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	OGRID Number	Contact
Yates Petroleum Corporation	25575	Jeremy Haass
Address		Telephone No.
104 S. 4TH Street		575-748-1471
Facility Name	API Number	Facility Type
Lotus 'ALT' State #3	30-025-36005	Pumping Unit

Surface Owner	Mineral Owner	Lease No.
State	State	V-2443

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
C	32	22S	32E	660	North	1980	West	Lea

Latitude 32.35323 **Longitude** 103.69841

NATURE OF RELEASE

Type of Release	Volume of Release	Volume Recovered
Crude Oil, Produced Water	7 B/O, 53 B/PW	0 B/O, 0 B/PW
Source of Release	Date and Hour of Occurrence	Date and Hour of Discovery
Poly Line	8/17/2011 AM	8/17/2011 AM
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? Maxey G. Brown, NMOCD I	
By Whom? Jeremy Haass, Yates Petroleum Corporation	Date and Hour 8/18/2011 AM (email)	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse. N/A	

HOBBS OCD
OCT 12 2011
RECEIVED

If a Watercourse was Impacted, Describe Fully.*
N/A

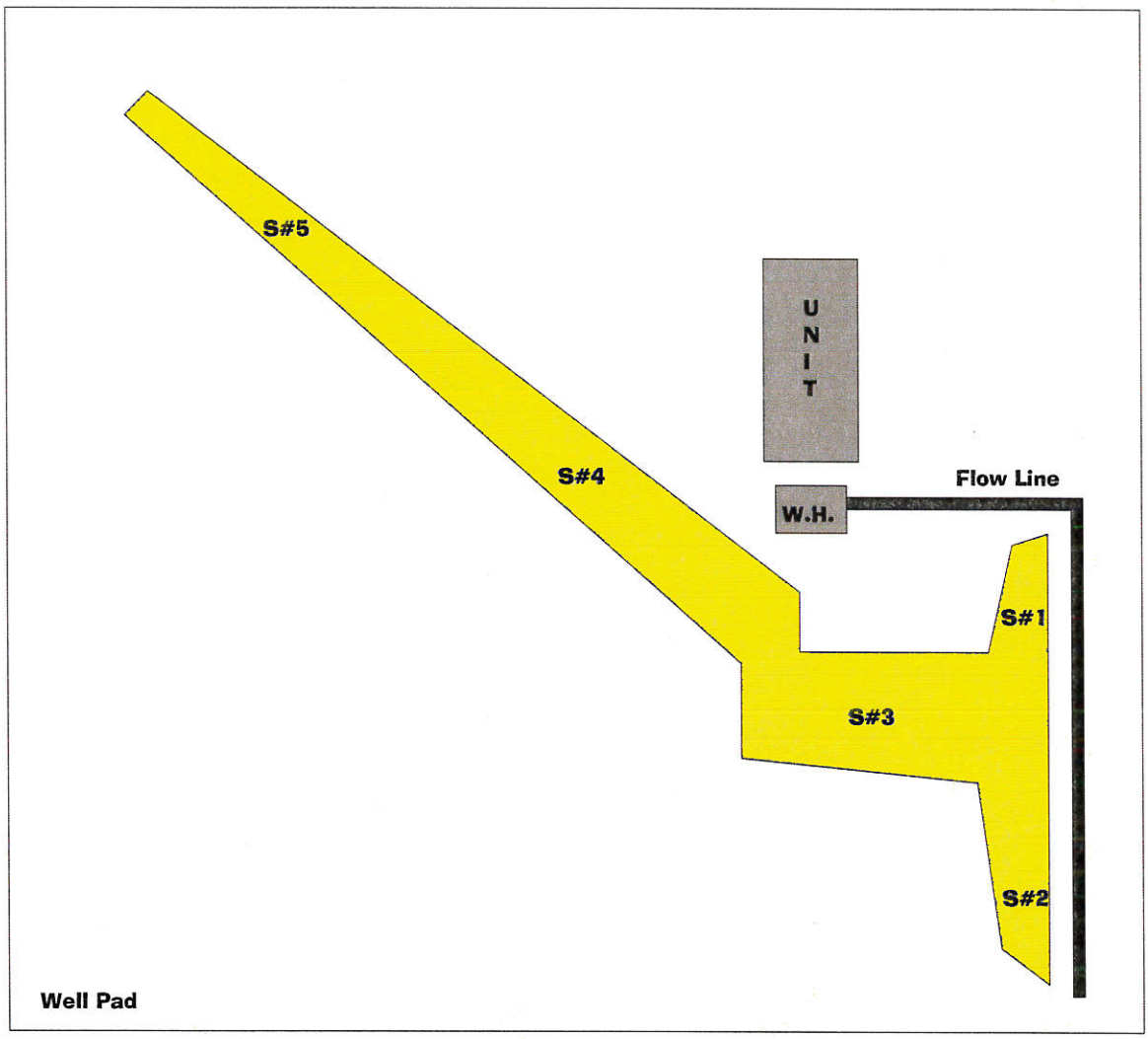
Describe Cause of Problem and Remedial Action Taken.*
A weak spot on the poly flow line from the well to the battery popped. Leak was isolated and crew was called out to fix line. Called backhoe and dump truck in to pick up affected soil.

Describe Area Affected and Cleanup Action Taken.*
An approximate area of 25' X 80', all on well pad. Impacted soils were cleaned up and taken to an NMOCD approved facility. Vertical and horizontal delineation samples were taken and analysis ran for TPH & BTEX. Third party analytical results for TPH & BTEX showed the site is well under RRAL's. **Depth to Ground Water: >100' (approximately 325', Section 32-T22S-R32E, per Trend Map), Wellhead Protection Area: No, Distance to Surface Water Body: >1000', SITE RANKING IS 0. Based on spill occurring and staying on location plus depth to ground water being 325', impacted soils excavated/hauled and enclosed analytical results, Yates Petroleum Corporation requests closure.**

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:	OIL CONSERVATION DIVISION	
Printed Name: Jeremy Haass	Approved by District Supervisor:	
Title: Environmental Regulatory Agent	Approval Date:	Expiration Date:
E-mail Address: jhaass@yatespetroleum.com	Conditions of Approval:	Attached ☐
Date: Tuesday, October 11, 2011 Phone: 575-748-1471	2RP-	

* Attach Additional Sheets If Necessary



YATES PETROLEUM CORPORATION

Lotus 'ALT' State #3

30-025-36005

Section 32, T22S-R32E

Lea County, NM

SAMPLE DIAGRAM(Not to Scale)

Xenco Laboratories# 426704 & 426705 & 427797
Report Date: 10/6/2011

Prepared by Jeremy Haass
Environmental Regulatory Agent

Analytical Report- 426704 & 426705 & 427797	Sample Date	Depth	BTEX	GRO	DRO	TOTAL	Chlorides
Sample #1	8/22/2011	1'	ND	ND	ND	ND	16700
Sample #2	8/22/2011	1'	.0226	ND	ND	ND	111
Sample #3	8/22/2011	1'	ND	ND	ND	ND	17900
Sample #4	8/22/2011	1'	ND	ND	ND	ND	5520
Sample #5	8/22/2011	1'	.0461	27.7	502	530	407
Sample #1	9/14/2011	3'	-	-	-	-	2590
Sample #3	9/14/2011	3'	-	-	-	-	3810
Sample #4	9/14/2011	3'	-	-	-	-	2880

Site Ranking is Zero (0). Depth to Ground Water >100' (approx. 325', per Trend Map).

All results are ppm.Chlorides for documentation. S **- Sample Points**

Released: 53 B/PW & 7 B/O; Recovered: 0 B/PW & 0 B/O. Release Date: 8/17/2011

Analytical Report 427797

for

Yates Petroleum Corporation

Project Manager: Jeremy Haass

Lotus 'ALT' State # 3

30-025-36005

29-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)

29-SEP-11

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

Reference: XENCO Report No: **427797**
Lotus 'ALT' State # 3
Project Address: Lea County

Jeremy Haass:

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 427797. 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. 427797 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 427797

Yates Petroleum Corporation, Artesia, NM

Lotus 'ALT' State # 3

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
Sample # 1	S	09-14-11 09:45	3 - 3 ft	427797-001
Sample # 3	S	09-14-11 10:00	3 - 3 ft	427797-002
Sample # 4	S	09-14-11 10:15	3 - 3 ft	427797-003

CASE NARRATIVE

Client Name: Yates Petroleum Corporation
Project Name: Lotus 'ALT' State # 3

Project ID:	*30-025-36005*	*Report Date:*	*29-SEP-11*
Work Order Number:	*427797*	*Date Received:*	*09/16/2011*

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Certificate of Analysis Summary 427797

Yates Petroleum Corporation, Artesia, NM

Project Name: Lotus 'ALT' State # 3

Project Id: 30-025-36005
Contact: Jeremy Haass
Project Location: Lea County

Date Received in Lab: Fri Sep-16-11 12:00 pm
Report Date: 29-SEP-11
Project Manager: Brent Barron II

Analysis Requested											
	Lab Id:	427797-001		427797-002		427797-003					
	Field Id:	Sample # 1		Sample # 3		Sample # 4					
	Depth:	3-3 ft		3-3 ft		3-3 ft					
	Matrix:	SOIL		SOIL		SOIL					
	Sampled:	Sep-14-11 09:45		Sep-14-11 10:00		Sep-14-11 10:15					
Anions by E300	*Extracted:*										
	Analyzed:	Sep-21-11 18:27		Sep-21-11 18:27		Sep-21-11 18:27					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Chloride		2590	21.5	3810	43.4	2880	42.6				
Percent Moisture	*Extracted:*										
	Analyzed:	Sep-19-11 10:30		Sep-19-11 10:30		Sep-19-11 10:30					
	Units/RL:	%	RL	%	RL	%	RL				
Percent Moisture		2.30	1.00	3.17	1.00	1.41	1.00				

Brent Barron II
Odessa Laboratory Manager

XENCO Laboratories

BS / BSD Recoveries

Project Name: Lotus 'ALT' State # 3

Work Order #: 427797
Analyst: BRB
Lab Batch ID: 870534
Sample: 870534-1-BKS
Units: mg/kg

Date Prepared: 09/21/2011
Batch #: 1

Project ID: 30-025-36005
Date Analyzed: 09/21/2011
Matrix: Solid

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Anions by E300 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
Chloride	<0.840	20.0	21.8	109	20.0	22.1	111	1	75-125	20	

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

XENCO Laboratories

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.

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.

Form 3 - MS Recoveries

Project Name: Lotus 'ALT' State # 3

Work Order #: 427797
Lab Batch #: 870534
Project ID: 30-025-36005
Date Analyzed: 09/21/2011
Date Prepared: 09/21/2011
Analyst: BRB
QC- Sample ID: 427797-001 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	2590	512	3000	80	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: Lotus 'ALT' State # 3

Work Order #: 427797

Lab Batch #: 870534 **Project ID:** 30-025-36005

Date Analyzed: 09/21/2011 18:27 **Date Prepared:** 09/21/2011 **Analyst:** BRB

QC- Sample ID: 427797-001 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	2590	2590	0	20	

Lab Batch #: 870381

Date Analyzed: 09/19/2011 10:30 **Date Prepared:** 09/19/2011 **Analyst:** BRB

QC- Sample ID: 427800-001 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	6.75	6.84	1	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

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: Jeremy Haass

Company Name: Yates Petroleum Corporation

Company Address: 105 South 4th Street

City/State/Zip: Artesia, NM 88210

Telephone No: 575-748-4311 Fax No:

Sampler Signature:

e-mail: jhaass@yatespetroleum.com

Project Name: Lotus 'ALT' State #3

Project #: 30-025-36005

Project Loc: Lea County

PO #: 103-2636

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

(lab use only)
ORDER #: 427797

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: 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.	Chlorides	RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
01	Sample #1	3ft	3ft	9/14/2011	9:45am			X								S												X		X
02	Sample #2	3ft	3ft	9/14/2011	10:00am			X								S												X		X
03	Sample #3	3ft	3ft	9/14/2011	10:15am			X								S												X		X
	PLEASE PUT CHLORIDES ON SEPARATE REPORT																													

Special Instructions: **TPH: 8015B, BTEX: 8021B & Chlorides.** Please show BTEX results as mg/kg. Thank you.

Relinquished by:	Date	Time	Received by:	Date	Time
	09/15/11	2:32 PM			
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by: Fedex	Date	Time	Received by ELOT: Andrea Elam	Date 9.16.11	Time 12:00pm

Laboratory Comments:

Sample Containers Intact?	X	N
VOCs Free of Headspace?	X	N
Labels on container(s)	X	N
Custody seals on container(s)		N
Custody seals on cooler(s)		N
Sample Hand Delivered	X	N

by Sampler/Client Rep. ? by Courier? UPS DHL (FedEx) Lone Star

Temperature Upon Receipt: 11.0 °C

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: 9.16.11 12:00

Lab ID # : 427797

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	11.0 °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

Analytical Report 426704

for

Yates Petroleum Corporation

Project Manager: Jeremy Haass

Lotus 'ALT' State # 3

30-025-36005

08-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)

08-SEP-11

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

Reference: XENCO Report No: **426704**
Lotus 'ALT' State # 3
Project Address: Lea

Jeremy Haass:

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 426704. 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. 426704 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 426704

Yates Petroleum Corporation, Artesia, NM

Lotus 'ALT' State # 3

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
Sample # 1	S	08-22-11 10:30	1 - 1 ft	426704-001
Sample # 2	S	08-22-11 10:45	1 - 1 ft	426704-002
Sample # 3	S	08-22-11 11:00	1 - 1 ft	426704-003
Sample # 4	S	08-22-11 11:20	1 - 1 ft	426704-004
Sample # 5	S	08-22-11 11:30	1 - 1 ft	426704-005

CASE NARRATIVE

Client Name: Yates Petroleum Corporation
Project Name: Lotus 'ALT' State # 3

Project ID:	*30-025-36005*	*Report Date:*	*08-SEP-11*
Work Order Number:	*426704*	*Date Received:*	*08/30/2011*

Sample receipt non conformances and comments:
None

Sample receipt non conformances and comments per sample:

None

Analytical non nonformances and comments:

Batch: LBA-869198 BTEX by EPA 8021B
SW8021BM

Batch 869198, 4-Bromofluorobenzene recovered above QC limits . Matrix interferences is suspected; data not confirmed by re-analysis
Samples affected are: 426704-005.

Batch: LBA-869326 TPH By SW8015B Mod
SW8015B_NM

Batch 869326, C6-C10 Gasoline Range Hydrocarbons recovered below QC limits in the Blank Spike Duplicate however was within limits for the Blank Spike, therefore data is reported as is.
Samples affected are: 426704-005, -003, -001, -002, -004.

Certificate of Analysis Summary 426704

Yates Petroleum Corporation, Artesia, NM

Project Name: Lotus 'ALT' State # 3

Project Id: 30-025-36005
Contact: Jeremy Haass
Project Location: Lea

Date Received in Lab: Tue Aug-30-11 09:45 am
Report Date: 08-SEP-11
Project Manager: Brent Barron II

Analysis Requested		Lab Id:	426704-001		426704-002		426704-003		426704-004		426704-005	
		Field Id:	Sample # 1		Sample # 2		Sample # 3		Sample # 4		Sample # 5	
		Depth:	1-1 ft		1-1 ft		1-1 ft		1-1 ft		1-1 ft	
		Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL	
		Sampled:	Aug-22-11 10:30		Aug-22-11 10:45		Aug-22-11 11:00		Aug-22-11 11:20		Aug-22-11 11:30	
BTEX by EPA 8021B		Extracted:	Sep-02-11 11:00		Sep-02-11 11:00		Sep-02-11 11:00		Sep-02-11 11:00		Sep-02-11 11:00	
		Analyzed:	Sep-02-11 13:07		Sep-03-11 03:10		Sep-03-11 03:33		Sep-03-11 03:56		Sep-03-11 04:19	
		Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene			ND	0.00108	ND	0.00101	ND	0.00107	ND	0.00112	ND	0.00102
Toluene			ND	0.00216	ND	0.00203	ND	0.00214	ND	0.00223	ND	0.00205
Ethylbenzene			ND	0.00108	0.00349	0.00101	ND	0.00107	ND	0.00112	0.0110	0.00102
m_p-Xylenes			ND	0.00216	0.0123	0.00203	ND	0.00214	ND	0.00223	0.0241	0.00205
o-Xylene			ND	0.00108	0.00680	0.00101	ND	0.00107	ND	0.00112	0.0110	0.00102
Total Xylenes			ND	0.00108	0.0191	0.00101	ND	0.00107	ND	0.00112	0.0351	0.00102
Total BTEX			ND	0.00108	0.0226	0.00101	ND	0.00107	ND	0.00112	0.0461	0.00102
Percent Moisture		Extracted:										
		Analyzed:	Aug-30-11 11:45		Aug-30-11 11:45		Aug-30-11 11:45		Aug-30-11 11:45		Aug-30-11 11:45	
		Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture			7.57	1.00	1.49	1.00	7.13	1.00	10.7	1.00	3.37	1.00
TPH By SW8015B Mod		Extracted:	Sep-01-11 13:40		Sep-01-11 13:40		Sep-01-11 13:40		Sep-01-11 13:40		Sep-01-11 13:40	
		Analyzed:	Sep-03-11 02:36		Sep-03-11 03:09		Sep-03-11 03:38		Sep-03-11 04:11		Sep-03-11 04:41	
		Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
C6-C10 Gasoline Range Hydrocarbons			ND	16.2	ND	15.2	ND	16.1	ND	16.8	27.7	15.5
C10-C28 Diesel Range Hydrocarbons			ND	16.2	ND	15.2	ND	16.1	ND	16.8	502	15.5
Total TPH			ND	16.2	ND	15.2	ND	16.1	ND	16.8	530	15.5

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.

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.

Form 2 - Surrogate Recoveries

Project Name: Lotus 'ALT' State # 3

Work Orders : 426704,

Project ID: 30-025-36005

Lab Batch #: 869198 **Sample:** 426704-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 09/02/11 13:07

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0300	0.0300	100	80-120	
4-Bromofluorobenzene	0.0292	0.0300	97	80-120	

Lab Batch #: 869326 **Sample:** 426704-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 09/03/11 02:36

TPH By SW8015B Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	80.7	99.7	81	70-135	
o-Terphenyl	41.9	49.9	84	70-135	

Lab Batch #: 869326 **Sample:** 426704-002 / SMP **Batch:** 1 **Matrix:** Soil

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

TPH By SW8015B Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	83.9	99.9	84	70-135	
o-Terphenyl	41.7	50.0	83	70-135	

Lab Batch #: 869198 **Sample:** 426704-002 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 09/03/11 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	0.0300	0.0300	100	80-120	
4-Bromofluorobenzene	0.0301	0.0300	100	80-120	

Lab Batch #: 869198 **Sample:** 426704-003 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 09/03/11 03:33

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0287	0.0300	96	80-120	
4-Bromofluorobenzene	0.0286	0.0300	95	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: Lotus 'ALT' State # 3

Work Orders : 426704,

Project ID: 30-025-36005

Lab Batch #: 869326 **Sample:** 426704-003 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 09/03/11 03:38

TPH By SW8015B Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	86.2	99.5	87	70-135	
o-Terphenyl	43.9	49.8	88	70-135	

Lab Batch #: 869198 **Sample:** 426704-004 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 09/03/11 03:56

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0258	0.0300	86	80-120	
4-Bromofluorobenzene	0.0251	0.0300	84	80-120	

Lab Batch #: 869326 **Sample:** 426704-004 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 09/03/11 04:11

TPH By SW8015B Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	87.4	100	87	70-135	
o-Terphenyl	44.3	50.1	88	70-135	

Lab Batch #: 869198 **Sample:** 426704-005 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 09/03/11 04:19

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0286	0.0300	95	80-120	
4-Bromofluorobenzene	0.0466	0.0300	155	80-120	*

Lab Batch #: 869326 **Sample:** 426704-005 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 09/03/11 04:41

TPH By SW8015B Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	114	99.9	114	70-135	
o-Terphenyl	55.4	50.0	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: Lotus 'ALT' State # 3

Work Orders : 426704,

Project ID: 30-025-36005

Lab Batch #: 869198 **Sample:** 610915-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 09/02/11 12:45

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0291	0.0300	97	80-120	
4-Bromofluorobenzene	0.0288	0.0300	96	80-120	

Lab Batch #: 869326 **Sample:** 610994-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 09/03/11 02:06

TPH By SW8015B Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	86.1	100	86	70-135	
o-Terphenyl	44.4	50.0	89	70-135	

Lab Batch #: 869198 **Sample:** 610915-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 09/02/11 11:13

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0295	0.0300	98	80-120	
4-Bromofluorobenzene	0.0260	0.0300	87	80-120	

Lab Batch #: 869326 **Sample:** 610994-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 09/03/11 01:03

TPH By SW8015B Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	101	100	101	70-135	
o-Terphenyl	42.9	50.1	86	70-135	

Lab Batch #: 869198 **Sample:** 610915-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 09/02/11 11:36

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0308	0.0300	103	80-120	
4-Bromofluorobenzene	0.0288	0.0300	96	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: Lotus 'ALT' State # 3

Work Orders : 426704,

Project ID: 30-025-36005

Lab Batch #: 869326 **Sample:** 610994-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 09/03/11 01:34

TPH By SW8015B Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	96.2	99.9	96	70-135	
o-Terphenyl	40.5	50.0	81	70-135	

Lab Batch #: 869198 **Sample:** 426704-001 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 09/02/11 14:16

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0308	0.0300	103	80-120	
4-Bromofluorobenzene	0.0306	0.0300	102	80-120	

Lab Batch #: 869326 **Sample:** 426704-001 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 09/03/11 10:32

TPH By SW8015B Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	112	101	111	70-135	
o-Terphenyl	46.3	50.3	92	70-135	

Lab Batch #: 869198 **Sample:** 426704-001 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 09/02/11 14:39

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	0.0322	0.0300	107	80-120	

Lab Batch #: 869326 **Sample:** 426704-001 SD / MSD **Batch:** 1 **Matrix:** Soil

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

TPH By SW8015B Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	102	99.5	103	70-135	
o-Terphenyl	40.8	49.8	82	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.

BS / BSD Recoveries

Project Name: Lotus 'ALT' State # 3

Work Order #: 426704 **Project ID:** 30-025-36005

Analyst: ASA **Date Prepared:** 09/02/2011 **Date Analyzed:** 09/02/2011

Lab Batch ID: 869198 **Sample:** 610915-1-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	<0.00100	0.100	0.115	115	0.100	0.118	118	3	70-130	35	
Toluene	<0.00200	0.100	0.101	101	0.100	0.105	105	4	70-130	35	
Ethylbenzene	<0.00100	0.100	0.110	110	0.100	0.115	115	4	71-129	35	
m_p-Xylenes	<0.00200	0.200	0.222	111	0.200	0.231	116	4	70-135	35	
o-Xylene	<0.00100	0.100	0.100	100	0.100	0.106	106	6	71-133	35	

Analyst: BBH **Date Prepared:** 09/01/2011 **Date Analyzed:** 09/03/2011

Lab Batch ID: 869326 **Sample:** 610994-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

TPH By SW8015B 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-C10 Gasoline Range Hydrocarbons	<15.0	1000	706	71	999	678	68	4	70-135	35	L
C10-C28 Diesel Range Hydrocarbons	<15.0	1000	814	81	999	784	78	4	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 / MSD Recoveries

Project Name: Lotus 'ALT' State # 3

Work Order # : 426704 **Project ID:** 30-025-36005

Lab Batch ID: 869198 **QC- Sample ID:** 426704-001 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 09/02/2011 **Date Prepared:** 09/02/2011 **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	<0.00108	0.108	0.0882	82	0.108	0.0986	91	11	70-130	35	
Toluene	<0.00216	0.108	0.0792	73	0.108	0.0886	82	11	70-130	35	
Ethylbenzene	<0.00108	0.108	0.0877	81	0.108	0.0977	90	11	71-129	35	
m_p-Xylenes	<0.00216	0.216	0.173	80	0.216	0.194	90	11	70-135	35	
o-Xylene	<0.00108	0.108	0.0794	74	0.108	0.0889	82	11	71-133	35	

Lab Batch ID: 869326 **QC- Sample ID:** 426704-001 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 09/03/2011 **Date Prepared:** 09/01/2011 **Analyst:** BBH

Reporting Units: mg/kg

TPH By SW8015B 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-C10 Gasoline Range Hydrocarbons	<16.3	1090	810	74	1080	762	71	6	70-135	35	
C10-C28 Diesel Range Hydrocarbons	<16.3	1090	988	91	1080	895	83	10	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

Final 1.000

Sample Duplicate Recovery

Project Name: Lotus 'ALT' State # 3

Work Order #: 426704

Lab Batch #: 868800 **Project ID:** 30-025-36005

Date Analyzed: 08/30/2011 11:45 **Date Prepared:** 08/30/2011 **Analyst:** BRB

QC- Sample ID: 426704-001 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	7.57	7.12	6	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

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: Jeremy Haass

Company Name: Yates Petroleum Corporation

Company Address: 105 South 4th Street

City/State/Zip: Artesia, NM 88210

Telephone No: 575-748-4311 Fax No:

Sampler Signature:

e-mail: jhaass@yatespetroleum.com

Project Name: Lotus 'ALT' State #3

Project #: 30-025-36005

Project Loc: Lea

PO #: 103-2636

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

(lab use only)
ORDER #: 426704 / 426705

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	TOTAL: TPH: TX 1005 TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/5030 or BTEX 8260	RCI	N.O.R.M.	Chlorides			RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
01	Sample #1	1ft	1ft	8/22/2011	10:30am			X								S	X								X			X				X
02	Sample #2	1ft	1ft	8/22/2011	10:45am			X								S	X								X			X				X
03	Sample #3	1ft	1ft	8/22/2011	11:00am			X								S	X								X			X				X
04	Sample #4	1ft	1ft	8/22/2011	11:20am			X								S	X								X			X				X
05	Sample #5	1ft	1ft	8/22/2011	11:30am			X								S	X								X			X				X
	PLEASE PUT CHLORIDES ON SEPARATE REPORT																															

Special Instructions: **TPH: 8015B, BTEX: 8021B & Chlorides.** Please show BTEX results as mg/kg. Thank you.

	Date	Time		Date	Time
Relinquished by:	08/29/11	9:12 AM	Received by:		
Relinquished by:			Received by:		
Relinquished by: Fedex			Received by ELOT: Andrea Elam	8.30.11	9:45

Laboratory Comments:

Sample Containers Intact?	N N N N N
VOCs Free of Headspace?	
Labels on container(s)	
Custody seals on container(s)	
Custody seals on cooler(s)	
Sample Hand Delivered by Sampler/Client Rep. ?	N N
by Courier? UPS DHL FedEx Lone Star	
4 oz glass	
Temperature Upon Receipt: 2.1 °C	

XENCO Laboratories	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: 8.30.11 9.45
Lab ID # : 426704 / 426705
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	2.1 °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 426705

for

Yates Petroleum Corporation

Project Manager: Jeremy Haass

Lotus 'ALT' State # 3

30-025-36005

08-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)

08-SEP-11

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

Reference: XENCO Report No: **426705**
Lotus 'ALT' State # 3
Project Address: Lea

Jeremy Haass:

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 426705. 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. 426705 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 426705

Yates Petroleum Corporation, Artesia, NM

Lotus 'ALT' State # 3

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
Sample # 1	S	08-22-11 10:30	1 - 1 ft	426705-001
Sample # 2	S	08-22-11 10:45	1 - 1 ft	426705-002
Sample # 3	S	08-22-11 11:00	1 - 1 ft	426705-003
Sample # 4	S	08-22-11 11:20	1 - 1 ft	426705-004
Sample # 5	S	08-22-11 11:30	1 - 1 ft	426705-005

CASE NARRATIVE

Client Name: Yates Petroleum Corporation
Project Name: Lotus 'ALT' State # 3

Project ID:	*30-025-36005*	*Report Date:*	*08-SEP-11*
Work Order Number:	*426705*	*Date Received:*	*08/30/2011*

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Certificate of Analysis Summary 426705

Yates Petroleum Corporation, Artesia, NM

Project Name: Lotus 'ALT' State # 3

Project Id: 30-025-36005
Contact: Jeremy Haass
Project Location: Lea

Date Received in Lab: Tue Aug-30-11 09:45 am
Report Date: 08-SEP-11
Project Manager: Brent Barron II

Analysis Requested											
	Lab Id:	426705-001		426705-002		426705-003		426705-004		426705-005	
	Field Id:	Sample # 1		Sample # 2		Sample # 3		Sample # 4		Sample # 5	
	Depth:	1-1 ft		1-1 ft		1-1 ft		1-1 ft		1-1 ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Aug-22-11 10:30		Aug-22-11 10:45		Aug-22-11 11:00		Aug-22-11 11:20		Aug-22-11 11:30	
Anions by E300	***Extracted:***										
	Analyzed:	Sep-01-11 08:19		Sep-01-11 08:19		Aug-31-11 18:04		Aug-31-11 18:04		Aug-31-11 18:04	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		16700	182	111	8.53	17900	452	5520	94.1	407	8.69
Percent Moisture	***Extracted:***										
	Analyzed:	Aug-30-11 11:45		Aug-30-11 11:45		Aug-30-11 11:45		Aug-30-11 11:45		Aug-30-11 11:45	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		7.57	1.00	1.49	1.00	7.13	1.00	10.7	1.00	3.37	1.00

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.

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.

BS / BSD Recoveries

Project Name: Lotus 'ALT' State # 3

Work Order #: 426705 **Project ID:** 30-025-36005

Analyst: BRB **Date Prepared:** 08/31/2011 **Date Analyzed:** 08/31/2011

Lab Batch ID: 868916 **Sample:** 868916-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Anions by E300 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
Chloride	<0.840	20.0	21.8	109	20.0	21.8	109	0	75-125	20	

Analyst: BRB **Date Prepared:** 09/01/2011 **Date Analyzed:** 09/01/2011

Lab Batch ID: 869030 **Sample:** 869030-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Anions by E300 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
Chloride	<0.840	20.0	22.6	113	20.0	22.4	112	1	75-125	20	

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: Lotus 'ALT' State # 3

Work Order #: 426705

Lab Batch #: 868916 **Project ID:** 30-025-36005

Date Analyzed: 08/31/2011 **Date Prepared:** 08/31/2011 **Analyst:** BRB

QC- Sample ID: 426772-001 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	618	201	811	96	75-125	

Lab Batch #: 869030

Date Analyzed: 09/01/2011 **Date Prepared:** 09/01/2011 **Analyst:** BRB

QC- Sample ID: 426798-001 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	382	215	647	123	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

Final 1.000

Sample Duplicate Recovery

Project Name: Lotus 'ALT' State # 3

Work Order #: 426705

Lab Batch #: 868916 **Project ID:** 30-025-36005

Date Analyzed: 08/31/2011 18:04 **Date Prepared:** 08/31/2011 **Analyst:** BRB

QC- Sample ID: 426772-001 D **Batch #:** 1 **Matrix:** Soil

Reporting Units: mg/kg

	SAMPLE / SAMPLE DUPLICATE RECOVERY				
Anions by E300 Analyte	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Chloride	618	619	0	20	

Lab Batch #: 869030

Date Analyzed: 09/01/2011 08:19 **Date Prepared:** 09/01/2011 **Analyst:** BRB

QC- Sample ID: 426798-001 D **Batch #:** 1 **Matrix:** Soil

Reporting Units: mg/kg

	SAMPLE / SAMPLE DUPLICATE RECOVERY				
Anions by E300 Analyte	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Chloride	382	387	1	20	

Lab Batch #: 868800

Date Analyzed: 08/30/2011 11:45 **Date Prepared:** 08/30/2011 **Analyst:** BRB

QC- Sample ID: 426704-001 D **Batch #:** 1 **Matrix:** Soil

Reporting Units: %

	SAMPLE / SAMPLE DUPLICATE RECOVERY				
Percent Moisture Analyte	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Percent Moisture	7.57	7.12	6	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

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: Jeremy Haass

Company Name: Yates Petroleum Corporation

Company Address: 105 South 4th Street

City/State/Zip: Artesia, NM 88210

Telephone No: 575-748-4311 Fax No:

Sampler Signature:

e-mail: jhaass@yatespetroleum.com

Project Name: Lotus 'ALT' State #3

Project #: 30-025-36005

Project Loc: Lea

PO #: 103-2636

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

(lab use only)
ORDER #: 426704 / 426705

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total # of Containers	Preservation & # of Containers: Ice	HNO_3	HCl	H_2SO_4	NaOH	$Na_2S_2O_3$	None	Other (Specify)	Matrix: DW=Drinking Water SL=Sludge GW=Groundwater S=Soil/Solid NP=Non-Potable Specify Other	Analyze For: TCLP: TPH: 8015B 8015M 418.1	TOTAL: TPH: TX 1005 TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/5030 or BTEX 8260	RCI	N.O.R.M.	Chlorides		RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
01	Sample #1	1ft	1ft	8/22/2011	10:30am			X								S	X								X			X			X
02	Sample #2	1ft	1ft	8/22/2011	10:45am			X								S	X								X			X			X
03	Sample #3	1ft	1ft	8/22/2011	11:00am			X								S	X								X			X			X
04	Sample #4	1ft	1ft	8/22/2011	11:20am			X								S	X								X			X			X
05	Sample #5	1ft	1ft	8/22/2011	11:30am			X								S	X								X			X			X
	PLEASE PUT CHLORIDES ON SEPARATE REPORT																														

Special Instructions: **TPH: 8015B, BTEX: 8021B & Chlorides.** Please show BTEX results as mg/kg. Thank you.

	Date	Time		Date	Time
Relinquished by:	08/29/11	9:12 AM	Received by:		
Relinquished by:			Received by:		
Relinquished by: Fedex			Received by ELOT: Andrea Elam	8.30.11	9:45

Laboratory Comments:

Sample Containers Intact?	N N N N N
VOCs Free of Headspace?	
Labels on container(s)	
Custody seals on container(s)	
Custody seals on cooler(s)	
Sample Hand Delivered by Sampler/Client Rep. ?	N
by Courier? UPS DHL FedEx Lone Star	
4 oz glass	
Temperature Upon Receipt: 2.1 °C	

XENCO Laboratories	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: 8.30.11 9.45

Lab ID # : 426704 / 426705

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	2.1 °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