

# Analytical Report 415987

for  
**Yates Petroleum Corporation**

**Project Manager: Amanda Trujillo**

**Archimedes SWD**

**12-MAY-11**



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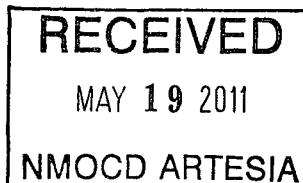
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12-MAY-11

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

Reference: XENCO Report No: **415987**  
**Archimedes SWD**  
Project Address:

**Amanda Trujillo:**

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 415987. 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. 415987 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 415987



Yates Petroleum Corporation, Artesia, NM

Archimedes SWD

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
Archimedes 1'	S	Apr-28-11 09:00	1 - 1.5 ft	415987-001
Archimedes 2'	S	Apr-28-11 09:00	2 - 2.5 ft	415987-002
Archimedes 3'	S	Apr-28-11 09:00	3 - 3.5 ft	415987-003



## CASE NARRATIVE

*Client Name: Yates Petroleum Corporation*

*Project Name: Archimedes SWD*



*Project ID:*

*Work Order Number: 415987*

*Report Date: 12-MAY-11*

*Date Received: 05/10/2011*

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**Sample receipt non conformances and Comments:**

None

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**Sample receipt Non Conformances and Comments per Sample:**

None

**Analytical Non Conformances and Comments:**

Batch: LBA-855794 TPH By SW8015B Mod  
SW8015B\_NM

Batch 855794, 1-Chlorooctane recovered above QC limits . Matrix interferences is suspected;  
data not confirmed by re-analysis

Samples affected are: 415987-003 SD,415987-002.

o-Terphenyl recovered above QC limits . Matrix interferences is suspected; data not confirmed  
by re-analysis

Samples affected are: 415987-003 SD,415987-002,415987-003.

SW8015B\_NM

Batch 855794, C10-C28 Diesel Range Hydrocarbons recovered above QC limits in the Matrix  
Spike Duplicate.

Samples affected are: 415987-003, -002, -001.

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



# Certificate of Analysis Summary 415987

Yates Petroleum Corporation, Artesia, NM



Project Id:

Contact: Amanda Trujillo

Project Location:

Project Name: Archimedes SWD

Date Received in Lab: Tue May-10-11 12:33 pm


Report Date: 12-MAY-11

Project Manager: Brent Barron, II

<i>Analysis Requested</i>	<i>Lab Id:</i>	415987-001	415987-002	415987-003			
	<i>Field Id:</i>	Archimedes 1'	Archimedes 2'	Archimedes 3'			
	<i>Depth:</i>	1-1.5 ft	2-2.5 ft	3-3.5 ft			
	<i>Matrix:</i>	SOIL	SOIL	SOIL			
	<i>Sampled:</i>	Apr-28-11 09:00	Apr-28-11 09:00	Apr-28-11 09:00			
<b>BTEX by EPA 8021B</b>	<i>Extracted:</i>	May-11-11 09:28	May-11-11 09:28	May-11-11 09:28			
	<i>Analyzed:</i>	May-11-11 14:41	May-11-11 15:04	May-11-11 15:27			
	<i>Units/RL:</i>	mg/kg	mg/kg	mg/kg			
		RL	RL	RL			
Benzene		ND	ND	ND			
Toluene		ND	ND	ND			
Ethylbenzene		ND	ND	ND			
m_p-Xylenes		ND	ND	ND			
o-Xylene		ND	ND	ND			
Total Xylenes		ND	ND	ND			
Total BTEX		ND	ND	ND			
<b>Percent Moisture</b>	<i>Extracted:</i>						
	<i>Analyzed:</i>	May-10-11 17:00	May-10-11 17:00	May-10-11 17:00			
	<i>Units/RL:</i>	%	%	%			
		RL	RL	RL			
Percent Moisture		12.6	13.1	24.7			
<b>TPH By SW8015B Mod</b>	<i>Extracted:</i>	May-10-11 14:30	May-10-11 14:30	May-10-11 14:30			
	<i>Analyzed:</i>	May-11-11 19:35	May-11-11 20:04	May-11-11 20:33			
	<i>Units/RL:</i>	mg/kg	mg/kg	mg/kg			
		RL	RL	RL			
C6-C10 Gasoline Range Hydrocarbons		ND	ND	ND			
C10-C28 Diesel Range Hydrocarbons		ND	ND	ND			
Total TPH		ND	ND	ND			

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 MQL and above the SQL.
  - U** Analyte was not detected.
  - L** The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.
  - H** The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.
  - K** Sample analyzed outside of recommended hold time.
  - JN** A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.
- BRL** Below Reporting Limit.
- RL** Reporting Limit
- MDL** Method Detection Limit
- PQL** Practical Quantitation Limit
- LOD** Limit of Detection
- LOQ** Limit of Quantitation
- DL** Method Detection Limit
- \* Outside XENCO's scope of NELAC Accreditation.**

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5757 NW 158th St, Miami Lakes, FL 33014	(305) 823-8500	(305) 823-8555
12600 West I-20 East, Odessa, TX 79765	(432) 563-1800	(432) 563-1713
842 Cantwell Lane, Corpus Christi, TX 78408	(361) 884-0371	(361) 884-9116



## Form 2 - Surrogate Recoveries

Project Name: Archimedes SWD

Work Orders : 415987,

Project ID:

Lab Batch #: 855732

Sample: 602569-1-BKS / BKS

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 05/11/11 10:03

### SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0293	0.0300	98	80-120	
4-Bromofluorobenzene	0.0325	0.0300	108	80-120	

Lab Batch #: 855732

Sample: 602569-1-BSD / BSD

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 05/11/11 10:25

### SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0304	0.0300	101	80-120	
4-Bromofluorobenzene	0.0324	0.0300	108	80-120	

Lab Batch #: 855732

Sample: 602569-1-BLK / BLK

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 05/11/11 11:33

### SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0273	0.0300	91	80-120	
4-Bromofluorobenzene	0.0274	0.0300	91	80-120	

Lab Batch #: 855732

Sample: 415987-001 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 05/11/11 14:41

### SURROGATE RECOVERY STUDY

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

Lab Batch #: 855732

Sample: 415987-002 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 05/11/11 15:04

### SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0270	0.0300	90	80-120	
4-Bromofluorobenzene	0.0321	0.0300	107	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: Archimedes SWD

Work Orders : 415987,

Project ID:

Lab Batch #: 855732

Sample: 415987-003 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 05/11/11 15:27

### SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0272	0.0300	91	80-120	
4-Bromofluorobenzene	0.0304	0.0300	101	80-120	

Lab Batch #: 855732

Sample: 415878-001 S / MS

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 05/11/11 15:54

### SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0303	0.0300	101	80-120	
4-Bromofluorobenzene	0.0338	0.0300	113	80-120	

Lab Batch #: 855732

Sample: 415878-001 SD / MSD

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 05/11/11 16:17

### SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0303	0.0300	101	80-120	
4-Bromofluorobenzene	0.0348	0.0300	116	80-120	

Lab Batch #: 855794

Sample: 602627-1-BKS / BKS

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 05/11/11 16:07

### SURROGATE RECOVERY STUDY

TPH By SW8015B Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Chlorooctane	131	100	131	70-135	
o-Terphenyl	64.4	50.2	128	70-135	

Lab Batch #: 855794

Sample: 602627-1-BSD / BSD

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 05/11/11 16:37

### SURROGATE RECOVERY STUDY

TPH By SW8015B Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Chlorooctane	126	99.8	126	70-135	
o-Terphenyl	60.9	49.9	122	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: Archimedes SWD

Work Orders : 415987,

Project ID:

Lab Batch #: 855794

Sample: 602627-1-BLK / BLK

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 05/11/11 17:07

### SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	128	101	127	70-135	
o-Terphenyl	66.6	50.3	132	70-135	

Lab Batch #: 855794

Sample: 415987-001 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 05/11/11 19:35

### SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	125	100	125	70-135	
o-Terphenyl	67.7	50.0	135	70-135	

Lab Batch #: 855794

Sample: 415987-002 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 05/11/11 20:04

### SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	163	99.8	163	70-135	*
o-Terphenyl	85.6	49.9	172	70-135	*

Lab Batch #: 855794

Sample: 415987-003 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 05/11/11 20:33

### SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	131	99.5	132	70-135	
o-Terphenyl	67.7	49.8	136	70-135	*

Lab Batch #: 855794

Sample: 415987-003 S / MS

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 05/11/11 21:02

### SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	123	99.9	123	70-135	
o-Terphenyl	61.9	50.0	124	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: Archimedes SWD

Work Orders : 415987,

Project ID:

Lab Batch #: 855794

Sample: 415987-003 SD / MSD

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 05/11/11 21:32

### SURROGATE RECOVERY STUDY

TPH By SW8015B Mod  Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	162	99.9	162	70-135	*
o-Terphenyl	79.0	50.0	158	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: Archimedes SWD

Work Order #: 415987

Analyst: ASA

Date Prepared: 05/11/2011

Project ID:

Date Analyzed: 05/11/2011

Lab Batch ID: 855732

Sample: 602569-1-BKS

Batch #: 1

Matrix: Solid

Units: mg/kg

### BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B	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
Analytes											
Benzene	<0.00100	0.100	0.0989	99	0.100	0.101	101	2	70-130	35	
Toluene	<0.00200	0.100	0.101	101	0.100	0.104	104	3	70-130	35	
Ethylbenzene	<0.00100	0.100	0.0973	97	0.100	0.0990	99	2	71-129	35	
m_p-Xylenes	<0.00200	0.200	0.198	99	0.200	0.200	100	1	70-135	35	
o-Xylene	<0.00100	0.100	0.0986	99	0.100	0.100	100	1	71-133	35	

Analyst: BEV

Date Prepared: 05/10/2011

Date Analyzed: 05/11/2011

Lab Batch ID: 855794

Sample: 602627-1-BKS

Batch #: 1

Matrix: Solid

Units: mg/kg

### BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

TPH By SW8015B Mod	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
Analytes											
C6-C10 Gasoline Range Hydrocarbons	<15.0	1000	1050	105	998	1040	104	1	70-135	35	
C10-C28 Diesel Range Hydrocarbons	<15.0	1000	1150	115	998	1120	112	3	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: Archimedes SWD

Work Order #: 415987

Project ID:

Lab Batch ID: 855732

QC- Sample ID: 415878-001 S

Batch #: 1 Matrix: Soil

Date Analyzed: 05/11/2011

Date Prepared: 05/11/2011

Analyst: ASA

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY											
BTEX by EPA 8021B Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.00100	0.100	0.0874	87	0.100	0.0879	88	1	70-130	35	
Toluene	0.00382	0.100	0.0923	88	0.100	0.0918	88	1	70-130	35	
Ethylbenzene	0.00243	0.100	0.0881	86	0.100	0.0870	85	1	71-129	35	
m_p-Xylenes	0.00524	0.200	0.181	88	0.200	0.177	86	2	70-135	35	
o-Xylene	0.00244	0.100	0.0942	92	0.100	0.0897	87	5	71-133	35	

Lab Batch ID: 855794

QC- Sample ID: 415987-003 S

Batch #: 1 Matrix: Soil

Date Analyzed: 05/11/2011

Date Prepared: 05/10/2011

Analyst: BEV

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY											
TPH By SW8015B Mod Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
C6-C10 Gasoline Range Hydrocarbons	<19.9	1330	1290	97	1330	1690	127	27	70-135	35	
C10-C28 Diesel Range Hydrocarbons	<19.9	1330	1410	106	1330	1840	138	26	70-135	35	X

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 Applicable  
N = See Narrative, EQL = Estimated Quantitation Limit



## Sample Duplicate Recovery



**Project Name:** Archimedes SWD

**Work Order #:** 415987

**Lab Batch #:** 855514

**Date Analyzed:** 05/10/2011 17:00

**Date Prepared:** 05/10/2011

**Project ID:**

**Analyst:** WRU

**QC- Sample ID:** 415903-001 D

**Batch #:** 1

**Matrix:** Soil

**Reporting Units:** %

SAMPLE / SAMPLE DUPLICATE RECOVERY					
Percent Moisture	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Analyte					
Percent Moisture	9.64	9.29	4	20	

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

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

BRL - Below Reporting Limit

# XENCO

## 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: Amanda Trujillo

Project Name: Archimedes SWD

Company Name: Yates Petroleum Corporation

Project #: \_\_\_\_\_

Company Address: 105 South 4th Street

Project Loc: \_\_\_\_\_

City/State/Zip: Artesia, NM 88210

PO #: 12693

Telephone No: 575-748-4310

Fax No: 575-748-4585

Report Format: ☒ Standard ☐ TRRP ☐ NPDES

Sampler Signature: *A Trujillo*

e-mail: atrujillo@yatespetroleum.com

LAB # (lab use only)		FIELD CODE		Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total # of Containers	Preservation & # of Containers										Matrix	Analyze For:																		
										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=Sludge	GW=Groundwater S=Soil/Solid	NP=Non-Portable Specify Other	TPH: 418.1	8015M	8015B	TPH: 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 8260	RCI	N.O.R.M.	Chlorides	TLCp	RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT	
01		Archimedes 1'		1'	1.5'	4/28/2011	9:00 AM			x									S		x																		
02		Archimedes 2'		2'	2.5'	4/28/2011	9:00 AM			x									S		x																		
03		Archimedes 3'		3'	3.5'	4/28/2011	9:00 PM			x									S		x																		

ORDER #: 415987 B+T 416075 A

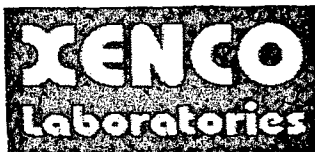
Special Instructions: Please put Chlorides in separate report

Relinquished by: *A Trujillo* Date: 05/09/11 Time: 3:11 PM Received by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

Relinquished by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_ Received by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

Relinquished by: FedEx Date: \_\_\_\_\_ Time: \_\_\_\_\_ Received by: Andrea Elam Date: 5-10-11 Time: 12:33

Laboratory Comments:  
Sample Containers Intact? ☒  
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. ? ☒  
by Courier? ☒ UPS ☒ DHL ☒ FedEx ☒ Lone Star  
Temperature Upon Receipt: 40.2455 2.6 °C

**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: 5-10-11 12:33  
Lab ID #: 415987  
Initials: AZ

**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?	Yes	No	<u>N/A</u>	
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>2.6</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