 37' x 20' (deep) area until laboratory results of samples reported TPH concentrations below 100 mg/kg and chloride concentrations below 250 mg/kg. Impacted soil was hauled to Sundance Disposal facility, and the excavation was backfilled with clean soil. A site drawing with sample locations is attached, along with laboratory documentation, a table summarizing the sample results and a chloride report of water similar to that which was released.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature: Cindy Crain	OIL CONSERVATION DIVISION
Printed Name: Cindy Crain as Agent for Burgundy Oil and Gas	Approved by District Supervisor: ENVIRONMENTAL ENGINEER
Title: Geologist / Environmental Manager	Approval Date: 10-18-07 Expiration Date: —
E-mail Address: cindy.crain@gmail.com	Conditions of Approval: — Attached ☐
Date: 10/11/07 Phone: (505) 441-7244	

Request for Backfill Approval - Burgundy Oil and Gas - Eunice Monument Unit #28 - 1RP # 1277

Print all

Cindy Crain to Larry,, Ben show details 11:20 am (0 minutes ago) Reply

Larry,

Burgundy Oil and Gas reported a flow line spill on a C141 dated 3/19/07 at the Eunice Monument Unit #28. The site is located in
Unit Letter M, Section 19, T20S, R37E, Lea County, New Mexico. Depth to groundwater is approximately 25 feet bgs.

Ocotillo Environmental has completed excavation of the impacted soil and has collected confirmation samples that report TPH concentrations
below 100 mg/kg, and chloride concentrations below 250 mg/kg. Attached please find Table 1, that provides a summary of the laboratory results.

As you requested a chloride report of the released water on the C141, a water sample is being collected today from the well.
I am in the process of preparing the final C141 report, and will be able to submit that to you when the results of the water sample are obtained.

In the meantime, Burgundy would like to go ahead and backfill the excavation pending your approval to do so.

Please let me know if we can proceed with backfilling.

Thank you,

–
Cindy Crain
Environmental Manager

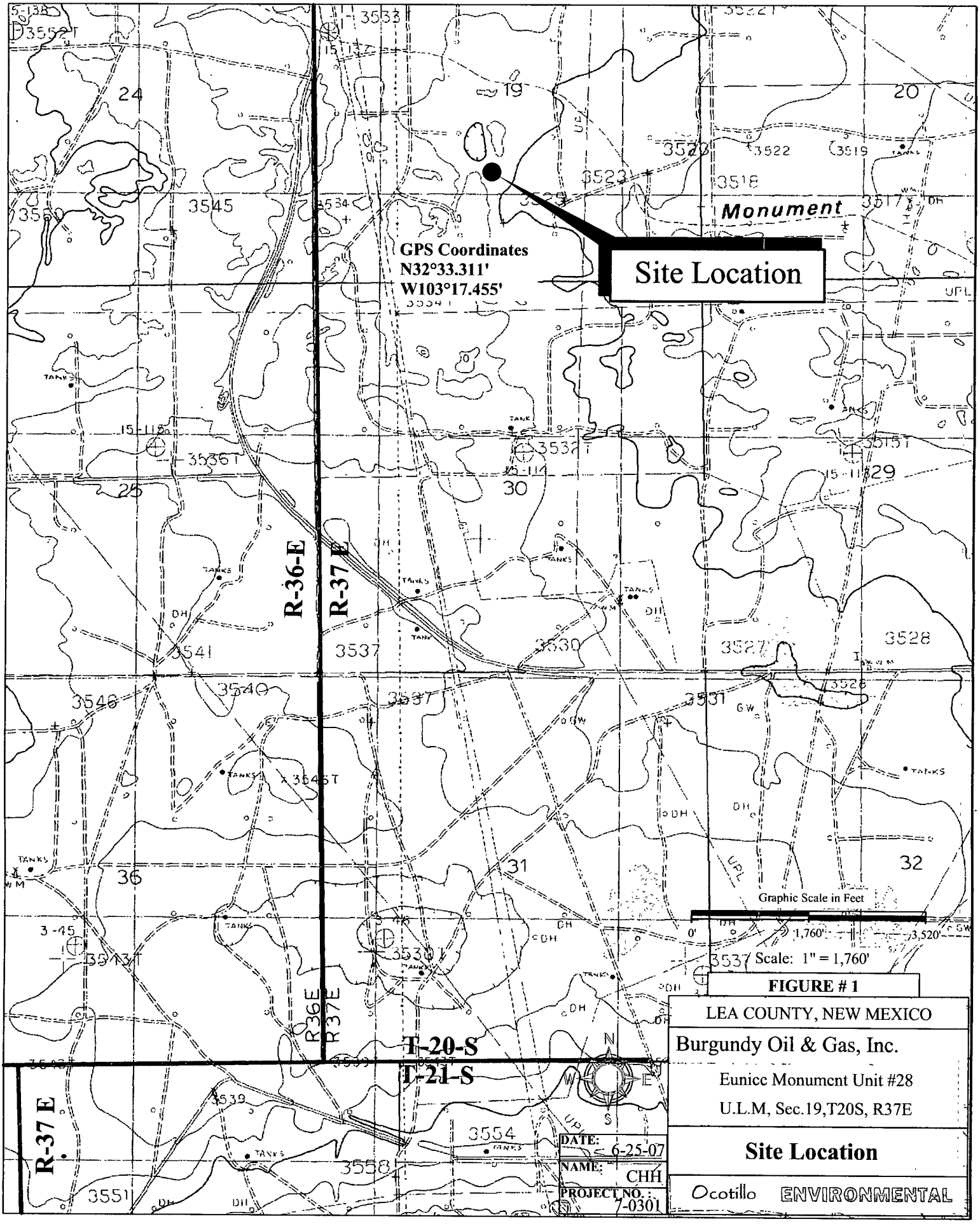
Ocotillo Environmental
2125 French Drive
Hobbs, NM 88240

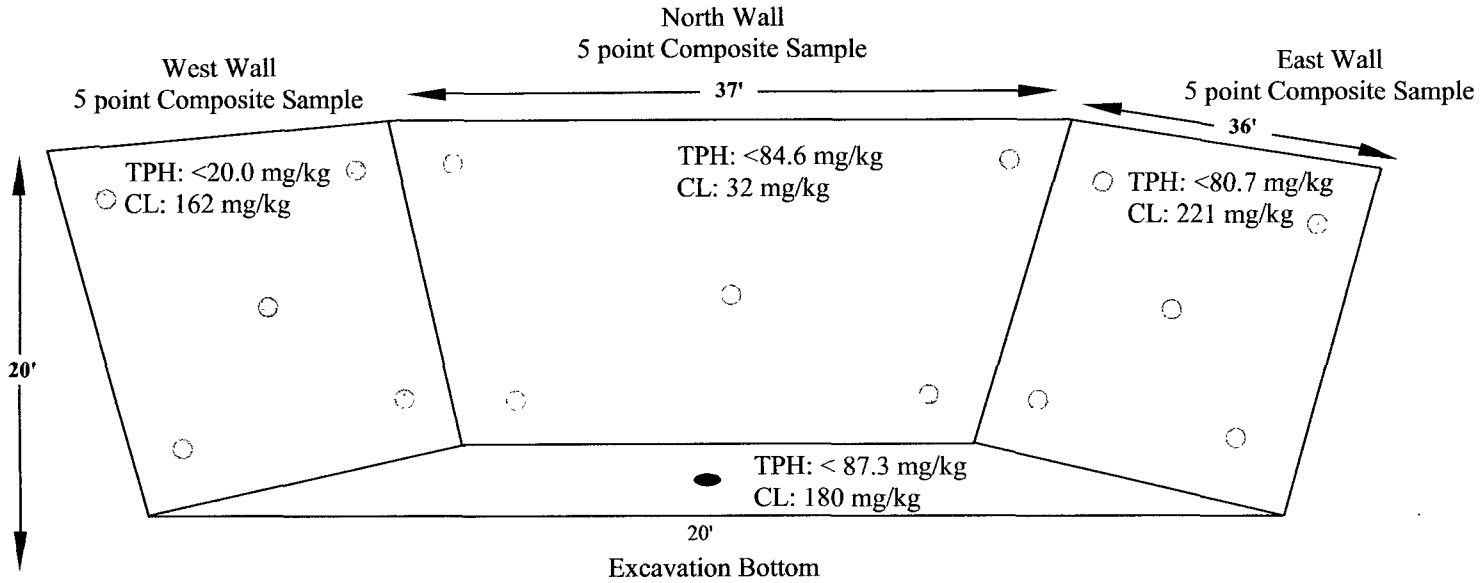
Office (505) 393-6371
Cell (505) 441-7244
Fax (432) 272-0304

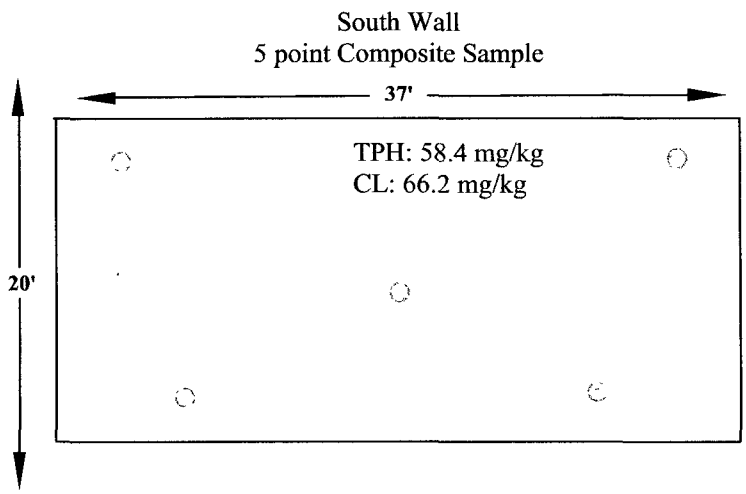
Verbal approval
10/11/07

Table.xls
27K View as HTML Open as a Google spreadsheet Download

Reply Reply to all Forward


GPS Coordinates
N32°33.311'
W103°17.455'
Site Location
Monument
R-36-E
R-37 E
T-20-S
T-21-S
Graphic Scale in Feet
0'
1,760'
3,520'
Scale: 1" = 1,760'
FIGURE # 1
LEA COUNTY, NEW MEXICO
Burgundy Oil & Gas, Inc.
Eunice Monument Unit #28
U.L.M, Sec.19,T20S, R37E
Site Location
DATE: 6-25-07
NAME: CHH
PROJECT NO.: 7-0301
Ocotillo ENVIRONMENTAL





LEGEND

Soil sample location for sidewall composite sample.

N
W E
S

FIGURE # 2

LEA COUNTY, NEW MEXICO

Burgundy Oil & Gas, Inc.

Eunice Monument Unit #28

U.L.M, Sec.19,T20S, R37E

Site Drawing with Sample Locations

DATE:	10-14-07
NAME:	CHH
PROJECT NO. :	0807-018R

Ocotillo ENVIRONMENTAL

Table 1: Summary of Laboratory Analysis of Soil Samples
Burgundy Oil & Gas, Inc., EMU Lease
Section 19, Township 20 South, Range 37 East
Lea County, New Mexico

Sample Date	Soil Sample Number	Sample Depth (feet BGS)	PID	TPH C6-C12 (mg/kg)	TPH C12-C28 (mg/kg)	TPH C28-C35 (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)	Benzene (mg/kg)	Total BTEX (mg/kg)
Standard (WQCC)							100	250	10	50
6/6/07	SS-1	0-1	73	1,620	23,600	3,100	28,320	21.3	---	---
6/6/07	SS-2	5-6	842	2,590	11,000	1,490	15,080	63.8	0.89	12.73
6/6/07	SS-3	10-11	610	2,110	7,120	1,020	10,250	574	2.50	18.47
6/6/07	SS-4	15-16	168	19	82.7	23.4	125.1	1,360	<0.0250	0.126
6/6/07	SS-5	0-1	7	<10.0	6.22	<10.0	6.22	21.3	---	---
6/6/07	SS-6	5-6	5	<10.0	<10.0	<10.0	<30.0	<20.0	---	---
6/20/07	Bottom	17'	0	<29.1	<29.1	<29.1	<87.3	1,920	---	---
7/11/07	Bottom	20'	---	<10.6	45.9	25.3	71.2	633	---	---
8/9/07	Bottom	20'	---	---	---	---	---	180	---	---
6/20/07	North Side	Composite	13	<28 2	<28.2	<28.2	<84.6	1,310	---	---
8/9/07	North Side	Composite	---	---	---	---	---	624	---	---
9/4/07	SS-6	Composite	---	---	---	---	---	432	---	---
10/3/07	SS-8	Composite	---	---	---	---	---	32	---	---
6/20/07	South Side	Composite	33	75.6	808	150	1033.6	738	---	---
7/11/07	South Side	Composite	---	<10.5	36.8	21.6	58.4	268	---	---
8/9/07	South Side	Composite	---	---	---	---	---	66.2	---	---
6/20/07	East Side	Composite	0	<26.9	<26.9	<26.9	<80.7	1,010	---	---
8/9/07	East Side	Composite	---	---	---	---	---	221	---	---
6/20/07	West Side	Composite	42	84.1	727	146	957.1	865	---	---
7/11/07	West Side	Composite	---	<10.5	75	34.9	109.9	162	---	---
8/9/07	West Side	Composite	---	<10.8	104	11	115	---	---	---
9/4/07	West Side	Composite	---	<10.0	---	<20.0	<20.0	---	---	---

Notes
1. BGS Depth in feet below ground surface
2 mg/kg Milligrams per kilogram
3 --- No data available
4. < Below method detection limit

Technical Services Group
16107 West University
Odessa, Texas 79769
(800)-374-2802

B. B. CHEMICALS

WATER ANALYSIS REPORT

Sample Information

Company	**Burgundy**
Lease	**EMU**
Well Number	**34**
Sample Location	**Well head**
Sample Date	**08/01/07**

City/ County	
State	
Formation	
BB Chem. Rep.:	**Ray Pierson**
Analysis Date:	**08/03/07**

Dissolved Gasses	PPM
Hydrogen Sulfide	0
Carbon Dioxide	ND
Dissolved Oxygen	ND

Fluid Conditions		
Fluid Temp.	72	ºF
Resistivity (RW)	0.240	Ohm-m
pH	6.71	
SpGr.	1.012	

Cations	mg/L	meq/L
Sodium	11,056	480.7
Calcium	1,163	58.1
Magnesium	146	12.0
Barium	1	0.0
Iron	0.4	0.0
Manganese	0.004	
Strontium	11.5	

Anions	mg/L	meq/L
Bicarbonate	1,415	23.2
Chloride	15,517	437.1
Sulfate	1,125	23.4

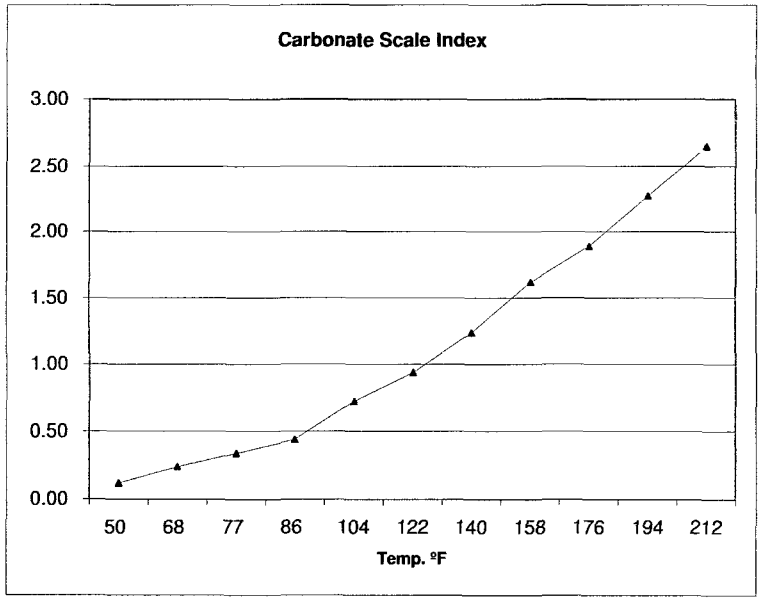
Total Dissolved Solids	30,435
Total Ionic Strength	0.57
Total Hardness as CaCO3	3,502

Calcium Carbonate
Scaling Tendency

Stability Index:

ºF	
50	0.12
68	0.24
77	0.34
86	0.44
104	0.72
122	0.94
140	1.24
158	1.62
176	1.89
194	2.27
212	2.65

Calcium Carbonate Index Legend
SI of less than 0 = No Potential
SI of 0 to 0.5 = Marginal Potential
SI of 0.5 to 1.0 = Moderate Potential
SI of above 1.0 = Severe Potential



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Technical Services Group
16107 West University
Odessa, Texas 79769
(800)-374-2802

B. B. CHEMICALS

WATER ANALYSIS REPORT

Sample Information

Company	**Burgundy**
Lease	**EMU**
Well Number	**34**
Sample Location	**Well head**
Sample Date	**8/1/2007**

City/ State	
County	
Formation	
BB Chem. Rep.:	**Ray Pierson**
Analysis Date:	**08/03/07**

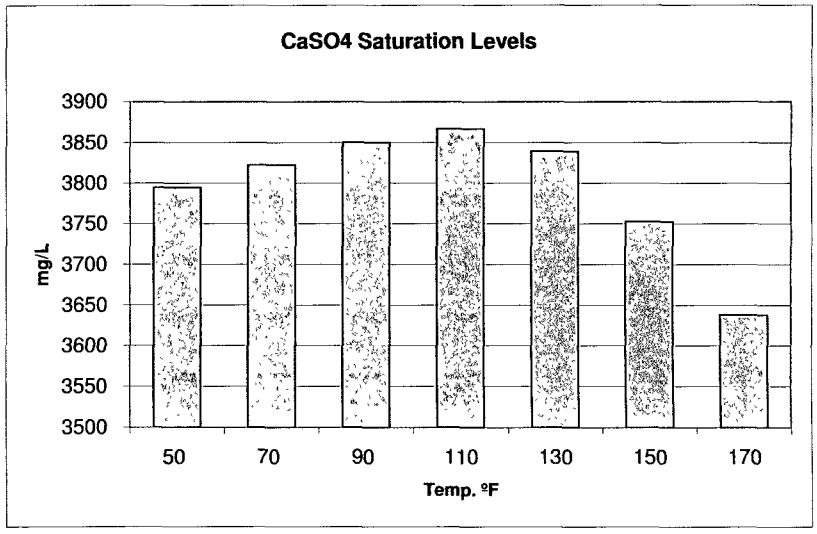
Calcium Sulfate Scaling Tendency

Maximum Amount of CaSO4 which can be held in solution at these temperatures.

ºF	mg/L
50	3794.62
70	3822.58
90	3850.39
110	3867.01
130	3839.29
150	3752.40
170	3638.12

Actual CaSO4 Conc. = 2017.97

If the actual value exceeds any of the mg/L values above. Calcium sulfate scale is likely



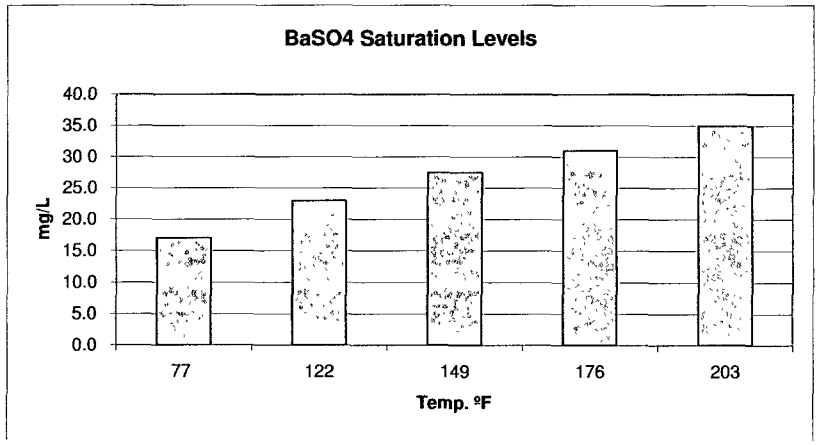
Barium Sulfate Scaling Tendency

Maximum Amount of BaSO4 which can be held in solution at these temperatures.

ºF	mg/L
77	17.0
122	23.0
149	27.5
176	31.0
203	35.0

Actual BaSO4 Conc. = 1.41

If the actual value exceeds any of the mg/L values above. barium sulfate scale is likely



ENVIRONMENTAL LAB OF

12600 West I-20 East - Odessa, Texas 79765

A Xenco Laboratories Company

Analytical Report

Prepared for:

Cindy Crain

Ocotillo Environmental

2125 French Dr.

Hobbs, NM 88201

Project: Burgundy EMU Lease

Project Number: 7-0201

Location: Monument, NM

Lab Order Number: 7F06026

Report Date: 06/13/07

Ocotillo Environmental
2125 French Dr.
Hobbs NM, 88201

Project: Burgundy EMU Lease
Project Number: 7-0201
Project Manager: Cindy Crain

Fax: (432) 367-6747

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SS-1	7F06026-01	Soil	06/06/07 09:23	06-06-2007 16:00
SS-2	7F06026-02	Soil	06/06/07 09:26	06-06-2007 16:00
SS-3	7F06026-03	Soil	06/06/07 09:50	06-06-2007 16:00
SS-4	7F06026-04	Soil	06/06/07 10:05	06-06-2007 16:00
SS-5	7F06026-05	Soil	06/06/07 10:15	06-06-2007 16:00
SS-6	7F06026-06	Soil	06/06/07 10.30	06-06-2007 16:00

Ocotillo Environmental	Project: Burgundy EMU Lease	Fax: (432) 367-6747
2125 French Dr.	Project Number: 7-0201	
Hobbs NM, 88201	Project Manager: Cindy Crain	

Organics by GC
Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SS-1 (7F06026-01) Soil									
Carbon Ranges C6-C12	**1620**	100	mg/kg dry	10	EF70702	06/07/07	06/09/07	EPA 8015M	
Carbon Ranges C12-C28	**23600**	100	"	"	"	"	"	"	
Carbon Ranges C28-C35	**3100**	100	"	"	"	"	"	"	
Total Hydrocarbons	**28300**	100	"	"	"	"	"	"	
Surrogate 1-Chlorooctane		*15.5 %*	*70-130*		"	"	"	"	*S-06*
Surrogate 1-Chlorooctadecane		*14.0 %*	*70-130*		"	"	"	"	*S-06*
SS-2 (7F06026-02) Soil									
Benzene	**0.890**	0 200	mg/kg dry	200	EF70705	06/07/07	06/08/07	EPA 8021B	
Toluene	**2.91**	0.200	"	"	"	"	"	"	
Ethylbenzene	**2.20**	0.200	"	"	"	"	"	"	
Xylene (p/m)	**5.18**	0.200	"	"	"	"	"	"	
Xylene (o)	**1.55**	0 200	"	"	"	"	"	"	
Surrogate a,a,a-Trifluorotoluene		*138 %*	*75-125*		"	"	"	"	*S-04*
Surrogate 4-Bromofluorobenzene		*110 %*	*75-125*		"	"	"	"	
Carbon Ranges C6-C12	**2590**	100	mg/kg dry	10	EF70702	06/07/07	06/09/07	EPA 8015M	
Carbon Ranges C12-C28	**11000**	100	"	"	"	"	"	"	
Carbon Ranges C28-C35	**1490**	100	"	"	"	"	"	"	
Total Hydrocarbons	**15100**	100	"	"	"	"	"	"	
Surrogate 1-Chlorooctane		*20.2 %*	*70-130*		"	"	"	"	*S-06*
Surrogate 1-Chlorooctadecane		*12.7 %*	*70-130*		"	"	"	"	*S-06*
SS-3 (7F06026-03) Soil									
Benzene	**2.50**	0.200	mg/kg dry	200	EF70705	06/07/07	06/08/07	EPA 8021B	
Toluene	**5.24**	0.200	"	"	"	"	"	"	
Ethylbenzene	**3.25**	0.200	"	"	"	"	"	"	
Xylene (p/m)	**5.11**	0.200	"	"	"	"	"	"	
Xylene (o)	**2.37**	0.200	"	"	"	"	"	"	
Surrogate a,a,a-Trifluorotoluene		*214 %*	*75-125*		"	"	"	"	*S-04*
Surrogate 4-Bromofluorobenzene		*134 %*	*75-125*		"	"	"	"	*S-04*
Carbon Ranges C6-C12	**2110**	100	mg/kg dry	10	EF70702	06/07/07	06/09/07	EPA 8015M	
Carbon Ranges C12-C28	**7120**	100	"	"	"	"	"	"	
Carbon Ranges C28-C35	**1020**	100	"	"	"	"	"	"	
Total Hydrocarbons	**10200**	100	"	"	"	"	"	"	
Surrogate 1-Chlorooctane		*18 1 %*	*70-130*		"	"	"	"	*S-06*
Surrogate 1-Chlorooctadecane		*12 1 %*	*70-130*		"	"	"	"	*S-06*

Organics by GC
Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SS-4 (7F06026-04) Soil									
Benzene	**ND**	0.0250	mg/kg dry	25	EF70705	06/07/07	06/08/07	EPA 8021B	
Toluene	**J [0.0248]**	0.0250	"	"	"	"	"	"	J
Ethylbenzene	**0.0344**	0.0250	"	"	"	"	"	"	
Xylene (p/m)	**0.0470**	0.0250	"	"	"	"	"	"	
Xylene (o)	**J [0.0198]**	0.0250	"	"	"	"	"	"	J
Surrogate a,a,a-Trifluorotoluene		*98.0 %*	*75-125*		"	"	"	"	
Surrogate. 4-Bromofluorobenzene		*83.2 %*	*75-125*		"	"	"	"	
Carbon Ranges C6-C12	**19.0**	10.0	mg/kg dry	1	EF70702	06/07/07	06/09/07	EPA 8015M	
Carbon Ranges C12-C28	**82.7**	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	**23.4**	10.0	"	"	"	"	"	"	
Total Hydrocarbons	**125**	10.0	"	"	"	"	"	"	
Surrogate 1-Chlorooctane		*123 %*	*70-130*		"	"	"	"	
Surrogate 1-Chlorooctadecane		*118 %*	*70-130*		"	"	"	"	
SS-5 (7F06026-05) Soil									
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EF70702	06/07/07	06/09/07	EPA 8015M	
Carbon Ranges C12-C28	**J [6.22]**	10.0	"	"	"	"	"	"	J
Carbon Ranges C28-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbons	ND	10.0	"	"	"	"	"	"	
Surrogate 1-Chlorooctane		*110 %*	*70-130*		"	"	"	"	
Surrogate 1-Chlorooctadecane		*109 %*	*70-130*		"	"	"	"	
SS-6 (7F06026-06) Soil									
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EF70703	06/07/07	06/11/07	EPA 8015M	
Carbon Ranges C12-C28	ND	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbons	ND	10.0	"	"	"	"	"	"	
Surrogate 1-Chlorooctane		*80.0 %*	*70-130*		"	"	"	"	
Surrogate 1-Chlorooctadecane		*79.6 %*	*70-130*		"	"	"	"	

Ocotillo Environmental	Project: Burgundy EMU Lease	Fax: (432) 367-6747
2125 French Dr	Project Number: 7-0201	
Hobbs NM, 88201	Project Manager: Cindy Crain	

General Chemistry Parameters by EPA / Standard Methods
Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SS-1 (7F06026-01) Soil									
Chloride	**21.3**	20.0	mg/kg Wet	2	EF71106	06/11/07	06/11/07	SW 846 9253	
% Moisture	**4.6**	0.1	%	1	EF70801	06/07/07	06/08/07	% calculation	
SS-2 (7F06026-02) Soil									
Chloride	**63.8**	20.0	mg/kg Wet	2	EF71106	06/11/07	06/11/07	SW 846 9253	
% Moisture	**10.4**	0.1	%	1	EF70801	06/07/07	06/08/07	% calculation	
SS-3 (7F06026-03) Soil									
Chloride	**574**	20.0	mg/kg Wet	2	EF71106	06/11/07	06/11/07	SW 846 9253	
% Moisture	**6.7**	0.1	%	1	EF70801	06/07/07	06/08/07	% calculation	
SS-4 (7F06026-04) Soil									
Chloride	**1360**	20.0	mg/kg Wet	2	EF71106	06/11/07	06/11/07	SW 846 9253	
% Moisture	**10.8**	0.1	%	1	EF70801	06/07/07	06/08/07	% calculation	
SS-5 (7F06026-05) Soil									
Chloride	**21.3**	20.0	mg/kg Wet	2	EF71106	06/11/07	06/11/07	SW 846 9253	
% Moisture	**3.0**	0.1	%	1	EF70801	06/07/07	06/08/07	% calculation	
SS-6 (7F06026-06) Soil									
Chloride	**ND**	20.0	mg/kg Wet	2	EF71106	06/11/07	06/11/07	SW 846 9253	
% Moisture	**2.9**	0.1	%	1	EF70801	06/08/07	06/08/07	% calculation	

Organics by GC - Quality Control
Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EF70702 - Solvent Extraction (GC)										
Blank (EF70702-BLK1)				Prepared: 06/07/07 Analyzed: 06/09/07						
Carbon Ranges C6-C12	ND	10 0	mg/kg wet							
Carbon Ranges C12-C28	ND	10 0	"							
Carbon Ranges C28-C35	ND	10 0	"							
Total Hydrocarbons	ND	10 0	"							
Surrogate 1-Chlorooctane	*58 6*		*mg/kg*	*50 0*		*117*	*70-130*			
Surrogate 1-Chlorooctadecane	*56 8*		*"*	*50.0*		*114*	*70-130*			
LCS (EF70702-BS1)				Prepared: 06/07/07 Analyzed: 06/09/07						
Carbon Ranges C6-C12	484	10 0	mg/kg wet	500		96 8	75-125			
Carbon Ranges C12-C28	393	10 0	"	500		78 6	75-125			
Carbon Ranges C28-C35	ND	10 0	"	0 00			75-125			
Total Hydrocarbons	877	10 0	"	1000		87 7	75-125			
Surrogate 1-Chlorooctane	*61 1*		*mg/kg*	*50 0*		*122*	*70-130*			
Surrogate 1-Chlorooctadecane	*56 4*		*"*	*50 0*		*113*	*70-130*			
Calibration Check (EF70702-CCV1)				Prepared: 06/07/07 Analyzed: 06/09/07						
Carbon Ranges C6-C12	221		mg/kg wet	250		88 4	80-120			
Carbon Ranges C12-C28	226		"	250		90 4	80-120			
Total Hydrocarbons	448		"	500		89 6	80-120			
Surrogate 1-Chlorooctane	*64 6*		*mg/kg*	*50 0*		*129*	*70-130*			
Surrogate 1-Chlorooctadecane	*60 8*		*"*	*50 0*		*122*	*70-130*			
Matrix Spike (EF70702-MS1)	**Source: 7F06012-07**			Prepared: 06/07/07 Analyzed: 06/09/07						
Carbon Ranges C6-C12	468	10 0	mg/kg dry	509	ND	91 9	75-125			
Carbon Ranges C12-C28	444	10 0	"	509	41 6	79 1	75-125			
Carbon Ranges C28-C35	25 1	10 0	"	0 00	18 0		75-125			
Total Hydrocarbons	937	10 0	"	1020	59 6	86 0	75-125			
Surrogate 1-Chlorooctane	*59 8*		*mg/kg*	*50 0*		*120*	*70-130*			
Surrogate 1-Chlorooctadecane	*54 3*		*"*	*50 0*		*109*	*70-130*			

Organics by GC - Quality Control
Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EF70702 - Solvent Extraction (GC)										
Matrix Spike Dup (EF70702-MSD1)	**Source: 7F06012-07**			Prepared: 06/07/07	Analyzed: 06/09/07					
Carbon Ranges C6-C12	488	10 0	mg/kg dry	509	ND	95 9	75-125	4 26	20	
Carbon Ranges C12-C28	469	10 0	"	509	41.6	84 0	75-125	6 01	20	
Carbon Ranges C28-C35	25.5	10 0	"	0 00	18 0		75-125		20	
Total Hydrocarbons	983	10.0	"	1020	59 6	90 5	75-125	5 10	20	
Surrogate 1-Chlorooctane	*61 8*		*mg/kg*	*50 0*		*124*	*70-130*			
Surrogate 1-Chlorooctadecane	*54 5*		*"*	*50 0*		*109*	*70-130*			
Batch EF70703 - Solvent Extraction (GC)										
Blank (EF70703-BLK1)				Prepared: 06/07/07	Analyzed: 06/11/07					
Carbon Ranges C6-C12	ND	10 0	mg/kg wet							
Carbon Ranges C12-C28	ND	10 0	"							
Carbon Ranges C28-C35	ND	10 0	"							
Total Hydrocarbons	ND	10 0	"							
Surrogate 1-Chlorooctane	*42 1*		*mg/kg*	*50 0*		*84 2*	*70-130*			
Surrogate 1-Chlorooctadecane	*44 2*		*"*	*50 0*		*88.4*	*70-130*			
LCS (EF70703-BS1)				Prepared: 06/07/07	Analyzed: 06/11/07					
Carbon Ranges C6-C12	491	10 0	mg/kg wet	500		98.2	75-125			
Carbon Ranges C12-C28	387	10 0	"	500		77 4	75-125			
Carbon Ranges C28-C35	ND	10 0	"	0 00			75-125			
Total Hydrocarbons	878	10 0	"	1000		87 8	75-125			
Surrogate 1-Chlorooctane	*46 4*		*mg/kg*	*50 0*		*92 8*	*70-130*			
Surrogate. 1-Chlorooctadecane	*44 3*		*"*	*50 0*		*88 6*	*70-130*			
Calibration Check (EF70703-CCV1)				Prepared: 06/07/07	Analyzed: 06/11/07					
Carbon Ranges C6-C12	210		mg/kg wet	250		84 0	80-120			
Carbon Ranges C12-C28	235		"	250		94 0	80-120			
Total Hydrocarbons	445		"	500		89 0	80-120			
Surrogate 1-Chlorooctane	*52 5*		*mg/kg*	*50 0*		*105*	*70-130*			
Surrogate 1-Chlorooctadecane	*50 1*		*"*	*50 0*		*100*	*70-130*			

Organics by GC - Quality Control
Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EF70703 - Solvent Extraction (GC)										
Matrix Spike (EF70703-MS1)	**Source: 7F06027-01**			Prepared: 06/07/07 Analyzed: 06/11/07						
Carbon Ranges C6-C12	502	10 0	mg/kg dry	528	ND	95 1	75-125			
Carbon Ranges C12-C28	426	10 0	"	528	ND	80.7	75-125			
Carbon Ranges C28-C35	ND	10 0	"	0 00	ND		75-125			
Total Hydrocarbons	929	10 0	"	1060	ND	87 6	75-125			
Surrogate 1-Chlorooctane	*56 7*		*mg/kg*	*50 0*		*113*	*70-130*			
Surrogate 1-Chlorooctadecane	*46 4*		*"*	*50 0*		*92 8*	*70-130*			
Matrix Spike Dup (EF70703-MSD1)	**Source: 7F06027-01**			Prepared: 06/07/07 Analyzed: 06/11/07						
Carbon Ranges C6-C12	523	10 0	mg/kg dry	528	ND	99 1	75-125	4 12	20	
Carbon Ranges C12-C28	432	10 0	"	528	ND	81 8	75-125	1 35	20	
Carbon Ranges C28-C35	ND	10 0	"	0 00	ND		75-125		20	
Total Hydrocarbons	956	10 0	"	1060	ND	90 2	75-125	2 92	20	
Surrogate· 1-Chlorooctane	*50 5*		*mg/kg*	*50 0*		*101*	*70-130*			
Surrogate 1-Chlorooctadecane	*45 1*		*"*	*50 0*		*90.2*	*70-130*			
Batch EF70705 - EPA 5030C (GC)										
Blank (EF70705-BLK1)				Prepared 06/07/07 Analyzed: 06/08/07						
Benzene	ND	0 00100	mg/kg wet							
Toluene	ND	0 00100	"							
Ethylbenzene	ND	0 00100	"							
Xylene (p/m)	ND	0 00100	"							
Xylene (o)	ND	0 00100	"							
Surrogate a,a,a-Trifluorotoluene	*48 0*		*ug/kg*	*50.0*		*96 0*	*75-125*			
Surrogate 4-Bromofluorobenzene	*45 2*		*"*	*50.0*		*90 4*	*75-125*			
LCS (EF70705-BS1)				Prepared: 06/07/07 Analyzed: 06/08/07						
Benzene	0 0538	0 00100	mg/kg wet	0 0500		108	80-120			
Toluene	0 0550	0 00100	"	0 0500		110	80-120			
Ethylbenzene	0 0535	0 00100	"	0 0500		107	80-120			
Xylene (p/m)	0 101	0.00100	"	0.100		101	80-120			
Xylene (o)	0 0561	0 00100	"	0 0500		112	80-120			
Surrogate a,a,a-Trifluorotoluene	*51 9*		*ug/kg*	*50 0*		*104*	*75-125*			
Surrogate 4-Bromofluorobenzene	*50 6*		*"*	*50 0*		*101*	*75-125*			

Organics by GC - Quality Control
Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EF70705 - EPA 5030C (GC)										
Calibration Check (EF70705-CCV1)				Prepared: 06/07/07 Analyzed: 06/08/07						
Benzene	0 0548		mg/kg wet	0.0500		110	80-120			
Toluene	0 0537		"	0 0500		107	80-120			
Ethylbenzene	0.0489		"	0.0500		97 8	80-120			
Xylene (p/m)	0 0947		"	0 100		94 7	80-120			
Xylene (o)	0 0535		"	0 0500		107	80-120			
Surrogate a,a,a-Trifluorotoluene	*52 8*		*ug/kg*	*50 0*		*106*	*75-125*			
Surrogate 4-Bromofluorobenzene	*45 8*		*"*	*50.0*		*91 6*	*75-125*			
Matrix Spike (EF70705-MS1)		**Source: 7F06002-01**		Prepared: 06/07/07 Analyzed: 06/08/07						
Benzene	0 102	0 00200	mg/kg dry	0 100	ND	102	80-120			
Toluene	0 101	0 00200	"	0 100	ND	101	80-120			
Ethylbenzene	0 0963	0.00200	"	0.100	ND	96 3	80-120			
Xylene (p/m)	0 178	0 00200	"	0 200	ND	89 0	80-120			
Xylene (o)	0.0986	0 00200	"	0 100	ND	98 6	80-120			
Surrogate a,a,a-Trifluorotoluene	*47 7*		*ug/kg*	*50 0*		*95 4*	*75-125*			
Surrogate 4-Bromofluorobenzene	*45.5*		*"*	*50 0*		*91 0*	*75-125*			
Matrix Spike Dup (EF70705-MSD1)		**Source: 7F06002-01**		Prepared: 06/07/07 Analyzed 06/08/07						
Benzene	0 0973	0 00200	mg/kg dry	0.100	ND	97 3	80-120	4 72	20	
Toluene	0 0943	0 00200	"	0 100	ND	94.3	80-120	6 86	20	
Ethylbenzene	0 0929	0 00200	"	0 100	ND	92.9	80-120	3 59	20	
Xylene (p/m)	0 164	0 00200	"	0 200	ND	82 0	80-120	8 19	20	
Xylene (o)	0 0921	0 00200	"	0 100	ND	92 1	80-120	6 82	20	
Surrogate a,a,a-Trifluorotoluene	*43 0*		*ug/kg*	*50 0*		*86 0*	*75-125*			
Surrogate 4-Bromofluorobenzene	*42 8*		*"*	*50 0*		*85 6*	*75-125*			

General Chemistry Parameters by EPA / Standard Methods - Quality Control
Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EF70801 - General Preparation (Prep)										
Blank (EF70801-BLK1)				Prepared & Analyzed: 06/08/07						
% Solids	100		%							
Duplicate (EF70801-DUP1)		Source: 7F06026-01		Prepared: 06/07/07 Analyzed: 06/08/07						
% Solids	96 1		%		95 4			0 731	20	
Duplicate (EF70801-DUP2)		Source: 7F06024-09		Prepared: 06/07/07 Analyzed: 06/08/07						
% Solids	88 6		%		88 5			0.113	20	
Duplicate (EF70801-DUP3)		Source: 7F07003-03		Prepared: 06/07/07 Analyzed: 06/08/07						
% Solids	83 3		%		97 1			15 3	20	
Duplicate (EF70801-DUP4)		Source: 7F06026-06		Prepared & Analyzed: 06/08/07						
% Solids	97.0		%		97 1			0 103	20	
Batch EF71106 - General Preparation (WetChem)										
Blank (EF71106-BLK1)				Prepared & Analyzed: 06/11/07						
Chloride	ND	20 0	mg/kg Wet							
LCS (EF71106-BS1)				Prepared & Analyzed: 06/11/07						
Chloride	91 5	10 0	mg/kg Wet	100		91 5	80-120			
Matrix Spike (EF71106-MS1)		Source: 7F06024-01		Prepared & Analyzed: 06/11/07						
Chloride	447	20 0	mg/kg Wet	500	63 8	76 6	80-120			QM-10
Matrix Spike Dup (EF71106-MSD1)		Source: 7F06024-01		Prepared & Analyzed. 06/11/07						
Chloride	468	20 0	mg/kg Wet	500	63 8	80.8	80-120	4 59	20	

General Chemistry Parameters by EPA / Standard Methods - Quality Control
Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EF71106 - General Preparation (WetChem)										
Reference (EF71106-SRM1)				Prepared & Analyzed: 06/11/07						
Chloride	53.2	10.0	mg/kg Wet	50.0		106	80-120			

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.
S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
QM-10	LCS/LCSD were analyzed in place of MS/MSD.
J	Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
LCS	Laboratory Control Spike
MS	Matrix Spike
Dup	Duplicate

Report Approved By: _____ Date: 6/13/07

Brent Barron, Laboratory Director/Corp. Technical Director
Celey D. Keene, Org. Tech Director
Raland K. Tuttle, Laboratory Consultant

James Mathis, QA/QC Officer
Jeanne Mc Murrey, Inorg. Tech Director

Environmental Lab of Texas

12600 West I-20 East
Odessa, Texas 79765
Phone: 432-563-1800
Fax: 432-563-1713

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Project Manager: Cindy Crain
Company Name: Ocotillo Environmental
Company Address: 2125 French Drive, P.O. Box 1816
City/State/Zip: Hobbs, NM 88241
Telephone No: (505) 441-7244 Fax No: (432) 367-6747
Sampler Signature: Cindy Crain
Email: cindy.crain@gmail.com

Project Name: Burgundy EMU Lease
Project #: 7-0201
Project Loc: Monument, NM
PO #:

283847
TF060026

LAB # (lab use only)	FIELD CODE	Date Sampled	Time Sampled	No of Containers	Preservative: Ice	HNO_3	HCl	NaOH	H_2SO_4	None	Other (Specify)	Matrix: Water	Sludge	Soil	Other (specify)	Analyze For: TPH: 418.1 / 8015M / 1005 / 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, CO3, HCO3)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/5030 or BTEX 8260	RCI	N O R M	RUSH TAT (Pre-Schedule)	Standard TAT
01	SS-1 (0-1')	6/6/07	0923	1	✓									✓		✓		✓					✓				✓
02	SS-2 (5-6')	"	0926	1	✓									✓		✓		✓					✓				✓
03	SS-3 (10-11')	"	0950	1	✓									✓		✓		✓					✓				✓
04	SS-4 (15-16')	"	1005	1	✓									✓		✓		✓					✓				✓
05	SS-5 (0-1')	"	1015	1	✓									✓		✓		✓									✓
06	SS-6 (5-6')	"	1030	1	✓									✓		✓		✓									✓

Special Instructions:

Sample Containers Intact? (Y) N
Labels on container? on Lid Y (N)
Custody Seals. Containers / Cooler
Temperature Upon Receipt 0.0 °C

Laboratory Comments:

Relinquished by	Date	Time	Received by	Date	Time
Cindy Crain	6/6/07	1600			
Relinquished by	Date	Time	Received by ELOT	Date	Time
			Andrea Law	6-6-07	1600

Environmental Lab of Texas

Variance/ Corrective Action Report- Sample Log-In

Client: Ocotillo Env.

Date/ Time: 6.6.07 16:00

Lab ID #: 7F06026

Initials: AL

Sample Receipt Checklist

					Client Initials
#1	Temperature of container/ cooler?	Yes	No	0.0 °C	
#2	Shipping container in good condition?	Yes	No		
#3	Custody Seals intact on shipping container/ cooler?	Yes	No	Not Present	
#4	Custody Seals intact on sample bottles/ container?	Yes	No	Not Present	
#5	Chain of Custody present?	Yes	No		
#6	Sample instructions complete of Chain of Custody?	Yes	No		
#7	Chain of Custody signed when relinquished/ received?	Yes	No		
#8	Chain of Custody agrees with sample label(s)?	Yes	No	ID written on Cont / Lid	
#9	Container label(s) legible and intact?	Yes	No	Not Applicable	
#10	Sample matrix/ properties agree with Chain of Custody?	Yes	No		
#11	Containers supplied by ELOT?	Yes	No		
#12	Samples in proper container/ bottle?	Yes	No	See Below	
#13	Samples properly preserved?	Yes	No	See Below	
#14	Sample bottles intact?	Yes	No		
#15	Preservations documented on Chain of Custody?	Yes	No		
#16	Containers documented on Chain of Custody?	Yes	No		
#17	Sufficient sample amount for indicated test(s)?	Yes	No	See Below	
#18	All samples received within sufficient hold time?	Yes	No	See Below	
#19	Subcontract of sample(s)?	Yes	No	Not Applicable	
#20	VOC samples have zero headspace?	Yes	No	Not Applicable	

Variance Documentation

Contact: _____ Contacted by: _____ Date/ Time: _____

Regarding: _____

Corrective Action Taken:

Check all that Apply:

- ☐ See attached e-mail/ fax
- ☐ Client understands and would like to proceed with analysis
- ☐ Cooling process had begun shortly after sampling event

Analytical Report 284712

for

Ocotillo Environmental, LLC

Project Manager: Cindy Crane

Burgundy EMU Lease

7-0201

29-JUN-07

12600 West I-20 East Odessa, Texas 79765

NELAC certification numbers:
Houston, TX E871002 - Miami, FL E86678 - Tampa, FL E86675

Houston - Dallas - San Antonio - Austin - Tampa - Miami - Latin America

29-JUN-07

Project Manager: **Cindy Crane**
Ocotillo Environmental, LLC
2125 French Drive
P.O. Box 1816
Hobbs, NM 88241

Reference: XENCO Report No: **284712**
Burgundy EMU Lease
Project Address: Monument, NM

Cindy Crane:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number 284712. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. Estimation of data uncertainty for this report is found in the quality control section of this report unless otherwise noted. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 284712 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

Brent Barron

Odessa Laboratory Director

Sample Cross Reference 284712

Ocotillo Environmental, LLC, Hobbs, NM

Burgundy EMU Lease

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
Bottom (17')	S	Jun-20-07 09:40		284712-001
North Side	S	Jun-20-07 09:45		284712-002
South Side	S	Jun-20-07 09:50		284712-003
East Side	S	Jun-20-07 09:55		284712-004
West Side	S	Jun-20-07 10:00		284712-005

Certificate of Analysis Summary 284712

Ocotillo Environmental, LLC, Hobbs, NM

Project Name: Burgundy EMU Lease

Project Id: 7-0201
Contact: Cindy Crane
Project Location: Monument, NM

Date Received in Lab: Thu Jun-21-07 02:55 pm
Report Date: 29-JUN-07
Project Manager: Brent Barron, II

Analysis Requested											
	Lab Id:	284712-001		284712-002		284712-003		284712-004		284712-005	
	Field Id:	Bottom (17')		North Side		South Side		East Side		West Side	
	Depth:										
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Jun-20-07 09.40		Jun-20-07 09 45		Jun-20-07 09.50		Jun-20-07 09 55		Jun-20-07 10 00	
Inorganic Anions by EPA 300	***Extracted:***										
	Analyzed:	Jun-27-07 17 29		Jun-27-07 18.29		Jun-27-07 18 49		Jun-27-07 19.09		Jun-27-07 19 29	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		1920	0.582	1310	0 564	738	0 536	1010	0.539	865	0 541
Percent Moisture	***Extracted:***										
	Analyzed:	Jun-21-07 17 00		Jun-21-07 17 05		Jun-21-07 17·15		Jun-21-07 17 20		Jun-21-07 17 25	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		14 2		11 3	1 00	6 67	1 00	7 15	1.00	7 64	1 00
TPH by SW8015 Mod	***Extracted:***	Jun-23-07 09 14		Jun-23-07 09 14		Jun-23-07 09.14		Jun-23-07 09·14		Jun-23-07 09 14	
	Analyzed:	Jun-24-07 06 18		Jun-24-07 06·43		Jun-24-07 07:08		Jun-24-07 07 33		Jun-24-07 07 58	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
C6-C12 Gasoline Range Hydrocarbons		ND	29 1	ND	28 2	75.6	26 8	ND	26.9	84 1	27 1
C12-C28 Diesel Range Hydrocarbons		ND	29 1	ND	28.2	808	26 8	ND	26 9	727	27 1
C28-C35 Oil Range Hydrocarbons		ND	29 1	ND	28.2	150	26 8	ND	26 9	146	27 1
Total TPH		ND		ND		1033 6		ND		957 1	

Brent Barron
Odessa Laboratory Director

Flagging Criteria

X In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to effect the recovery of the spike concentration. This condition could also effect the relative percent difference in the MS/MSD.

B A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.

D The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.

E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.

F RPD exceeded lab control limits.

J The target analyte was positively identified below the MQL and above the SQL.

U Analyte was not detected.

L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.

H The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.

K Sample analyzed outside of recommended hold time.

Form 2 - Surrogate Recoveries

Project Name: Burgundy EMU Lease

Work Order #: 284712 **Project ID:** 7-0201

Lab Batch #: 699120 **Sample:** 284705-022 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH by SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctadecane	45.4	50.0	91	70-135	
1-Chlorooctane	56.7	50.0	113	70-135	

Lab Batch #: 699120 **Sample:** 284705-022 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH by SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctadecane	42 9	50.0	86	70-135	
1-Chlorooctane	52.7	50.0	105	70-135	

Lab Batch #: 699120 **Sample:** 284712-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH by SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctadecane	40 3	50 0	81	70-135	
1-Chlorooctane	40.3	50.0	81	70-135	

Lab Batch #: 699120 **Sample:** 284712-002 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH by SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctadecane	40.2	50 0	80	70-135	
1-Chlorooctane	41 5	50.0	83	70-135	

Lab Batch #: 699120 **Sample:** 284712-003 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH by SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctadecane	41 1	50.0	82	70-135	
1-Chlorooctane	42 6	50.0	85	70-135	

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.

Form 2 - Surrogate Recoveries

Project Name: Burgundy EMU Lease

Work Order #: 284712 **Project ID:** 7-0201

Lab Batch #: 699120 **Sample:** 284712-004 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH by SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctadecane	37.7	50.0	75	70-135	
1-Chlorooctane	38.8	50 0	78	70-135	

Lab Batch #: 699120 **Sample:** 284712-005 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH by SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctadecane	40.4	50.0	81	70-135	
1-Chlorooctane	41.3	50.0	83	70-135	

Lab Batch #: 699120 **Sample:** 496400-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg

TPH by SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctadecane	56 0	50.0	112	70-135	
1-Chlorooctane	61.5	50.0	123	70-135	

Lab Batch #: 699120 **Sample:** 496400-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg

TPH by SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctadecane	50.2	50.0	100	70-135	
1-Chlorooctane	46.9	50.0	94	70-135	
o-Terphenyl	ND	ND		70-135	*U

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.

Blank Spike Recovery

Project Name: Burgundy EMU Lease

Work Order #: 284712 **Project ID:** 7-0201

Lab Batch #: 699338 **Sample:** 699338-1-BKS **Matrix:** Solid
Date Analyzed: 06/27/2007 **Date Prepared:** 06/27/2007 **Analyst:** LATCOR
Reporting Units: mg/kg **Batch #:** 1

Inorganic Anions by EPA 300	BLANK /BLANK SPIKE RECOVERY STUDY					
Analytes	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
Chloride	ND	10.0	9.95	100	75-125	

Lab Batch #: 699120 **Sample:** 496400-1-BKS **Matrix:** Solid
Date Analyzed: 06/24/2007 **Date Prepared:** 06/23/2007 **Analyst:** SHE
Reporting Units: mg/kg **Batch #:** 1

TPH by SW8015 Mod	BLANK /BLANK SPIKE RECOVERY STUDY					
Analytes	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
C6-C12 Gasoline Range Hydrocarbons	ND	500	536	107	70-135	
C12-C28 Diesel Range Hydrocarbons	ND	500	402	80	70-135	

Blank Spike Recovery [D] = 100*[C]/[B]
All results are based on MDL and validated for QC purposes.

Form 3 - MS Recoveries

Project Name: Burgundy EMU Lease

Work Order #: 284712
Lab Batch #: 699338
Project ID: 7-0201
Date Analyzed: 06/27/2007
Date Prepared: 06/27/2007
Analyst: LATCOR
QC- Sample ID: 284705-028 S
Batch #: 1
Matrix: Soil
Reporting Units: mg/kg

Inorganic Anions by EPA 300	MATRIX / MATRIX SPIKE RECOVERY STUDY					
Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	55.4	102	160	103	75-125	

Lab Batch #: 699338
Date Analyzed: 06/27/2007
Date Prepared: 06/27/2007
Analyst: LATCOR
QC- Sample ID: 284712-002 S
Batch #: 1
Matrix: Soil
Reporting Units: mg/kg

Inorganic Anions by EPA 300	MATRIX / MATRIX SPIKE RECOVERY STUDY					
Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	1310	1130	1930	55	75-125	X

Matrix Spike Percent Recovery [D] = 100*(C-A)/B
Relative Percent Difference [E] = 200*(C-A)/(C+B)
All Results are based on MDL and Validated for QC Purposes

Form 3 - MS / MSD Recoveries

Project Name: Burgundy EMU Lease

Work Order # : 284712 **Project ID:** 7-0201

Lab Batch ID: 699120 **QC- Sample ID:** 284705-022 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 06/24/2007 **Date Prepared:** 06/23/2007 **Analyst:** SHE

Reporting Units: mg/kg

TPH by SW8015 Mod Analytes	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY										
	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
C6-C12 Gasoline Range Hydrocarbons	ND	548	683	125	548	662	121	3	70-135	35	
C12-C28 Diesel Range Hydrocarbons	ND	548	583	106	548	537	98	8	70-135	35	

Matrix Spike Percent Recovery [D] = 100*(C-A)/B
Relative Percent Difference RPD = 200*(D-G)/(D+G)

Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not ApplicableN = See Narrative, EQL = Estimated Quantitation Limit

Sample Duplicate Recovery

Project Name: Burgundy EMU Lease

Work Order #: 284712

Lab Batch #: 699338 **Project ID:** 7-0201
Date Analyzed: 06/27/2007 **Date Prepared:** 06/27/2007 **Analyst:** LATCOR
QC- Sample ID: 284705-028 D **Batch #:** 1 **Matrix:** Soil
Reporting Units: mg/kg

Inorganic Anions by EPA 300 Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY				
	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Chloride	55.4	52.1	6	20	

Lab Batch #: 699338
Date Analyzed: 06/27/2007 **Date Prepared:** 06/27/2007 **Analyst:** LATCOR
QC- Sample ID: 284712-002 D **Batch #:** 1 **Matrix:** Soil
Reporting Units: mg/kg

Inorganic Anions by EPA 300 Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY				
	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Chloride	1310	1280	2	20	

Lab Batch #: 698984
Date Analyzed: 06/21/2007 **Date Prepared:** 06/21/2007 **Analyst:** JLG
QC- Sample ID: 284705-015 D **Batch #:** 1 **Matrix:** Soil
Reporting Units: %

Percent Moisture Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY				
	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Percent Moisture	1.37	1.50	9	20	

Lab Batch #: 699100
Date Analyzed: 06/21/2007 **Date Prepared:** 06/21/2007 **Analyst:** CELKEE
QC- Sample ID: 284712-002 D **Batch #:** 1 **Matrix:** Soil
Reporting Units: %

Percent Moisture Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY				
	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Percent Moisture	11.3	11.6	3	20	

Spike Relative Difference RPD 200 * | (B-A)/(B+A) |
All Results are based on MDL and validated for QC purposes.

Environmental Lab of Texas

12600 West I-20 East
Odessa, Texas 79765
Phone 432-563-1800
Fax 432-563-1713

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Project Manager: Cindy Crain
Company Name: Ocotillo Environmental
Company Address: 2125 French Drive, P.O. Box 1816
City/State/Zip: Hobbs, NM 88241
Telephone No: (505) 441-7244
Fax No: (575) 392-0304
Sampler Signature: Cindy Crain
Email: cindy.crain@gmail.com

Project Name: Burgundy EMU Lease
Project #: 7-0201
Project Loc: Monument, NM
PO #:

284712 LAB # (lab use only)	FIELD CODE	Date Sampled	Time Sampled	No of Containers	Preservative: Ice	HNO3	HCl	NaOH	H2SO4	None	Other (specify)	Matrix: Water	Sludge	Soil	Other (specify)	Analyze For: TPH 418.1 (8015) 1005 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, CO3, HCO3)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/5030 or BTEX 8260	RC						RUSH TAT (Pre-Schedule)	Standard TAT
01	Bottom (17')	6/20/07	0940	1	✓									✓		✓		✓													
02	North Side	"	0945	1	✓									✓		✓		✓													
03	South Side	"	0950	1	✓									✓		✓		✓													
04	East Side	"	0955	1	✓									✓		✓		✓													
05	West Side	"	1000	1	✓									✓		✓		✓													

Special Instructions:

Sample Containers Intact? Y N
Labels on container? Y N
Custody Seals Containers / Cooler
Temperature Upon Receipt

Laboratory Comments: -1 C

Relinquished by	Date	Time	Received by	Date	Time
Cindy Crain	6/21/07	1455			
Relinquished by	Date	Time	Received by ELOT	Date	Time
			Andrea Lam	6/21/07	14:55

Environmental Lab of Texas

Variance/ Corrective Action Report- Sample Log-In

Client: Ocotillo

Date/ Time: 6.21.07 14:55

Lab ID #: 284712

Initials: aL

Sample Receipt Checklist

					Client Initials
#1	Temperature of container/ cooler?	~~Yes~~	No	-1.0 °C	
#2	Shipping container in good condition?	~~Yes~~	No		
#3	Custody Seals intact on shipping container/ cooler?	Yes	No	~~Not Present~~	
#4	Custody Seals intact on sample bottles/ container?	Yes	No	~~Not Present~~	
#5	Chain of Custody present?	~~Yes~~	No		
#6	Sample instructions complete of Chain of Custody?	~~Yes~~	No		
#7	Chain of Custody signed when relinquished/ received?	~~Yes~~	No		
#8	Chain of Custody agrees with sample label(s)?	Yes	No	ID written on Cont / Lid	
#9	Container label(s) legible and intact?	~~Yes~~	No	Not Applicable	
#10	Sample matrix/ properties agree with Chain of Custody?	~~Yes~~	No		
#11	Containers supplied by ELOT?	~~Yes~~	No		
#12	Samples in proper container/ bottle?	~~Yes~~	No	See Below	
#13	Samples properly preserved?	~~Yes~~	No	See Below	
#14	Sample bottles intact?	~~Yes~~	No		
#15	Preservations documented on Chain of Custody?	~~Yes~~	No		
#16	Containers documented on Chain of Custody?	~~Yes~~	No		
#17	Sufficient sample amount for indicated test(s)?	~~Yes~~	No	See Below	
#18	All samples received within sufficient hold time?	~~Yes~~	No	See Below	
#19	Subcontract of sample(s)?	Yes	No	~~Not Applicable~~	
#20	VOC samples have zero headspace?	~~Yes~~	No	Not Applicable	

Variance Documentation

Contact: _____ Contacted by: _____ Date/ Time: _____

Regarding: _____

Corrective Action Taken: _____

Check all that Apply:

- ☐ See attached e-mail/ fax
- ☐ Client understands and would like to proceed with analysis
- ☐ Cooling process had begun shortly after sampling event

Environmental Lab of Texas

12600 West I-20 East
Odessa, Texas 79765
Phone: 432-563-1800
Fax: 432-563-1713

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Project Manager: Cindy Crain
Company Name: Ocotillo Environmental
Company Address: 2125 French Drive, P.O. Box 1816
City/State/Zip: Hobbs, NM 88241
Telephone No: (505) 441-7244 Fax No: (432) 272-0304
Sampler Signature: Cindy Crain
Email: cindy.crain@gmail.com

Project Name: Burgundy EMU Lease
Project #: 7-0201
Project Loc: Monument, NM
PO #:

LAB # (lab use only)	FIELD CODE	Date Sampled	Time Sampled	No of Containers	Preservative: Ice	HNO_3	HCl	NaOH	H_2SO_4	None	Other (Specify)	Matrix: Water	Sludge	Soil	Other (specify)	Analyze For: TPH 418.1 / 8015M 1005 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO_4, CO_3, HCO_3)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/5030 or BTEX 8260	RCI	N O R M					RUSH TAT (Pre-Schedule)	Standard TAT
284712																TCLP / TOTAL															
01	Bottom (17')	6/20/07	0940	1	✓									✓		✓		✓													
02	North Side	"	0945	1	✓									✓		✓		✓													
03	South Side	"	0950	1	✓									✓		✓		✓													
04	East Side	"	0955	1	✓									✓		✓		✓													
05	West Side	"	1000	1	✓									✓		✓		✓													

Special Instructions:

Sample Containers Intact? Y N
Labels on container? on lid Y N
Custody Seals. Containers / Cooler
Temperature Upon Receipt
Laboratory Comments: -1.0

Relinquished by	Date	Time	Received by	Date	Time
Cindy Crain	6/21/07	1455			
Relinquished by	Date	Time	Received by ELOT	Date	Time
			Andrea Lam	6-21-07	14:55

Environmental Lab of Texas

Variance/ Corrective Action Report- Sample Log-In

Client: Ocotillo

Date/ Time: 6.21.07 14:55

Lab ID #: 284712

Initials: AL

Sample Receipt Checklist

					Client Initials
#1	Temperature of container/ cooler?	~~Yes~~	No	-1.0 °C	
#2	Shipping container in good condition?	~~Yes~~	No		
#3	Custody Seals intact on shipping container/ cooler?	Yes	No	~~Not Present~~	
#4	Custody Seals intact on sample bottles/ container?	Yes	No	~~Not Present~~	
#5	Chain of Custody present?	~~Yes~~	No		
#6	Sample instructions complete of Chain of Custody?	~~Yes~~	No		
#7	Chain of Custody signed when relinquished/ received?	~~Yes~~	No		
#8	Chain of Custody agrees with sample label(s)?	Yes	No	~~ID written on Cont./ Lid~~	
#9	Container label(s) legible and intact?	~~Yes~~	No	Not Applicable	
#10	Sample matrix/ properties agree with Chain of Custody?	~~Yes~~	No		
#11	Containers supplied by ELOT?	~~Yes~~	No		
#12	Samples in proper container/ bottle?	~~Yes~~	No	See Below	
#13	Samples properly preserved?	~~Yes~~	No	See Below	
#14	Sample bottles intact?	~~Yes~~	No		
#15	Preservations documented on Chain of Custody?	~~Yes~~	No		
#16	Containers documented on Chain of Custody?	~~Yes~~	No		
17	Sufficient sample amount for indicated test(s)?	~~Yes~~	No	See Below	
18	All samples received within sufficient hold time?	~~Yes~~	No	See Below	
19	Subcontract of sample(s)?	Yes	No	~~Not Applicable~~	
20	VOC samples have zero headspace?	~~Yes~~	No	Not Applicable	

Variance Documentation

ontact _____ Contacted by: _____ Date/ Time: _____

egarding _____

orrective Action Taken:

_____

_____

_____

heck all that Apply:

- ☐ See attached e-mail/ fax
- ☐ Client understands and would like to proceed with analysis
- ☐ Cooling process had begun shortly after sampling event

Analytical Report 285805

for

Ocotillo Environmental, LLC

Project Manager: Cindy Crain

Burgundy EMU Lease

7-0201

19-JUL-07

12600 West I-20 East Odessa, Texas 79765

A Xenco Laboratories Company

NELAC certification numbers:
Houston, TX E871002 - Miami, FL E86678 - Tampa, FL E86675

Houston - Dallas - San Antonio - Austin - Tampa - Miami - Latin America

19-JUL-07

Project Manager: **Cindy Crain**
Ocotillo Environmental, LLC
2125 French Drive
P.O. Box 1816
Hobbs, NM 88241

Reference: XENCO Report No: **285805**
Burgundy EMU Lease
Project Address: Monument, NM

Cindy Crain:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number 285805. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. Estimation of data uncertainty for this report is found in the quality control section of this report unless otherwise noted. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 285805 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

Brent Barron

Odessa Laboratory Director

Sample Cross Reference 285805

Ocotillo Environmental, LLC, Hobbs, NM

Burgundy EMU Lease

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
West Side	S	Jul-11-07 12:12		285805-001
South Side	S	Jul-11-07 12:20		285805-002
Bottom	S	Jul-11-07 12:30	20 - 20	285805-003

Certificate of Analysis Summary 285805

Ocotillo Environmental, LLC, Hobbs, NM

Project Name: Burgundy EMU Lease

Project Id: 7-0201
Contact: Cindy Crain
Project Location: Monument, NM

Date Received in Lab: Wed Jul-11-07 03:15 pm
Report Date: 19-JUL-07
Project Manager: Brent Barron, II

Analysis Requested													
	Lab Id:	285805-001		285805-002		285805-003							
	Field Id:	West Side		South Side		Bottom							
	Depth:					20-20							
	Matrix:	SOIL		SOIL		SOIL							
	Sampled:	Jul-11-07 12 12		Jul-11-07 12.20		Jul-11-07 12.30							
Inorganic Anions by EPA 300	*Extracted:*												
	Analyzed:	Jul-13-07 09:35		Jul-13-07 09:35		Jul-13-07 09:35							
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL						
Chloride		162	5 27	268	10 5	633	10 6						
Percent Moisture	*Extracted:*												
	Analyzed:	Jul-12-07 18.00		Jul-12-07 18:05		Jul-12-07 18:10							
	Units/RL:	%	RL	%	RL	%	RL						
Percent Moisture		5.12		4 31		5 78							
TPH by SW8015 Mod	*Extracted:*	Jul-12-07 18.42		Jul-12-07 18 42		Jul-12-07 18:42							
	Analyzed:	Jul-13-07 19:45		Jul-13-07 20:10		Jul-13-07 20 34							
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL						
C6-C12 Gasoline Range Hydrocarbons		ND	10 5	ND	10.5	ND	10 6						
C12-C28 Diesel Range Hydrocarbons		75 0	10.5	36 8	10.5	45.9	10 6						
C28-C35 Oil Range Hydrocarbons		34 9	10 5	21.6	10.5	25 3	10 6						
Total TPH		109.9		58.4		71.2							

Brent Barron
Odessa Laboratory Director

Flagging Criteria

X In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to effect the recovery of the spike concentration. This condition could also effect the relative percent difference in the MS/MSD.

B A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.

D The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.

E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.

F RPD exceeded lab control limits.

J The target analyte was positively identified below the MQL and above the SQL.

U Analyte was not detected.

L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.

H The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.

K Sample analyzed outside of recommended hold time.

Form 2 - Surrogate Recoveries

Project Name: Burgundy EMU Lease

Work Order #: 285805 **Project ID:** 7-0201

Lab Batch #: 700656 **Sample:** 285714-008 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH by SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctadecane	32.6	50.0	65	70-135	*
1-Chlorooctane	40 9	50.0	82	70-135	

Lab Batch #: 700656 **Sample:** 285714-008 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH by SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctadecane	32.8	50.0	66	70-135	*
1-Chlorooctane	38.3	50.0	77	70-135	

Lab Batch #: 700656 **Sample:** 285805-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH by SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctadecane	33.6	50.0	67	70-135	**
1-Chlorooctane	35.3	50.0	71	70-135	

Lab Batch #: 700656 **Sample:** 285805-002 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH by SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctadecane	33.9	50.0	68	70-135	**
1-Chlorooctane	36.0	50.0	72	70-135	

Lab Batch #: 700656 **Sample:** 285805-003 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH by SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount- [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctadecane	36.2	50.0	72	70-135	
1-Chlorooctane	38.2	50.0	76	70-135	

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.

Form 2 - Surrogate Recoveries

Project Name: Burgundy EMU Lease

Work Order #: 285805 **Project ID:** 7-0201

Lab Batch #: 700656 **Sample:** 497156-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg

TPH by SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctadecane	35 1	50.0	70	70-135	
1-Chlorooctane	41 4	50 0	83	70-135	

Lab Batch #: 700656 **Sample:** 497156-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg

TPH by SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctadecane	38.6	50.0	77	70-135	
1-Chlorooctane	39.3	50.0	79	70-135	

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.

Blank Spike Recovery

Project Name: Burgundy EMU Lease

Work Order #: 285805 **Project ID:** 7-0201

Lab Batch #: 700568 **Sample:** 700568-1-BKS **Matrix:** Solid
Date Analyzed: 07/13/2007 **Date Prepared:** 07/13/2007 **Analyst:** LATCOR
Reporting Units: mg/kg **Batch #:** 1

Inorganic Anions by EPA 300 Analytes	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
	BLANK /BLANK SPIKE RECOVERY STUDY					
Chloride	ND	10.0	9.95	100	75-125	

Lab Batch #: 700656 **Sample:** 497156-1-BKS **Matrix:** Solid
Date Analyzed: 07/13/2007 **Date Prepared:** 07/12/2007 **Analyst:** CELKEE
Reporting Units: mg/kg **Batch #:** 1

TPH by SW8015 Mod Analytes	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
	BLANK /BLANK SPIKE RECOVERY STUDY					
C6-C12 Gasoline Range Hydrocarbons	ND	500	527	105	70-135	
C12-C28 Diesel Range Hydrocarbons	ND	500	426	85	70-135	

Blank Spike Recovery [D] = 100*[C]/[B]
All results are based on MDL and validated for QC purposes.

Form 3 - MS Recoveries

Project Name: Burgundy EMU Lease

Work Order #: 285805
Lab Batch #: 700568
Project ID: 7-0201
Date Analyzed: 07/13/2007
Date Prepared: 07/13/2007
Analyst: LATCOR
QC- Sample ID: 285714-001 S
Batch #: 1
Matrix: Soil
Reporting Units: mg/kg

Inorganic Anions by EPA 300	MATRIX / MATRIX SPIKE RECOVERY STUDY					
Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	107	138	247	101	75-125	

Matrix Spike Percent Recovery [D] = 100*(C-A)/B
Relative Percent Difference [E] = 200*(C-A)/(C+B)
All Results are based on MDL and Validated for QC Purposes

Form 3 - MS / MSD Recoveries

Project Name: Burgundy EMU Lease

Work Order # : 285805 **Project ID:** 7-0201

Lab Batch ID: 700656 **QC- Sample ID:** 285714-008 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 07/13/2007 **Date Prepared:** 07/12/2007 **Analyst:** CELKEE

Reporting Units: mg/kg

	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY										
TPH by SW8015 Mod **Analytes**	**Parent Sample Result [A]**	**Spike Added [B]**	**Spiked Sample Result [C]**	**Spiked Sample %R [D]**	**Spike Added [E]**	**Duplicate Spiked Sample Result [F]**	**Spiked Dup. %R [G]**	**RPD %**	**Control Limits %R**	**Control Limits %RPD**	**Flag**
C6-C12 Gasoline Range Hydrocarbons	ND	522	539	103	522	506	97	6	70-135	35	
C12-C28 Diesel Range Hydrocarbons	ND	522	428	82	522	418	80	2	70-135	35	

Matrix Spike Percent Recovery [D] = 100*(C-A)/B
Relative Percent Difference RPD = 200*(D-G)/(D+G)

Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not ApplicableN = See Narrative, EQL = Estimated Quantitation Limit

Sample Duplicate Recovery

Project Name: Burgundy EMU Lease

Work Order #: 285805

Lab Batch #: 700568 **Project ID:** 7-0201
Date Analyzed: 07/13/2007 **Date Prepared:** 07/13/2007 **Analyst:** LATCOR
QC- Sample ID: 285714-001 D **Batch #:** 1 **Matrix:** Soil
Reporting Units: mg/kg

Inorganic Anions by EPA 300	SAMPLE / SAMPLE DUPLICATE RECOVERY				
Analyte	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Chloride	107	104	3	20	

Lab Batch #: 700234
Date Analyzed: 07/12/2007 **Date Prepared:** 07/12/2007 **Analyst:** JLG
QC- Sample ID: 285794-001 D **Batch #:** 1 **Matrix:** Soil
Reporting Units: %

Percent Moisture	SAMPLE / SAMPLE DUPLICATE RECOVERY				
Analyte	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Percent Moisture	7.58	7.49	1	20	

Spike Relative Difference RPD 200 * | (B-A)/(B+A) |
All Results are based on MDL and validated for QC purposes.

Environmental Lab of Texas

A Xenco Laboratories Company

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

12600 West I-20 East
Odessa, Texas 79765

Phone: 432-563-1800
Fax: 432-563-1713

Project Manager: Cindy Crain
Company Name: Ocotillo Environmental
Company Address: 2125 French Dr. P.O. Box 1816
City/State/Zip: Hobbs, NM 88241
Telephone No: (505) 441-7244 Fax No: (432) 272-0304
Sampler Signature: Cindy Crain e-mail: cindy.crain@gmail.com

Project Name: Burgundy EMU Lease
Project #: 7-0201
Project Loc: Monument, NM
PO #:
Report Format: ☒ Standard ☐ TRRP ☐ NPDES

(lab use only) ORDER #: 288305

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total # of Containers	Preservation & # of Containers: Ice	HNO_3	HCl	H_2SO_4	NaOH	$Na_2S_2O_3$	None	Other (Specify)	Matrix: DW=Drinking Water SL=Sludge GW=Groundwater S=Soil/Solid NP=Non-Potable Specify Other	Analyze For: TCLP: TPH: 418.1 8015M	TOTAL: 8015B TPH: TX 1005 TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO_4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/5030 or BTEX 8260	RCI	N.O.R.M.	RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
01	West Side	-	-	7/11/07	1212		1	✓								S	✓			✓									✓
02	South Side	-	-	7/11/07	1220		1	✓								S	✓			✓									✓
03	Bottom	20	20	7/11/07	1230		1	✓								S	✓			✓									✓

Special Instructions:

Relinquished by:	Date	Time	Received by:	Date	Time
Cindy Crain	7/11/07	1515			
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by ELOT: Andrea Law	7-11-07	15:15

Laboratory Comments:

Sample Containers Intact?	Y	N
VOCs Free of Headspace?	Y	N
Labels on container(s)	Y	N
Custody seals on container(s)	Y	N
Custody seals on cooler(s)	Y	N
Sample Hand Delivered by Sampler/Client Rep.?	Y	N

by Courier? UPS DHL FedEx Lone Star
4 0 2 9 1 2 5 5
Temperature Upon Receipt: 6.0 °C

Environmental Lab of Texas

Variance/ Corrective Action Report- Sample Log-In

Client: Ocotillo Env.

Date/ Time 7.11.07 15:15

Lab ID # : 289805

Initials: al

Sample Receipt Checklist

					Client Initials
#1	Temperature of container/ cooler?	Yes	No	6.0 °C	
#2	Shipping container in good condition?	Yes	No		
#3	Custody Seals intact on shipping container/ cooler?	Yes	No	Not Present	
#4	Custody Seals intact on sample bottles/ container?	Yes	No	Not Present	
#5	Chain of Custody present?	Yes	No		
#6	Sample instructions complete of Chain of Custody?	Yes	No		
#7	Chain of Custody signed when relinquished/ received?	Yes	No		
#8	Chain of Custody agrees with sample label(s)?	Yes	No	ID written on Cont/ Lid	
#9	Container label(s) legible and intact?	Yes	No	Not Applicable	
#10	Sample matrix/ properties agree with Chain of Custody?	Yes	No		
#11	Containers supplied by ELOT?	Yes	No		
#12	Samples in proper container/ bottle?	Yes	No	See Below	
#13	Samples properly preserved?	Yes	No	See Below	
#14	Sample bottles intact?	Yes	No		
#15	Preservations documented on Chain of Custody?	Yes	No		
#16	Containers documented on Chain of Custody?	Yes	No		
#17	Sufficient sample amount for indicated test(s)?	Yes	No	See Below	
#18	All samples received within sufficient hold time?	Yes	No	See Below	
#19	Subcontract of sample(s)?	Yes	No	Not Applicable	
#20	VOC samples have zero headspace?	Yes	No	Not Applicable	

Variance Documentation

Contact: _____ Contacted by: _____ Date/ Time: _____

Regarding: _____

Corrective Action Taken:

Check all that Apply:

- ☐ See attached e-mail/ fax
- ☐ Client understands and would like to proceed with analysis
- ☐ Cooling process had begun shortly after sampling event

Analytical Report 287734

for

Ocotillo Environmental, LLC

Project Manager: Cindy Crain

Burgundy EMU Lease

7-0201

18-AUG-07

12600 West I-20 East Odessa, Texas 79765

A Xenco Laboratories Company

NELAC certification numbers:
Houston, TX E871002 - Miami, FL E86678 - Tampa, FL E86675

Houston - Dallas - San Antonio - Austin - Tampa - Miami - Latin America

18-AUG-07

Project Manager: **Cindy Crain**
Ocotillo Environmental, LLC
2125 French Drive
P.O. Box 1816
Hobbs, NM 88241

Reference: XENCO Report No: **287734**
Burgundy EMU Lease
Project Address: Lea County, NM

Cindy Crain:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number 287734. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. Estimation of data uncertainty for this report is found in the quality control section of this report unless otherwise noted. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 287734 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

Brent Barron
Odessa Laboratory Director

Certificate of Analysis Summary 287734

Ocotillo Environmental, LLC, Hobbs, NM

Project Name: Burgundy EMU Lease

Project Id: 7-0201
Contact: Cindy Crain
Project Location: Lea County, NM

Date Received in Lab: Fri Aug-10-07 03.15 pm
Report Date: 18-AUG-07
Project Manager: Brent Barron, II

Analysis Requested											
	Lab Id:	287734-001		287734-002		287734-003		287734-004		287734-005	
	Field Id:	SS-1 Bottom		SS-2 (North Side Wall Comp		SS-3 (West Side Wall Comp		SS-4 (South Side Wall Comp		SS-5 (East Side Wall Comp	
	Depth:	20-20 ft									
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Aug-09-07 09.16		Aug-09-07 10.01		Aug-09-07 10.40		Aug-09-07 10 22		Aug-09-07 09 41	
Percent Moisture	*Extracted:*										
	Analyzed:	Aug-13-07 11 15		Aug-13-07 09:20		Aug-13-07 16 19		Aug-14-07 18 30		Aug-14-07 18:35	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		5.62		7.91		7.16		3 63		3 6	
TPH by SW8015 Mod	*Extracted:*					Aug-15-07 16.17					
	Analyzed:					Aug-17-07 14:31					
	Units/RL:					mg/kg	RL				
C6-C12 Gasoline Range Hydrocarbons						ND	10 8				
C12-C28 Diesel Range Hydrocarbons						104	10 8				
C28-C35 Oil Range Hydrocarbons						11 0	10 8				
Total TPH						115					
Total Chloride by EPA 325.3	*Extracted:*										
	Analyzed:	Aug-15-07 16 26		Aug-15-07 16.26				Aug-15-07 16.26		Aug-15-07 16:26	
	Units/RL:	mg/kg	RL	mg/kg	RL			mg/kg	RL	mg/kg	RL
Chloride		180	15.9	624	16.3			66.2	15 6	221	15.6

Since 1990 Houston - Dallas - San Antonio - Austin - Tampa - Miami - Latin America

Brent Barron
Odessa Laboratory Director

Flagging Criteria

X In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to effect the recovery of the spike concentration. This condition could also effect the relative percent difference in the MS/MSD.

B A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.

D The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.

E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.

F RPD exceeded lab control limits.

J The target analyte was positively identified below the MQL and above the SQL.

U Analyte was not detected.

L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.

H The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.

K Sample analyzed outside of recommended hold time.

Form 2 - Surrogate Recoveries

Project Name: Burgundy EMU Lease

Work Order #: 287734 **Project ID:** 7-0201

Lab Batch #: 702521 **Sample:** 287690-002 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH by SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctadecane	40.6	50.0	81	70-135	
1-Chlorooctane	43.1	50.0	86	70-135	

Lab Batch #: 702521 **Sample:** 287690-002 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH by SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctadecane	42.7	49.8	86	70-135	
1-Chlorooctane	38.0	49.8	76	70-135	

Lab Batch #: 702521 **Sample:** 287734-003 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH by SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctadecane	47.1	50.1	94	70-135	
1-Chlorooctane	42.7	50.1	85	70-135	

Lab Batch #: 702521 **Sample:** 498276-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg

TPH by SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctadecane	41.8	50.0	84	70-135	
1-Chlorooctane	40.8	50.0	82	70-135	

Lab Batch #: 702521 **Sample:** 498276-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg

TPH by SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctadecane	38.9	50.0	78	70-135	
1-Chlorooctane	35.2	50.0	70	70-135	

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.

Blank Spike Recovery

Project Name: Burgundy EMU Lease

Work Order #: 287734 **Project ID:** 7-0201

Lab Batch #: 702521 **Sample:** 498276-1-BKS **Matrix:** Solid
Date Analyzed: 08/16/2007 **Date Prepared:** 08/15/2007 **Analyst:** SHE
Reporting Units: mg/kg **Batch #:** 1

TPH by SW8015 Mod Analytes	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
	BLANK /BLANK SPIKE RECOVERY STUDY					
C6-C12 Gasoline Range Hydrocarbons	ND	500	471	94	70-135	
C12-C28 Diesel Range Hydrocarbons	ND	500	456	91	70-135	

Lab Batch #: 702308 **Sample:** 702308-1-BKS **Matrix:** Solid
Date Analyzed: 08/15/2007 **Date Prepared:** 08/15/2007 **Analyst:** IRO
Reporting Units: mg/kg **Batch #:** 1

Total Chloride by EPA 325.3 Analytes	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
	BLANK /BLANK SPIKE RECOVERY STUDY					
Chloride	11.7	50.0	59.6	96	75-125	

Blank Spike Recovery [D] = 100*[C]/[B]
All results are based on MDL and validated for QC purposes.

Form 3 - MS / MSD Recoveries

Project Name: Burgundy EMU Lease

Work Order # 287734 **Project ID:** 7-0201

Lab Batch ID: 702521 **QC- Sample ID:** 287690-002 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 08/17/2007 **Date Prepared:** 08/15/2007 **Analyst:** SHE

Reporting Units: mg/kg

TPH by SW8015 Mod	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY										
Analytes	**Parent Sample Result [A]**	**Spike Added [B]**	**Spiked Sample Result [C]**	**Spiked Sample %R [D]**	**Spike Added [E]**	**Duplicate Spiked Sample Result [F]**	**Spiked Dup. %R [G]**	**RPD %**	**Control Limits %R**	**Control Limits %RPD**	**Flag**
C6-C12 Gasoline Range Hydrocarbons	531	512	498	0	510	ND	0	NC	70-135	35	X
C12-C28 Diesel Range Hydrocarbons	411	512	369	0	510	ND	0	NC	70-135	35	X

Lab Batch ID: 702308 **QC- Sample ID:** 287734-001 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 08/15/2007 **Date Prepared:** 08/15/2007 **Analyst:** IRO

Reporting Units: mg/kg

Total Chloride by EPA 325.3	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY										
Analytes	**Parent Sample Result [A]**	**Spike Added [B]**	**Spiked Sample Result [C]**	**Spiked Sample %R [D]**	**Spike Added [E]**	**Duplicate Spiked Sample Result [F]**	**Spiked Dup. %R [G]**	**RPD %**	**Control Limits %R**	**Control Limits %RPD**	**Flag**
Chloride	180	265	428	94	265	428	94	0	75-125	30	

Matrix Spike Percent Recovery [D] = 100*(C-A)/B

Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

Relative Percent Difference RPD = 200*(D-G)/(D+G)

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not ApplicableN = See Narrative, EQL = Estimated Quantitation Limit

Sample Duplicate Recovery

Project Name: Burgundy EMU Lease

Work Order #: 287734

Lab Batch #: 702246 **Project ID:** 7-0201
Date Analyzed: 08/13/2007 **Date Prepared:** 08/13/2007 **Analyst:** JLG
QC- Sample ID: 287690-001 D **Batch #:** 1 **Matrix:** Soil
Reporting Units: %

Percent Moisture Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Percent Moisture	5.16	4.34	17	20	

Lab Batch #: 702265
Date Analyzed: 08/14/2007 **Date Prepared:** 08/14/2007 **Analyst:** JLG
QC- Sample ID: 287734-004 D **Batch #:** 1 **Matrix:** Soil
Reporting Units: %

Percent Moisture Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Percent Moisture	3.63	3.87	6	20	

Spike Relative Difference RPD 200 * | (B-A)/(B+A) |
All Results are based on MDL and validated for QC purposes.

Environmental Lab of Texas

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

12600 West I-20 East
Odessa, Texas 79765

Phone: 432-563-1800
Fax: 432-563-1713

Project Manager: Cindy Crain

Company Name: Ocotillo Environmental, LLC

Company Address: PO Box 1816

City/State/Zip: Hobbs, NM 88241

Telephone No: (505) 441-7244 Fax No: (432) 272-0304

Sampler Signature: Steve Cannon e-mail: cindy.crain@gmail.com

Project Name: Burgundy EMU Lease

Project #: 7-0201

Project Loc: Lea County NM

PO #:

Report Format: ~~Standard~~ ☐ TRRP ☐ NPDES

(lab use only)
ORDER #: 287734

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total # of Containers	Preservation & # of Containers: Ice	HNO_3	HCl	H_2SO_4	NaOH	$Na_2S_2O_3$	None	Other (Specify)	Matrix: DW=Drinking Water SL=Sludge GW = Groundwater S=Soil/Solid NP=Non-Potable Specify Other	Analyze For: TCLP: TPH 418.1	TCLP: 8015M	TCLP: 8015B	TPH TX 1005	TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/5030 or BTEX 8260	RCI	N O R M	Chlorides	RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
-001	SS-1 Bottom	20'	20'	8-9-07	9:40		1							✓		S															✓		✓
-002	SS-2 (North Side Wall Comp)			8-9-07	10:01		1							✓		S															✓		✓
-003	SS-3 (West Side Wall Comp)	~~[illegible]~~	~~[illegible]~~	8-9-07	10:40		1	✓								S	✓																✓
-004	SS-4 (South Side Wall Comp)			8-9-07	10:22		1							✓		S															✓		✓
-005	SS-5 (East Side wall Comp)			8-9-07	9:41		1							✓		S															✓		✓

Special Instructions:

Relinquished by	Date	Time	Received by	Date	Time
Cindy Crain	8/10/07	1515			
Relinquished by	Date	Time	Received by	Date	Time
Relinquished by	Date	Time	Received by ELOT	Date	Time
			Jeanne Fitch	08-10-07	1515

Laboratory Comments:

Sample Containers Intact? (Y) N
VOCs Free of Headspace? (Y) N
Labels on container(s) id on lid Y N
Custody seals on container(s) Y (N)
Custody seals on cooler(s) Y (N)
Sample Hand Delivered (Y) N
by Sampler/Client Rep.? Y N
by Courier? UPS DHL FedEx Lone Star

Temperature Upon Receipt: 25.0 °C

Environmental Lab of Texas

Variance/ Corrective Action Report- Sample Log-In

Client: Ocotillo

Date/ Time: 08-10-07@1515

Lab ID #: 287734

Initials: JMF

Sample Receipt Checklist

					Client Initials
1	Temperature of container/ cooler?	(Yes)	No	25.0 °C	
2	Shipping container in good condition?	(Yes)	No		
3	Custody Seals intact on shipping container/ cooler?	Yes	No	(Not Present)	
4	Custody Seals intact on sample bottles/ container?	Yes	No	(Not Present)	
5	Chain of Custody present?	(Yes)	No		
6	Sample instructions complete of Chain of Custody?	(Yes)	No		
7	Chain of Custody signed when relinquished/ received?	(Yes)	No		
8	Chain of Custody agrees with sample label(s)?	Yes	No	(ID written on Cont./ Lid)	
9	Container label(s) legible and intact?	Yes	No	(Not Applicable)	
10	Sample matrix/ properties agree with Chain of Custody?	(Yes)	No		
11	Containers supplied by ELOT?	(Yes)	No		
12	Samples in proper container/ bottle?	(Yes)	No	See Below	
13	Samples properly preserved? * 1 sample for TPH not cold	Yes	No	* See Below	
14	Sample bottles intact?	(Yes)	No		
15	Preservations documented on Chain of Custody?	(Yes)	No		
16	Containers documented on Chain of Custody?	(Yes)	No		
17	Sufficient sample amount for indicated test(s)?	(Yes)	No	See Below	
18	All samples received within sufficient hold time?	(Yes)	No	See Below	
19	Subcontract of sample(s)?	Yes	(No)	Not Applicable	
20	VOC samples have zero headspace?	(Yes)	No	Not Applicable	

Variance Documentation

Contact: Cindy Crain Contacted by: Jeanne Fitch Date/ Time: 08-10-07@ 1515

Regarding: temperature for TPH

Corrective Action Taken:

Check all that Apply:

- ☐ See attached e-mail/ fax
- ☒ Client understands and would like to proceed with analysis
- ☐ Cooling process had begun shortly after sampling event

CARDINAL LABORATORIES

PHONE (325) 673-7001 • 2111 BEECHWOOD • ABILENE, TX 79603
PHONE (505) 393-2326 • 101 E MARLAND • HOBBS, NM 88240

ANALYTICAL RESULTS FOR
OCOTILLO ENVIRONMENTAL, LLC
ATTN: CINDY CRAIN
P.O. BOX 1816
HOBBS, NM 88241
FAX TO: (432) 272-0304

Receiving Date: 09/04/07
Reporting Date: 09/06/07
Project Number: 7-0200
Project Name: ENU LEASE
Project Location: LEA COUNTY, NM

Analysis Date: 09/06/07
Sampling Date: 09/04/07
Sample Type: SOIL
Sample Condition: COOL & INTACT
Sample Received By: AB
Analyzed By: KS

LAB NO.	SAMPLE ID	Cl^- (mg/Kg)
H13225-1	SS-6	432
Quality Control		500
True Value QC		500
% Recovery		100
Relative Percent Difference		< 0.1

METHOD: Standard Methods	4500-ClˉB

Note: Analysis performed on a 1:4 w:v aqueous extract.

Kristen Sypnoto
Chemist

09/06/07
Date

H13225 OCO

CARDINAL LABORATORIES

PHONE (325) 673-7001 • 2111 BEECHWOOD • ABILENE, TX 79603
PHONE (505) 393-2326 • 101 E MARLAND • HOBBS, NM 88240

ANALYTICAL RESULTS FOR
OCOTILLO ENVIRONMENTAL LLC
ATTN: CINDY CRAIN
P.O. BOX 1816
HOBBS, NM 88241
FAX TO: (432) 272-0304

Receiving Date: 09/04/07
Reporting Date: 09/05/07
Project Owner: BURGUNDY
Project Name: ENU LEASE
Project Location: LEA COUNTY, NM

Sampling Date: 09/04/07
Sample Type: SOIL
Sample Condition: COOL & INTACT
Sample Received By: AB
Analyzed By: BC

LAB NUMBER	SAMPLE ID	GRO (C_6-C_{10}) (mg/Kg)	DRO (>C_{10}-C_{28}) (mg/Kg)
ANALYSIS DATE:		09/04/07	09/04/07
H13225-2	SS-7	<10.0	<10.0
Quality Control		771	779
True Value QC		800	800
% Recovery		96.4	97 4
Relative Percent Difference		3.7	4.0

METHOD: SW-846 8015 M

Chemist

9/05/07
Date

H13225A OCOTILLO

CARDINAL LABORATORIES

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240 2111 Beechwood, Abilene, TX 79603
(505) 393-2326 FAX (505) 393-2476 (325) 673-7001 FAX (325)673-7020

Company Name:	Ocotillo Environmental LLC	BILL TO	
Project Manager:	Cindy Crain	P.O. #:	
Address:	2125 French Dr.	Company:	Ocotillo
City:	Hobbs	State: NM Zip: 88240	Attn:
Phone #:	505-441-7244	Fax #: 432-272-0304	Address:
Project #:	7-0200	Project Owner: Burgundy	City:
Project Name:	ENU Lease		State: Zip:
Project Location:	Lea County NM		Phone #:
Sampler Name:	Steve Cannon		Fax #:

FOR LAB USE ONLY				MATRIX						PRESERV			SAMPLING		ANALYSIS REQUEST	
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	Chloride	TPH (8015 M)
H13225-1	SS-6	G	1			✓					✓		9-04-07	9:55	✓	✓
-2	SS-7	G	1			✓					✓		"	10:05		

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By:	Date:	Received By:	Phone Result. ☐ Yes ☒ No	Add'l Phone #:
	Time:		Fax Result: ☒ Yes ☐ No	Add'l Fax #:
Relinquished By: Steve Cannon	Date: 9-4-07 Time: 11:35am	Received By:	REMARKS: 432-272-0304	
Delivered By: (Circle One) Sampler - UPS - Bus - Other:		Sample Condition Cool: ☒ Yes ☐ No Intact: ☒ Yes ☐ No	CHECKED BY: (Initials)	

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

CARDINAL LABORATORIES

PHONE (325) 673-7001 • 2111 BEECHWOOD • ABILENE, TX 79603
PHONE (505) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

ANALYTICAL RESULTS FOR
OCOTILLO ENVIRONMENTAL, LLC
ATTN: CINDY CRAIN
P.O. BOX 1816
HOBBS, NM 88241
FAX TO: (432) 272-0304

Receiving Date: 10/02/07
Reporting Date: 10/04/07
Project Number: 7-0200
Project Name: ENU LEASE
Project Location: LEA COUNTY, NM

Analysis Date: 10/03/07
Sampling Date: 10/02/07
Sample Type: SOIL
Sample Condition: INTACT
Sample Received By: SB
Analyzed By: KS

LAB NO.	SAMPLE ID	Cl^- (mg/Kg)
H13422-1	SS-8	32
Quality Control		500
True Value QC		500
% Recovery		100
Relative Percent Difference		< 0.1

METHOD: Standard Methods	4500-Cl^-B

Note: Analysis performed on a 1:4 w:v aqueous extract.

Kristen Sugrate
Chemist

10/04/07
Date

H13422 OCO

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

CARDINAL LABORATORIES

101 East Marland, Hobbs, NM 88240 2111 Beechwood, Abilene, TX 79603

(505) 393-2326 FAX (505) 393-2476 (325) 673-7001 FAX (325)673-7020

Company Name:	Ocotillo Environmental LLC	**BILL TO**	ANALYSIS REQUEST
Project Manager:	Cindy Crain	P.O. #:	
Address:	2125 French Dr.	Company: Ocotillo	
City: Hobbs	State: NM Zip: 88240	Attn:	
Phone #: 505-441-7244	Fax #: 432-272-0340	Address:	
Project #: 7-0200	Project Owner: Burgundy	City:	
Project Name: ENU Lease		State: Zip:	
Project Location: Lea County NM		Phone #:	
Sampler Name: Steve Cannon		Fax #:	

FOR LAB USE ONLY				MATRIX						PRESERV.			SAMPLING		Chlorides
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	
H13422-1	55-8	C	1			✓							10-2-07	10:07	✓

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By: Steve Cannon	Date: 10-2-07 Time: 4:15 PM	Received By: Dave Barnes 10/2/07 4:15pm	Phone Result: ☐ Yes ☑ No Add'l Phone #:
Relinquished By:	Date: Time:	Received By:	Fax Result: ☑ Yes ☐ No Add'l Fax #:
			REMARKS: Fax # 432-272-0304

Delivered By: (Circle One)

Sampler - UPS - Bus - Other:

Sample Condition		CHECKED BY: (Initials)
Cool	Intact	
☐ Yes	☑ Yes	SB
☒ No	☐ No	

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