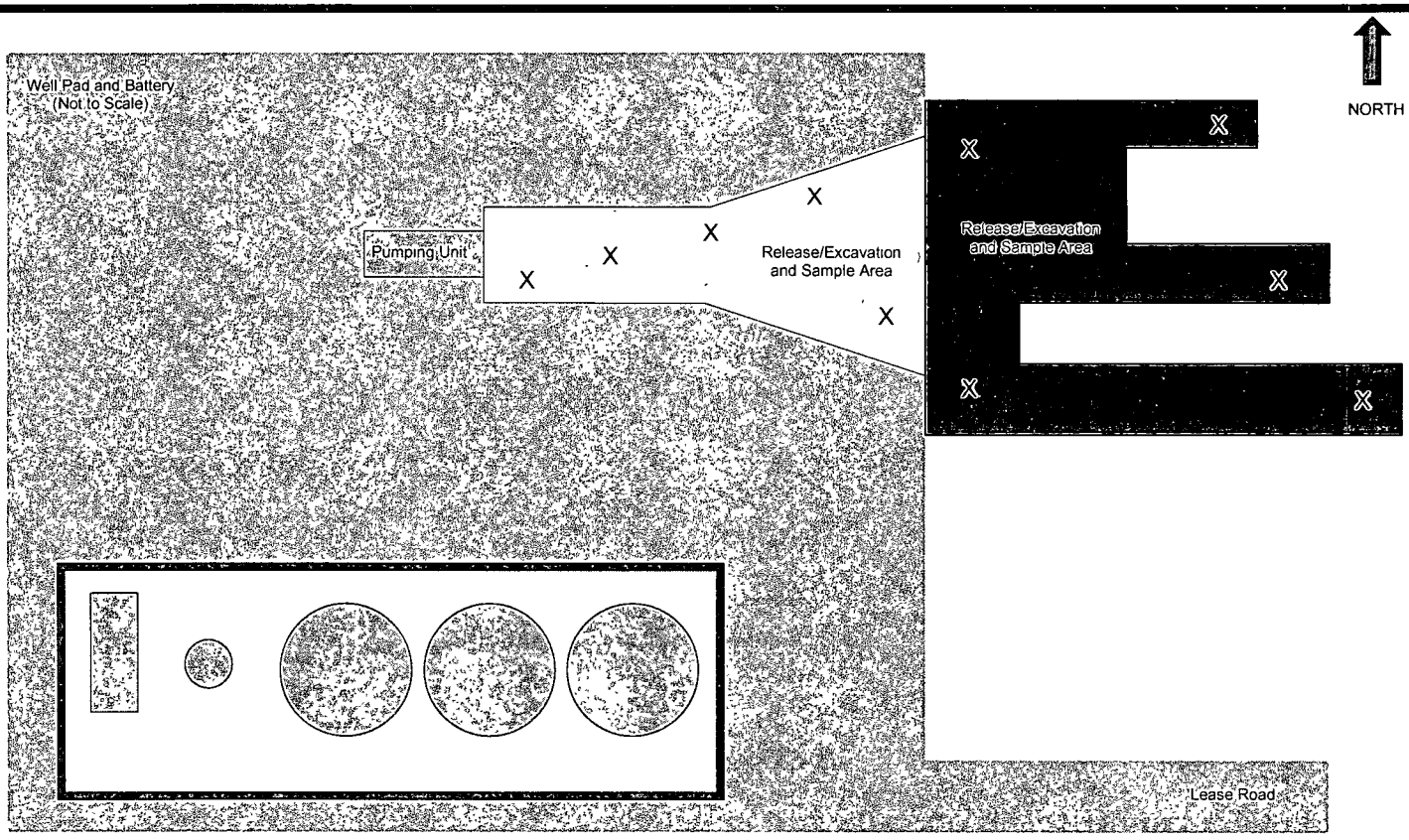

Analytical Report-438212	Sample Area	Sample Date	Sample Type	Depth	BTEX	GRO	DRO	TOTAL
Approximately 0.5 feet of impacted soils were excavated from the well pad and taken to an NMOCD approved facility.								
Comp-00.5	Release Area	3/1/2012	Comp/Auger	6" (12" BSL)	0.0272	ND	253	253
Comp-01.0	Release Area	3/1/2012	Comp/Auger	12" (18" BSL)	0.0151	ND	56.2	56.2
Comp-01.5	Release Area	3/1/2012	Comp/Auger	18" (24" BSL)	0.0158	ND	ND	ND
Analytical Report-438212	Sample Area	Sample Date	Sample Type	Depth	BTEX	GRO	DRO	TOTAL
Approximately 1.0 feet of impacted soils were excavated east of the pad and taken to an NMOCD approved facility.								
Comp-00.5	Release Area	3/1/2012	Comp/Auger	6" (18" BSL)	0.0177	ND	ND	ND
Comp-01.0	Release Area	3/1/2012	Comp/Auger	12" (24" BSL)	0.0098	ND	ND	ND
Comp-01.5	Release Area	3/1/2012	Comp/Auger	18" (30" BSL)	ND	ND	ND	ND

Site Ranking is Ten (10). Depth to Ground Water 50-99' (approx. 70', per Trend Map).

All results are ppm. **X - Sample Points**

Released: 45 B/O ; Recovered: 40 B/O. Release Date: 1/28/2012

YATES PETROLEUM CORPORATION

Cheroot BPF State Com. #1-H #1

30-015-37555

Section 3, T25S-R27E

Eddy County, NM

ENVIRONMENTAL SAMPLE DIAGRAM

(Not to Scale)

March 13, 2012

Prepared by
YPC Environmental Division

Analytical Report 438212

for

Yates Petroleum Corporation

Project Manager: Robert Asher

Cheroot BPF State Com. # 1-H

30-015-37555

12-MAR-12

Collected By: Client

Celebrating 20 Years of commitment to excellence in Environmental Testing Services

12600 West I-20 East Odessa, Texas 79765

Xenco-Houston (EPA Lab code: TX00122):
Texas (T104704215-10-6-TX), Arizona (AZ0765), 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 Phoenix (EPA Lab Code: AZ00901): Arizona(AZ0757)
Xenco-Phoenix Mobile (EPA Lab code: AZ00901): Arizona (AZM757)
Xenco Tucson (EPA Lab code:AZ000989): Arizona (AZ0758)

12-MAR-12

Project Manager: **Robert Asher**
Yates Petroleum Corporation
105 South Fourth St.
Artesia, NM 88210

Reference: XENCO Report No: **438212**
Cheroot BPF State Com. # 1-H
Project Address: Eddy County, NM

Robert Asher:

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 438212. 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. 438212 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

XENCO Laboratories

Sample Cross Reference 438212

Yates Petroleum Corporation, Artesia, NM

Cheroot BPF State Com. # 1-H

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
Comp-00.5 WP	S	03-01-12 10:37	6 - 6 In	438212-001
Comp-01.0 WP	S	03-01-12 10:51	12 - 12 In	438212-002
Comp-01.5 WP	S	03-01-12 11:06	18 - 18 In	438212-003
Comp-00.5 E	S	03-01-12 10:37	6 - 6 In	438212-004
Comp-01.0 E	S	03-01-12 10:51	12 - 12 In	438212-005
Comp-01.5 E	S	03-01-12 11:06	18 - 18 In	438212-006

CASE NARRATIVE

Client Name: Yates Petroleum Corporation
Project Name: Cheroot BPF State Com. # 1-H

Project ID:	*30-015-37555*	*Report Date:*	*12-MAR-12*
Work Order Number:	*438212*	*Date Received:*	*03/06/2012*

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non nonformances and comments:

Batch: LBA-883138 BTEX by EPA 8021B
SW8021BM

Batch 883138, Benzene, Ethylbenzene, Toluene, m_p-Xylenes, o-Xylene recovered below QC limits in the Matrix Spike and Matrix Spike Duplicate.
Samples affected are: 438212-001, -002, -005, -003, -004, -006.
The Laboratory Control Sample for Toluene, Benzene, Ethylbenzene, m_p-Xylenes , o-Xylene is within laboratory Control Limits

Certificate of Analysis Summary 438212

Yates Petroleum Corporation, Artesia, NM

Project Name: Cheroot BPF State Com. # 1-H

Project Id: 30-015-37555
Contact: Robert Asher
Project Location: Eddy County, NM

Date Received in Lab: Tue Mar-06-12 12:45 pm
Report Date: 12-MAR-12
Project Manager: Brent Barron II

Analysis Requested		Lab Id:	438212-001		438212-002		438212-003		438212-004		438212-005		438212-006	
		Field Id:	Comp-00.5 WP		Comp-01.0 WP		Comp-01 5 WP		Comp-00.5 E		Comp-01.0 E		Comp-01.5 E	
		Depth:	6-6 In		12-12 In		18-18 In		6-6 In		12-12 In		18-18 In	
		Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
		Sampled:	Mar-01-12 10:37		Mar-01-12 10:51		Mar-01-12 11:06		Mar-01-12 10:37		Mar-01-12 10:51		Mar-01-12 11:06	
BTEX by EPA 8021B		Extracted:	Mar-06-12 15:13		Mar-06-12 15:13		Mar-06-12 15:13		Mar-06-12 15:13		Mar-06-12 15:13		Mar-06-12 15:13	
		Analyzed:	Mar-08-12 05:07		Mar-08-12 05:30		Mar-08-12 05:52		Mar-08-12 06:15		Mar-08-12 06:38		Mar-08-12 07:01	
		Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene			ND	0.00109	ND	0.00117	ND	0.00120	ND	0.00123	ND	0.00124	ND	0.00126
Toluene			0.00639	0.00217	0.00382	0.00234	0.00374	0.00240	0.00415	0.00246	ND	0.00248	ND	0.00251
Ethylbenzene			0.00464	0.00109	0.00251	0.00117	0.00252	0.00120	0.00239	0.00123	0.00150	0.00124	ND	0.00126
m_p-Xylenes			0.0116	0.00217	0.00640	0.00234	0.00730	0.00240	0.00838	0.00246	0.00635	0.00248	ND	0.00251
o-Xylene			0.00458	0.00109	0.00238	0.00117	0.00221	0.00120	0.00277	0.00123	0.00197	0.00124	ND	0.00126
Total Xylenes			0.0162	0.00109	0.00878	0.00117	0.00951	0.00120	0.0112	0.00123	0.00832	0.00124	ND	0.00126
Total BTEX			0.0272	0.00109	0.0151	0.00117	0.0158	0.00120	0.0177	0.00123	0.00982	0.00124	ND	0.00126
Percent Moisture		Extracted:												
		Analyzed:	Mar-06-12 15:10		Mar-06-12 15:10		Mar-06-12 15:10		Mar-06-12 15:10		Mar-06-12 15:10		Mar-06-12 15:10	
		Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture			8.37	1.00	14.8	1.00	17.0	1.00	18.7	1.00	19.7	1.00	20.5	1.00
TPH By SW8015B Mod		Extracted:	Mar-08-12 14:00		Mar-08-12 14:00		Mar-08-12 14:00		Mar-08-12 14:00		Mar-08-12 14:00		Mar-08-12 14:00	
		Analyzed:	Mar-10-12 00:20		Mar-10-12 00:52		Mar-10-12 01:24		Mar-10-12 01:56		Mar-10-12 02:28		Mar-10-12 03:00	
		Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
C6-C10 Gasoline Range Hydrocarbons			ND	16.3	ND	17.5	ND	18.1	ND	18.4	ND	18.7	ND	18.8
C10-C28 Diesel Range Hydrocarbons			253	16.3	56.2	17.5	ND	18.1	ND	18.4	ND	18.7	ND	18.8
Total TPH			253	16.3	56.2	17.5	ND	18.1	ND	18.4	ND	18.7	ND	18.8

Brent Barron II
Odessa Laboratory Manager

Final 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 affect the recovery of the spike concentration. This condition could also affect 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 quantiation limit and above the detection limit.

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.

* Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

MDL Method Detection Limit **SDL** Sample Detection Limit **LOD** Limit of Detection

PQL Practical Quantitation Limit **MQL** Method Quantitation Limit **LOQ** Limit of Quantitation

DL Method Detection Limit

NC Non-Calculable

\+ NELAC certification not offered for this compound.

* (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation

XENCO-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: Robert Asher | Project Name: Cheroot BPF State Com. #1-H

Company Name: Yates Petroleum Corporation | Project #: 30-015-37555

Company Address: 105 South 4th Street | Project Loc: Eddy County

City/State/Zip: Artesia, NM 88210 | PO #: 105632

Telephone No: 575-748-4217 | Fax No: 575-748-4662 | Report Format: [x] Standard [ ] TRRP [ ] NPDES

Sampler Signature: | e-mail: boba@yatespetroleum.com

(lab use only) ORDER #: 438212

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	TOTAL: BTEX 8021B/5030 or BTEX 8260	RCI	N.O.R.M	Chlorides	RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
01	Comp-00.5 WP	6"	6"	3/1/2012	10:37 AM		1							X		S	X							X					X
02	Comp-01.0 WP	12"	12"	3/1/2012	10:51 AM		1							X		S	X							X					X
03	Comp-01.5 WP	18"	18"	3/1/2012	11:06 AM		1							X		S	X							X					X
04	Comp-00.5 E	6"	6"	3/1/2012	10:37 AM		1							X		S	X							X					X
05	Comp-01.0 E	12"	12"	3/1/2012	10:51 AM		1							X		S	X							X					X
06	Comp-01.5 E	18"	18"	3/1/2012	11:06 AM		1							X		S	X							X					X

Special Instructions: TPH 8015B & BTEX 8021B. ALL results in mg/kg. Thank you.

Relinquished by	Date	Time	Received by	Date	Time
RCA/YPC	03/05/12	1:58 PM			
Relinquished by.	Date	Time	Received by:	Date	Time
Relinquished by: Fedex	Date	Time	Received by ELOT: Andrea Elam	Date: 3.6.12	Time: 12:45

Laboratory Comments:

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

by Courier? UPS DHL (FedEx) Lone Star

Temperature Upon Receipt: 5.5 / 4.6 °C (Corrected)

XENCO Laboratories	Document Title: Sample Receipt Checklist
Atlanta, Boca Raton, Corpus Christi, Dallas	Document No.: SYS-SRC
Houston, Miami, Odessa, Philadelphia	Revision/Date: No. 01, 5/27/2010
Phoenix, San Antonio, Tampa	Effective Date: 6/1/2010 Page 1 of 1

Prelogin / Nonconformance Report - Sample Log-In

Client: Yates Petroleum

Date/Time: 3.6.12 12:45

Lab ID # : 438212

Initials: AE

Sample Receipt Checklist

1. Samples on ice?	Blue	Water	No	
2. Shipping container in good condition?	(Yes)	No	None	
3. Custody seals intact on shipping container (cooler) and bottles?	(Yes)	No	N/A	
4. Chain of Custody present?	(Yes)	No		
5. Sample instructions complete on chain of custody?	(Yes)	No		
6. Any missing / extra samples?	Yes	(No)		
7. Chain of custody signed when relinquished / received?	(Yes)	No		
8. Chain of custody agrees with sample label(s)?	(Yes)	No		
9. Container labels legible and intact?	(Yes)	No		
10. Sample matrix / properties agree with chain of custody?	(Yes)	No		
11. Samples in proper container / bottle?	(Yes)	No		
12. Samples properly preserved?	(Yes)	No	N/A	
13. Sample container intact?	(Yes)	No		
14. Sufficient sample amount for indicated test(s)?	(Yes)	No		
15. All samples received within sufficient hold time?	(Yes)	No		
16. Subcontract of sample(s)?	Yes	No	(N/A)	
17. VOC sample have zero head space?	(Yes)	No	N/A	

18. Cooler 1 No.		Cooler 2 No.		Cooler 3 No.		Cooler 4 No.		Cooler 5 No.	
lbs	4.0 °C	lbs	°C	lbs	°C	lbs	°C	lbs	°C

Nonconformance Documentation

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

Regarding: _____

Corrective Action Taken: _____

Check all that apply:
- ☐ Cooling process has begun shortly after sampling event and out of temperature condition acceptable by NELAC 5.5.8.3.1.a.1.
- ☐ Initial and Backup Temperature confirm out of temperature conditions
- ☐ Client understands and would like to proceed with analysis