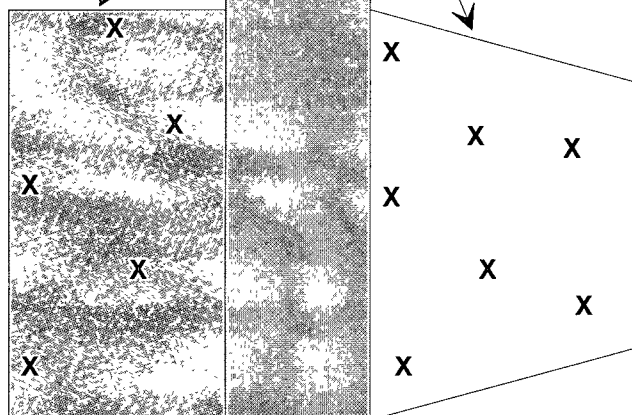




Release/Excavation Area  
(contaminated soils scraped from surface)



Lease Road

Production Pad  
Graham AKB State #8

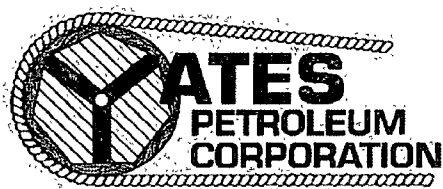
Pumping Unit

Analytical Report 425794 & 425795	Sample Area	Sample Date	Sample Type	Depth	BTEX	GRO	DRO	TOTAL	Chlorides
Comp-01 0A	Release Area	8/12/2011	Comp/Auger	1'	3.29	203	1020	1220	4,470
Comp-02 0A	Release Area	8/12/2011	Comp/Auger	2'	0.204	64.2	632	696	5,360
Comp-03 0A	Release Area	8/12/2011	Comp/Auger	3'	ND	ND	106	106	5,560
Comp-01 0B	Release Area	8/12/2011	Comp/Auger	1'	ND	ND	296	296	942
Comp-02 0B	Release Area	8/12/2011	Comp/Auger	2'	ND	ND	55.1	55.1	218

Site Ranking is ZERO (0). Depth to Ground Water >100' (approx. 124').

All results are ppm. Chlorides for documentation. X - Sample Points

Released: 42 B/PW, 6 B/O; Recovered: 0 B/PW, 0 B/O. Release Date: 8/7/2011



**Graham AKB State #8**

**30-015-31913**

**Section 2, T22S-R31E**

**Eddy County, NM**

**SAMPLE DIAGRAM(Not to Scale)**

**Xenco Laboratories# 425794 & 425795  
Report Date: 8/24/2011**

**Prepared by Amber Cannon  
Environmental Regulatory Agent Trainee**



Release/Excavation Area  
(contaminated soils scraped from surface)

X

Lease Road

Production Pad  
Graham AKB State #8

Pumping Unit

Analytical Report- 427563	Sample Area	Sample Date	Sample Type	Depth	BTEX	GRO	DRO	TOTAL	Chlorides
Grab-04.0	Release Area	9/13/2011	Grab/Backhoe	4'	ANALYSIS NOT CONDUCTED AS YATES WAS IN LIMITS FROM FIRST SAMPLES TAKEN 8/12/2011				1,780
Grab-05.0	Release Area	9/13/2011	Grab/Backhoe	5'					39.9
Grab-06.0	Release Area	9/13/2011	Grab/Backhoe	6'					7.7

Site Ranking is ZERO (0). Depth to Ground Water >100' (approx. 124').

All results are ppm. Chlorides for documentation. X - Sample Points

Released: 42 B/PW, 6 B/O; Recovered: 0 B/PW, 0 B/O. Release Date: 8/7/2011



Graham AKB State #8

30-015-31913

Section 2, T22S-R31E

Eddy County, NM

SAMPLE DIAGRAM(Not to Scale)

Xenco Laboratories# 427563

Report Date: 9/21/2011

Prepared by Amber Cannon  
Environmental Regulatory Agent Trainee

# Analytical Report 425794

for

Yates Petroleum Corporation

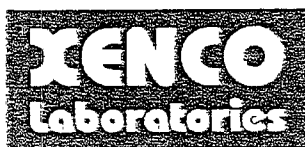
Project Manager: Amber Cannon

Graham AKB State # 8

30-015-31913

24-AUG-11

Collected By: Client



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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)



24-AUG-11

Project Manager: Amber Cannon  
Yates Petroleum Corporation  
105 South Fourth St.  
Artesia, NM 88210

Reference: XENCO Report No: 425794  
Graham AKB State # 8  
Project Address: Eddy County

Amber Cannon.

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 425794. 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. 425794 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

*Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.*

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## Sample Cross Reference 425794



Yates Petroleum Corporation, Artesia, NM

Graham AKB State # 8

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
Comp-01 0 A	S	08-12-11 11:27	1 - 1 ft	425794-001
Comp-02.0 A	S	08-12-11 11:54	2 - 2 ft	425794-002
Comp-03 0 A	S	08-12-11 12:33	3 - 3 ft	425794-003
Comp-01.0 B	S	08-12-11 13:17	1 - 1 ft	425794-004
Comp-02 0 B	S	08-12-11 13:37	2 - 2 ft	425794-005



## CASE NARRATIVE

*Client Name: Yates Petroleum Corporation*

*Project Name: Graham AKB State # 8*



*Project ID: 30-015-31913*

*Work Order Number: 425794*

*Report Date: 24-AUG-11*

*Date Received: 08/16/2011*

---

***Sample receipt non conformances and comments:***

*None*

---

***Sample receipt non conformances and comments per sample:***

*None*

***Analytical non nonconformances and comments:***

*Batch: LBA-867727 TPH By SW8015B Mod  
SW8015B\_NM*

*Batch 867727, 1-Chlorooctane recovered above QC limits Data not confirmed by re-analysis.  
Samples affected are: 610130-1-BKS, 610130-1-BLK, 610130-1-BSD, 425370-001 SD.*

*SW8015B\_NM*

*Batch 867727, C10-C28 Diesel Range Hydrocarbons recovered below QC limits in the Matrix Spike.*

*Samples affected are: 425794-003, -004, -002, -001, -005.*

*The Laboratory Control Sample for C10-C28 Diesel Range Hydrocarbons is within laboratory Control Limits*

*Batch: LBA-867872 BTEX by EPA 8021B  
SW8021BM*

*Batch 867872, 4-Bromofluorobenzene recovered above QC limits . Matrix interferences is suspected; data not confirmed by re-analysis*

*Samples affected are: 425689-001 S, 425689-001 SD.*

*SW8021BM*

*Batch 867872, Benzene, Ethylbenzene, Toluene, m\_p-Xylenes, o-Xylene recovered below QC limits in the Matrix Spike and Matrix Spike Duplicate.*

*Samples affected are: 425794-004, -005.*

*The Laboratory Control Sample for Toluene, Benzene, Ethylbenzene, m\_p-Xylenes , o-Xylene is within laboratory Control Limits*



## CASE NARRATIVE

*Client Name: Yates Petroleum Corporation*

*Project Name: Graham AKB State # 8*



*Project ID: 30-015-31913*

*Work Order Number: 425794*

*Report Date: 24-AUG-11*

*Date Received: 08/16/2011*

---

*Batch: LBA-868086 BTEX by EPA 8021B  
SW8021BM*

*Batch 868086, 1,4-Difluorobenzene recovered below QC limits . Matrix interferences is  
suspected; data confirmed by re-analysis  
Samples affected are: 425794-001.*

*4-Bromofluorobenzene recovered above QC limits . Matrix interferences is suspected; data  
confirmed by re-analysis  
Samples affected are: 425794-002, 425794-001.*



# Certificate of Analysis Summary 425794

Yates Petroleum Corporation, Artesia, NM



Project Id: 30-015-31913

Contact: Amber Cannon

Project Location: Eddy County

Project Name: Graham AKB State # 8

Date Received in Lab: Tue Aug-16-11 09:50 am


Report Date: 24-AUG-11

Project Manager: Brent Barron II

Analysis Requested	Lab Id:	425794-001	425794-002	425794-003	425794-004	425794-005	
	Field Id:	Comp-01 0 A	Comp-02 0 A	Comp-03 0 A	Comp-01 0 B	Comp-02 0 B	
	Depth:	1-1 ft	2-2 ft	3-3 ft	1-1 ft	2-2 ft	
	Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	
	Sampled:	Aug-12-11 11:27	Aug-12-11 11:54	Aug-12-11 12:33	Aug-12-11 13:17	Aug-12-11 13:37	
BTEX by EPA 8021B	Extracted:	Aug-23-11 11:00	Aug-23-11 11:00	Aug-23-11 11:00	Aug-19-11 16:00	Aug-19-11 16:00	
	Analyzed:	Aug-23-11 19:20	Aug-23-11 15:54	Aug-23-11 16:17	Aug-20-11 05:25	Aug-20-11 05:48	
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	
	Benzene	0.0223 0.0205	ND 0.00106	ND 0.00103	ND 0.00103	ND 0.00102	
	Toluene	0.0497 0.0409	ND 0.00212	ND 0.00207	ND 0.00206	ND 0.00205	
Ethylbenzene		0.642 0.0205	0.0326 0.00106	ND 0.00103	ND 0.00103	ND 0.00102	
m_p-Xylenes		2.02 0.0409	0.111 0.00212	ND 0.00207	ND 0.00206	ND 0.00205	
o-Xylene		0.559 0.0205	0.0602 0.00106	ND 0.00103	ND 0.00103	ND 0.00102	
Total Xylenes		2.58 0.0205	0.171 0.00106	ND 0.00103	ND 0.00103	ND 0.00102	
Total BTEX		3.29 0.0205	0.204 0.00106	ND 0.00103	ND 0.00103	ND 0.00102	
Percent Moisture	Extracted:	Aug-16-11 11:15	Aug-16-11 11:15	Aug-16-11 11:15	Aug-16-11 11:15	Aug-16-11 11:15	
	Analyzed:	Aug-16-11 11:15	Aug-16-11 11:15	Aug-16-11 11:15	Aug-16-11 11:15	Aug-16-11 11:15	
	Units/RL:	% RL	% RL	% RL	% RL	% RL	
	Percent Moisture	3.03 1.00	5.26 1.00	3.02 1.00	3.20 1.00	1.88 1.00	
TPH By SW8015B Mod	Extracted:	Aug-17-11 16:00	Aug-17-11 16:00	Aug-17-11 16:00	Aug-17-11 16:00	Aug-17-11 16:00	
	Analyzed:	Aug-18-11 12:34	Aug-18-11 13:02	Aug-18-11 13:30	Aug-18-11 13:59	Aug-18-11 14:27	
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	
	C6-C10 Gasoline Range Hydrocarbons	203 15.5	64.2 15.8	ND 15.5	ND 15.5	ND 15.3	
	C10-C28 Diesel Range Hydrocarbons	1020 15.5	632 15.8	106 15.5	296 15.5	55.1 15.3	
Total TPH		1220 15.5	696 15.8	106 15.5	296 15.5	55.1 15.3	

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories. XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

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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 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 quantitation 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.

**BRL** Below Reporting Limit.

**RL** Reporting Limit

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

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

**DL** Method Detection Limit

**NC** Non-Calculable

+ Outside XENCO's scope of NELAC Accreditation.

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2505 North Falkenburg Rd, Tampa, FL 33619  
5757 NW 158th St, Miami Lakes, FL 33014  
12600 West I-20 East, Odessa, TX 79765  
6017 Financial Drive, Norcross, GA 30071  
3725 E. Atlanta Ave, Phoenix, AZ 85040

Phone	Fax
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(214) 902 0300	(214) 351-9139
(210) 509-3334	(210) 509-3335
(813) 620-2000	(813) 620-2033
(305) 823-8500	(305) 823-8555
(432) 563-1800	(432) 563-1713
(770) 449-8800	(770) 449-5477
(602) 437-0330	

## 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: Amber Cannon

Project Name: **Graham AKB State #8**

Company Name Yates Petroleum Corporation

Project #: 30-015-31913

Company Address 105 South 4th Street

Project Loc: Eddy CountyCity/State/Zip: Artesia, NM 88210

PO #: 1032020

Telephone No: 575-748-4111

Fax No: 575-748-4585

Report Format: ☒ Standard ☐ TRRP ☐ NPDES

Sampler Signature:

e-mail, acannon@yatespetroleum.com

[illegible]



XENCO Laboratories  
Atlanta, Boca Raton, Corpus Christi, Dallas  
Houston, Miami, Odessa, Philadelphia  
Phoenix, San Antonio, Tampa

Document Title: Sample Receipt Checklist  
Document No.: SYS-SRC  
Revision/Date: No. 01, 5/27/2010  
Effective Date: 6/1/2010 Page 1 of 1

### Pralogin / Nonconformance Report - Sample Log-In

Client: Yates Petroleum  
Date/Time: 8:16:11 9:50  
Lab ID #: 435794 / 435795  
Initials: AE

### Sample Receipt Checklist

1. Samples on ice?	Blue	<u>Water</u>	No	
2. Shipping container in good condition?	<u>Yes</u>	No	None	
3. Custody seals intact on shipping container (cooler) and bottles?	<u>Yes</u>	No	N/A	
4. Chain of Custody present?	<u>Yes</u>	No		
5. Sample instructions complete on chain of custody?	<u>Yes</u>	No		
6. Any missing / extra samples?	Yes	<u>No</u>		
7. Chain of custody signed when relinquished / received?	<u>Yes</u>	No		
8. Chain of custody agrees with sample label(s)?	<u>Yes</u>	No		
9. Container labels legible and intact?	<u>Yes</u>	No		
10. Sample matrix / properties agree with chain of custody?	<u>Yes</u>	No		
11. Samples in proper container / bottle?	<u>Yes</u>	No		
12. Samples properly preserved?	<u>Yes</u>	No	N/A	
13. Sample container intact?	<u>Yes</u>	No		
14. Sufficient sample amount for indicated test(s)?	<u>Yes</u>	No		
15. All samples received within sufficient hold time?	<u>Yes</u>	No		
16. Subcontract of sample(s)?	Yes	No	<u>N/A</u>	
17. VOC sample have zero head space?	<u>Yes</u>	No	N/A	
18. Cooler 1 No.	Cooler 2 No.	Cooler 3 No.	Cooler 4 No.	Cooler 5 No.
lbs <u>6.0</u> °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

# Analytical Report 425795

for

Yates Petroleum Corporation

Project Manager: Amber Cannon

Graham AKB State # 8

30-015-31913

24-AUG-11

Collected By: Client



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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)

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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)



24-AUG-11

Project Manager: Amber Cannon  
Yates Petroleum Corporation  
105 South Fourth St.  
Artesia, NM 88210

Reference: XENCO Report No: 425795  
Graham AKB State # 8  
Project Address: Eddy County

Amber Cannon:

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 425795. 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. 425795 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

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## Sample Cross Reference 425795



Yates Petroleum Corporation, Artesia, NM

Graham AKB State # 8

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
Comp-01.0 A	S	08-12-11 11:27	1 - 1 ft	425795-001
Comp-02.0 A	S	08-12-11 11:54	2 - 2 ft	425795-002
Comp-03.0 A	S	08-12-11 12:33	3 - 3 ft	425795-003
Comp-01.0 B	S	08-12-11 13:17	1 - 1 ft	425795-004
Comp-02.0 B	S	08-12-11 13:37	2 - 2 ft	425795-005



## CASE NARRATIVE

*Client Name: Yates Petroleum Corporation*

*Project Name: Graham AKB State # 8*



*Project ID 30-015-31913*

*Work Order Number 425795*

*Report Date: 24-AUG-11*

*Date Received: 08/16/2011*

---

***Sample receipt non conformances and comments:***

*None*

---

***Sample receipt non conformances and comments per sample:***

*None*

***Analytical non nonformances and comments:***

*Batch: LBA-867919 Anions by E300*

*E300MI*

*Batch 867919, Chloride recovered above QC limits in the Matrix Spike.*

*Samples affected are: 425795-003, -001, -002, -005, -004.*

*The Laboratory Control Sample for Chloride is within laboratory Control Limits*



# Certificate of Analysis Summary 425795

Yates Petroleum Corporation, Artesia, NM



Project Id: 30-015-31913

Contact: Amber Cannon

Project Location: Eddy County

Project Name: Graham AKB State # 8

Date Received in Lab: Tue Aug-16-11 09:50 am


Report Date: 24-AUG-11

Project Manager: Brent Barron II

Analysis Requested	Lab Id:	425795-001	425795-002	425795-003	425795-004	425795-005	
	Field Id:	Comp-01.0 A	Comp-02.0 A	Comp-03.0 A	Comp-01.0 B	Comp-02.0 B	
	Depth:	1-1 ft	2-2 ft	3-3 ft	1-1 ft	2-2 ft	
	Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	
	Sampled:	Aug-12-11 11:27	Aug-12-11 11:54	Aug-12-11 12:33	Aug-12-11 13:17	Aug-12-11 13:37	
Anions by E300	Extracted:						
	Analyzed:	Aug-20-11 11:00	Aug-20-11 11:00	Aug-20-11 11:00	Aug-20-11 11:00	Aug-20-11 11:00	
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	
Chloride		4470 86.6	5360 88.7	5560 86.6	942 21.7	218 21.4	
Percent Moisture	Extracted:						
	Analyzed:	Aug-16-11 11:15	Aug-16-11 11:15	Aug-16-11 11:15	Aug-16-11 11:15	Aug-16-11 11:15	
	Units/RL:	% RL	% RL	% RL	% RL	% RL	
Percent Moisture		3.03 1.00	5.26 1.00	3.02 1.00	3.20 1.00	1.88 1.00	

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories. XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

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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 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 quantitation 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.
- 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
- + Outside XENCO's scope of NELAC Accreditation.

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5757 NW 158th St, Miami Lakes, FL 33014  
12600 West I-20 East, Odessa, TX 79765  
6017 Financial Drive, Norcross, GA 30071  
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(210) 509-3334	(210) 509-3335
(813) 620-2000	(813) 620-2033
(305) 823-8500	(305) 823-8555
(432) 563-1800	(432) 563-1713
(770) 449-8800	(770) 449-5477
(602) 437-0330	

## 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. Amber Cannon

Project Name. **Graham AKB State #8**

Company Name      Yales Petroleum Corporation

Project #. 30-015-31913

Company Address. 105 South 4th Street

Project Loc: Eddy County

City/State/Zip:       Artesia, NM 88210

PO #: 1032020

Telephone No: 575-748-4111

Fax No: 575-748-4585

Report Format: ☒ Standard

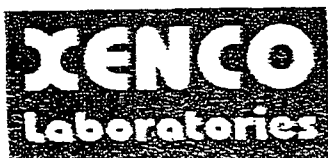
☐ TRRP☐ NPDES

Sampler Signature:

e-mail.

acannon@vatespetroleum.com

LAB # (lab use only)		FIELD CODE		Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total #. of Containers	Preservation & # of Containers										Matrix	TCLP		Analyze For													
ORDER #: 425794 / 425795										Ice	HNO <sub>3</sub>	HCl	H <sub>2</sub> SO <sub>4</sub>	NaOH	Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>	None	Other (Specify)	DW = Drinking Water SL = Sudge GW = Groundwater S = Soil/Solid NP = Non-Portable Specify Other:	TPH 418.1	TPH 8015B	TX 1005	TX 1006	Cations (Ca Mg Na, K)	Anions (Cl, SO <sub>4</sub> , Alkalinity)	SAR / ESP / CEC	Metals As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/5030 or BTEX 2260	PCI	NORM	Chlorides	RUSH TAT (Pre-Schedule) 24, 48, 72 hrs			
01	Comp-01.0 A	1'	1'	8/12/2011	11:27 AM	1	X											S	X																	
02	Comp-02.0 A	2'	2'	8/12/2011	11:54 AM	1	X											S	X																	
03	Comp-03.0 A	3'	3'	8/12/2011	12:33 PM	1	X											S	X																	
04	Comp-01.0 B	1'	1'	8/12/2011	1:17 PM	1	X											S	X																	
05	Comp-02.0 B	2'	2'	8/12/2011	1:37 PM	1	X											S	X																	
PLEASE PUT CHLORIDES ON SEPARATE REPORT																																				
Special Instructions: TPH: 8015B, BTEX: 8021B & Chlorides. Please show BTEX results as mg/kg Thank you.										Laboratory Comments: Sample Containers Intact? N VOCs Free of Headspace? N Labels on container(s) N Custody seals on container(s) N Custody seals on cooler(s) N Sample Hand Delivered N by Sampler/Client Rep? N by Courier? UPS DHL FedEx Lone Star Temperature Upon Receipt 6.0 °C																										
Relinquished by Amber Cannon	Date 08/15/11	Time 10 25 AM	Received by	Date	Time																															
Relinquished by	Date	Time	Received by	Date	Time																															
Relinquished by Fedex	Date	Time	Received by ELOT Amber Elam	Date 8/16/11	Time 9:50																															



XENCO Laboratories  
Atlanta, Boca Raton, Corpus Christi, Dallas  
Houston, Miami, Odessa, Philadelphia  
Phoenix, San Antonio, Tampa

Document Title: Sample Receipt Checklist  
Document No.: SYS-SRC  
Revision/Date: No. 01, 5/27/2010  
Effective Date: 6/1/2010 Page 1 of 1

### Prelogin / Nonconformance Report - Sample Log-In

Client: Yates Petroleum  
Date/Time: 8-16-11 9:50  
Lab ID #: 425794 / 425795  
Initials: AE

#### Sample Receipt Checklist

1. Samples on ice?	Blue	<u>Water</u>	No	
2. Shipping container in good condition?	<u>Yes</u>	No	None	
3. Custody seals intact on shipping container (cooler) and bottles?	<u>Yes</u>	No	N/A	
4. Chain of Custody present?	<u>Yes</u>	No		
5. Sample instructions complete on chain of custody?	<u>Yes</u>	No		
6. Any missing / extra samples?	Yes	<u>No</u>		
7. Chain of custody signed when relinquished / received?	<u>Yes</u>	No		
8. Chain of custody agrees with sample label(s)?	<u>Yes</u>	No		
9. Container labels legible and intact?	<u>Yes</u>	No		
10. Sample matrix / properties agree with chain of custody?	<u>Yes</u>	No		
11. Samples in proper container / bottle?	<u>Yes</u>	No		
12. Samples properly preserved?	<u>Yes</u>	No	N/A	
13. Sample container intact?	<u>Yes</u>	No		
14. Sufficient sample amount for indicated test(s)?	<u>Yes</u>	No		
15. All samples received within sufficient hold time?	<u>Yes</u>	No		
16. Subcontract of sample(s)?	Yes	No	<u>N/A</u>	
17. VOC sample have zero head space?	<u>Yes</u>	No	N/A	
18. Cooler 1 No.	Cooler 2 No.	Cooler 3 No.	Cooler 4 No.	Cooler 5 No.
lbs. <u>6.0</u> °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

# Analytical Report 427563

for  
Yates Petroleum Corporation

Project Manager: Amber Cannon

Graham AKB State # 8

30-015-31913

21-SEP-11

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)



21-SEP-11

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

Reference: XENCO Report No: **427563**  
**Graham AKB State # 8**  
Project Address: Eddy County

**Amber Cannon:**

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 427563. 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. 427563 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

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## Sample Cross Reference 427563



Yates Petroleum Corporation, Artesia, NM  
Graham AKB State # 8

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
Grab 04 0	S	09-13-11 09:05	4 - 4 ft	427563-001
Grab 05.0	S	09-13-11 09:10	5 - 5 ft	427563-002
Grab 06 0	S	09-13-11 09:15	6 - 6 ft	427563-003



## CASE NARRATIVE

*Client Name: Yates Petroleum Corporation*

*Project Name: Graham AKB State # 8*



*Project ID: 30-015-31913*

*Work Order Number: 427563*

*Report Date: 21-SEP-11*

*Date Received: 09/14/2011*

---

***Sample receipt non conformances and comments:***

*None*

---

***Sample receipt non conformances and comments per sample:***

*None*



# Certificate of Analysis Summary 427563

Yates Petroleum Corporation, Artesia, NM



Project Id: 30-015-31913

Contact: Amber Cannon

Project Location: Eddy County

Project Name: Graham AKB State # 8

Date Received in Lab: Wed Sep-14-11 09 30 am

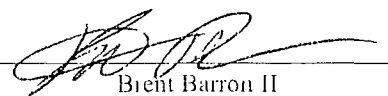
Report Date: 21-SEP-11

Project Manager: Brent Barron II

<b>Analysis Requested</b>	<b>Lab Id:</b>	427563-001	427563-002	427563-003			
	<b>Field Id:</b>	Grab 04 0	Grab 05 0	Grab 06 0			
	<b>Depth:</b>	4-4 ft	5-5 ft	6-6 ft			
	<b>Matrix:</b>	SOIL	SOIL	SOIL			
	<b>Sampled:</b>	Sep-13-11 09:05	Sep-13-11 09:10	Sep-13-11 09:15			
<b>Anions by E300</b>	<b>Extracted:</b>						
	<b>Analyzed:</b>	Sep-15-11 18:54	Sep-15-11 18:54	Sep-15-11 18:54			
	<b>Units/RL:</b>	mg/kg RL	mg/kg RL	mg/kg RL			
Chloride		1780 18.1	39.9 4.38	7.70 4.32			
<b>Percent Moisture</b>	<b>Extracted:</b>						
	<b>Analyzed:</b>	Sep-14-11 13:15	Sep-14-11 13:15	Sep-14-11 13:15			
	<b>Units/RL:</b>	% RL	% RL	% RL			
Percent Moisture		7.00 1.00	4.03 1.00	2.75 1.00			

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories. XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

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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 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 quantitation 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.

**BRL** Below Reporting Limit.

**RL** Reporting Limit

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

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

**DL** Method Detection Limit

**NC** Non-Calculable

+ Outside XENCO's scope of NELAC Accreditation.

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(813) 620-2000	(813) 620-2033
(305) 823-8500	(305) 823-8555
(432) 563-1800	(432) 563-1713
(770) 449-8800	(770) 449-5477
(602) 437-0330	

## 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: Amber Cannon

Project Name: **Graham AKB State #8**

Company Name Yates Petroleum Corporation

Project #: 30-015-31913

Company Address: 105 South 4th Street

Project Loc. Eddy County

City/State/Zip: Artesia, NM 88210

PO #: 1032020

Telephone No: 575-748-4111 Fax No: 575-748-4585

Report Format. ☒ Standard ☐ TRRP ☐ NPDES

Sampler Signature: Amber Cannon

e-mail. [acannon@yatespetroleum.com](mailto:acannon@yatespetroleum.com)

[illegible]

**XENCO Laboratories**

Atlanta, Boca Raton, Corpus Christi, Dallas

Houston, Miami, Odessa, Philadelphia

Phoenix, San Antonio, Tampa

Document Title: Sample Receipt Checklist

Document No.: SYS-SRC

Revision/Date: No. 01, 5/27/2010

Effective Date: 6/1/2010 Page 1 of 1

**Prelogin / Nonconformance Report - Sample Log-In**Client: Yates PetroleumDate/Time: 9/14/11 9:30Lab ID #: 427563Initials: UE**Sample Receipt Checklist**

1. Samples on ice?	Blue	Water	<u>No</u>	
2. Shipping container in good condition?	<u>Yes</u>	No	None	
3. Custody seals intact on shipping container (cooler) and bottles?	<u>Yes</u>	No	N/A	
4. Chain of Custody present?	<u>Yes</u>	No		
5. Sample instructions complete on chain of custody?	<u>Yes</u>	No		
6. Any missing / extra samples?	Yes	<u>No</u>		
7. Chain of custody signed when relinquished / received?	<u>Yes</u>	No		
8. Chain of custody agrees with sample label(s)?	<u>Yes</u>	No		
9. Container labels legible and intact?	<u>Yes</u>	No		
10. Sample matrix / properties agree with chain of custody?	<u>Yes</u>	No		
11. Samples in proper container / bottle?	<u>Yes</u>	No		
12. Samples properly preserved?	<u>Yes</u>	No	N/A	
13. Sample container intact?	<u>Yes</u>	No		
14. Sufficient sample amount for indicated test(s)?	<u>Yes</u>	No		
15. All samples received within sufficient hold time?	<u>Yes</u>	No		
16. Subcontract of sample(s)?	Yes	No	<u>N/A</u>	
17. VCC sample have zero head space?	Yes	No	<u>N/A</u>	
18. Cooler 1 No.	Cooler 2 No.	Cooler 3 No.	Cooler 4 No.	Cooler 5 No.
lbs 21.5 °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