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 of NM, Inc.	Contact	Ben Taylor
Address	401 W. Texas, Suite 1003, Midland, TX 79701	Telephone No.	(432) 684-4033
Facility Name	Eunice Monument Unit #29	Facility Type	Well / Flow Line

Surface Owner:	Mineral Owner:	Lease No.
State	State	015823

LOCATION OF RELEASE API #30-025-06171-00-00

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
N	19	20S	37E	660	South	1980	West	Lea

Latitude N 32.55215° **Longitude** W 103.29415°

NATURE OF RELEASE

Type of Release	Oil and Water	Volume of Release 3 bbl	Volume Recovered None
Source of Release	Flow Line	Date and Hour of Occurrence Unknown	Date and Hour of Discovery 9/21/09
Was Immediate Notice Given? ☐ Yes ☒ No ☐ Not Required		If YES, To Whom? Leak discovered by J.R. Harrison – OCD at 3:49 pm	
By Whom?		Date and Hour	
Was a Watercourse Reached? ☐ Yes ☒ No		If YES, Volume Impacting the Watercourse.	

RECEIVED
MAY 13 2010
HOBBSOCD

If a Watercourse was Impacted, Describe Fully.*

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 an approximate 320' x 75' x 9' (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 an NMOCD approved 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.

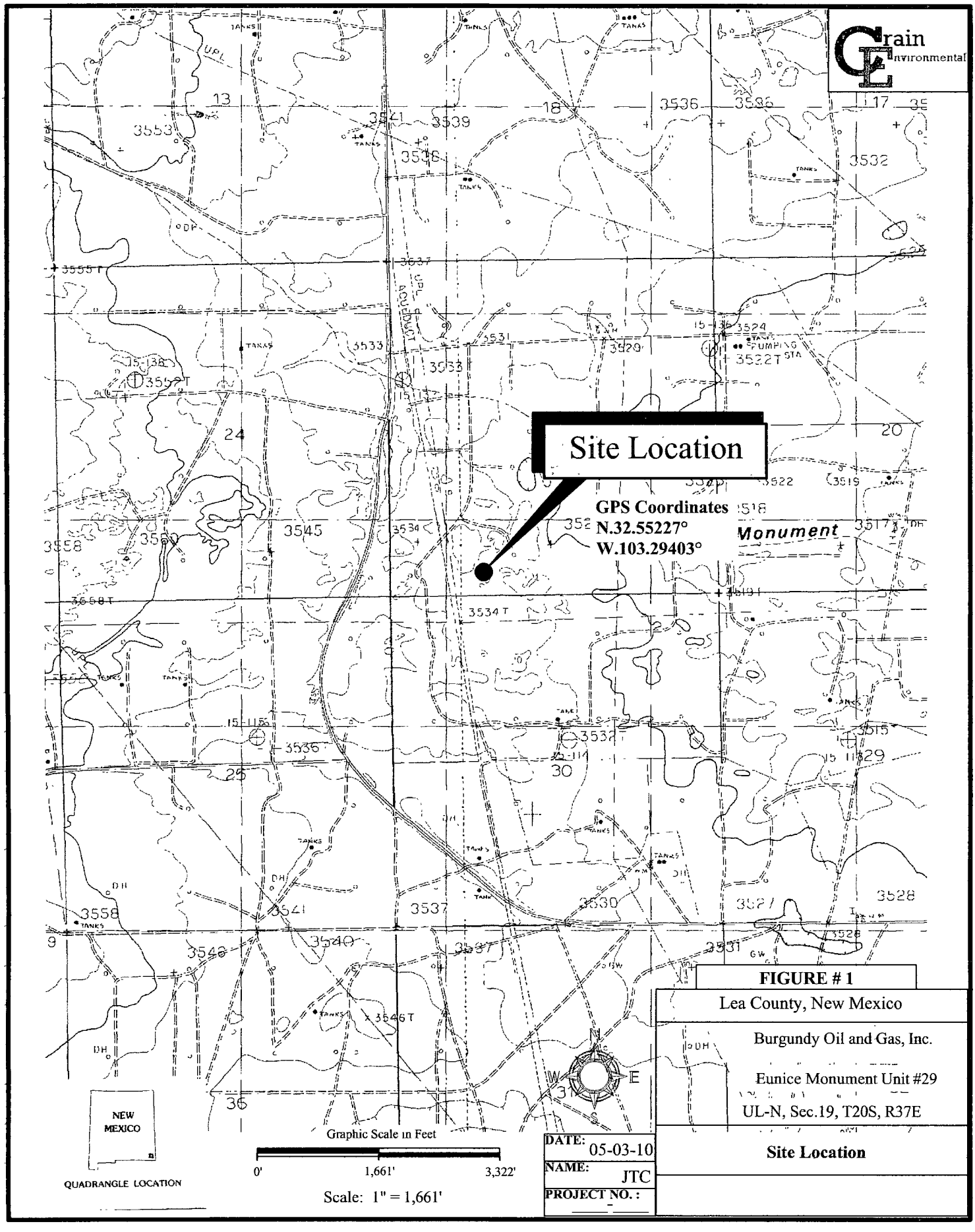
Signature: Ben Taylor	OIL CONSERVATION DIVISION	
Printed Name: Ben Taylor	ENV ENGINEER: Approved by ~~District Supervisor~~: Geoffrey Leking	
Title: Production Manager	Approval Date: 05/14/10	Expiration Date: —
E-mail Address: bogi@t3wireless.com	Conditions of Approval:	Attached ☐ IRP-9-11-2320
Date: 5/08/10 Phone: (432) 684-4033		

Attach Additional Sheets If Necessary

Table 1: Summary of Laboratory Analysis of Soil Samples
Burgundy Oil & Gas, Inc., EMU #29
Unit Letter N, Section 19, Township 20 South, Range 37 East
Lea County, New Mexico

Sample Date	Soil Sample Number	Sample Depth (feet BGS)	TPH C6-C12 (mg/kg)	TPH C12-C28 (mg/kg)	TPH C28-C40 (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)	Total BTEX (mg/kg)	Soil Status
Standard (WQCC)						100	250	10				50	
10/12/09	SS-1	3	61.7	547	60 4	669	3240	<0 0013	<0 0025	<0 0013	<0 0013	<0 0064	Excavated
10/12/09	SS-2	4	4,260	21,200	2,390	27,850	1880	0 7887	2 531	4 084	17 622	25 026	Excavated
10/13/09	SS-3	7	70 1	607	75 8	753	515	<0 0011	<0 0022	0 0030	0 0136	0 0166	Excavated
11/9/09	SS-1	0-6"	90 8	1,380	178	1,649	177	<0 0010	<0 0020	<0 0010	0 0052	0 0052	Excavated
11/23/09		7	36 4	1,070	83 9	1,190	---	---	---	---	---	---	Excavated
12/16/09		8	32 5	229	23 9	285	---	---	---	---	---	---	Excavated
1/19/10		9	<18 4	<18 4	<18 4	<55 2	---	---	---	---	---	---	In Place
11/9/09	SS-2	0-6"	40 1	1,030	114	1,184	474	<0 0010	<0 0021	<0 0010	<0 0010	<0 0051	Excavated
11/23/09		7	<15 4	76 3	152	228	781	---	---	---	---	---	Excavated
12/16/09		8	<17 1	26 4	<17 1	26 4	656	---	---	---	---	---	Excavated
1/19/10		9	---	---	---	---	9 95	---	---	---	---	---	In Place
11/9/09	SS-3	0-6"	156	1,730	158	2,044	857	0 0030	0 0023	0 0137	0 0237	0 0290	Excavated
11/23/09		7	<15 4	339	26 5	366	196	---	---	---	---	---	Excavated
12/16/09		8	<18 1	144	21 4	165	---	---	---	---	---	---	Excavated
1/19/10		9	<18 2	<18 2	<18 2	<54 6	---	---	---	---	---	---	In Place
11/9/09	SS-4	0-6"	<16 9	<16 9	<16 9	<50 7	1,320	<0 0011	<0 0023	<0 0011	<0 0011	<0 0056	Excavated
11/23/09		7	---	---	---	---	2,100	---	---	---	---	---	Excavated
12/16/09		8	---	---	---	---	271	---	---	---	---	---	Excavated
1/19/10		9	---	---	---	---	39 2	---	---	---	---	---	In Place
11/9/09	SS-5	0-6"	276	4,000	431	4,707	567	<0 0010	<0 0020	<0 0010	0 0015	0 0015	Excavated
11/23/09		7	<15 5	20 3	<15.5	20 3	1,790	---	---	---	---	---	Excavated
12/16/09		8	---	---	---	---	270	---	---	---	---	---	Excavated
1/19/10		9	---	---	---	---	55 6	---	---	---	---	---	In Place
11/9/09	SS-6	0-6"	<15 6	<15 6	<15 6	<46 8	1,100	<0 0010	<0 0021	<0 0010	<0 0010	<0 0051	Excavated
11/23/09		7	---	---	---	---	688	---	---	---	---	---	Excavated
12/16/09		8	---	---	---	---	510	---	---	---	---	---	Excavated
1/19/10		9	---	---	---	---	87 8	---	---	---	---	---	In Place
11/9/09	SS-7	0-6"	<16 1	<16 1	<16 1	<48 3	2,130	<0 0011	<0 0021	<0 0011	<0 0011	<0 0054	Excavated
11/23/09		7	---	---	---	---	1,980	---	---	---	---	---	Excavated
12/16/09		8	---	---	---	---	24 5	---	---	---	---	---	In Place
11/9/09	SS-8	Comp	<15 3	538	81 3	619	1,700	<0 0010	<0 0020	<0 0010	<0 0010	<0 0050	Excavated
11/23/09		Comp	<15 2	305	25.1	330	417	---	---	---	---	---	Excavated
1/19/10		Comp	<15 0	42 1	<15 0	42 1	25 1	---	---	---	---	---	In Place
11/9/09	SS-9	Comp	<15 0	<15 0	<15 0	<45 0	71 5	<0 0010	<0 0020	<0 0010	<0 0010	<0 0050	In Place
11/9/09	SS-10	Comp	<16 2	<16 2	<16 2	<48 6	9,200	<0 0011	<0 0022	<0 0011	<0 0011	<0 0055	Excavated
11/23/09		Comp					15,700						Excavated
12/16/09		Comp	---	---	---	---	10,000	---	---	---	---	---	Excavated
1/19/10		Comp	---	---	---	---	3,290	---	---	---	---	---	Excavated
4/6/10		Comp	---	---	---	---	63 1	---	---	---	---	---	In Place

Notes *Samples Analyzed by Xenco Laboratories, Odessa, Texas*
1 BGS Depth in feet below ground surface
2 mg/kg Milligrams per kilogram
3 --- No data available
4 < Below method detection limit



Grain Environmental

FIGURE # 1

Lea County, New Mexico

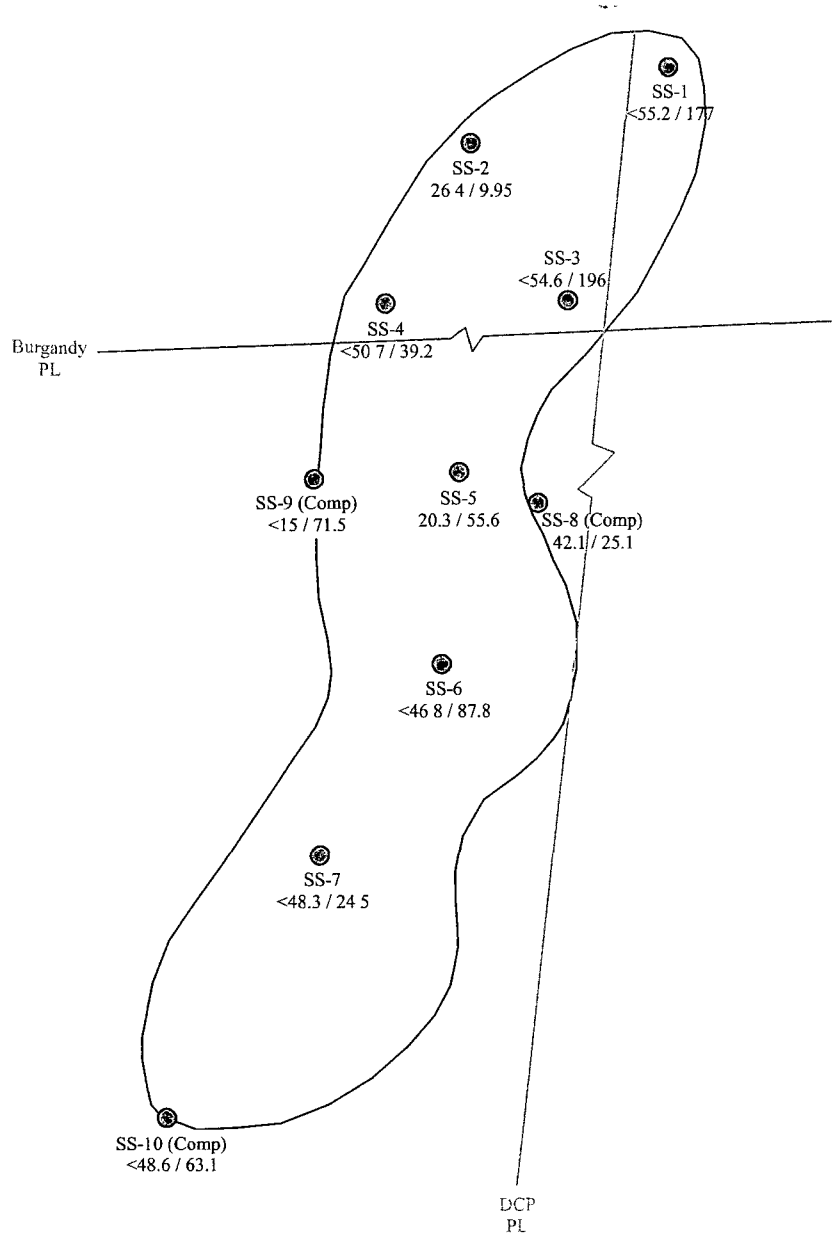
Burgundy Oil and Gas, Inc.

Eunice Monument Unit #29

UL-N, Sec.19, T20S, R37E

Site Location

DATE:	05-03-10
NAME:	JTC
PROJECT NO. :	



Graphic Scale in Feet

0' 50' 100'

Scale: 1" = 50'

FIGURE # 2

Lea County, New Mexico

Burgundy Oil and Gas, Inc.

Eunice Monument Unit #29

UL-N, Sec.19, T20S, R37E

Site Drawing With Soil Sample Locations

LEGEND

SS-1 <55.2/177 — Soil Sample Location With Final TPH/Chloride Concentrations (mg/kg)

GPS Coordinates		
SS-1	N.32.55227	W.103.29403
SS-2	N.32.55222	W.103.29411
SS-3	N.32.55215	W.103.29407
SS-4	N.32.55215	W.103.29415
SS-5	N.32.55207	W.103.29406
SS-6	N.32.55204	W103.29408
SS-7	N.32.55199	W.103.29414

N W E S

DATE: 05-03-10

NAME: JTC

PROJECT NO. :

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 of NM, INC.	Contact	Ben Taylor
Address	401 W. TX. Suite 1003 Midland, TX. 79701	Telephone No.	(432) 684-4033
Facility Name	Eunice Monument Unit #29	Facility Type	Well / FLOW LINE

Surface Owner STATE	Mineral Owner STATE	Lease No. 015823

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
N	19	20S	37E	660'	South	1980	West	Lea

Latitude _____ Longitude _____

NATURE OF RELEASE

Type of Release OIL & WATER	Volume of Release 3 bbl	Volume Recovered 0 bbl
Source of Release FLOW LINE	Date and Hour of Occurrence UNK	Date and Hour of Discovery 9/21/09
Was Immediate Notice Given? ☐ Yes ☒ No ☐ Not Required	If YES, To Whom? Leak discovered by J.R. Harrison - OCD 3:49 pm	
By Whom?	Date and Hour	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.*
Small oil & water release from FLOW LINE. Compromised soil will be excavated and hauled to approved disposal facility by Ocotillo.

Describe Area Affected and Cleanup Action Taken.*
Testing of soil around spill site will be conducted. Results Reported as become available.

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: Ben Taylor	OIL CONSERVATION DIVISION	
Printed Name: Ben Taylor	Approved by District Supervisor:	
Title: Prod. Manager	Approval Date:	Expiration Date:
E-mail Address:	Conditions of Approval:	Attached ☐
Date 10/02/09 Phone: (432) 684-4033		

* Attach Additional Sheets If Necessary

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

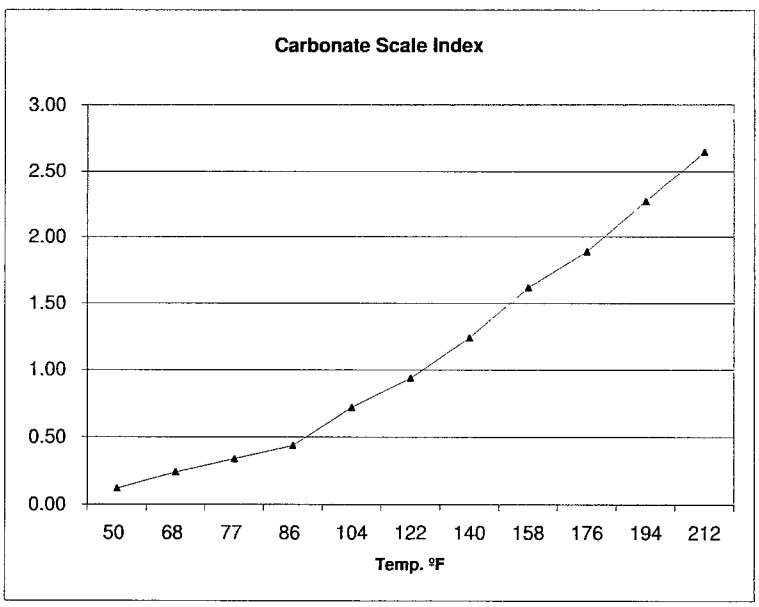
Total Dissolved Solids	30,435
Total Ionic Strength	0.57
Total Hardness as CaCO3	3,502

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



0

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**

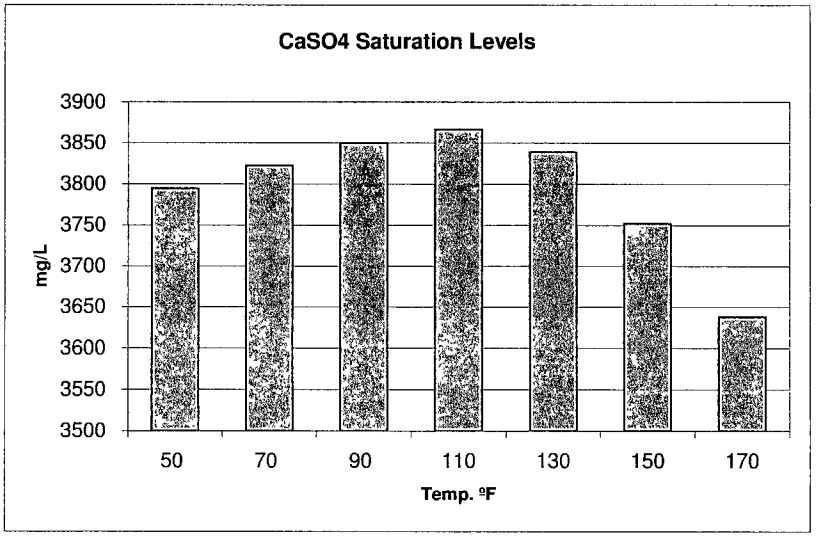
Calcium Sulfate Scaling Tendency

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



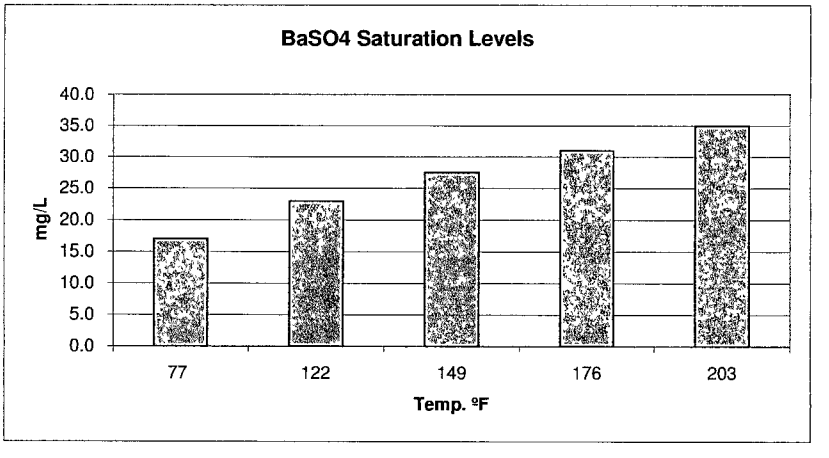
Barium Sulfate Scaling Tendency

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



Analytical Report 348344

for

Ocotillo Environmental, LLC

Project Manager: Cindy Crain

Burgundy EMU Lease

21-OCT-09

12600 West I-20 East Odessa, Texas 79765

Xenco-Houston (EPA Lab code: TX00122):
Texas (T104704215-08-TX), Arizona (AZ0738), Arkansas (08-039-0), Connecticut (PH-0102), Florida (E871002)
Illinois (002082), Indiana (C-TX-02), Iowa (392), Kansas (E-10380), Kentucky (45), Louisiana (03054)
New Hampshire (297408), New Jersey (TX007), New York (11763), Oklahoma (9218), Pennsylvania (68-03610)
Rhode Island (LAO00308), USDA (S-44102)

Xenco-Atlanta (EPA Lab Code: GA00046):
Florida (E87428), North Carolina (483), South Carolina (98015), Utah (AALI1), West Virginia (362), Kentucky (85)
Louisiana (04176), USDA (P330-07-00105)

Xenco-Miami (EPA Lab code: FL01152): Florida (E86678), Maryland (330)
Xenco-Tampa Mobile (EPA Lab code: FL01212): Florida (E84900)
Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400-08-TX)
Xenco-Dallas (EPA Lab code: TX01468): Texas (T104704295-08-TX)
Xenco-Corpus Christi (EPA Lab code: TX02613): Texas (T104704370-08-TX)
Xenco-Boca Raton (EPA Lab Code: FL00449): Florida(E86240),
South Carolina(96031001), Louisiana(04154), Georgia(917)

21-OCT-09

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

Reference: XENCO Report No: **348344**
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 348344. 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. 348344 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, II
Odessa Laboratory Manager

Sample Cross Reference 348344

Ocotillo Environmental, LLC, Hobbs, NM

Burgundy EMU Lease

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
SS-1	S	Oct-12-09 13:25	3 - 3 ft	348344-001
SS-2	S	Oct-12-09 13:30	4 - 4 ft	348344-002
SS-3	S	Oct-13-09 10:50	7 - 7 ft	348344-003

CASE NARRATIVE

Client Name: Ocotillo Environmental, LLC
Project Name: Burgundy EMU Lease

Project ID:
Work Order Number: 348344

Report Date: 21-OCT-09
Date Received: 10/14/2009

Sample receipt non conformances and Comments:

None

Sample receipt Non Conformances and Comments per Sample:

None

Analytical Non Conformances and Comments:

Batch: LBA-777207 Percent Moisture
None

Batch: LBA-777348 Inorganic Anions by EPA 300
None

Batch: LBA-777492 BTEX-MTBE EPA 8021B
SW8021BM

Batch 777492, Ethylbenzene recovered below QC limits in the Matrix Spike Duplicate.
Samples affected are: 348344-001.
The Laboratory Control Sample for Ethylbenzene is within laboratory Control Limits

CASE NARRATIVE

Client Name: Ocotillo Environmental, LLC
Project Name: Burgundy EMU Lease

Project ID: *Report Date: 21-OCT-09*
Work Order Number: 348344 *Date Received: 10/14/2009*

Batch: LBA-777544 BTEX-MTBE EPA 8021B
SW8021BM

Batch 777544, Benzene, Ethylbenzene, Toluene, m,p-Xylenes, o-Xylene recovered below QC limits in the Matrix Spike and Matrix Spike Duplicate.
Samples affected are: 348344-002, -003.
The Laboratory Control Sample for Toluene, m,p-Xylenes , Benzene, Ethylbenzene, o-Xylene is within laboratory Control Limits

SW8021BM

Batch 777544, 4-Bromofluorobenzene recovered above QC limits . Matrix interferences is suspected; data not confirmed by re-analysis
Samples affected are: 348221-001 S,348221-001 SD,348344-002.

SW8021BM

Batch 777544, Benzene, Ethylbenzene, Toluene, m,p-Xylenes , o-Xylene RPD was outside QC limits.
Samples affected are: 348344-002, -003

Batch: LBA-777890 TX1005
SW8015M

Batch 777890, 1-Chlorooctane recovered above QC limits; Data confirmed by re-analysis.
Samples affected are: 348344-002, 348653-001 S
o-Terphenyl recovered below QC limits; Data confirmed by re-analysis. Samples affected are: 340344-002
Matrix interference is suspected in sample surrogate failures.

Certificate of Analysis Summary 348344

Ocotillo Environmental, LLC, Hobbs, NM

Project Name: Burgundy EMU Lease

Project Id:
Contact: Cindy Crain
Project Location: Lea County, NM

Date Received in Lab: Wed Oct-14-09 11:26 am
Report Date: 21-OCT-09
Project Manager: Brent Barron, II

Analysis Requested											
	Lab Id:	348344-001		348344-002		348344-003					
	Field Id:	SS-1		SS-2		SS-3					
	Depth:	3-3 ft		4-4 ft		7-7 ft					
	Matrix:	SOIL		SOIL		SOIL					
	Sampled:	Oct-12-09 13:25		Oct-12-09 13:30		Oct-13-09 10:50					
Anions by E300	*Extracted:*										
	Analyzed:	Oct-15-09 11:25		Oct-15-09 11:45		Oct-15-09 12:05					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Chloride		3240	53.2	1880	23 9	515	9.37				
BTEX by EPA 8021B	*Extracted:*	Oct-16-09 10:00		Oct-15-09 17:45		Oct-15-09 17:45					
	Analyzed:	Oct-16-09 16:11		Oct-16-09 09:03		Oct-16-09 08:21					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Benzene		ND	0.0013	0.7887	0.1130	ND	0 0011				
Toluene		ND	0 0025	2.531	0.2260	ND	0.0022				
Ethylbenzene		ND	0.0013	4.084	0.1130	0.0030	0.0011				
m,p-Xylenes		ND	0.0025	9.061	0.2260	0.0074	0 0022				
o-Xylene		ND	0.0013	8.561	0.1130	0.0062	0.0011				
Total Xylenes		ND	0.0013	17.622	0.1130	0.0136	0.0011				
Total BTEX		ND	0.0013	25.026	0.1130	0.0166	0.0011				
Percent Moisture	*Extracted:*										
	Analyzed:	Oct-14-09 13:00		Oct-14-09 13:00		Oct-14-09 13:00					
	Units/RL:	%	RL	%	RL	%	RL				
Percent Moisture		21.1	1.00	12.2	1.00	10.3	1.00				
TPH By SW8015 Mod	*Extracted:*	Oct-16-09 10:40		Oct-16-09 10:40		Oct-16-09 10.40					
	Analyzed:	Oct-19-09 19:18		Oct-19-09 19:45		Oct-19-09 20:14					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL				
C6-C12 Gasoline Range Hydrocarbons		61.7	19.0	4260	341	70.1	16.4				
C12-C28 Diesel Range Hydrocarbons		547	19.0	21200	341	607	16.4				
C28-C40 Oil Range Hydrocarbons		60.4	19.0	2390	341	75.8	16.4				
Total TPH		669	19.0	27850	341	753	16.4				

Brent Barron, II
Odessa Laboratory Manager

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.

JN A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

BRL Below Reporting Limit.

RL Reporting Limit

* Outside XENCO's scope of NELAC Accreditation.

Form 2 - Surrogate Recoveries

Project Name: Burgundy EMU Lease

Work Orders : 348344,

Project ID:

Lab Batch #: 777492 **Sample:** 540732-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 10/16/09 10:48

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0292	0.0300	97	80-120	
4-Bromofluorobenzene	0.0311	0.0300	104	80-120	

Lab Batch #: 777492 **Sample:** 540732-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 10/16/09 11:31

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0259	0.0300	86	80-120	
4-Bromofluorobenzene	0.0293	0.0300	98	80-120	

Lab Batch #: 777492 **Sample:** 348344-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/16/09 16:11

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0257	0.0300	86	80-120	
4-Bromofluorobenzene	0.0294	0.0300	98	80-120	

Lab Batch #: 777492 **Sample:** 348344-001 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/16/09 21:12

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0281	0.0300	94	80-120	
4-Bromofluorobenzene	0.0287	0.0300	96	80-120	

Lab Batch #: 777492 **Sample:** 348344-001 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/16/09 21:33

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0279	0.0300	93	80-120	
4-Bromofluorobenzene	0.0359	0.0300	120	80-120	

* Surrogate outside of Laboratory QC limits

** 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 Orders : 348344,

Project ID:

Lab Batch #: 777544 **Sample:** 540708-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 10/16/09 00:38

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0304	0.0300	101	80-120	
4-Bromofluorobenzene	0.0299	0.0300	100	80-120	

Lab Batch #: 777544 **Sample:** 540708-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 10/16/09 00:59

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0302	0.0300	101	80-120	
4-Bromofluorobenzene	0.0304	0.0300	101	80-120	

Lab Batch #: 777544 **Sample:** 540708-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 10/16/09 01:41

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0262	0.0300	87	80-120	
4-Bromofluorobenzene	0.0289	0.0300	96	80-120	

Lab Batch #: 777544 **Sample:** 348344-003 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/16/09 08:21

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0242	0.0300	81	80-120	
4-Bromofluorobenzene	0.0310	0.0300	103	80-120	

Lab Batch #: 777544 **Sample:** 348344-002 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/16/09 09:03

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0271	0.0300	90	80-120	
4-Bromofluorobenzene	0.0558	0.0300	186	80-120	*

* Surrogate outside of Laboratory QC limits

** 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 Orders : 348344,

Project ID:

Lab Batch #: 777544 **Sample:** 348221-001 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/16/09 09:45

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0254	0.0300	85	80-120	
4-Bromofluorobenzene	0.0379	0.0300	126	80-120	*

Lab Batch #: 777544 **Sample:** 348221-001 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/16/09 10:06

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0242	0.0300	81	80-120	
4-Bromofluorobenzene	0.0389	0.0300	130	80-120	*

Lab Batch #: 777890 **Sample:** 541004-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 10/19/09 17:57

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	115	99.5	116	70-135	
o-Terphenyl	36.6	49.8	73	70-135	

Lab Batch #: 777890 **Sample:** 541004-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 10/19/09 18:24

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	113	99.6	113	70-135	
o-Terphenyl	36.1	49.8	72	70-135	

Lab Batch #: 777890 **Sample:** 541004-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 10/19/09 18:51

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	76.1	99.7	76	70-135	
o-Terphenyl	37.4	49.9	75	70-135	

* Surrogate outside of Laboratory QC limits

** 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 Orders : 348344,

Project ID:

Lab Batch #: 777890 **Sample:** 348344-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/19/09 19:18

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	73.9	99.9	74	70-135	
o-Terphenyl	36.3	50.0	73	70-135	

Lab Batch #: 777890 **Sample:** 348344-002 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/19/09 19:45

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	191	99.9	191	70-135	**
o-Terphenyl	5.59	50.0	11	70-135	**

Lab Batch #: 777890 **Sample:** 348344-003 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/19/09 20:14

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	73.6	98.0	75	70-135	
o-Terphenyl	36.1	49.0	74	70-135	

Lab Batch #: 777890 **Sample:** 348653-001 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/20/09 04:09

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	143	99.9	143	70-135	**
o-Terphenyl	53.5	50.0	107	70-135	

Lab Batch #: 777890 **Sample:** 348653-001 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/20/09 04:37

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	131	99.9	131	70-135	
o-Terphenyl	52.8	50.0	106	70-135	

* Surrogate outside of Laboratory QC limits

** 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 #: 348344 **Project ID:**

Lab Batch #: 777492 **Sample:** 540732-1-BKS **Matrix:** Solid

Date Analyzed: 10/16/2009 **Date Prepared:** 10/16/2009 **Analyst:** ASA

Reporting Units: mg/kg **Batch #:** 1

BTEX by EPA 8021B Analytes	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
		BLANK /BLANK SPIKE RECOVERY STUDY				
Benzene	ND	0.1000	0 0891	89	70-130	
Toluene	ND	0.1000	0.0892	89	70-130	
Ethylbenzene	ND	0.1000	0.0914	91	71-129	
m,p-Xylenes	ND	0.2000	0.2021	101	70-135	
o-Xylene	ND	0.1000	0.0969	97	71-133	

Lab Batch #: 777348 **Sample:** 777348-1-BKS **Matrix:** Solid

Date Analyzed: 10/15/2009 **Date Prepared:** 10/15/2009 **Analyst:** LATCOR

Reporting Units: mg/kg **Batch #:** 1

Anions by E300 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	9.84	98	75-125	

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

BS / BSD Recoveries

Project Name: Burgundy EMU Lease

Work Order #: 348344 **Project ID:**

Analyst: ASA **Date Prepared:** 10/15/2009 **Date Analyzed:** 10/16/2009

Lab Batch ID: 777544 **Sample:** 540708-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	ND	0.1000	0.0982	98	0.1	0 0987	99	1	70-130	35	
Toluene	ND	0.1000	0 0959	96	0.1	0.0964	96	1	70-130	35	
Ethylbenzene	ND	0.1000	0.0977	98	0.1	0.0984	98	1	71-129	35	
m,p-Xylenes	ND	0 2000	0.2163	108	0 2	0.2177	109	1	70-135	35	
o-Xylene	ND	0.1000	0.1031	103	0.1	0.1042	104	1	71-133	35	

Analyst: BEV **Date Prepared:** 10/16/2009 **Date Analyzed:** 10/19/2009

Lab Batch ID: 777890 **Sample:** 541004-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
C6-C12 Gasoline Range Hydrocarbons	ND	995	915	92	996	905	91	1	70-135	35	
C12-C28 Diesel Range Hydrocarbons	ND	995	738	74	996	728	73	1	70-135	35	

Relative Percent Difference RPD = 200*|(C-F)/(C+F)|
Blank Spike Recovery [D] = 100*(C)/[B]
Blank Spike Duplicate Recovery [G] = 100*(F)/[E]
All results are based on MDL and Validated for QC Purposes

Form 3 - MS Recoveries

Project Name: Burgundy EMU Lease

Work Order #: 348344
Lab Batch #: 777348
Project ID:
Date Analyzed: 10/15/2009
Date Prepared: 10/15/2009
Analyst: LATCOR
QC- Sample ID: 348352-001 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	73.4	402	458	96	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

BRL - Below Reporting Limit

Form 3 - MS / MSD Recoveries

Project Name: Burgundy EMU Lease

Work Order # : 348344 **Project ID:**

Lab Batch ID: 777492 **QC- Sample ID:** 348344-001 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 10/16/2009 **Date Prepared:** 10/16/2009 **Analyst:** ASA

Reporting Units: mg/kg

BTEX by EPA 8021B 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
Benzene	ND	0.1268	0.0959	76	0.1268	0.0966	76	1	70-130	35	
Toluene	ND	0.1268	0 0937	74	0.1268	0.0944	74	1	70-130	35	
Ethylbenzene	ND	0.1268	0.0919	72	0.1268	0.0877	69	5	71-129	35	X
m,p-Xylenes	ND	0.2535	0.2012	79	0.2535	0.2011	79	0	70-135	35	
o-Xylene	ND	0.1268	0.0970	76	0.1268	0.0963	76	1	71-133	35	

Lab Batch ID: 777544 **QC- Sample ID:** 348221-001 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 10/16/2009 **Date Prepared:** 10/15/2009 **Analyst:** ASA

Reporting Units: mg/kg

BTEX by EPA 8021B 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
Benzene	0.0043	0.1164	0.0546	43	0.1164	0.0029	0	180	70-130	35	XF
Toluene	0.0136	0.1164	0.0575	38	0.1164	0.0046	0	170	70-130	35	XF
Ethylbenzene	0.0373	0.1164	0.0610	20	0.1164	0.0219	0	94	71-129	35	XF
m,p-Xylenes	0.1173	0.2327	0.1379	9	0.2327	0.0624	0	75	70-135	35	XF
o-Xylene	0.0114	0.1164	0.0492	32	0.1164	0.0088	0	139	71-133	35	XF

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

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

Relative Percent Difference RPD = 200*|(C-F)/(C+F)|

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

Form 3 - MS / MSD Recoveries

Project Name: Burgundy EMU Lease

Work Order # : 348344 **Project ID:**

Lab Batch ID: 777890 **QC- Sample ID:** 348653-001 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 10/20/2009 **Date Prepared:** 10/16/2009 **Analyst:** BEV

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	1100	1050	95	1100	1060	96	1	70-135	35	
C12-C28 Diesel Range Hydrocarbons	99.7	1100	888	72	1100	928	75	4	70-135	35	

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

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 #: 348344

Lab Batch #: 777348 **Project ID:**

Date Analyzed: 10/15/2009 **Date Prepared:** 10/15/2009 **Analyst:** LATCOR

QC- Sample ID: 348352-001 D **Batch #:** 1 **Matrix:** Soil

Reporting Units: mg/kg

Anions by E300 Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY				
	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Chloride	73.4	72.3	2	20	

Lab Batch #: 777207

Date Analyzed: 10/14/2009 **Date Prepared:** 10/14/2009 **Analyst:** WRU

QC- Sample ID: 348344-001 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	21.1	20.0	5	20	

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

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.: (575) 441-7244

Fax No: (432) 272-0304

Sampler Signature: Cindy Crain

e-mail: cindy crain@gmail com

Project Name: Burgundy EMU Lease

Project #:

Project Loc: Lea County, NM

PO #:

Report Format: ☑ Standard ☐ TRRP ☐ NPDES

Extended to C40

(lab use only)
ORDER #: 348344

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total # 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)	TPH 418.1 8015M	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.	Fingerprint			RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
01	SS-1	3	3	10/12/09	1325		1	✓								S	X			X					X			X				✓
02	SS 2	4	4	10/12/09	1330		1	✓								S	X			X					X			X				✓
03	SS 3	7	7	10/13/09	1050		1	✓								S	X			X					X			X				✓

Special Instructions:

Relinquished by	Date	Time	Received by	Date	Time
Cindy Crain	10/14/09	1126			
			Received by ELOT: Andrea Serna	10-14-09	11:24

Laboratory Comments:

- Sample Containers Intact? (Y) N
- VOCs Free of Headspace? (Y) N
- Labels on container(s) (Y) N — 1/2 on lid
- 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
- 4 oz glass
- Temperature Upon Receipt: 3.6 °C

Environmental Lab of Texas

Variance/ Corrective Action Report- Sample Log-In

Client: Cotillo Env

Date/ Time: 10 14.09 11 26

Lab ID #: 348344

Initials: AL

Sample Receipt Checklist

				Client Initials
#1	Temperature of container/ cooler?	(Yes)	No	3.6 °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

22-OCT-09

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

Reference: XENCO Report No: **348344**
Burgundy EMU Lease
Project Address: Lea County, NM

Cindy Crain:

On October 14, 2009, Xenco laboratories received three samples. The requested analysis for these samples was BTEX by method SW8021, Chlorides by method EPA 300, and TPH by method 8015M. Additionally, a fingerprint/product Identification analysis was requested on these samples.

For the fingerprint/product identification analysis, Xenco laboratories used the extract from the TPH 8015 analysis. These extracts were analyzed on a Gas Chromatograph (GC) with a Flame Ionization Detector (FID). The resulting chromatography was reviewed and compared to daily standards, as well as reference chromatography for product identification.

The following determinations and opinions were made of the contamination present in the samples.

The contamination in Samples SS-1, SS-2 and SS-3 appears to be from crude oil Contamination and is fairly consistent between the three samples with the following exception. Sample SS-2 also appears to have some lighter hydrocarbons present prior to the Crude oil area in this sample. This area of chromatography is not present in samples SS-1 and SS-3 and could be the result of condesate or other light hydrocarbons such as gasoline.

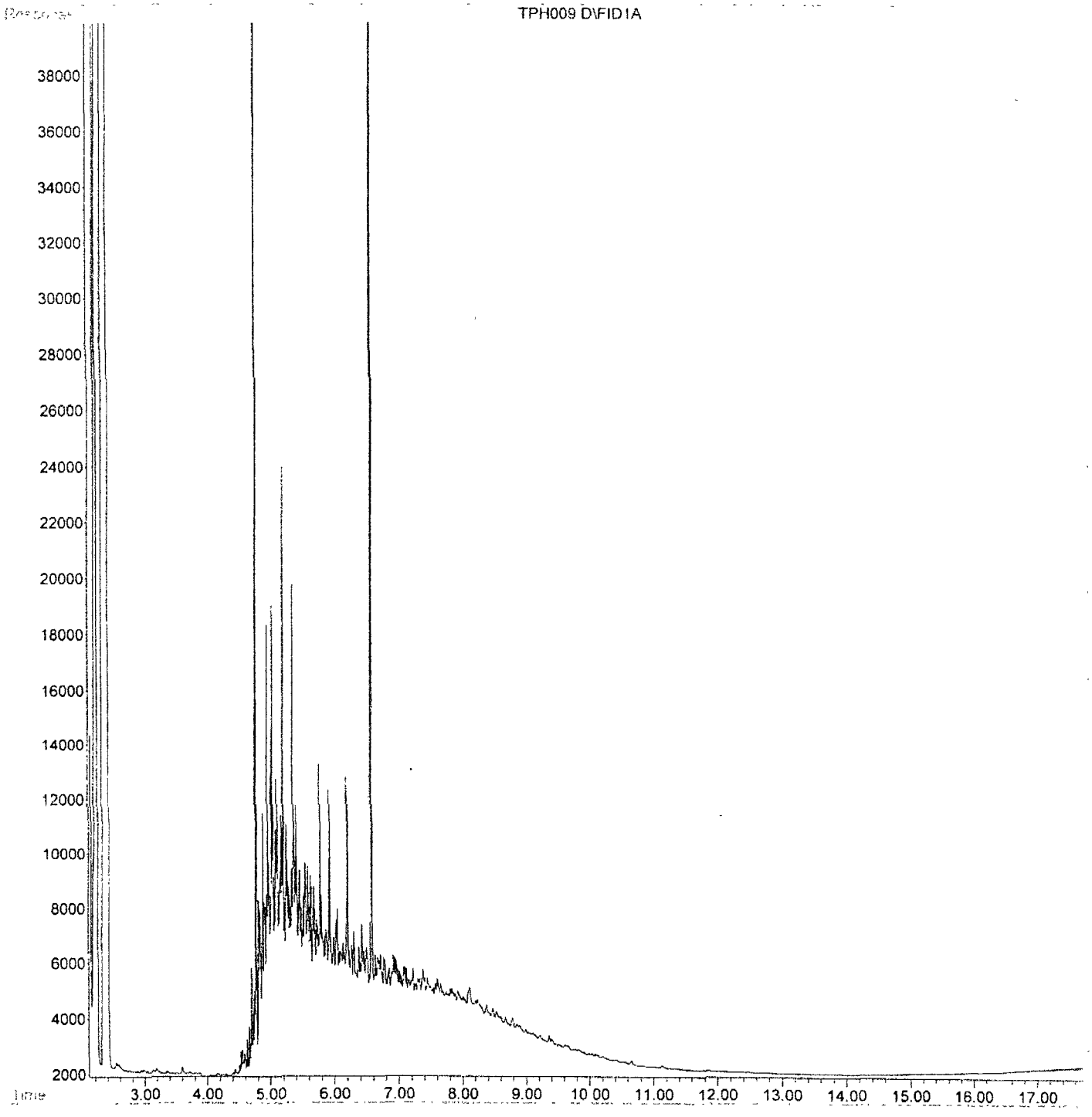
The chromatography for the samples listed above is attached to this report as well as reference chromatography.

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,

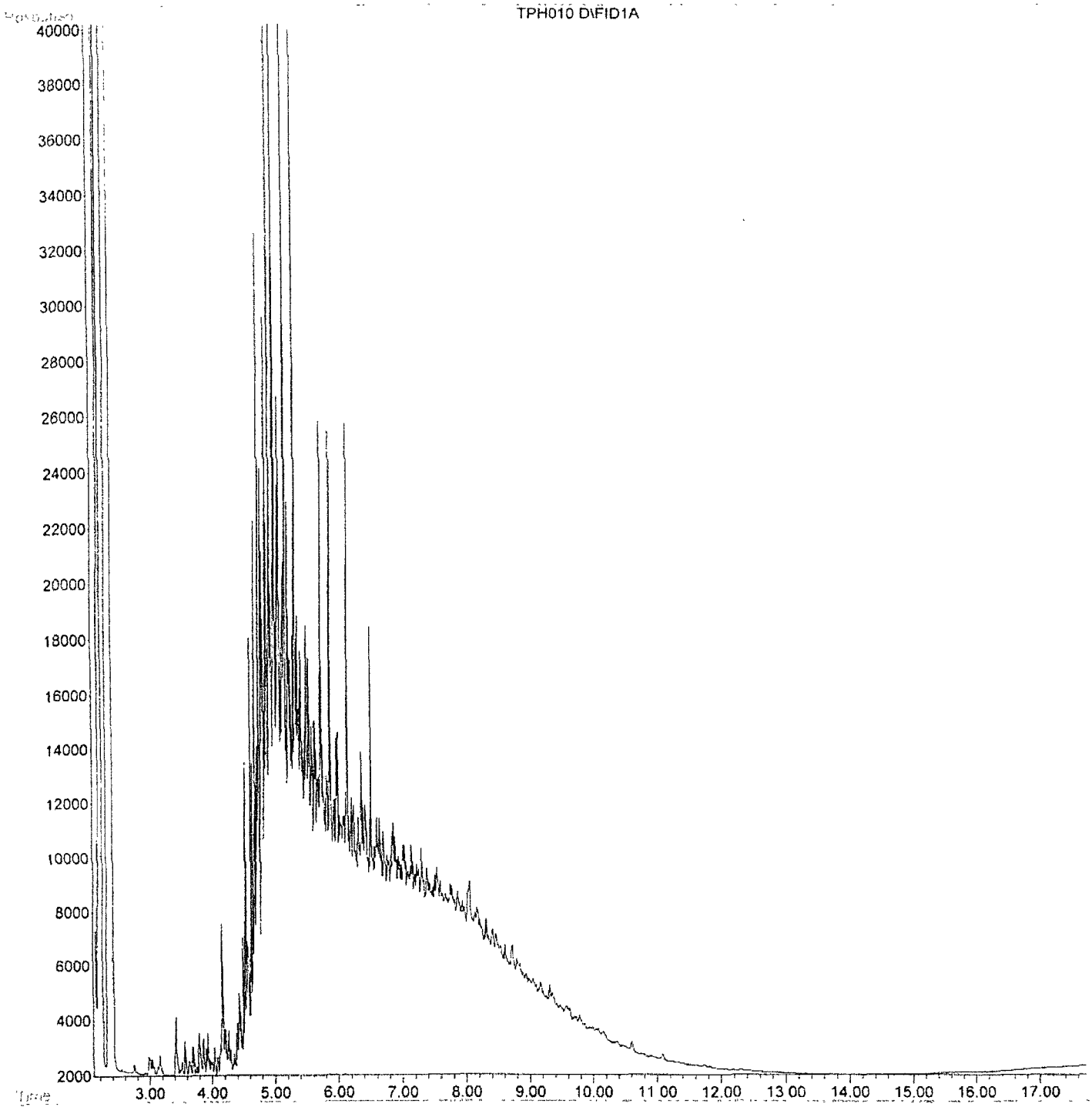
Brent Barron, II
Odessa Laboratory Manager

File : C:\HPCHEM\1\DATA\101909\TPH009.D
Operator : BR/AS
Acquired : 19 Oct 2009 19:18 using AcqMethod 1005BB.M
Instrument : A108
Sample Name: 348344-001 SS-1
Misc Info : 10/16/09 10:40 BR SOILS
Vial Number: 8



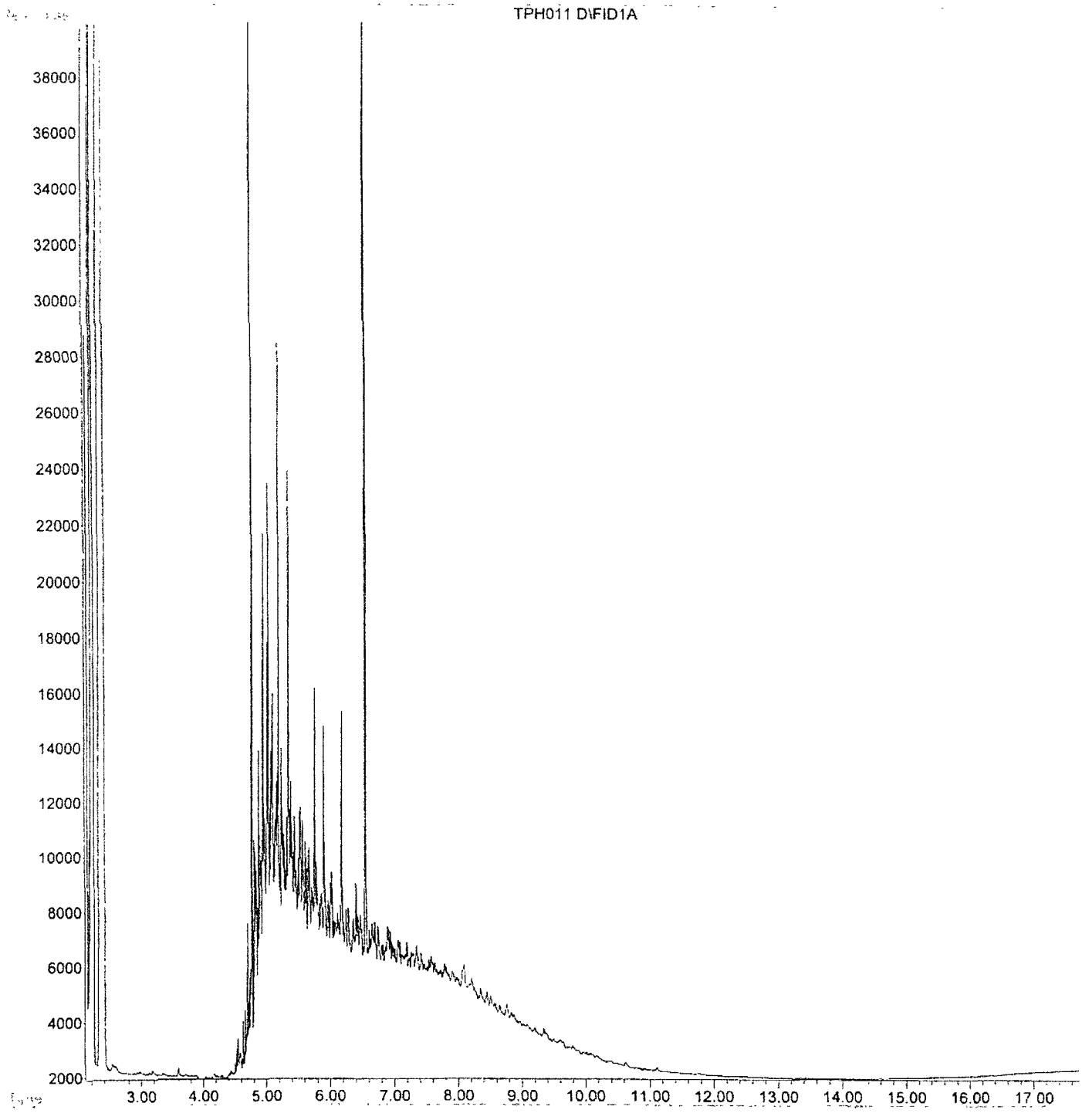
File : C:\HPCHEM\1\DATA\101909\TPH010.D
Operator : BR/AS
Acquired : 19 Oct 2009 19:45 using AcqMethod 1005BB.M
Instrument : A108
Sample Name: 348344-002*20
Misc Info :
Vial Number. 9

SS-2

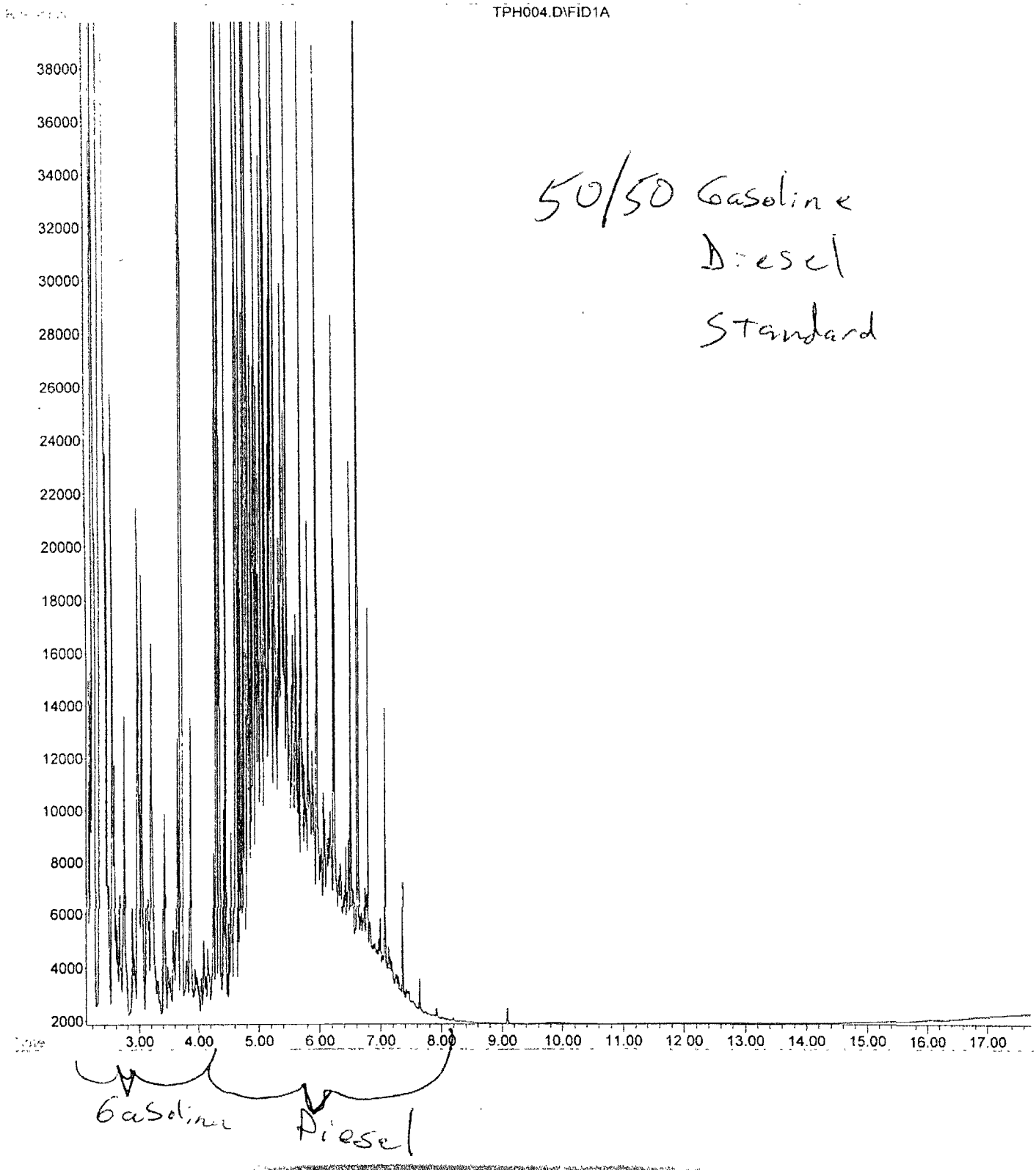


File : C:\HPCHEM\1\DATA\101909\TPH011.D
Operator : BR/AS
Acquired : 19 Oct 2009 20:14 using AcqMethod 1005BB.M
Instrument : A108
Sample Name: 348344-003
Misc Info :
Vial Number: 10

SS-3



File : C:\HPCHEM\1\DATA\101909\TPH004.D
Operator : BR/AS
Acquired : 19 Oct 2009 17:02 using AcqMethod 1005BB.M
Instrument : A108
Sample Name: CCV
Misc Info :
Vial Number: 3



Analytical Report 351729

for

Ocotillo Environmental, LLC

Project Manager: Cindy Crain

Burgundy EMU Lease

1009-019C

17-NOV-09

12600 West I-20 East Odessa, Texas 79765

Xenco-Houston (EPA Lab code: TX00122):
Texas (T104704215-08-TX), Arizona (AZ0738), Arkansas (08-039-0), Connecticut (PH-0102), Florida (E871002)
Illinois (002082), Indiana (C-TX-02), Iowa (392), Kansas (E-10380), Kentucky (45), Louisiana (03054)
New Hampshire (297408), New Jersey (TX007), New York (11763), Oklahoma (9218), Pennsylvania (68-03610)
Rhode Island (LAO00308), USDA (S-44102)

Xenco-Atlanta (EPA Lab Code: GA00046):
Florida (E87428), North Carolina (483), South Carolina (98015), Utah (AALI1), West Virginia (362), Kentucky (85)
Louisiana (04176), USDA (P330-07-00105)

Xenco-Miami (EPA Lab code: FL01152): Florida (E86678), Maryland (330)
Xenco-Tampa Mobile (EPA Lab code: FL01212): Florida (E84900)
Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400-08-TX)
Xenco-Dallas (EPA Lab code: TX01468): Texas (T104704295-08-TX)
Xenco-Corpus Christi (EPA Lab code: TX02613): Texas (T104704370-08-TX)
Xenco-Boca Raton (EPA Lab Code: FL00449): Florida(E86240),
South Carolina(96031001), Louisiana(04154), Georgia(917)

17-NOV-09

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

Reference: XENCO Report No: **351729**
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 351729. 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. 351729 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, II
Odessa Laboratory Manager

Sample Cross Reference 351729

Ocotillo Environmental, LLC, Hobbs, NM

Burgundy EMU Lease

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
SS-1	S	Nov-09-09 12:30	0 - 6 In	351729-001
SS-2	S	Nov-09-09 12:33	0 - 6 In	351729-002
SS-3	S	Nov-09-09 12:36	0 - 6 In	351729-003
SS-4	S	Nov-09-09 12:39	0 - 6 In	351729-004
SS-5	S	Nov-09-09 12:42	0 - 6 In	351729-005
SS-6	S	Nov-09-09 12:45	0 - 6 In	351729-006
SS-7	S	Nov-09-09 12:48	0 - 6 In	351729-007
SS-8	S	Nov-09-09 12:51	0 - 6 In	351729-008
SS-9	S	Nov-09-09 12:54	0 - 6 In	351729-009
SS-10	S	Nov-09-09 13:00	0 - 6 In	351729-010

CASE NARRATIVE

Client Name: Ocotillo Environmental, LLC
Project Name: Burgundy EMU Lease

Project ID: 1009-019C
Work Order Number: 351729

Report Date: 17-NOV-09
Date Received: 11/10/2009

Sample receipt non conformances and Comments:

None

Sample receipt Non Conformances and Comments per Sample:

None

Analytical Non Conformances and Comments:

Batch: LBA-781290 Inorganic Anions by EPA 300
None

Batch: LBA-781403 Percent Moisture
None

Batch: LBA-781515 TPH By SW8015 Mod
None

Batch: LBA-781674 TPH By SW8015 Mod
None

Batch: LBA-781905 BTEX by EPA 8021B
SW8021BM

Batch 781905, Benzene, Ethylbenzene, Toluene, m,p-Xylenes, o-Xylene recovered below QC limits in the Matrix Spike and Matrix Spike Duplicate.
Samples affected are: 351729-005, -007, -008, -006, -010, -004, -009.
The Laboratory Control Sample for Toluene, m,p-Xylenes , Benzene, Ethylbenzene, o-Xylene is within laboratory Control Limits

SW8021BM

Batch 781905, Benzene, Ethylbenzene, Toluene, m,p-Xylenes , o-Xylene RPD was outside QC limits.
Samples affected are: 351729-005, -007, -008, -006, -010, -004, -009

Batch: LBA-781910 BTEX by EPA 8021B
None

Certificate of Analysis Summary 351729

Ocotillo Environmental, LLC, Hobbs, NM

Project Name: Burgundy EMU Lease

Project Id: 1009-019C
Contact: Cindy Crain
Project Location: Lea County, NM

Date Received in Lab: Tue Nov-10-09 04:23 pm
Report Date: 17-NOV-09
Project Manager: Brent Barron, II

Analysis Requested													
	Lab Id:	351729-001		351729-002		351729-003		351729-004		351729-005		351729-006	
	Field Id:	SS-1		SS-2		SS-3		SS-4		SS-5		SS-6	
	Depth:	0-6 In		0-6 In		0-6 In		0-6 In		0-6 In		0-6 In	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Nov-09-09 12.30		Nov-09-09 12:33		Nov-09-09 12 36		Nov-09-09 12:39		Nov-09-09 12:42		Nov-09-09 12:45	
Anions by E300	*Extracted:*												
	Analyzed:	Nov-11-09 13.33		Nov-11-09 13:33		Nov-11-09 13 33		Nov-11-09 13:33		Nov-11-09 13:33		Nov-11-09 13:33	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		177	4.24	474	8.68	857	8.50	1320	19.0	567	8.59	1100	17.5
BTEX by EPA 8021B	*Extracted:*	Nov-13-09 16:00		Nov-13-09 16:00		Nov-13-09 16:00		Nov-13-09 14:30		Nov-13-09 14:30		Nov-13-09 14:30	
	Analyzed:	Nov-15-09 18:32		Nov-15-09 18:53		Nov-15-09 19:14		Nov-14-09 20.08		Nov-14-09 20:29		Nov-14-09 20:50	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0011	ND	0.0010	ND	0.0010
Toluene		ND	0.0020	ND	0.0021	0.0030	0.0020	ND	0 0023	ND	0.0020	ND	0.0021
Ethylbenzene		ND	0.0010	ND	0.0010	0 0023	0 0010	ND	0.0011	ND	0 0010	ND	0.0010
m,p-Xylenes		0.0029	0.0020	ND	0.0021	0.0137	0.0020	ND	0.0023	ND	0.0020	ND	0 0021
o-Xylene		0.0023	0.0010	ND	0.0010	0.0100	0.0010	ND	0.0011	0.0015	0.0010	ND	0 0010
Total Xylenes		0.0052	0.0010	ND	0.0010	0.0237	0.0010	ND	0.0011	0 0015	0.0010	ND	0.0010
Total BTEX		0.0052	0.0010	ND	0 0010	0.0290	0.0010	ND	0.0011	0.0015	0.0010	ND	0.0010
Percent Moisture	*Extracted:*												
	Analyzed:	Nov-12-09 14:41		Nov-12-09 14:41		Nov-12-09 14:41		Nov-12-09 14:41		Nov-12-09 14:41		Nov-12-09 14:41	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		1.01	1.00	3.23	1.00	1.14	1.00	11 5	1.00	2 20	1.00	4.20	1.00
TPH By SW8015 Mod	*Extracted:*	Nov-11-09 12:45		Nov-11-09 12.45		Nov-11-09 12:45		Nov-11-09 12:45		Nov-11-09 12:45		Nov-11-09 12:45	
	Analyzed:	Nov-12-09 14:10		Nov-12-09 14:35		Nov-12-09 15 00		Nov-12-09 15:25		Nov-12-09 15 50		Nov-12-09 16:16	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
C6-C12 Gasoline Range Hydrocarbons		90.8	75.5	40.1	15 4	156	152	ND	16.9	276	153	ND	15.6
C12-C28 Diesel Range Hydrocarbons		1380	75.5	1030	15.4	1730	152	ND	16.9	4000	153	ND	15.6
C28-C35 Oil Range Hydrocarbons		178	75.5	114	15.4	158	152	ND	16.9	431	153	ND	15.6
Total TPH		1649	75.5	1184	15.4	2044	152	ND	16.9	4707	153	ND	15.6

Brent Barron, II
Odessa Laboratory Manager

Certificate of Analysis Summary 351729

Ocotillo Environmental, LLC, Hobbs, NM

Project Name: Burgundy EMU Lease

Project Id: 1009-019C
Contact: Cindy Crain
Project Location: Lea County, NM

Date Received in Lab: Tue Nov-10-09 04:23 pm
Report Date: 17-NOV-09
Project Manager: Brent Barron, II

Analysis Requested													
	Lab Id:	351729-007		351729-008		351729-009		351729-010					
	Field Id:	SS-7		SS-8		SS-9		SS-10					
	Depth:	0-6 In		0-6 In		0-6 In		0-6 In					
	Matrix:	SOIL		SOIL		SOIL		SOIL					
	Sampled:	Nov-09-09 12:48		Nov-09-09 12:51		Nov-09-09 12:54		Nov-09-09 13:00					
Anions by E300	Extracted:												
	Analyzed:	Nov-11-09 13:33		Nov-11-09 13:33		Nov-11-09 13:33		Nov-11-09 13:33					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Chloride		2130	45.2	1700	21.6	71 5	4.21	9200	182				
BTEX by EPA 8021B	Extracted:	Nov-13-09 14:30		Nov-13-09 14:30		Nov-13-09 14:30		Nov-13-09 14:30					
	Analyzed:	Nov-14-09 21:11		Nov-14-09 22:15		Nov-14-09 22:36		Nov-14-09 22:57					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Benzene		ND	0.0011	ND	0.0010	ND	0.0010	ND	0.0011				
Toluene		ND	0.0021	ND	0.0020	ND	0.0020	ND	0.0022				
Ethylbenzene		ND	0.0011	ND	0 0010	ND	0.0010	ND	0.0011				
m,p-Xylenes		ND	0.0021	ND	0.0020	ND	0.0020	ND	0.0022				
o-Xylene		ND	0.0011	ND	0.0010	ND	0.0010	ND	0.0011				
Total Xylenes		ND	0 0011	ND	0.0010	ND	0.0010	ND	0.0011				
Total BTEX		ND	0.0011	ND	0.0010	ND	0.0010	ND	0.0011				
Percent Moisture	Extracted:												
	Analyzed:	Nov-12-09 14:41		Nov-12-09 14:41		Nov-12-09 14 41		Nov-12-09 14:41					
	Units/RL:	%	RL	%	RL	%	RL	%	RL				
Percent Moisture		7.10	1.00	2.65	1.00	ND	1.00	7.67	1.00				
TPH By SW8015 Mod	Extracted:	Nov-11-09 12:45		Nov-11-09 12:45		Nov-11-09 12:45		Nov-11-09 12 45					
	Analyzed:	Nov-12-09 16:42		Nov-13-09 11:38		Nov-13-09 09:52		Nov-13-09 10:18					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL				
C6-C12 Gasoline Range Hydrocarbons		ND	16 1	ND	15.3	ND	15 0	ND	16 2				
C12-C28 Diesel Range Hydrocarbons		ND	16.1	538	15.3	ND	15 0	ND	16.2				
C28-C35 Oil Range Hydrocarbons		ND	16.1	81.3	15.3	ND	15 0	ND	16.2				
Total TPH		ND	16.1	619	15.3	ND	15.0	ND	16.2				

Brent Barron, II
Odessa Laboratory Manager

Final Ver. 1.000

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.

JN A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

BRL Below Reporting Limit.

RL Reporting Limit

* Outside XENCO's scope of NELAC Accreditation.

Form 2 - Surrogate Recoveries

Project Name: Burgundy EMU Lease

Work Orders : 351729, **Project ID:** 1009-019C

Lab Batch #: 781905 **Sample:** 543289-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 11/14/09 16:37

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0303	0.0300	101	80-120	
4-Bromofluorobenzene	0.0295	0.0300	98	80-120	

Lab Batch #: 781905 **Sample:** 543289-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 11/14/09 16:58

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0 0305	0.0300	102	80-120	
4-Bromofluorobenzene	0.0296	0 0300	99	80-120	

Lab Batch #: 781905 **Sample:** 543289-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 11/14/09 17:40

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0269	0.0300	90	80-120	
4-Bromofluorobenzene	0 0299	0.0300	100	80-120	

Lab Batch #: 781905 **Sample:** 351729-004 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/14/09 20:08

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0278	0.0300	93	80-120	
4-Bromofluorobenzene	0.0294	0.0300	98	80-120	

Lab Batch #: 781905 **Sample:** 351729-005 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/14/09 20:29

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0274	0 0300	91	80-120	
4-Bromofluorobenzene	0.0280	0.0300	93	80-120	

* Surrogate outside of Laboratory QC limits

** 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 Orders : 351729, **Project ID:** 1009-019C

Lab Batch #: 781905 **Sample:** 351729-006 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/14/09 20:50

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0276	0.0300	92	80-120	
4-Bromofluorobenzene	0 0316	0.0300	105	80-120	

Lab Batch #: 781905 **Sample:** 351729-007 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/14/09 21:11

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0276	0.0300	92	80-120	
4-Bromofluorobenzene	0.0304	0.0300	101	80-120	

Lab Batch #: 781905 **Sample:** 351729-008 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/14/09 22:15

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0275	0.0300	92	80-120	
4-Bromofluorobenzene	0.0277	0.0300	92	80-120	

Lab Batch #: 781905 **Sample:** 351729-009 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/14/09 22:36

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0273	0.0300	91	80-120	
4-Bromofluorobenzene	0.0302	0.0300	101	80-120	

Lab Batch #: 781905 **Sample:** 351729-010 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/14/09 22:57

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0 0276	0.0300	92	80-120	
4-Bromofluorobenzene	0.0308	0 0300	103	80-120	

* Surrogate outside of Laboratory QC limits

** 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 Orders : 351729,

Project ID: 1009-019C

Lab Batch #: 781905 **Sample:** 351729-004 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/15/09 01:45

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0277	0.0300	92	80-120	
4-Bromofluorobenzene	0.0295	0.0300	98	80-120	

Lab Batch #: 781905 **Sample:** 351729-004 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/15/09 02:07

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0281	0.0300	94	80-120	
4-Bromofluorobenzene	0.0280	0.0300	93	80-120	

Lab Batch #: 781910 **Sample:** 543291-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 11/15/09 02:49

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0294	0.0300	98	80-120	
4-Bromofluorobenzene	0.0300	0.0300	100	80-120	

Lab Batch #: 781910 **Sample:** 543291-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 11/15/09 03:10

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0301	0.0300	100	80-120	
4-Bromofluorobenzene	0.0299	0.0300	100	80-120	

Lab Batch #: 781910 **Sample:** 543291-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 11/15/09 03:52

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0270	0.0300	90	80-120	
4-Bromofluorobenzene	0.0293	0.0300	98	80-120	

* Surrogate outside of Laboratory QC limits

** 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 Orders : 351729,

Project ID: 1009-019C

Lab Batch #: 781910 **Sample:** 351729-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/15/09 18:32

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0274	0.0300	91	80-120	
4-Bromofluorobenzene	0.0304	0 0300	101	80-120	

Lab Batch #: 781910 **Sample:** 351729-002 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/15/09 18:53

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0260	0.0300	87	80-120	
4-Bromofluorobenzene	0 0289	0.0300	96	80-120	

Lab Batch #: 781910 **Sample:** 351729-003 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/15/09 19:14

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0254	0.0300	85	80-120	
4-Bromofluorobenzene	0.0318	0.0300	106	80-120	

Lab Batch #: 781910 **Sample:** 351716-001 D / MD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/15/09 19:57

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0277	0.0300	92	80-120	
4-Bromofluorobenzene	0 0288	0.0300	96	80-120	

Lab Batch #: 781515 **Sample:** 543098-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 11/12/09 07:12

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	126	99 9	126	70-135	
o-Terphenyl	52.6	50.0	105	70-135	

* Surrogate outside of Laboratory QC limits

** 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 Orders : 351729,

Project ID: 1009-019C

Lab Batch #: 781515 **Sample:** 543098-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 11/12/09 07:39

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	129	99.5	130	70-135	
o-Terphenyl	58.1	49.8	117	70-135	

Lab Batch #: 781515 **Sample:** 543098-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 11/12/09 08:04

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	91.8	99.8	92	70-135	
o-Terphenyl	58.2	49.9	117	70-135	

Lab Batch #: 781515 **Sample:** 351729-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/12/09 14:10

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	89.6	99.7	90	70-135	
o-Terphenyl	56.5	49.9	113	70-135	

Lab Batch #: 781515 **Sample:** 351729-002 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/12/09 14:35

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	95.3	99.5	96	70-135	
o-Terphenyl	55.2	49.8	111	70-135	

Lab Batch #: 781515 **Sample:** 351729-003 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/12/09 15:00

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	96.6	99.9	97	70-135	
o-Terphenyl	58.4	50.0	117	70-135	

* Surrogate outside of Laboratory QC limits

** 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 Orders : 351729, **Project ID:** 1009-019C

Lab Batch #: 781515 **Sample:** 351729-004 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/12/09 15:25

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	96 4	100	96	70-135	
o-Terphenyl	61.3	50.0	123	70-135	

Lab Batch #: 781515 **Sample:** 351729-005 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/12/09 15:50

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	104	99.6	104	70-135	
o-Terphenyl	59.0	49.8	118	70-135	

Lab Batch #: 781515 **Sample:** 351729-006 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/12/09 16:16

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	93.5	99.5	94	70-135	
o-Terphenyl	56.5	49.8	113	70-135	

Lab Batch #: 781515 **Sample:** 351729-007 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/12/09 16:42

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	93.6	100	94	70-135	
o-Terphenyl	57.2	50.0	114	70-135	

Lab Batch #: 781515 **Sample:** 351716-009 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/12/09 17:33

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	130	99 5	131	70-135	
o-Terphenyl	55.1	49.8	111	70-135	

* Surrogate outside of Laboratory QC limits

** 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 Orders : 351729,

Project ID: 1009-019C

Lab Batch #: 781515 **Sample:** 351716-009 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/12/09 17:59

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	114	99.8	114	70-135	
o-Terphenyl	58.8	49.9	118	70-135	

Lab Batch #: 781515 **Sample:** 351729-008 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/13/09 11:38

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	88.5	99.6	89	70-135	
o-Terphenyl	53.3	49.8	107	70-135	

Lab Batch #: 781674 **Sample:** 543182-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 11/13/09 08:09

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	91.8	100	92	70-135	
o-Terphenyl	57.9	50.0	116	70-135	

Lab Batch #: 781674 **Sample:** 543182-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 11/13/09 08:33

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	112	99.5	113	70-135	
o-Terphenyl	58.5	49.8	117	70-135	

Lab Batch #: 781674 **Sample:** 543182-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 11/13/09 09:00

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	124	100	124	70-135	
o-Terphenyl	55.0	50.0	110	70-135	

* Surrogate outside of Laboratory QC limits

** 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 Orders : 351729,

Project ID: 1009-019C

Lab Batch #: 781674 **Sample:** 351729-009 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/13/09 09:52

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	76.9	100	77	70-135	
o-Terphenyl	43.1	50.0	86	70-135	

Lab Batch #: 781674 **Sample:** 351729-010 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/13/09 10:18

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	91.3	99 8	91	70-135	
o-Terphenyl	55.6	49.9	111	70-135	

Lab Batch #: 781674 **Sample:** 351729-010 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/13/09 12:04

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	123	100	123	70-135	
o-Terphenyl	58.3	50.0	117	70-135	

Lab Batch #: 781674 **Sample:** 351729-010 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/13/09 12:30

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	124	99.5	125	70-135	
o-Terphenyl	54 4	49.8	109	70-135	

* Surrogate outside of Laboratory QC limits

** 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 #: 351729 **Project ID:** 1009-019C

Lab Batch #: 781290 **Sample:** 781290-1-BKS **Matrix:** Solid

Date Analyzed: 11/11/2009 **Date Prepared:** 11/11/2009 **Analyst:** LATCOR

Reporting Units: mg/kg **Batch #:** 1

Anions by E300 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	10.6	106	75-125	

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

BS / BSD Recoveries

Project Name: Burgundy EMU Lease

Work Order #: 351729 **Project ID:** 1009-019C

Analyst: ASA **Date Prepared:** 11/13/2009 **Date Analyzed:** 11/14/2009

Lab Batch ID: 781905 **Sample:** 543289-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BTEX by EPA 8021B	BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY										
Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	ND	0.1000	0.0889	89	0.1	0.0873	87	2	70-130	35	
Toluene	ND	0.1000	0.0885	89	0.1	0.0867	87	2	70-130	35	
Ethylbenzene	ND	0.1000	0.0869	87	0.1	0.0856	86	2	71-129	35	
m,p-Xylenes	ND	0.2000	0.1873	94	0.2	0.1845	92	2	70-135	35	
o-Xylene	ND	0.1000	0.0915	92	0.1	0.0920	92	1	71-133	35	

Analyst: ASA **Date Prepared:** 11/13/2009 **Date Analyzed:** 11/15/2009

Lab Batch ID: 781910 **Sample:** 543291-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BTEX by EPA 8021B	BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY										
Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	ND	0.1000	0.0900	90	0.1	0.0893	89	1	70-130	35	
Toluene	ND	0.1000	0.0889	89	0.1	0.0882	88	1	70-130	35	
Ethylbenzene	ND	0.1000	0.0875	88	0.1	0.0869	87	1	71-129	35	
m,p-Xylenes	ND	0.2000	0.1883	94	0.2	0.1859	93	1	70-135	35	
o-Xylene	ND	0.1000	0.0938	94	0.1	0.0930	93	1	71-133	35	

Relative Percent Difference RPD = 200*|(C-F)/(C+F)|
Blank Spike Recovery [D] = 100*(C)/[B]
Blank Spike Duplicate Recovery [G] = 100*(F)/[E]
All results are based on MDL and Validated for QC Purposes

BS / BSD Recoveries

Project Name: Burgundy EMU Lease

Work Order #: 351729 **Project ID:** 1009-019C

Analyst: BEV **Date Prepared:** 11/11/2009 **Date Analyzed:** 11/12/2009

Lab Batch ID: 781515 **Sample:** 543098-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

TPH By SW8015 Mod	BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY										
Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
C6-C12 Gasoline Range Hydrocarbons	ND	999	878	88	995	928	93	6	70-135	35	
C12-C28 Diesel Range Hydrocarbons	ND	999	747	75	995	828	83	10	70-135	35	

Analyst: BEV **Date Prepared:** 11/11/2009 **Date Analyzed:** 11/13/2009

Lab Batch ID: 781674 **Sample:** 543182-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

TPH By SW8015 Mod	BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY										
Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
C6-C12 Gasoline Range Hydrocarbons	ND	995	925	93	1000	880	88	5	70-135	35	
C12-C28 Diesel Range Hydrocarbons	ND	995	746	75	1000	793	79	6	70-135	35	

Relative Percent Difference RPD = 200*|(C-F)/(C+F)|
Blank Spike Recovery [D] = 100*(C)/[B]
Blank Spike Duplicate Recovery [G] = 100*(F)/[E]
All results are based on MDL and Validated for QC Purposes

Form 3 - MS Recoveries

Project Name: Burgundy EMU Lease

Work Order #: 351729
Lab Batch #: 781290
Project ID: 1009-019C
Date Analyzed: 11/11/2009
Date Prepared: 11/11/2009
Analyst: LATCOR
QC- Sample ID: 351720-001 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	2120	1300	3700	122	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

BRL - Below Reporting Limit

Form 3 - MS / MSD Recoveries

Project Name: Burgundy EMU Lease

Work Order # : 351729 **Project ID:** 1009-019C

Lab Batch ID: 781905 **QC- Sample ID:** 351729-004 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 11/15/2009 **Date Prepared:** 11/13/2009 **Analyst:** ASA

Reporting Units: mg/kg

BTEX by EPA 8021B 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
Benzene	ND	0.1130	0.0224	20	0.1130	0.0636	56	96	70-130	35	XF
Toluene	ND	0.1130	0.0132	12	0.1130	0.0386	34	98	70-130	35	XF
Ethylbenzene	ND	0.1130	0.0166	15	0.1130	0.0545	48	107	71-129	35	XF
m,p-Xylenes	ND	0.2260	0.0024	1	0.2260	0.0041	2	52	70-135	35	XF
o-Xylene	ND	0.1130	0.0129	11	0.1130	0.0435	38	109	71-133	35	XF

Lab Batch ID: 781515 **QC- Sample ID:** 351716-009 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 11/12/2009 **Date Prepared:** 11/11/2009 **Analyst:** BEV

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	1070	971	91	1080	1000	93	3	70-135	35	
C12-C28 Diesel Range Hydrocarbons	ND	1070	815	76	1080	902	84	10	70-135	35	

Lab Batch ID: 781674 **QC- Sample ID:** 351729-010 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 11/13/2009 **Date Prepared:** 11/11/2009 **Analyst:** BEV

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	1080	950	88	1080	962	89	1	70-135	35	
C12-C28 Diesel Range Hydrocarbons	ND	1080	888	82	1080	938	87	5	70-135	35	

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

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 #: 351729

Lab Batch #: 781290 **Project ID:** 1009-019C

Date Analyzed: 11/11/2009 **Date Prepared:** 11/11/2009 **Analyst:** LATCOR

QC- Sample ID: 351720-001 D **Batch #:** 1 **Matrix:** Soil

Reporting Units: mg/kg

Anions by E300 Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY				
	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Chloride	2120	2110	0	20	

Lab Batch #: 781910

Date Analyzed: 11/15/2009 **Date Prepared:** 11/13/2009 **Analyst:** ASA

QC- Sample ID: 351716-001 D **Batch #:** 1 **Matrix:** Soil

Reporting Units: mg/kg

BTEX by EPA 8021B Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY				
	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Benzene	ND	ND	NC	35	
Toluene	ND	ND	NC	35	
Ethylbenzene	ND	ND	NC	35	
m,p-Xylenes	ND	ND	NC	35	
o-Xylene	ND	ND	NC	35	
a,a,a-Trifluorotoluene	0.030	0.031	3	35	

Lab Batch #: 781403

Date Analyzed: 11/12/2009 **Date Prepared:** 11/12/2009 **Analyst:** BEV

QC- Sample ID: 351716-016 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	9.47	8.39	12	20	

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

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: (575) 441-7244 Fax No: (432) 272-0304
Sampler Signature: Cindy Crain e-mail: cindy.crain@gmail.com

Project Name: Burgundy EMU Lease
Project #: 1009-019C
Project Loc: Lea County, NM
PO #:
Report Format: [X] Standard [ ] TRRP [ ] NPDES

(lab use only)
ORDER #: 351729

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total # of Containers	Preservation & # of Containers: Ice	HNO3	HCl	H2SO4	NaOH	Na2S2O3	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	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.	RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
01	SS-1	0	6"	11/9/2009	1230		1	X								S	X					X						X				X
02	SS-2	0	6"	11/9/2009	1233		1	X								S	X					X						X				X
03	SS-3	0	6"	11/9/2009	1236		1	X								S	X					X						X				X
04	SS-4	0	6"	11/9/2009	1239		1	X								S	X					X						X				X
05	SS-5	0	6"	11/9/2009	1242		1	X								S	X					X						X				X
06	SS-6	0	6"	11/9/2009	1245		1	X								S	X					X						X				X
07	SS-7	0	6"	11/9/2009	1248		1	X								S	X					X						X				X
08	SS-8	0	6"	11/9/2009	1251		1	X								S	X					X						X				X
09	SS-9	0	6"	11/9/2009	1254		1	X								S	X					X						X				X
10	SS-10	0	6"	11/9/2009	1300		1	X								S	X					X						X				X

Special Instructions:

Relinquished by:	Date	Time	Received by:	Date	Time
Cindy Crain	11/10/09	1623			
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by ELOT: Andrea Sam	Date 11-10-09	Time 16:23

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	Y	N
by Sampler/Client Rep. ?	Y	N

by Courier? UPS DHL FedEx Lone Star
4 oz glass
Temperature Upon Receipt: 2.1 °C

Environmental Lab of Texas

Variance/ Corrective Action Report- Sample Log-In

Client: Ocotillo Env.

Date/ Time: 11.10.09 16.23

Lab ID #: 351729

Initials: AL

Sample Receipt Checklist

					Client Initials
#1	Temperature of container/ cooler?	(Yes)	No	2.1 °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 353394

for

Ocotillo Environmental, LLC

Project Manager: Cindy Crain

Burgundy EMU Lease

1009-019C

30-NOV-09

12600 West I-20 East Odessa, Texas 79765

Xenco-Houston (EPA Lab code: TX00122):
Texas (T104704215-08-TX), Arizona (AZ0738), Arkansas (08-039-0), Connecticut (PH-0102), Florida (E871002)
Illinois (002082), Indiana (C-TX-02), Iowa (392), Kansas (E-10380), Kentucky (45), Louisiana (03054)
New Hampshire (297408), New Jersey (TX007), New York (11763), Oklahoma (9218), Pennsylvania (68-03610)
Rhode Island (LAO00308), USDA (S-44102)

Xenco-Atlanta (EPA Lab Code: GA00046):
Florida (E87428), North Carolina (483), South Carolina (98015), Utah (AALI1), West Virginia (362), Kentucky (85)
Louisiana (04176), USDA (P330-07-00105)

Xenco-Miami (EPA Lab code: FL01152): Florida (E86678), Maryland (330)
Xenco-Tampa Mobile (EPA Lab code: FL01212): Florida (E84900)
Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400-08-TX)
Xenco-Dallas (EPA Lab code: TX01468): Texas (T104704295-08-TX)
Xenco-Corpus Christi (EPA Lab code: TX02613): Texas (T104704370-08-TX)
Xenco-Boca Raton (EPA Lab Code: FL00449): Florida(E86240),
South Carolina(96031001), Louisiana(04154), Georgia(917)

30-NOV-09

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

Reference: XENCO Report No: **353394**
Burgundy EMU Lease
Project Address: Lea County, New Mexico

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 353394. 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. 353394 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, II
Odessa Laboratory Manager

Sample Cross Reference 353394

Ocotillo Environmental, LLC, Hobbs, NM

Burgundy EMU Lease

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
SS-1	S	Nov-23-09 13:30	7 - 7 ft	353394-001
SS-2	S	Nov-23-09 13:34	7 - 7 ft	353394-002
SS-3	S	Nov-23-09 13:37	7 - 7 ft	353394-003
SS-4	S	Nov-23-09 13:40	7 - 7 ft	353394-004
SS-5	S	Nov-23-09 13:45	7 - 7 ft	353394-005
SS-6	S	Nov-23-09 13:48	7 - 7 ft	353394-006
SS-7	S	Nov-23-09 13:52	4 - 4 ft	353394-007
SS-8	S	Nov-23-09 13:56		353394-008
SS-10 (Comp)	S	Nov-23-09 14:00		353394-009

CASE NARRATIVE

Client Name: Ocotillo Environmental, LLC
Project Name: Burgundy EMU Lease

Project ID: 1009-019C
Work Order Number: 353394

Report Date: 30-NOV-09
Date Received: 11/24/2009

Sample receipt non conformances and Comments:

None

Sample receipt Non Conformances and Comments per Sample:

None

Analytical Non Conformances and Comments:

Batch: LBA-783197 Inorganic Anions by EPA 300
None

Batch: LBA-783206 Percent Moisture
None

Batch: LBA-783209 Percent Moisture
None

Batch: LBA-783625 TPH By SW8015 Mod
SW8015MOD_NM

Batch 783625, 1-Chlorooctane, o-Terphenyl recovered below QC limits . Matrix interferences is suspected; data not confirmed by re-analysis
Samples affected are: 353394-008.

Certificate of Analysis Summary 353394

Ocotillo Environmental, LLC, Hobbs, NM

Project Name: Burgundy EMU Lease

Project Id: 1009-019C
Contact: Cindy Crain
Project Location: Lea County, New Mexico

Date Received in Lab: Tue Nov-24-09 02:40 pm
Report Date: 30-NOV-09
Project Manager: Brent Barron, II

Analysis Requested																	
	Lab Id:	353394-001		353394-002		353394-003		353394-004		353394-005		353394-006					
	Field Id:	SS-1		SS-2		SS-3		SS-4		SS-5		SS-6					
	Depth:	7-7 ft		7-7 ft		7-7 ft		7-7 ft		7-7 ft		7-7 ft					
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL					
	Sampled:	Nov-23-09 13:30		Nov-23-09 13:34		Nov-23-09 13:37		Nov-23-09 13:40		Nov-23-09 13:45		Nov-23-09 13:48					
Anions by E300	*Extracted:*																
	Analyzed:			Nov-24-09 20.22		Nov-24-09 20:22		Nov-24-09 20.22		Nov-24-09 20.22		Nov-24-09 20:22					
	Units/RL:			mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Chloride				781	8.62	196	8.64	2100	25.5	1790	21.8	688	9.31				
Percent Moisture	*Extracted:*																
	Analyzed:	Nov-24-09 17:00		Nov-24-09 17:00		Nov-24-09 17:00		Nov-24-09 17:00		Nov-24-09 17:00		Nov-24-09 17.00					
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL	%	RL				
Percent Moisture		2.02	1.00	2.54	1.00	2.83	1.00	17.5	1.00	3.49	1.00	9.76	1.00				
TPH By SW8015 Mod	*Extracted:*	Nov-24-09 15:45		Nov-24-09 15:45		Nov-24-09 15:45				Nov-24-09 15:45							
	Analyzed:	Nov-26-09 10.05		Nov-26-09 10:31		Nov-26-09 10:56				Nov-26-09 11:21							
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL			mg/kg	RL						
C6-C12 Gasoline Range Hydrocarbons		36.4	15.3	ND	15.4	ND	15.4			ND	15.5						
C12-C28 Diesel Range Hydrocarbons		1070	15.3	76 3	15.4	339	15.4			20 3	15.5						
C28-C35 Oil Range Hydrocarbons		83.9	15.3	152	15.4	26.5	15.4			ND	15.5						
Total TPH		1190	15.3	228	15.4	366	15.4			20.3	15.5						

Brent Barron, II
Odessa Laboratory Manager

Final Ver. 1.000

Certificate of Analysis Summary 353394

Ocotillo Environmental, LLC, Hobbs, NM

Project Name: Burgundy EMU Lease

Project Id: 1009-019C
Contact: Cindy Crain
Project Location: Lea County, New Mexico

Date Received in Lab: Tue Nov-24-09 02:40 pm
Report Date: 30-NOV-09
Project Manager: Brent Barron, II

Analysis Requested													
	Lab Id:	353394-007		353394-008		353394-009							
	Field Id:	SS-7		SS-8		SS-10 (Comp)							
	Depth:	4-4 ft											
	Matrix:	SOIL		SOIL		SOIL							
	Sampled:	Nov-23-09 13:52		Nov-23-09 13:56		Nov-23-09 14.00							
Anions by E300	*Extracted:*												
	Analyzed:	Nov-24-09 20:22		Nov-24-09 20:22		Nov-24-09 20.22							
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL						
Chloride		1980	23.2	417	8.50	15700	173						
Percent Moisture	*Extracted:*												
	Analyzed:	Nov-24-09 17.00		Nov-24-09 17:00		Nov-24-09 17:00							
	Units/RL:	%	RL	%	RL	%	RL						
Percent Moisture		9.51	1.00	1.13	1.00	2.98	1.00						
TPH By SW8015 Mod	*Extracted:*			Nov-24-09 15:45									
	Analyzed:			Nov-26-09 11:46									
	Units/RL:			mg/kg	RL								
C6-C12 Gasoline Range Hydrocarbons				ND	15.2								
C12-C28 Diesel Range Hydrocarbons				305	15 2								
C28-C35 Oil Range Hydrocarbons				25.1	15.2								
Total TPH				330	15.2								

Brent Barron, II
Odessa Laboratory Manager

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.

JN A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

BRL Below Reporting Limit.

RL Reporting Limit

* Outside XENCO's scope of NELAC Accreditation.

Form 2 - Surrogate Recoveries

Project Name: Burgundy EMU Lease

Work Orders : 353394,

Project ID: 1009-019C

Lab Batch #: 783625 **Sample:** 544355-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 11/26/09 04:10

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	125	99.8	125	70-135	
o-Terphenyl	49.8	49.9	100	70-135	

Lab Batch #: 783625 **Sample:** 544355-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 11/26/09 04:35

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	119	100	119	70-135	
o-Terphenyl	48.5	50.0	97	70-135	

Lab Batch #: 783625 **Sample:** 544355-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 11/26/09 05:01

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	86.5	99.8	87	70-135	
o-Terphenyl	53.0	49.9	106	70-135	

Lab Batch #: 783625 **Sample:** 353394-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/26/09 10:05

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	86.0	100	86	70-135	
o-Terphenyl	59.3	50.0	119	70-135	

Lab Batch #: 783625 **Sample:** 353394-002 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/26/09 10:31

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	84.5	100	85	70-135	
o-Terphenyl	51.3	50.0	103	70-135	

* Surrogate outside of Laboratory QC limits

** 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 Orders : 353394, **Project ID:** 1009-019C

Lab Batch #: 783625 **Sample:** 353394-003 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/26/09 10:56

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	84.4	99.6	85	70-135	
o-Terphenyl	50.4	49.8	101	70-135	

Lab Batch #: 783625 **Sample:** 353394-005 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/26/09 11:21

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	86.5	99.9	87	70-135	
o-Terphenyl	52.8	50.0	106	70-135	

Lab Batch #: 783625 **Sample:** 353394-008 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/26/09 11:46

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	4.42	99.9	4	70-135	*
o-Terphenyl	3.05	50.0	6	70-135	*

Lab Batch #: 783625 **Sample:** 353324-002 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/26/09 12:12

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	123	99.6	123	70-135	
o-Terphenyl	52.2	49.8	105	70-135	

Lab Batch #: 783625 **Sample:** 353324-002 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/26/09 12:37

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	118	99.6	118	70-135	
o-Terphenyl	51.9	49.8	104	70-135	

* Surrogate outside of Laboratory QC limits

** 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 #: 353394 **Project ID:** 1009-019C

Lab Batch #: 783197 **Sample:** 783197-1-BKS **Matrix:** Solid

Date Analyzed: 11/24/2009 **Date Prepared:** 11/24/2009 **Analyst:** LATCOR

Reporting Units: mg/kg **Batch #:** 1

Anions by E300 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	10.5	105	75-125	

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

BS / BSD Recoveries

Project Name: Burgundy EMU Lease

Work Order #: 353394
Analyst: BEV
Lab Batch ID: 783625
Sample: 544355-1-BKS
Units: mg/kg

Date Prepared: 11/24/2009
Batch #: 1

Project ID: 1009-019C
Date Analyzed: 11/26/2009
Matrix: Solid

	BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY										
TPH By SW8015 Mod **Analytes**	**Blank Sample Result [A]**	**Spike Added [B]**	**Blank Spike Result [C]**	**Blank Spike %R [D]**	**Spike Added [E]**	**Blank Spike Duplicate Result [F]**	**Blk. Spk Dup. %R [G]**	**RPD %**	**Control Limits %R**	**Control Limits %RPD**	**Flag**
C6-C12 Gasoline Range Hydrocarbons	ND	998	928	93	1000	935	94	1	70-135	35	
C12-C28 Diesel Range Hydrocarbons	ND	998	738	74	1000	783	78	6	70-135	35	

Relative Percent Difference RPD = 200*|(C-F)/(C+F)|
Blank Spike Recovery [D] = 100*(C)/[B]
Blank Spike Duplicate Recovery [G] = 100*(F)/[E]
All results are based on MDL and Validated for QC Purposes

Form 3 - MS Recoveries

Project Name: Burgundy EMU Lease

Work Order #: 353394
Lab Batch #: 783197
Project ID: 1009-019C
Date Analyzed: 11/24/2009
Date Prepared: 11/24/2009
Analyst: LATCOR
QC- Sample ID: 353317-001 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	16700	13800	30700	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

BRL - Below Reporting Limit

Form 3 - MS / MSD Recoveries

Project Name: Burgundy EMU Lease

Work Order # : 353394 **Project ID:** 1009-019C

Lab Batch ID: 783625 **QC- Sample ID:** 353324-002 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 11/26/2009 **Date Prepared:** 11/24/2009 **Analyst:** BEV

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	1420	1330	94	1420	1300	92	2	70-135	35	
C12-C28 Diesel Range Hydrocarbons	ND	1420	1300	92	1420	1240	87	5	70-135	35	

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

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 #: 353394

Lab Batch #: 783197 **Project ID:** 1009-019C

Date Analyzed: 11/24/2009 **Date Prepared:** 11/24/2009 **Analyst:** LATCOR

QC- Sample ID: 353317-001 D **Batch #:** 1 **Matrix:** Soil

Reporting Units: mg/kg

Anions by E300 Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY				
	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Chloride	16700	16600	1	20	

Lab Batch #: 783206

Date Analyzed: 11/24/2009 **Date Prepared:** 11/24/2009 **Analyst:** WRU

QC- Sample ID: 353324-001 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	6.95	7.64	9	20	

Lab Batch #: 783209

Date Analyzed: 11/24/2009 **Date Prepared:** 11/24/2009 **Analyst:** WRU

QC- Sample ID: 353394-007 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	9.51	9.85	4	20	

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

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
Project Name: Burgundy EMU Lease
Company Name: Ocotillo Environmental, LLC
Project #: 1009-019C
Company Address: PO Box 1816
Project Loc: Lea County, New Mexico
City/State/Zip: Hobbs, NM 88241
PO #:
Telephone No: (575) 441-7244
Fax No: (432) 272-0304
Report Format: ☒ Standard ☐ TRRP ☐ NPDES
Sampler Signature: Cindy Crain
e-mail: cindy.crain@gmail.com

(lab use only)
ORDER #: 353394

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total # of Containers	Preservation & # of Containers: Ice	HNO3	HCl	H2SO4	NaOH	Na2S2O3	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	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.	RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
01	SS-1	7'	7'	11/23/2009	1330		1	X								S	X															X
02	SS-2	7'	7'	11/23/2009	1334		1	X								S	X						X									X
03	SS-3	7'	7'	11/23/2009	1337		1	X								S	X						X									X
04	SS-4	7'	7'	11/23/2009	1340		1	X								S							X									X
05	SS-5	7'	7'	11/23/2009	1345		1	X								S	X						X									X
06	SS-6	7'	7'	11/23/2009	1348		1	X								S							X									X
07	SS-7	4'	4'	11/23/2009	1352		1	X								S							X									X
08	SS-8	---	---	11/23/2009	1356		1	X								S	X						X									X
09	SS-10 (Comp)	---	---	11/23/2009	1400		1	X								S							X									X

Special Instructions:

Relinquished by:	Date	Time	Received by:	Date	Time
Cindy Crain	11/24/09	1440			
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by ELOT: Andrea Cain	Date 11.24.09	Time 14:40

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	Y	N
by Sampler/Client Rep. ?	Y	N

by Courier? UPS DHL FedEx Lone Star
4029955
Temperature Upon Receipt: 4.6 °C

Environmental Lab of Texas

Variance/ Corrective Action Report- Sample Log-In

Client: Ocotillo Env.

Date/ Time: 11.24.09 14:40

Lab ID # : 353394

Initials: AL

Sample Receipt Checklist

					Client Initials
#1	Temperature of container/ cooler?	Yes	No	4.0 °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 356011

for

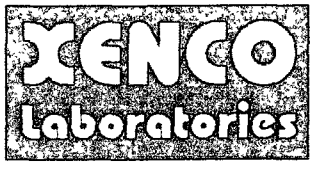
Ocotillo Environmental, LLC

Project Manager: Cindy Crain

Burgundy EMU Lease

1009-019C

05-JAN-10



12600 West I-20 East Odessa, Texas 79765

Xenco-Houston (EPA Lab code: TX00122):
Texas (T104704215-08-TX), Arizona (AZ0738), Arkansas (08-039-0), Connecticut (PH-0102), Florida (E871002)
Illinois (002082), Indiana (C-TX-02), Iowa (392), Kansas (E-10380), Kentucky (45), Louisiana (03054)
New Hampshire (297408), New Jersey (TX007), New York (11763), Oklahoma (9218), Pennsylvania (68-03610)
Rhode Island (LAO00308), USDA (S-44102)

Xenco-Atlanta (EPA Lab Code: GA00046):
Florida (E87429), North Carolina (483), South Carolina (98015), Utah (AALI1), West Virginia (362), Kentucky (85)
Louisiana (04176), USDA (P330-07-00105)

Xenco-Miami (EPA Lab code: FL01152): Florida (E86678), Maryland (330)
Xenco-Tampa Mobile (EPA Lab code: FL01212): Florida (E84900)
Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400-08-TX)
Xenco-Dallas (EPA Lab code: TX01468): Texas (T104704295-08-TX)
Xenco-Corpus Christi (EPA Lab code: TX02613): Texas (T104704370-08-TX)
Xenco-Boca Raton (EPA Lab Code: FL00449): Florida(E86240),
South Carolina(96031001), Louisiana(04154), Georgia(917)

05-JAN-10

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

Reference: XENCO Report No: **356011**
Burgundy EMU Lease
Project Address: Lea County, New Mexico

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 356011. 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. 356011 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, II
Odessa Laboratory Manager

Sample Cross Reference 356011

Ocotillo Environmental, LLC, Hobbs, NM

Burgundy EMU Lease

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
SS-1	S	Dec-16-09 15:20	7 - 7 ft	356011-001
SS-2	S	Dec-16-09 15:23	7 - 7 ft	356011-002
SS-3	S	Dec-16-09 15:26	7 - 7 ft	356011-003
SS-4	S	Dec-16-09 15:30	7 - 7 ft	356011-004
SS-5	S	Dec-16-09 15:33	7 - 7 ft	356011-005
SS-6	S	Dec-16-09 15:35	7 - 7 ft	356011-006
SS-7	S	Dec-16-09 15:38	4 - 4 ft	356011-007
SS-10 (Comp)	S	Dec-16-09 15:45		356011-008

CASE NARRATIVE

Client Name: Ocotillo Environmental, LLC
Project Name: Burgundy EMU Lease

Project ID:	*1009-019C*	*Report Date:*	*05-JAN-10*
Work Order Number:	*356011*	*Date Received:*	*12/17/2009*

Sample receipt non conformances and Comments:

None

Sample receipt Non Conformances and Comments per Sample:

None

Analytical Non Conformances and Comments:

Batch: LBA-786262 Percent Moisture
AD2216A
Batch 786262, Percent Moisture RPD is outside the QC limit. This is most likely due to sample non-homogeneity.
Samples affected are: 356011-001, -002, -007, -003, -004, -006, -005, -008.

Batch: LBA-786494 TPH By SW8015 Mod
None

Batch: LBA-786498 Anions by E300
None

Certificate of Analysis Summary 356011

Ocotillo Environmental, LLC, Hobbs, NM

Project Name: Burgundy EMU Lease

Project Id: 1009-019C
Contact: Cindy Crain
Project Location: Lea County, New Mexico

Date Received in Lab: Thu Dec-17-09 02:45 pm
Report Date: 05-JAN-10
Project Manager: Brent Barron, II

Analysis Requested													
	Lab Id:	356011-001		356011-002		356011-003		356011-004		356011-005		356011-006	
	Field Id:	SS-1		SS-2		SS-3		SS-4		SS-5		SS-6	
	Depth:	7-7 ft		7-7 ft		7-7 ft		7-7 ft		7-7 ft		7-7 ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Dec-16-09 15:20		Dec-16-09 15:23		Dec-16-09 15:26		Dec-16-09 15:30		Dec-16-09 15:33		Dec-16-09 15:35	
Anions by E300	*Extracted:*												
	Analyzed:			Dec-18-09 13:07				Dec-18-09 13:07		Dec-18-09 13:07		Dec-18-09 13:07	
	Units/RL:			mg/kg	RL			mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride				656	9.57			271	11.4	270	4.37	510	56.1
Percent Moisture	*Extracted:*												
	Analyzed:	Dec-17-09 17.00		Dec-17-09 17:00		Dec-17-09 17:00		Dec-17-09 17:00		Dec-17-09 17:00		Dec-17-09 17:00	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		16.3	1.00	12.3	1.00	17.3	1.00	26.5	1.00	3.87	1.00	25 1	1.00
TPH By SW8015 Mod	*Extracted:*	Dec-17-09 15:45		Dec-17-09 15:45		Dec-17-09 15:45							
	Analyzed:	Dec-19-09 09:10		Dec-19-09 09.36		Dec-19-09 10:04							
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL						
C6-C12 Gasoline Range Hydrocarbons		32.5	17.9	ND	17.1	ND	18.1						
C12-C28 Diesel Range Hydrocarbons		229	17.9	26.4	17 1	144	18.1						
C28-C35 Oil Range Hydrocarbons		23.9	17.9	ND	17.1	21.4	18.1						
Total TPH		285	17.9	26.4	17.1	165	18.1						

Brent Barron, II
Odessa Laboratory Manager

Certificate of Analysis Summary 356011

Ocotillo Environmental, LLC, Hobbs, NM

Project Name: Burgundy EMU Lease

Project Id: 1009-019C
Contact: Cindy Crain
Project Location: Lea County, New Mexico

Date Received in Lab: Thu Dec-17-09 02:45 pm
Report Date: 05-JAN-10
Project Manager: Brent Barron, II

Analysis Requested													
	Lab Id:	356011-007				356011-008							
	Field Id:	SS-7				SS-10 (Comp)							
	Depth:	4-4 ft											
	Matrix:	SOIL				SOIL							
	Sampled:	Dec-16-09 15:38				Dec-16-09 15:45							
Anions by E300	*Extracted:*												
	Analyzed:	Dec-18-09 13:07				Dec-18-09 13:07							
	Units/RL:	mg/kg	RL			mg/kg	RL						
Chloride		32.1	5.57			10000	226						
Percent Moisture	*Extracted:*												
	Analyzed:	Dec-17-09 17:00				Dec-17-09 17:00							
	Units/RL:	%	RL			%	RL						
Percent Moisture		24.5	1.00			25.8	1.00						

Brent Barron, II
Odessa Laboratory Manager

Final Ver. 1.000

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.

JN A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

BRL Below Reporting Limit.

RL Reporting Limit

* Outside XENCO's scope of NELAC Accreditation.

Form 2 - Surrogate Recoveries

Project Name: Burgundy EMU Lease

Work Orders : 356011, **Project ID:** 1009-019C

Lab Batch #: 786494 **Sample:** 545951-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 12/19/09 01:07

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	89.3	99.8	89	70-135	
o-Terphenyl	40.4	49.9	81	70-135	

Lab Batch #: 786494 **Sample:** 545951-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 12/19/09 01:34

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	94.4	99.8	95	70-135	
o-Terphenyl	41.8	49.9	84	70-135	

Lab Batch #: 786494 **Sample:** 545951-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 12/19/09 02:00

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	71.3	100	71	70-135	
o-Terphenyl	42.0	50.0	84	70-135	

Lab Batch #: 786494 **Sample:** 356011-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 12/19/09 09:10

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	76.9	100	77	70-135	
o-Terphenyl	45.6	50.0	91	70-135	

Lab Batch #: 786494 **Sample:** 356011-002 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 12/19/09 09:36

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	78.5	99.9	79	70-135	
o-Terphenyl	46.2	50.0	92	70-135	

* *Surrogate outside of Laboratory QC limits*

** 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 Orders : 356011, **Project ID:** 1009-019C

Lab Batch #: 786494 **Sample:** 356011-003 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 12/19/09 10:04

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	73.8	100	74	70-135	
o-Terphenyl	43.8	50.0	88	70-135	

Lab Batch #: 786494 **Sample:** 355920-001 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 12/19/09 10:31

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	86.2	99.6	87	70-135	
o-Terphenyl	39.8	49.8	80	70-135	

Lab Batch #: 786494 **Sample:** 355920-001 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 12/19/09 10:58

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	90.8	99.8	91	70-135	
o-Terphenyl	42.4	49.9	85	70-135	

* Surrogate outside of Laboratory QC limits

** 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 #: 356011 **Project ID:** 1009-019C

Lab Batch #: 786498 **Sample:** 786498-1-BKS **Matrix:** Solid

Date Analyzed: 12/18/2009 **Date Prepared:** 12/18/2009 **Analyst:** LATCOR

Reporting Units: mg/kg **Batch #:** 1

Anions by E300 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	11.0	11.1	101	75-125	

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

BS / BSD Recoveries

Project Name: Burgundy EMU Lease

Work Order #: 356011 **Project ID:** 1009-019C

Analyst: BEV **Date Prepared:** 12/17/2009 **Date Analyzed:** 12/19/2009

Lab Batch ID: 786494 **Sample:** 545951-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

TPH By SW8015 Mod Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
	BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY										
C6-C12 Gasoline Range Hydrocarbons	ND	998	893	89	998	961	96	7	70-135	35	
C12-C28 Diesel Range Hydrocarbons	ND	998	841	84	998	787	79	7	70-135	35	

Relative Percent Difference RPD = 200*|(C-F)/(C+F)|
Blank Spike Recovery [D] = 100*(C)/[B]
Blank Spike Duplicate Recovery [G] = 100*(F)/[E]
All results are based on MDL and Validated for QC Purposes

Form 3 - MS Recoveries

Project Name: Burgundy EMU Lease

Work Order #: 356011
Lab Batch #: 786498
Project ID: 1009-019C
Date Analyzed: 12/18/2009
Date Prepared: 12/18/2009
Analyst: LATCOR
QC- Sample ID: 356011-002 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	656	228	844	82	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

BRL - Below Reporting Limit

Form 3 - MS / MSD Recoveries

Project Name: Burgundy EMU Lease

Work Order # : 356011 **Project ID:** 1009-019C

Lab Batch ID: 786494 **QC- Sample ID:** 355920-001 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 12/19/2009 **Date Prepared:** 12/17/2009 **Analyst:** BEV

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	1080	940	87	1080	962	89	2	70-135	35	
C12-C28 Diesel Range Hydrocarbons	43.8	1080	910	80	1080	808	71	12	70-135	35	

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

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 #: 356011

Lab Batch #: 786498 **Project ID:** 1009-019C

Date Analyzed: 12/18/2009 **Date Prepared:** 12/18/2009 **Analyst:** LATCOR

QC- Sample ID: 356011-002 D **Batch #:** 1 **Matrix:** Soil

Reporting Units: mg/kg

Anions by E300 Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY				
	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Chloride	656	652	1	20	

Lab Batch #: 786262

Date Analyzed: 12/17/2009 **Date Prepared:** 12/17/2009 **Analyst:** WRU

QC- Sample ID: 355915-007 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	1.43	1.99	33	20	F

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

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: (575) 441-7244

Fax No: (432) 272-0304

Sampler Signature: Cindy Crain

e-mail: cindy.crain@gmail.com

Project Name: Burgundy EMU Lease

Project #: 1009-019C

Project Loc: Lea County, New Mexico

PO #:

Report Format: ☒ Standard ☐ TRRP ☐ NPDES

(lab use only)
ORDER #: 356011

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total #. 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)	TPH: 418.1 (8015M) 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.				RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
01	SS-1	7'	7'	12/16/2009	1520		1	X								S	X															X
02	SS-2	7'	7'	12/16/2009	1523		1	X								S	X			X												X
03	SS-3	7'	7'	12/16/2009	1526		1	X								S	X															X
04	SS-4	7'	7'	12/16/2009	1530		1	X								S				X												X
05	SS-5	7'	7'	12/16/2009	1533		1	X								S				X												X
06	SS-6	7'	7'	12/16/2009	1535		1	X								S				X												X
07	SS-7	4'	4'	12/16/2009	1538		1	X								S				X												X
08	SS-10 (Comp)	---	---	12/16/2009	1545		1	X								S				X												X

Special Instructions:

Relinquished by:	Date	Time	Received by:	Date	Time
Cindy Crain	12/17/09	1445			
			Received by ELOT: Andrea Sam	12-17-09	14:45

Laboratory Comments:
Sample Containers Intact? Ⓨ N
VOCs Free of Headspace? Ⓨ N
Labels on container(s) ID on lid Ⓨ N
Custody seals on container(s) Y Ⓝ
Custody seals on cooler(s) Y Ⓝ
Sample Hand Delivered Ⓨ N
by Sampler/Client Rep. ? Ⓨ N
by Courier? UPS DHL FedEx Lone Star
4oz glass
Temperature Upon Receipt: 3.1 °C

Environmental Lab of Texas

Variance/ Corrective Action Report- Sample Log-In

Client: Ocotillo Env.

Date/ Time: 12.17.09 14:45

Lab ID # : 356011

Initials: AL

Sample Receipt Checklist

					Client Initials
#1	Temperature of container/ cooler?	Yes	No	3.1 °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 359357

for

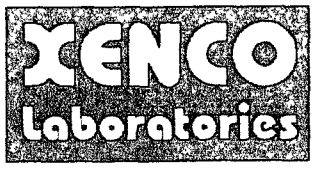
Ocotillo Environmental, LLC

Project Manager: Cindy Crain

Burgundy EMU Lease

1009-019 C

22-JAN-10



12600 West I-20 East Odessa, Texas 79765

Xenco-Houston (EPA Lab code: TX00122):
Texas (T104704215-08-TX), Arizona (AZ0738), Arkansas (08-039-0), Connecticut (PH-0102), Florida (E871002)
Illinois (002082), Indiana (C-TX-02), Iowa (392), Kansas (E-10380), Kentucky (45), Louisiana (03054)
New Hampshire (297408), New Jersey (TX007), New York (11763), Oklahoma (9218), Pennsylvania (68-03610)
Rhode Island (LAO00308), USDA (S-44102)

Xenco-Atlanta (EPA Lab Code: GA00046):
Florida (E87429), North Carolina (483), South Carolina (98015), Utah (AALI1), West Virginia (362), Kentucky (85)
Louisiana (04176), USDA (P330-07-00105)

Xenco-Miami (EPA Lab code: FL01152): Florida (E86678), Maryland (330)
Xenco-Tampa Mobile (EPA Lab code: FL01212): Florida (E84900)
Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400-08-TX)
Xenco-Dallas (EPA Lab code: TX01468): Texas (T104704295-08-TX)
Xenco-Corpus Christi (EPA Lab code: TX02613): Texas (T104704370-08-TX)
Xenco-Boca Raton (EPA Lab Code: FL00449): Florida(E86240),
South Carolina(96031001), Louisiana(04154), Georgia(917)

22-JAN-10

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

Reference: XENCO Report No: **359357**
Burgundy EMU Lease
Project Address: Lea Co., 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 359357. 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. 359357 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, II
Odessa Laboratory Manager

Sample Cross Reference 359357

Ocotillo Environmental, LLC, Hobbs, NM

Burgundy EMU Lease

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
SS-1	S	Jan-19-10 09:05		359357-001
SS-2	S	Jan-19-10 09:08		359357-002
SS-3	S	Jan-19-10 09:12		359357-003
SS-4	S	Jan-19-10 09:15		359357-004
SS-5	S	Jan-19-10 09:18		359357-005
SS-6	S	Jan-19-10 09:23		359357-006
SS-8	S	Jan-19-10 09:28		359357-007
SS-10	S	Jan-19-10 09:32		359357-008

CASE NARRATIVE

Client Name: Ocotillo Environmental, LLC
Project Name: Burgundy EMU Lease

Project ID: *1009-019 C* | *Report Date:* *22-JAN-10*
Work Order Number: *359357* | *Date Received:* *01/20/2010*

Sample receipt non conformances and Comments:
None

Sample receipt Non Conformances and Comments per Sample:

None

Analytical Non Conformances and Comments:

Batch: LBA-790374 Percent Moisture
None

Batch: LBA-790386 Inorganic Anions by EPA 300
None

Batch: LBA-790498 TPH By SW8015 Mod
None

Certificate of Analysis Summary 359357

Ocotillo Environmental, LLC, Hobbs, NM

Project Name: Burgundy EMU Lease

Project Id: 1009-019 C
Contact: Cindy Crain
Project Location: Lea Co., NM

Date Received in Lab: Wed Jan-20-10 04:50 pm
Report Date: 22-JAN-10
Project Manager: Brent Barron, II

Analysis Requested													
	Lab Id:	359357-001		359357-002		359357-003		359357-004		359357-005		359357-006	
	Field Id:	SS-1		SS-2		SS-3		SS-4		SS-5		SS-6	
	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Jan-19-10 09.05		Jan-19-10 09:08		Jan-19-10 09:12		Jan-19-10 09:15		Jan-19-10 09 18		Jan-19-10 09:23	
Anions by E300	*Extracted:*												
	Analyzed:			Jan-21-10 21.23				Jan-21-10 21:23		Jan-21-10 21.23		Jan-21-10 21:23	
	Units/RL:			mg/kg	RL			mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride				9.95	4.25			39.2	5.20	55.6	4.22	87.8	4.25
Percent Moisture	*Extracted:*												
	Analyzed:	Jan-21-10 12.25		Jan-21-10 12:25		Jan-21-10 12:25		Jan-21-10 12:25		Jan-21-10 12·25		Jan-21-10 12:25	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		18.4	1.00	1.11	1.00	17.8	1.00	19.2	1 00	ND	1.00	1.13	1.00
TPH By SW8015 Mod	*Extracted:*	Jan-21-10 11.30				Jan-21-10 11:30							
	Analyzed:	Jan-22-10 14:46				Jan-22-10 15:12							
	Units/RL:	mg/kg	RL			mg/kg	RL						
C6-C12 Gasoline Range Hydrocarbons		ND	18.4			ND	18.2						
C12-C28 Diesel Range Hydrocarbons		ND	18 4			ND	18.2						
C28-C35 Oil Range Hydrocarbons		ND	18.4			ND	18.2						
Total TPH		ND	18.4			ND	18.2						

Brent Barron, II
Odessa Laboratory Manager

Certificate of Analysis Summary 359357

Ocotillo Environmental, LLC, Hobbs, NM

Project Name: Burgundy EMU Lease

Project Id: 1009-019 C
Contact: Cindy Crain
Project Location: Lea Co., NM

Date Received in Lab: Wed Jan-20-10 04:50 pm
Report Date: 22-JAN-10
Project Manager: Brent Barron, II

Analysis Requested									
	Lab Id:	359357-007		359357-008					
	Field Id:	SS-8		SS-10					
	Depth:								
	Matrix:	SOIL		SOIL					
	Sampled:	Jan-19-10 09:28		Jan-19-10 09.32					
Anions by E300	*Extracted:*								
	Analyzed:	Jan-21-10 21:23		Jan-21-10 21:23					
	Units/RL:	mg/kg	RL	mg/kg	RL				
Chloride		25.1	4.21	3290	43.0				
Percent Moisture	*Extracted:*								
	Analyzed:	Jan-21-10 12:25		Jan-21-10 12:25					
	Units/RL:	%	RL	%	RL				
Percent Moisture		ND	1.00	2.40	1.00				
TPH By SW8015 Mod	*Extracted:*	Jan-21-10 11:30							
	Analyzed:	Jan-22-10 15.39							
	Units/RL:	mg/kg	RL						
C6-C12 Gasoline Range Hydrocarbons		ND	15.0						
C12-C28 Diesel Range Hydrocarbons		42.1	15 0						
C28-C35 Oil Range Hydrocarbons		ND	15.0						
Total TPH		42.1	15.0						

Brent Barron, II
Odessa Laboratory Manager

Final Ver. 1 000

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.

JN A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

BRL Below Reporting Limit.

RL Reporting Limit

* Outside XENCO's scope of NELAC Accreditation.

Form 2 - Surrogate Recoveries

Project Name: Burgundy EMU Lease

Work Orders : 359357, **Project ID:** 1009-019 C

Lab Batch #: 790498 **Sample:** 548278-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 01/22/10 10:44

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	115	100	115	70-135	
o-Terphenyl	50.8	50.2	101	70-135	

Lab Batch #: 790498 **Sample:** 548278-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 01/22/10 11:11

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	105	99.8	105	70-135	
o-Terphenyl	47 4	49.9	95	70-135	

Lab Batch #: 790498 **Sample:** 548278-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 01/22/10 11:37

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	91.1	99.9	91	70-135	
o-Terphenyl	50.2	50.0	100	70-135	

Lab Batch #: 790498 **Sample:** 359357-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 01/22/10 14:46

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	100	100	100	70-135	
o-Terphenyl	54.3	50 0	109	70-135	

Lab Batch #: 790498 **Sample:** 359357-003 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 01/22/10 15:12

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	101	99.8	101	70-135	
o-Terphenyl	55.3	49.9	111	70-135	

* Surrogate outside of Laboratory QC limits

** 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 Orders : 359357,

Project ID: 1009-019 C

Lab Batch #: 790498 **Sample:** 359357-007 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 01/22/10 15:39

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	81.2	99.6	82	70-135	
o-Terphenyl	43.9	49.8	88	70-135	

* Surrogate outside of Laboratory QC limits

** 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 #: 359357 **Project ID:** 1009-019 C

Lab Batch #: 790386 **Sample:** 790386-1-BKS **Matrix:** Solid

Date Analyzed: 01/21/2010 **Date Prepared:** 01/21/2010 **Analyst:** LATCOR

Reporting Units: mg/kg **Batch #:** 1

	BLANK /BLANK SPIKE RECOVERY STUDY					
Anions by E300 **Analytes**	**Blank Result [A]**	**Spike Added [B]**	**Blank Spike Result [C]**	**Blank Spike %R [D]**	**Control Limits %R**	**Flags**
Chloride	ND	10.0	9.36	94	75-125	

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

BS / BSD Recoveries

Project Name: Burgundy EMU Lease

Work Order #: 359357 **Project ID:** 1009-019 C

Analyst: BEV **Date Prepared:** 01/21/2010 **Date Analyzed:** 01/22/2010

Lab Batch ID: 790498 **Sample:** 548278-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

TPH By SW8015 Mod Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY											
C6-C12 Gasoline Range Hydrocarbons	ND	1000	993	99	998	908	91	9	70-135	35	
C12-C28 Diesel Range Hydrocarbons	ND	1000	786	79	998	881	88	11	70-135	35	

Relative Percent Difference RPD = 200*|(C-F)/(C+F)|
Blank Spike Recovery [D] = 100*(C)/[B]
Blank Spike Duplicate Recovery [G] = 100*(F)/[E]
All results are based on MDL and Validated for QC Purposes

Form 3 - MS Recoveries

Project Name: Burgundy EMU Lease

Work Order #: 359357
Lab Batch #: 790386
Project ID: 1009-019 C
Date Analyzed: 01/21/2010
Date Prepared: 01/21/2010
Analyst: LATCOR
QC- Sample ID: 359288-001 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	4740	4900	9690	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

BRL - Below Reporting Limit

Sample Duplicate Recovery

Project Name: Burgundy EMU Lease

Work Order #: 359357

Lab Batch #: 790386 **Project ID:** 1009-019 C

Date Analyzed: 01/21/2010 **Date Prepared:** 01/21/2010 **Analyst:** LATCOR

QC- Sample ID: 359288-001 D **Batch #:** 1 **Matrix:** Soil

Reporting Units: mg/kg

Anions by E300	SAMPLE / SAMPLE DUPLICATE RECOVERY				
Analyte	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Chloride	4740	4790	1	20	

Lab Batch #: 790374

Date Analyzed: 01/21/2010 **Date Prepared:** 01/21/2010 **Analyst:** JLG

QC- Sample ID: 359350-001 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	9.74	9.51	2	20	

*Spike Relative Difference RPD 200 * | (B-A)/(B+A) |*

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

BRL - Below Reporting Limit

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: (575) 441-7244 Fax No: (432) 272-0304
Sampler Signature: Cindy Crain e-mail: cindy.crain@gmail.com

Project Name: Burgundy EMU Lease
Project #: 1009-019C
Project Loc: Lea Co., NM
PO #:
Report Format: ☑ Standard ☐ TRRP ☐ NPDES

(lab use only)
ORDER #: 359357

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total # of Containers	Preservation & # of Containers: Ice	HNO3	HCl	H2SO4	NaOH	Na2S2O3	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	8015B	8015M	TX 1005	TX 1006	TOTAL: TPH:	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.	RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
01	SS-1	-	-	1/19/10	0905		1	✓								S	✓																✓
02	SS-2	-	-	"	0908		1	✓								S								✓									✓
03	SS-3	-	-	"	0912		1	✓								S	✓																✓
04	SS-4	-	-	"	0915		1	✓								S								✓									✓
05	SS-5	-	-	"	0918		1	✓								S								✓									✓
06	SS-6	-	-	"	0923		1	✓								S								✓									✓
07	SS-8	-	-	"	0928		1	✓								S	✓							✓									✓
08	SS-10	-	-	"	0932		1	✓								S								✓									✓

Special Instructions:

Relinquished by:	Date	Time	Received by:	Date	Time
Cindy Crain	1/20/10	16:50			
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by ELOT:	Date	Time
				1/20/10	16:50

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) N/A Y (N)
Sample Hand Delivered by (Sampler/Client Rep. ?) Y (N)
by Courier? UPS DHL FedEx Lone Star
Temperature Upon Receipt: 4oz C.9 3.6 °C

Environmental Lab of Texas

Variance/ Corrective Action Report- Sample Log-In

Client: Ocotillo Environmental

Date/ Time: 1/20/10 16:50

Lab ID # : 359357

Initials: AS

Sample Receipt Checklist

					Client Initials
#1	Temperature of container/ cooler?	(Yes)	No	3.6 °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 368406

for

Crain Environmental

Project Manager: Cindy Crain

Burgundy EMU Lease

0410-002

14-APR-10

12600 West I-20 East Odessa, Texas 79765

Xenco-Houston (EPA Lab code: TX00122):
Texas (T104704215-TX), Arizona (AZ0738), Arkansas (08-039-0), Connecticut (PH-0102), Florida (E871002)
Illinois (002082), Indiana (C-TX-02), Iowa (392), Kansas (E-10380), Kentucky (45), Louisiana (03054)
New Hampshire (297408), New Jersey (TX007), New York (11763), Oklahoma (9218), Pennsylvania (68-03610)
Rhode Island (LAO00312), USDA (S-44102)

Xenco-Atlanta (EPA Lab Code: GA00046):
Florida (E87429), North Carolina (483), South Carolina (98015), Utah (AALI1), West Virginia (362), Kentucky (85)
Louisiana (04176), USDA (P330-07-00105)

Xenco-Miami (EPA Lab code: FL01152): Florida (E86678), Maryland (330)
Xenco-Tampa Mobile (EPA Lab code: FL01212): Florida (E84900)
Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400-TX)
Xenco-Dallas (EPA Lab code: TX01468): Texas (T104704295-TX)
Xenco-Corpus Christi (EPA Lab code: TX02613): Texas (T104704370)
Xenco-Boca Raton (EPA Lab Code: FL00449):
Florida(E86240),South Carolina(96031001), Louisiana(04154), Georgia(917)
North Carolina(444), Texas(T104704468-TX), Illinois(002295)

14-APR-10

Project Manager: **Cindy Crain**
Crain Environmental
2925 E 17th St.
Odessa, TX 79761

Reference: XENCO Report No: **368406**
Burgundy EMU Lease
Project Address: Lea County, New Mexico

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 368406. 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. 368406 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, II
Odessa Laboratory Manager

Sample Cross Reference 368406

Crain Environmental, Odessa, TX

Burgundy EMU Lease

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
SS-10 (Comp)	S	Apr-06-10 17:37		368406-001

CASE NARRATIVE

Client Name: Crain Environmental
Project Name: Burgundy EMU Lease

Project ID: *0410-002* | *Report Date:* *14-APR-10*
Work Order Number: *368406* | *Date Received:* *04/07/2010*

Sample receipt non conformances and Comments:

None

Sample receipt Non Conformances and Comments per Sample:

None

Analytical Non Conformances and Comments:

Batch: LBA-801482 Inorganic Anions by EPA 300
E300MI
Batch 801482, Chloride RPD is outside the QC limit. This is most likely due to sample non-homogeneity.
Samples affected are: 368406-001.

Batch: LBA-802006 Percent Moisture
None

Certificate of Analysis Summary 368406

Crain Environmental, Odessa, TX

Project Name: Burgundy EMU Lease

Project Id: 0410-002
Contact: Cindy Crain
Project Location: Lea County, New Mexico

Date Received in Lab: Wed Apr-07-10 02:30 pm
Report Date: 14-APR-10
Project Manager: Brent Barron, II

Analysis Requested							
	Lab Id:	368406-001					
	Field Id:	SS-10 (Comp)					
	Depth:						
	Matrix:	SOIL					
	Sampled:	Apr-06-10 17:37					
Anions by E300	***Extracted:***						
	Analyzed:	Apr-07-10 15:00					
	Units/RL:	mg/kg	RL				
Chloride		63.1	4.22				
Percent Moisture	***Extracted:***						
	Analyzed:	Apr-08-10 17:00					
	Units/RL:	%	RL				
Percent Moisture		ND	1.00				

Brent Barron, II
Odessa Laboratory Manager

Final Ver. 1.000

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.

JN A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

BRL Below Reporting Limit.

RL Reporting Limit

* Outside XENCO's scope of NELAC Accreditation.

Blank Spike Recovery

Project Name: Burgundy EMU Lease

Work Order #: 368406 **Project ID:** 0410-002

Lab Batch #: 801482 **Sample:** 801482-1-BKS **Matrix:** Solid

Date Analyzed: 04/07/2010 **Date Prepared:** 04/07/2010 **Analyst:** LATCOR

Reporting Units: mg/kg **Batch #:** 1

Anions by E300 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	11.0	11.5	105	75-125	

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

Form 3 - MS Recoveries

Project Name: Burgundy EMU Lease

Work Order #: 368406
Lab Batch #: 801482
Project ID: 0410-002
Date Analyzed: 04/07/2010
Date Prepared: 04/07/2010
Analyst: LATCOR
QC- Sample ID: 368091-011 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	285	410	711	104	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

BRL - Below Reporting Limit

Sample Duplicate Recovery

Project Name: Burgundy EMU Lease

Work Order #: 368406

Lab Batch #: 801482 **Project ID:** 0410-002

Date Analyzed: 04/07/2010 **Date Prepared:** 04/07/2010 **Analyst:** LATCOR

QC- Sample ID: 368091-011 D **Batch #:** 1 **Matrix:** Soil

Reporting Units: mg/kg

Anions by E300 Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY				
	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Chloride	285	297	4	20	

Lab Batch #: 802006

Date Analyzed: 04/08/2010 **Date Prepared:** 04/08/2010 **Analyst:** LATCOR

QC- Sample ID: 368406-001 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	ND	ND	NC	20	

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

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: Crain Environmental

Company Address: 2925 East 17th Street

City/State/Zip: Odessa, TX 79761

Telephone No: (432) 530-9797 Fax No: (432) 272-0304

Sampler Signature: Cindy Crain e-mail: cindy.crain@gmail.com

Project Name: Burgundy EMU Lease

Project #: 0410-002

Project Loc: Lea County, New Mexico

PO #:

Report Format: [X] Standard [ ] TRRP [ ] NPDES

(lab use only)

ORDER #: 368402

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: TOTAL: TPH: 418.1 8015M	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 80218/5030 or BTEX 8260	RCI	N.O.R.M.	RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
01	SS-10 (Comp)	---	---	4/6/2010	1737		1							X		S						X									X

Special Instructions:

Laboratory Comments:

Sample Containers Intact? Y N

VOCs Free of Headspace? Y N NA

Labels on container(s) Y N

Custody seals on container(s) Y N NA

Custody seals on cooler(s) Y N NA

Sample Hand Delivered by Sampler/Client Rep. ? Y N

by Courier? UPS DHL FedEx Lone Star

4029695

Temperature Upon Receipt: 23.1 °C

Relinquished by:	Date	Time	Received by:	Date	Time
Cindy Crain	4/7/10	1430			
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by ELOT:	Date	Time
			Andrea Sanchez	4.7.10	14:30

Environmental Lab of Texas

Variance/ Corrective Action Report- Sample Log-In

Client: Crain Env.

Date/ Time: 4.7.10 14:30

Lab ID # : 368406

Initials: AL

Sample Receipt Checklist

					Client Initials
#1	Temperature of container/ cooler?	(Yes)	No	23.1 °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