Bratcher, Mike, EMNRD

From: Amber Cannon [ACannon@yatespetroleum.com]
Sent: Monday, December 05, 2011 11:37 AM
To: Bratcher, Mike, EMNRD
Subject: FW: Cigarillo SWD #1 (2RP-849)
Attachments: CigarilloSWD1_SampleDiagram&SampleTableSummary.pdf; CigarilloSWD1_426978_ver_1_000.pdf; CigarilloSWD1_426981_ver_1_000.pdf; CigarilloSWD1_430158_ver_1_000.pdf; CigarilloSWD1_430159_ver_1_000.pdf; CigarilloSWD1_432252_ver_1_000.pdf

Mike,

Please find attached a site diagram and a sample table summary (along with analytical results from the laboratory) for the Cigarillo SWD #1 release that occurred 7/24/2011 (2RP-849).

Based on the analytical results, Yates Petroleum Corporation would like to propose the following action for this location:

Scrape 6" from the entire spill area including Sections 1 (yellow), 2 (pink), 3 (orange) and 4 (green). This will eliminate the chlorides above 15,000 that came back from analytical report 426981. The other analytical reports show a decrease in the chloride levels in all four sections.

Yates realizes that section 1 (yellow) still shows chlorides to be over 5,000 at 1'. 2' and 3' (analytical report 430159); however we feel there is a significant safety hazard to clean-up contractors as there are high voltage electrical panels and lines that run through this section. This section is also on the facility pad. If allowed to leave these numbers in place, we would address these chlorides when the well is plugged and abandoned in the future.

Once the 6" is excavated from the location and disposed of at an NMOCD approved facility, Yates Petroleum would then submit a Final C-141 to your office requesting backfill and closure.

Thank you for your time,

Amber Cannon

Environmental Regulatory Agent
Yates Petroleum Corporation
Office: (575) 748-4111
Cell: (575) 513-8799
Email: acannon@yatespetroleum.com

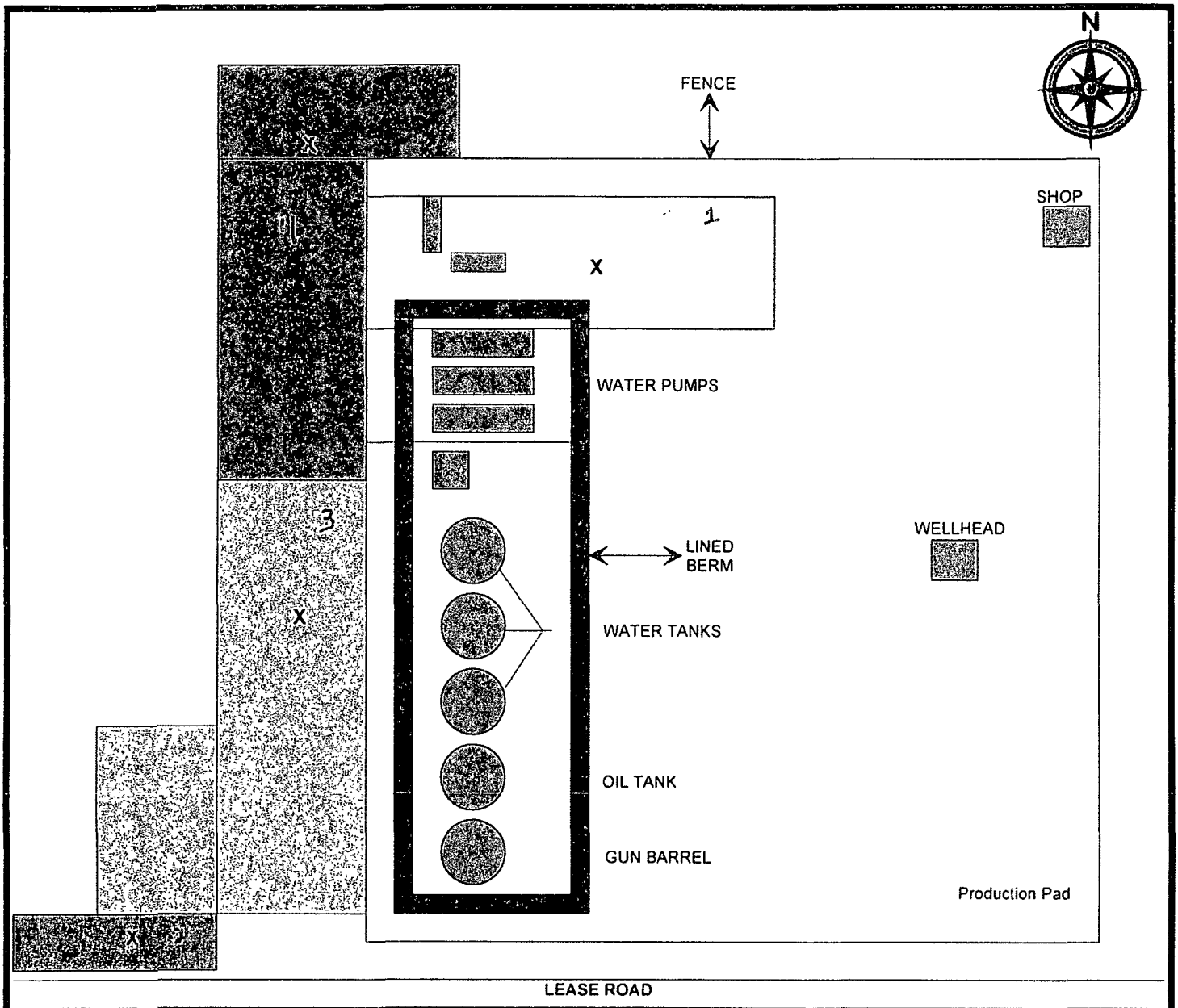
Cigarillo SWD #1

Analytical Report 426981 & 426978	Sample Area	Sample Date	Sample Type	Depth	BTEX	GRO	DRO	TOTAL	Chlorides
Comp-#1	Release Area	8/30/2011	Comp/Shovel	Surface	0.0270	30.7	1500	1530	27,400
Comp-#2	Release Area	8/30/2011	Comp/Shovel	Surface	ND	ND	39 3	39.3	15,700
Comp-#3	Release Area	8/30/2011	Comp/Shovel	Surface	ND	ND	802	802	17,700
Comp-#4	Release Area	8/30/2011	Comp/Shovel	Surface	ND	ND	745	745	15,300
Analytical Report 430158 & 430159	Sample Area	Sample Date	Sample Type	Depth	BTEX	GRO	DRO	TOTAL	Chlorides
Grab 1-1	Release Area	10/24/2011	Grab/Backhoe	1'	ND	ND	ND	ND	7,280
Grab 1-2	Release Area	10/24/2011	Grab/Backhoe	2'	ND	ND	ND	ND	6,510
Grab 1-3	Release Area	10/24/2011	Grab/Backhoe	3'	ND	ND	ND	ND	5,570
Grab 2-1	Release Area	10/24/2011	Grab/Backhoe	1'					2,700
Grab 2-2	Release Area	10/24/2011	Grab/Backhoe	2'					3,770
Grab 2-3	Release Area	10/24/2011	Grab/Backhoe	3'					3,830
Grab 3-1	Release Area	10/24/2011	Grab/Backhoe	1'					1,690
Grab 3-2	Release Area	10/24/2011	Grab/Backhoe	2'					2,640
Grab 3-3	Release Area	10/24/2011	Grab/Backhoe	3'					2,220
Grab 4-1	Release Area	10/24/2011	Grab/Backhoe	1'					1,650
Grab 4-2	Release Area	10/24/2011	Grab/Backhoe	2'					1,100
Grab 4-3	Release Area	10/24/2011	Grab/Backhoe	3'					486
Analytical Report 432252	Sample Area	Sample Date	Sample Type	Depth	BTEX	GRO	DRO	TOTAL	Chlorides
Grab 1-1	Release Area	11/2/2011	Grab/Backhoe	4'					4,730
Grab 1-2	Release Area	11/2/2011	Grab/Backhoe	5'					4,890
Grab 1-3	Release Area	11/2/2011	Grab/Backhoe	6'					4,890
Grab 2-1	Release Area	11/2/2011	Grab/Backhoe	4'					3,890
Grab 2-2	Release Area	11/2/2011	Grab/Backhoe	5'					1,720
Grab 2-3	Release Area	11/2/2011	Grab/Backhoe	6'					1,270
Grab 3-1	Release Area	11/23/2011	Grab/Backhoe	4'					443
Grab 3-2	Release Area	11/23/2011	Grab/Backhoe	5'					497
Grab 3-3	Release Area	11/23/2011	Grab/Backhoe	6'					1,620

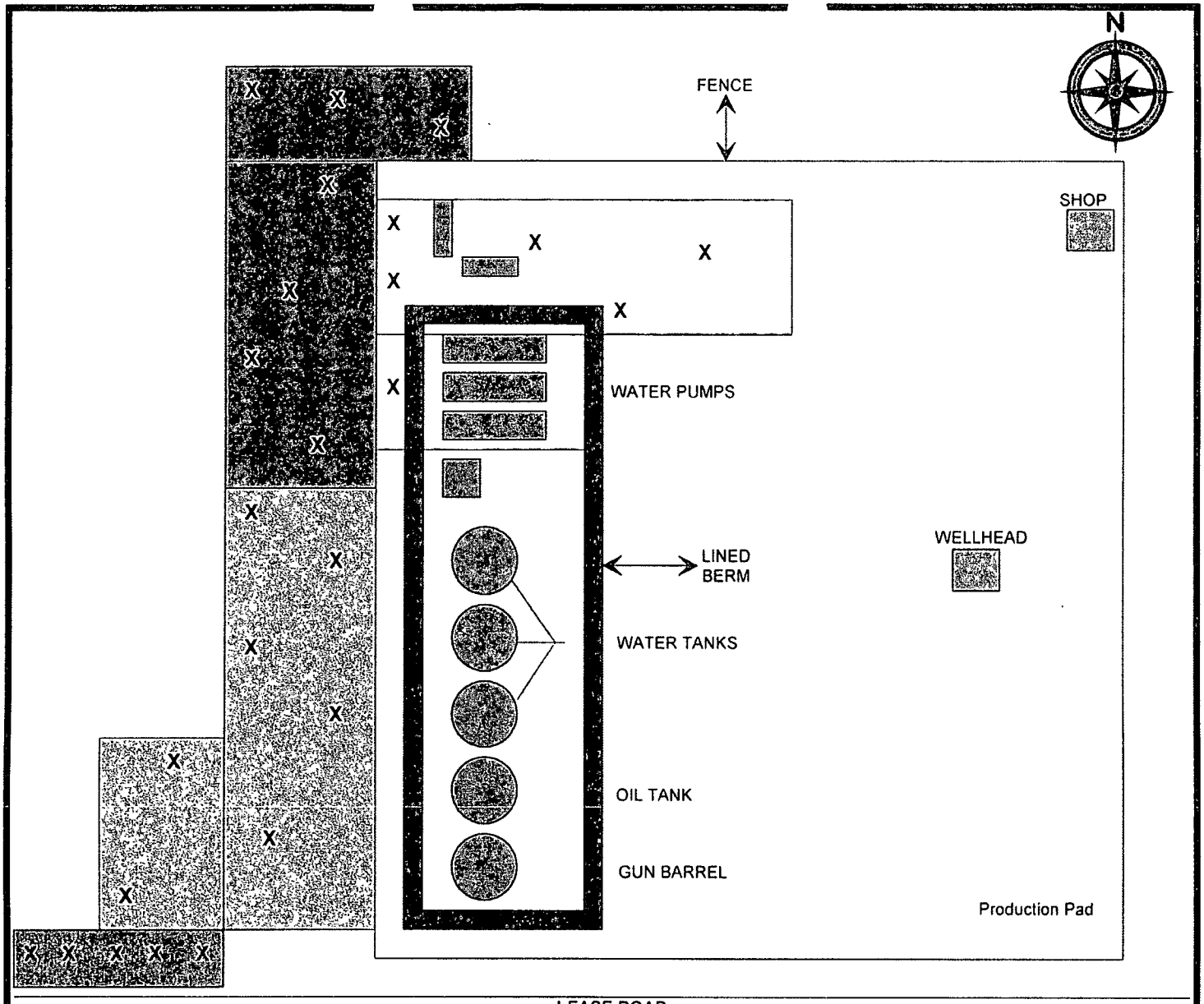
Site Ranking is Ten (10). Depth to Ground Water 50-99' (approx. 67', Section 35-23S-27E, per NMOSE).

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

Released: 380 B/PW; Recovered: 367 B/PW. Release Date: 7/24/2011



YATES PETROLEUM CORPORATION	Cigarillo SWD #1 30-015-21643 Section 36, T23S-R27E Eddy County, NM	SAMPLE DIAGRAM(Not to Scale) Xenco Laboratories# 430158 & 430159 & 432252 Report Date: 11/1/2011 & 12/1/2011 Prepared by Amber Cannon Environmental Regulatory Agent



YATES PETROLEUM CORPORATION

Cigarillo SWD #1

30-015-21643

Section 36, T23S-R27E

Eddy County, NM

SAMPLE DIAGRAM(Not to Scale)

Xenco Laboratories# 426981 & 426978
Report Date: 9/8/2011

Prepared by Amber Cannon
Environmental Regulatory Agent

Analytical Report 430158

for

Yates Petroleum Corporation

Project Manager: Amber Cannon

Cigarillo SWD # 1

30-015-21643

01-NOV-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)

01-NOV-11

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

Reference: XENCO Report No: **430158**
Cigarillo SWD # 1
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 430158. 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. 430158 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 430158

Yates Petroleum Corporation, Artesia, NM

Cigarillo SWD # 1

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
Grab 1-1	S	10-24-11 09:30	1 - 1 ft	430158-001
Grab 1-2	S	10-24-11 09:35	2 - 2 ft	430158-002
Grab 1-3	S	10-24-11 09:40	3 - 3 ft	430158-003

CASE NARRATIVE

Client Name: Yates Petroleum Corporation
Project Name: Cigarillo SWD # 1

Project ID:	*30-015-21643*	*Report Date:*	*01-NOV-11*
Work Order Number:	*430158*	*Date Received:*	*10/25/2011*

Sample receipt non conformances and comments:
None

Sample receipt non conformances and comments per sample:

None

Analytical non nonformances and comments:

Batch: LBA-873287 BTEX by EPA 8021B
SW8021BM

Batch 873287, Benzene, Ethylbenzene, Toluene, m_p-Xylenes, o-Xylene recovered below QC limits in the Matrix Spike and Matrix Spike Duplicate.
Samples affected are: 430158-003, -001, -002.
The Laboratory Control Sample for Toluene, Benzene, Ethylbenzene, m_p-Xylenes , o-Xylene is within laboratory Control Limits

Batch: LBA-873378 TPH By SW8015B Mod
SW8015B_NM

Batch 873378, C6-C10 Gasoline Range Hydrocarbons recovered slightly below QC limits in the Blank Spike and Duplicate.
Samples affected are: 430158-003, -001, -002. This is most likely due to an analyst spiking error. The Matrix Spike sample for this batch was within QC limits, therefore the data are reported as analyzed.

SW8015B_NM

Batch 873378, o-Terphenyl recovered below QC limits Data not confirmed by re-analysis.
Samples affected are: 613303-1-BSD.
1-Chlorooctane, o-Terphenyl recovered above QC limits . Matrix interferences is suspected; data not confirmed by re-analysis
Samples affected are: 430158-003 S,430158-003 SD.

Certificate of Analysis Summary 430158

Yates Petroleum Corporation, Artesia, NM

Project Name: Cigarillo SWD # 1

Project Id: 30-015-21643
Contact: Amber Cannon
Project Location: Eddy County

Date Received in Lab: Tue Oct-25-11 08 40 am
Report Date: 01-NOV-11
Project Manager: Brent Barron II

Analysis Requested											
	Lab Id:	430158-001		430158-002		430158-003					
	Field Id:	Grab 1-1		Grab 1-2		Grab 1-3					
	Depth:	1-1 ft		2-2 ft		3-3 ft					
	Matrix:	SOIL		SOIL		SOIL					
	Sampled:	Oct-24-11 09 30		Oct-24-11 09:35		Oct-24-11 09 40					
BTEX by EPA 8021B	*Extracted:*	Oct-26-11 15 45		Oct-26-11 15 45		Oct-26-11 15 45					
	Analyzed:	Oct-26-11 22.55		Oct-26-11 23.18		Oct-26-11 23.41					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Benzene		ND	0 00111	ND	0 00109	ND	0 00110				
Toluene		ND	0 00223	ND	0 00218	ND	0 00220				
Ethylbenzene		ND	0 00111	ND	0 00109	ND	0 00110				
m_p-Xylenes		ND	0 00223	ND	0.00218	ND	0 00220				
o-Xylene		ND	0 00111	ND	0 00109	ND	0 00110				
Total Xylenes		ND	0 00111	ND	0 00109	ND	0 00110				
Total BTEX		ND	0 00111	ND	0 00109	ND	0 00110				
Percent Moisture	*Extracted:*										
	Analyzed:	Oct-25-11 14:35		Oct-25-11 14 35		Oct-25-11 14:35					
	Units/RL:	%	RL	%	RL	%	RL				
Percent Moisture		10 3	1 00	9 15	1.00	9 62	1.00				
TPH By SW8015B Mod	*Extracted:*	Oct-27-11 15 45		Oct-27-11 15 45		Oct-27-11 15:45					
	Analyzed:	Oct-27-11 20:24		Oct-27-11 20 56		Oct-27-11 21 27					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL				
C6-C10 Gasoline Range Hydrocarbons		ND	16.7	ND	16 4	ND	16 6				
C10-C28 Diesel Range Hydrocarbons		ND	16 7	ND	16 4	ND	16 6				
Total TPH		ND	16.7	ND	16 4	ND	16.6				

Brent Barron II
Odessa Laboratory Manager

Final 1 000

Flagging Criteria

X In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration This condition could also affect the relative percent difference in the MS/MSD.

B A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.

D The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.

E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.

F RPD exceeded lab control limits.

J The target analyte was positively identified below the quantiation limit and above the detection limit.

U Analyte was not detected.

L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations

H The LCS data for this analytical batch was reported above the laboratory control limits Supporting QC Data were reviewed by the Department Supervisor and QA Director Data were determined to be valid for reporting.

K Sample analyzed outside of recommended hold time.

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

* Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

+ Outside XENCO's scope of NELAC Accreditation. ^ NELAC or State program does not offer Accreditation at this time.

Form 2 - Surrogate Recoveries

Project Name: Cigarillo SWD # 1

Work Orders : 430158,

Project ID: 30-015-21643

Lab Batch #: 873287 **Sample:** 430158-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/26/11 22:55

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0272	0 0300	91	80-120	
4-Bromofluorobenzene	0 0259	0 0300	86	80-120	

Lab Batch #: 873287 **Sample:** 430158-002 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/26/11 23:18

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0 0273	0 0300	91	80-120	
4-Bromofluorobenzene	0.0276	0.0300	92	80-120	

Lab Batch #: 873287 **Sample:** 430158-003 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/26/11 23:41

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0 0270	0 0300	90	80-120	
4-Bromofluorobenzene	0.0267	0 0300	89	80-120	

Lab Batch #: 873378 **Sample:** 430158-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/27/11 20:24

TPH By SW8015B Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	103	99 6	103	70-135	
o-Terphenyl	48.3	49.8	97	70-135	

Lab Batch #: 873378 **Sample:** 430158-002 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/27/11 20:56

TPH By SW8015B Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	103	99 5	104	70-135	
o-Terphenyl	49 0	49 8	98	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: Cigarillo SWD # 1

Work Orders : 430158,

Project ID: 30-015-21643

Lab Batch #: 873378 **Sample:** 430158-003 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/27/11 21:27

TPH By SW8015B Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	95 3	99.9	95	70-135	
o-Terphenyl	44 3	50.0	89	70-135	

Lab Batch #: 873287 **Sample:** 613245-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 10/26/11 22:33

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0278	0 0300	93	80-120	
4-Bromofluorobenzene	0 0259	0 0300	86	80-120	

Lab Batch #: 873378 **Sample:** 613303-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 10/27/11 19:53

TPH By SW8015B Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	75 7	99.9	76	70-135	
o-Terphenyl	35 3	50.0	71	70-135	

Lab Batch #: 873287 **Sample:** 613245-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 10/26/11 21:02

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 0280	0 0300	93	80-120	
4-Bromofluorobenzene	0 0279	0 0300	93	80-120	

Lab Batch #: 873378 **Sample:** 613303-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 10/27/11 18:51

TPH By SW8015B Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	86.8	99.8	87	70-135	
o-Terphenyl	36 8	49 9	74	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: Cigarillo SWD # 1

Work Orders : 430158,

Project ID: 30-015-21643

Lab Batch #: 873287 **Sample:** 613245-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 10/26/11 21:24

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	0.0275	0.0300	92	80-120	

Lab Batch #: 873378 **Sample:** 613303-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 10/27/11 19:22

TPH By SW8015B Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	83.2	99.8	83	70-135	
o-Terphenyl	34 2	49.9	69	70-135	*

Lab Batch #: 873287 **Sample:** 430158-001 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/27/11 02:43

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0283	0 0300	94	80-120	
4-Bromofluorobenzene	0 0280	0.0300	93	80-120	

Lab Batch #: 873378 **Sample:** 430158-003 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/27/11 21:58

TPH By SW8015B Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	204	100	204	70-135	*
o-Terphenyl	87.1	50.2	174	70-135	*

Lab Batch #: 873287 **Sample:** 430158-001 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/27/11 03:06

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0 0295	0 0300	98	80-120	
4-Bromofluorobenzene	0 0284	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: Cigarillo SWD # 1

Work Orders : 430158,

Project ID: 30-015-21643

Lab Batch #: 873378 **Sample:** 430158-003 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/27/11 22:31

TPH By SW8015B Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	196	99 8	196	70-135	*
o-Terphenyl	85 4	49 9	171	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: Cigarillo SWD # 1

Work Order #: 430158 **Project ID:** 30-015-21643

Analyst: ASA **Date Prepared:** 10/26/2011 **Date Analyzed:** 10/26/2011

Lab Batch ID: 873287 **Sample:** 613245-1-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	0.105	105	0.100	0.103	103	2	70-130	35	
Toluene	<0.00200	0.100	0.107	107	0.100	0.105	105	2	70-130	35	
Ethylbenzene	<0.00100	0.100	0.111	111	0.100	0.109	109	2	71-129	35	
m_p-Xylenes	<0.00200	0.200	0.222	111	0.200	0.219	110	1	70-135	35	
o-Xylene	<0.00100	0.100	0.110	110	0.100	0.109	109	1	71-133	35	

Analyst: ASA **Date Prepared:** 10/27/2011 **Date Analyzed:** 10/27/2011

Lab Batch ID: 873378 **Sample:** 613303-1-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	998	640	64	998	626	63	2	70-135	35	L
C10-C28 Diesel Range Hydrocarbons	<15.0	998	749	75	998	723	72	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: Cigarillo SWD # 1

Work Order # : 430158 **Project ID:** 30-015-21643

Lab Batch ID: 873287 **QC- Sample ID:** 430158-001 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 10/27/2011 **Date Prepared:** 10/26/2011 **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 00111	0 111	0 0744	67	0 111	0 0768	69	3	70-130	35	X
Toluene	<0 00222	0 111	0.0700	63	0 111	0 0719	65	3	70-130	35	X
Ethylbenzene	<0.00111	0 111	0 0662	60	0 111	0.0694	63	5	71-129	35	X
m_p-Xylenes	<0 00222	0 222	0 126	57	0 222	0 133	60	5	70-135	35	X
o-Xylene	<0.00111	0 111	0.0589	53	0 111	0 0629	57	7	71-133	35	X

Lab Batch ID: 873378 **QC- Sample ID:** 430158-003 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 10/27/2011 **Date Prepared:** 10/27/2011 **Analyst:** ASA

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 7	1110	1060	95	1100	996	91	6	70-135	35	
C10-C28 Diesel Range Hydrocarbons	<16 7	1110	1070	96	1100	1000	91	7	70-135	35	

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

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

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not ApplicableN = See Narrative, EQL = Estimated Quantitation Limit

Sample Duplicate Recovery

Project Name: Cigarillo SWD # 1

Work Order #: 430158

Lab Batch #: 873151 **Project ID:** 30-015-21643

Date Analyzed: 10/25/2011 10.10 **Date Prepared:** 10/25/2011 **Analyst:** BRB

QC- Sample ID: 430118-001 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	1 75	1 81	3	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: Amber Cannon
Project Name: **Cigarillo SWD #1**
Company Name: Yates Petroleum Corporation
Project #: 30-015-21643
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: [x] Standard [ ] TRRP [ ] NPDES
Sampler Signature: Amber Cannon e-mail: acannon@yatespetroleum.com

(lab use only)
ORDER #: 430158/430159

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, GW=Groundwater, NP=Non-Potable, SL=Sludge, S=Soil/Solid, Specify Other	Analyze For: TCLP/TOTAL: TPH 418.1	TPH 8015M	TPH TX 1005	TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	8015B	BTEX 8021B/5030 or BTEX 8260	RCI	N O R M	Chlorides	RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
01	Grab 1-1	1'	1'	10/24/2011	9:30 AM		1	X								S	X										X			X		X
02	Grab 1-2	2'	2'	10/24/2011	9:35 AM		1	X								S	X										X			X		X
03	Grab 1-3	3'	3'	10/24/2011	9:40 AM		1	X								S	X										X			X		X
04	Grab 2-1	1'	1'	10/24/2011	9:45 AM		1	X								S														X		X
05	Grab 2-2	2'	2'	10/24/2011	9:50 AM		1	X								S														X		X
06	Grab 2-3	3'	3'	10/24/2011	9:55 AM		1	X								S														X		X
07	Grab 3-1	1'	1'	10/24/2011	10.00 AM		1	X								S														X		X
08	Grab 3-2	2'	2'	10/24/2011	10.05 AM		1	X								S														X		X
09	Grab 3-3	3'	3'	10/24/2011	10.10 AM		1	X								S														X		X
10	Grab 4-1	1'	1'	10/24/2011	10:15 AM		1	X								S														X		X
11	Grab 4-2	2'	2'	10/24/2011	10:20 AM		1	X								S														X		X
12	Grab 4-3	3'	3'	10/24/2011	10:25 AM		1	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
Amber Cannon	10/24/11	3:30P			
Relinquished by	Date	Time	Received by	Date	Time
Relinquished by	Date	Time	Received by ELOT	Date	Time
			Bill Rubinson	10 25 11	08:40

Laboratory Comments:
Sample Containers Intact? (Y) N
VOCs Free of Headspace? (Y) N N
Labels on container(s) (Y) N N
Custody seals on container(s) (Y) N N
Custody seals on cooler(s) Y (N)
Sample Hand Delivered Y N
by Sampler/Client Rep ? (Y) N
by Courier? UPS DHL (FedEx) Lone Star
4029 AM
Temperature Upon Receipt 3.0 °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: ~~10.24.11 15:3~~ 10.25.11 8.40

Lab ID # : 430153 / 430157

Initials: WR / NE

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	30 °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 426978

for

Yates Petroleum Corporation

Project Manager: Amber Cannon

Cigarillo SWD #1

30-015-21643

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

Reference: XENCO Report No: **426978**
Cigarillo SWD #1
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 426978. 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. 426978 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 426978

Yates Petroleum Corporation, Artesia, NM

Cigarillo SWD #1

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
Comp-#1	S	08-30-11 09:33	2 - 2 In	426978-001
Comp-#2	S	08-30-11 09:45	2 - 2 In	426978-002
Comp-#3	S	08-30-11 09:55	2 - 2 In	426978-003
Comp-#4	S	08-30-11 10:06	2 - 2 In	426978-004

CASE NARRATIVE

Client Name: Yates Petroleum Corporation
Project Name: Cigarillo SWD #1

Project ID:	*30-015-21643*	*Report Date:*	*08-SEP-11*
Work Order Number:	*426978*	*Date Received:*	*09/02/2011*

Sample receipt non conformances and comments:
None

Sample receipt non conformances and comments per sample:

None

Analytical non nonformances and comments:

Batch: LBA-869210 BTEX by EPA 8021B
SW8021BM

Batch 869210, Ethylbenzene, Toluene, m_p-Xylenes, o-Xylene recovered below QC limits in the Matrix Spike and Matrix Spike Duplicate.
Samples affected are: 426978-004, -002, -001, -003.
The Laboratory Control Sample for Toluene, Ethylbenzene, m_p-Xylenes , o-Xylene is within laboratory Control Limits

Batch: LBA-869330 TPH By SW8015B Mod
SW8015B_NM

Batch 869330, C6-C10 Gasoline Range Hydrocarbons recovered below QC limits in the Matrix Spike Duplicate.
Samples affected are: 426978-004, -002, -001, -003.
The Laboratory Control Sample for C6-C10 Gasoline Range Hydrocarbons is within laboratory Control Limits

Certificate of Analysis Summary 426978

Yates Petroleum Corporation, Artesia, NM

Project Name: Cigarillo SWD #1

Project Id: 30-015-21643
Contact: Amber Cannon
Project Location: Eddy County

Date Received in Lab: Fri Sep-02-11 08:00 am
Report Date: 08-SEP-11
Project Manager: Brent Barron II

Analysis Requested													
	Lab Id:	426978-001		426978-002		426978-003		426978-004					
	Field Id:	Comp-#1		Comp-#2		Comp-#3		Comp-#4					
	Depth:	2-2 In		2-2 In		2-2 In		2-2 In					
	Matrix:	SOIL		SOIL		SOIL		SOIL					
	Sampled:	Aug-30-11 09 33		Aug-30-11 09 45		Aug-30-11 09:55		Aug-30-11 10 06					
BTEX by EPA 8021B	*Extracted:*	Sep-02-11 12 00		Sep-02-11 12:00		Sep-02-11 12 00		Sep-02-11 12 00					
	Analyzed:	Sep-03-11 14:36		Sep-03-11 08 52		Sep-03-11 09:15		Sep-03-11 09:38					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Benzene		ND	0 00101	ND	0 000992	ND	0 00101	ND	0 00100				
Toluene		ND	0 00201	ND	0 00198	ND	0 00201	ND	0 00200				
Ethylbenzene		0 00286	0 00101	ND	0 000992	ND	0 00101	ND	0 00100				
m_p-Xylenes		0 0168	0 00201	ND	0 00198	ND	0 00201	ND	0 00200				
o-Xylene		0 00732	0 00101	ND	0 000992	ND	0 00101	ND	0 00100				
Total Xylenes		0 0241	0 00101	ND	0 000992	ND	0 00101	ND	0 00100				
Total BTEX		0 0270	0.00101	ND	0 000992	ND	0 00101	ND	0.00100				
Percent Moisture	*Extracted:*												
	Analyzed:	Sep-02-11 10.00		Sep-02-11 10:00		Sep-02-11 10 00		Sep-02-11 10 00					
	Units/RL:	%	RL	%	RL	%	RL	%	RL				
Percent Moisture		1 45	1 00	ND	1 00	ND	1.00	ND	1 00				
TPH By SW8015B Mod	*Extracted:*	Sep-02-11 14:30		Sep-02-11 14.30		Sep-02-11 14 30		Sep-02-11 14 30					
	Analyzed:	Sep-03-11 16 11		Sep-03-11 16 42		Sep-03-11 17.13		Sep-03-11 17.44					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL				
C6-C10 Gasoline Range Hydrocarbons		30 7	15 1	ND	15.0	ND	15 1	ND	15 1				
C10-C28 Diesel Range Hydrocarbons		1500	15 1	39 3	15.0	802	15 1	745	15 1				
Total TPH		1530	15.1	39.3	15 0	802	15.1	745	15.1				

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: Cigarillo SWD #1

Work Orders : 426978, **Project ID:** 30-015-21643

Lab Batch #: 869210 **Sample:** 426978-002 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 09/03/11 08:52

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0 0263	0.0300	88	80-120	
4-Bromofluorobenzene	0 0259	0.0300	86	80-120	

Lab Batch #: 869210 **Sample:** 426978-003 / SMP **Batch:** 1 **Matrix:** Soil

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

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0 0291	0 0300	97	80-120	
4-Bromofluorobenzene	0.0261	0 0300	87	80-120	

Lab Batch #: 869210 **Sample:** 426978-004 / SMP **Batch:** 1 **Matrix:** Soil

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

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0 0275	0 0300	92	80-120	
4-Bromofluorobenzene	0 0263	0.0300	88	80-120	

Lab Batch #: 869210 **Sample:** 426978-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 09/03/11 14:36

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 0269	0 0300	90	80-120	
4-Bromofluorobenzene	0.0265	0.0300	88	80-120	

Lab Batch #: 869330 **Sample:** 426978-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 09/03/11 16:11

TPH By SW8015B Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	92 4	99.5	93	70-135	
o-Terphenyl	45.1	49 8	91	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: Cigarillo SWD #1

Work Orders : 426978,

Project ID: 30-015-21643

Lab Batch #: 869330 **Sample:** 426978-002 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 09/03/11 16:42

TPH By SW8015B Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	88 2	99.9	88	70-135	
o-Terphenyl	41 7	50.0	83	70-135	

Lab Batch #: 869330 **Sample:** 426978-003 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 09/03/11 17:13

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 7	84	70-135	
o-Terphenyl	40 5	49 9	81	70-135	

Lab Batch #: 869330 **Sample:** 426978-004 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 09/03/11 17:44

TPH By SW8015B Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	75.7	99 7	76	70-135	
o-Terphenyl	36.0	49.9	72	70-135	

Lab Batch #: 869330 **Sample:** 611000-1-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	87 0	99 9	87	70-135	
o-Terphenyl	42 9	50.0	86	70-135	

Lab Batch #: 869210 **Sample:** 610920-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 09/03/11 08:30

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 0282	0.0300	94	80-120	
4-Bromofluorobenzene	0.0256	0 0300	85	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: Cigarillo SWD #1

Work Orders : 426978,

Project ID: 30-015-21643

Lab Batch #: 869330 **Sample:** 611000-1-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	104	99.9	104	70-135	
o-Terphenyl	43.3	50.0	87	70-135	

Lab Batch #: 869210 **Sample:** 610920-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 09/03/11 06:59

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0 0297	0 0300	99	80-120	
4-Bromofluorobenzene	0.0279	0 0300	93	80-120	

Lab Batch #: 869330 **Sample:** 611000-1-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	99 3	99 7	100	70-135	
o-Terphenyl	41 9	49 9	84	70-135	

Lab Batch #: 869210 **Sample:** 610920-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 09/03/11 07:21

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0 0285	0.0300	95	80-120	
4-Bromofluorobenzene	0 0279	0.0300	93	80-120	

Lab Batch #: 869210 **Sample:** 426978-002 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 09/03/11 12:43

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0284	0 0300	95	80-120	
4-Bromofluorobenzene	0.0276	0 0300	92	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: Cigarillo SWD #1

Work Orders : 426978,

Project ID: 30-015-21643

Lab Batch #: 869330 **Sample:** 426985-002 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 09/03/11 19:15

TPH By SW8015B Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	103	99 7	103	70-135	
o-Terphenyl	41 7	49 9	84	70-135	

Lab Batch #: 869210 **Sample:** 426978-002 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 09/03/11 13:05

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 0264	0 0300	88	80-120	
4-Bromofluorobenzene	0 0257	0.0300	86	80-120	

Lab Batch #: 869330 **Sample:** 426985-002 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 09/03/11 19:46

TPH By SW8015B Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	92.5	99 6	93	70-135	
o-Terphenyl	37.3	49 8	75	70-135	

* Surrogate outside of Laboratory QC limits

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

BS / BSD Recoveries

Project Name: Cigarillo SWD #1

Work Order #: 426978 **Project ID:** 30-015-21643

Analyst: ASA **Date Prepared:** 09/02/2011 **Date Analyzed:** 09/03/2011

Lab Batch ID: 869210 **Sample:** 610920-1-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	0 111	111	0.100	0 108	108	3	70-130	35	
Toluene	<0 00200	0 100	0 0974	97	0.100	0 0965	97	1	70-130	35	
Ethylbenzene	<0 00100	0 100	0 105	105	0 100	0 104	104	1	71-129	35	
m_p-Xylenes	<0 00200	0 200	0 209	105	0 200	0 209	105	0	70-135	35	
o-Xylene	<0.00100	0.100	0 0980	98	0.100	0 0975	98	1	71-133	35	

Analyst: BBH **Date Prepared:** 09/02/2011 **Date Analyzed:** 09/03/2011

Lab Batch ID: 869330 **Sample:** 611000-1-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	999	722	72	997	698	70	3	70-135	35	
C10-C28 Diesel Range Hydrocarbons	<15.0	999	842	84	997	797	80	5	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: Cigarillo SWD #1

Work Order # : 426978 **Project ID:** 30-015-21643

Lab Batch ID: 869210 **QC- Sample ID:** 426978-002 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 09/03/2011 **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 000998	0.0998	0.0798	80	0 100	0 0718	72	11	70-130	35	
Toluene	<0 00200	0 0998	0 0665	67	0 100	0.0580	58	14	70-130	35	X
Ethylbenzene	<0 000998	0 0998	0.0641	64	0 100	0 0520	52	21	71-129	35	X
m_p-Xylenes	<0.00200	0 200	0.123	62	0 200	0.0983	49	22	70-135	35	X
o-Xylene	<0.000998	0.0998	0.0543	54	0 100	0 0438	44	21	71-133	35	X

Lab Batch ID: 869330 **QC- Sample ID:** 426985-002 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 09/03/2011 **Date Prepared:** 09/02/2011 **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	<15.2	1010	721	71	1010	657	65	9	70-135	35	X
C10-C28 Diesel Range Hydrocarbons	23.9	1010	848	82	1010	766	73	10	70-135	35	

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

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

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

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not ApplicableN = See Narrative, EQL = Estimated Quantitation Limit

Sample Duplicate Recovery

Project Name: Cigarillo SWD #1

Work Order #: 426978

Lab Batch #: 869091 **Project ID:** 30-015-21643

Date Analyzed: 09/02/2011 10:00 **Date Prepared:** 09/02/2011 **Analyst:** WRU

QC- Sample ID: 426978-001 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	1 45	1 34	8	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: Amber Cannon
Project Name: Cigarillo SWD #1
Company Name: Yates Petroleum Corporation
Project #: 30-015-21643
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: [X] Standard [ ] TRRP [ ] NPDES
Sampler Signature: Amber Cannon e-mail: acannon@yatespetroleum.com

(lab use only)
ORDER #: 426978/426981 (2)

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total # of Containers	Preservation & # of Containers: Ice	HNO_3	HCl	H_2SO_4	NaOH	$Na_2S_2O_3$	None	Other (Specify)	Matrix: DW=Drinking Water SL=Sludge	GW = Groundwater S=Soil/Solid	NP=Non-Potable Specify Other	Analyze For: TCLP/TOTAL: TPH 418.1	8015M	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
001	Comp-#1	2"	2"	8/30/2011	9 33 AM		1	X								S			X										X			X			X
002	Comp-#2	2"	2"	8/30/2011	9 45 AM		1	X								S			X										X			X			X
003	Comp-#3	2"	2"	8/30/2011	9:55 AM		1	X								S			X										X			X			X
004	Comp-#4	2"	2"	8/30/2011	10:06 AM		1	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.

Relinquished by	Date	Time	Received by	Date	Time
Amber Cannon	09/01/11	3:30PM			
Relinquished by	Date	Time	Received by	Date	Time
Relinquished by	Date	Time	Received by ELOT	Date	Time
			Lisa Hunderk	9-2-11	8:00

Laboratory Comments:
Sample Containers Intact? Y N
VOCs Free of Headspace? Y NA
Labels on container(s) Y N
Custody seals on container(s) Y N
Custody seals on cooler(s) Y N
Sample Hand Delivered by Sampler/Client Rep ? Y N
by Couner? UPS DHL FedEx Lone Star
Temperature Upon Receipt: 4.1 °C

Final 1.000

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

Date/Time: 9.2.11 8:00

Lab ID #: 426978 / 426978-C1

Initials: RM

Sample Receipt Checklist

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

18. Cooler 1 No.		Cooler 2 No.		Cooler 3 No.		Cooler 4 No.		Cooler 5 No.	
lbs	4.1 °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 430159

for

Yates Petroleum Corporation

Project Manager: Amber Cannon

Cigarillo SWD # 1

30-015-21643

01-NOV-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)

01-NOV-11

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

Reference: XENCO Report No: **430159**
Cigarillo SWD # 1
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 430159. 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. 430159 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 430159

Yates Petroleum Corporation, Artesia, NM

Cigarillo SWD # 1

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
Grab 1-1	S	10-24-11 09:30	1 - 1 ft	430159-001
Grab 1-2	S	10-24-11 09:35	2 - 2 ft	430159-002
Grab 1-3	S	10-24-11 09:40	3 - 3 ft	430159-003
Grab 2-1	S	10-24-11 09:45	1 - 1 ft	430159-004
Grab 2-2	S	10-24-11 09:50	2 - 2 ft	430159-005
Grab 2-3	S	10-24-11 09:55	3 - 3 ft	430159-006
Grab 3-1	S	10-24-11 10:00	1 - 1 ft	430159-007
Grab 3-2	S	10-24-11 10:05	2 - 2 ft	430159-008
Grab 3-3	S	10-24-11 10:10	3 - 3 ft	430159-009
Grab 4-1	S	10-24-11 10:15	1 - 1 ft	430159-010
Grab 4-2	S	10-24-11 10:20	2 - 2 ft	430159-011
Grab 4-3	S	10-24-11 10:25	3 - 3 ft	430159-012

CASE NARRATIVE

Client Name: Yates Petroleum Corporation
Project Name: Cigarillo SWD # 1

Project ID:	*30-015-21643*	*Report Date:*	*01-NOV-11*
Work Order Number:	*430159*	*Date Received:*	*10/25/2011*

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Certificate of Analysis Summary 430159

Yates Petroleum Corporation, Artesia, NM

Project Name: Cigarillo SWD # 1

Project Id: 30-015-21643
Contact: Amber Cannon
Project Location: Eddy County

Date Received in Lab: Tue Oct-25-11 08:40 am
Report Date: 01-NOV-11
Project Manager: Brent Barron II

Analysis Requested													
	Lab Id:	430159-001		430159-002		430159-003		430159-004		430159-005		430159-006	
	Field Id:	Grab 1-1		Grab 1-2		Grab 1-3		Grab 2-1		Grab 2-2		Grab 2-3	
	Depth:	1-1 ft		2-2 ft		3-3 ft		1-1 ft		2-2 ft		3-3 ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Oct-24-11 09 30		Oct-24-11 09.35		Oct-24-11 09 40		Oct-24-11 09 45		Oct-24-11 09 50		Oct-24-11 09 55	
Anions by E300	*Extracted:*												
	Analyzed:	Oct-26-11 11:50		Oct-26-11 11:50		Oct-26-11 11:50		Oct-26-11 11 50		Oct-26-11 11 50		Oct-26-11 11.50	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		7280	187	6510	185	5570	92 9	2700	46 5	3770	46.9	3830	46.8
Percent Moisture	*Extracted:*												
	Analyzed:	Oct-25-11 14:35		Oct-25-11 14 35		Oct-25-11 14.35		Oct-25-11 15 50		Oct-25-11 15 50		Oct-25-11 15:50	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		10 3	1.00	9 15	1 00	9 60	1 00	9 74	1 00	10 5	1.00	10.3	1 00

Brent Barron II
Odessa Laboratory Manager

Final 1 000

Certificate of Analysis Summary 430159

Yates Petroleum Corporation, Artesia, NM

Project Name: Cigarillo SWD # 1

Project Id: 30-015-21643
Contact: Amber Cannon
Project Location: Eddy County

Date Received in Lab: Tue Oct-25-11 08 40 am
Report Date: 01-NOV-11
Project Manager: Brent Barron II

Analysis Requested													
	Lab Id:	430159-007		430159-008		430159-009		430159-010		430159-011		430159-012	
	Field Id:	Grab 3-1		Grab 3-2		Grab 3-3		Grab 4-1		Grab 4-2		Grab 4-3	
	Depth:	1-1 ft		2-2 ft		3-3 ft		1-1 ft		2-2 ft		3-3 ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Oct-24-11 10 00		Oct-24-11 10 05		Oct-24-11 10.10		Oct-24-11 10.15		Oct-24-11 10 20		Oct-24-11 10 25	
Anions by E300	*Extracted:*												
	Analyzed:	Oct-26-11 11:50		Oct-26-11 11 50		Oct-26-11 11:50		Oct-26-11 21:25		Oct-26-11 11:50		Oct-26-11 11 50	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		1690	45 7	2640	45 8	2220	46 1	1650	22 6	1100	18.2	486	9 11
Percent Moisture	*Extracted:*												
	Analyzed:	Oct-25-11 15:50		Oct-25-11 15 50		Oct-25-11 15 50		Oct-25-11 15 50		Oct-25-11 15 50		Oct-25-11 15:50	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		8.04	1 00	8 32	1 00	8 84	1 00	7 03	1 00	7.51	1 00	7 78	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.

* Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

+ Outside XENCO's scope of NELAC Accreditation. ^ NELAC or State program does not offer Accreditation at this time.

BS / BSD Recoveries

Project Name: Cigarillo SWD # 1

Work Order #: 430159 **Project ID:** 30-015-21643

Analyst: BRB **Date Prepared:** 10/26/2011 **Date Analyzed:** 10/26/2011

Lab Batch ID: 873154 **Sample:** 873154-1-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 1	111	20 0	22.2	111	0	75-125	20	

Analyst: BRB **Date Prepared:** 10/26/2011 **Date Analyzed:** 10/26/2011

Lab Batch ID: 873272 **Sample:** 873272-1-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 0	110	20 0	21 3	107	3	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: Cigarillo SWD # 1

Work Order #: 430159

Lab Batch #: 873154 **Project ID:** 30-015-21643

Date Analyzed: 10/26/2011 **Date Prepared:** 10/26/2011 **Analyst:** BRB

QC- Sample ID: 430085-001 S **Batch #:** 1 **Matrix:** Soil

Reporting Units: mg/kg

MATRIX / MATRIX SPIKE RECOVERY STUDY						
Inorganic Anions by EPA 300 **Analytes**	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	1050	563	1680	112	75-125	

Lab Batch #: 873154

Date Analyzed: 10/26/2011 **Date Prepared:** 10/26/2011 **Analyst:** BRB

QC- Sample ID: 430159-004 S **Batch #:** 1 **Matrix:** Soil

Reporting Units: mg/kg

MATRIX / MATRIX SPIKE RECOVERY STUDY						
Inorganic Anions by EPA 300 **Analytes**	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	2700	1110	3980	115	75-125	

Lab Batch #: 873272

Date Analyzed: 10/26/2011 **Date Prepared:** 10/26/2011 **Analyst:** BRB

QC- Sample ID: 430159-010 S **Batch #:** 1 **Matrix:** Soil

Reporting Units: mg/kg

MATRIX / MATRIX SPIKE RECOVERY STUDY						
Inorganic Anions by EPA 300 **Analytes**	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	1650	538	2180	99	75-125	

Lab Batch #: 873272

Date Analyzed: 10/26/2011 **Date Prepared:** 10/26/2011 **Analyst:** BRB

QC- Sample ID: 430221-001 S **Batch #:** 1 **Matrix:** Soil

Reporting Units: mg/kg

MATRIX / MATRIX SPIKE RECOVERY STUDY						
Inorganic Anions by EPA 300 **Analytes**	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	2050	521	2470	81	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: Cigarillo SWD # 1

Work Order #: 430159

Lab Batch #: 873154 **Project ID:** 30-015-21643

Date Analyzed: 10/26/2011 11:50 **Date Prepared:** 10/26/2011 **Analyst:** BRB

QC- Sample ID: 430085-001 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	1050	1050	0	20	

Lab Batch #: 873272

Date Analyzed: 10/26/2011 21:25 **Date Prepared:** 10/26/2011 **Analyst:** BRB

QC- Sample ID: 430159-010 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	1650	1650	0	20	

Lab Batch #: 873151

Date Analyzed: 10/25/2011 10:10 **Date Prepared:** 10/25/2011 **Analyst:** BRB

QC- Sample ID: 430118-001 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	1.75	1 81	3	20	

Lab Batch #: 873159

Date Analyzed: 10/25/2011 15:50 **Date Prepared:** 10/25/2011 **Analyst:** BRB

QC- Sample ID: 430159-004 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	9 74	9 82	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

Final 1.000

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: Amber Cannon
Project Name: **Cigarillo SWD #1**
Company Name: Yates Petroleum Corporation
Project #: 30-015-21643
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: [x] Standard [ ] TRRP [ ] NPDES
Sampler Signature: Amber Cannon e-mail acannon@yatespetroleum.com

(lab use only) ORDER #: 430158/430159

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 418.1	TCLP 8015M	TOTAL TPH TX 1005	TOTAL 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	Grab 1-1	1'	1'	10/24/2011	9:30 AM		1	X								S	X										X			X			X
02	Grab 1-2	2'	2'	10/24/2011	9:35 AM		1	X								S	X										X			X			X
03	Grab 1-3	3'	3'	10/24/2011	9:40 AM		1	X								S	X										X			X			X
04	Grab 2-1	1'	1'	10/24/2011	9:45 AM		1	X								S														X			X
05	Grab 2-2	2'	2'	10/24/2011	9:50 AM		1	X								S														X			X
06	Grab 2-3	3'	3'	10/24/2011	9:55 AM		1	X								S														X			X
07	Grab 3-1	1'	1'	10/24/2011	10.00 AM		1	X								S														X			X
08	Grab 3-2	2'	2'	10/24/2011	10.05 AM		1	X								S														X			X
09	Grab 3-3	3'	3'	10/24/2011	10:10 AM		1	X								S														X			X
10	Grab 4-1	1'	1'	10/24/2011	10:15 AM		1	X								S														X			X
11	Grab 4-2	2'	2'	10/24/2011	10:20 AM		1	X								S														X			X
12	Grab 4-3	3'	3'	10/24/2011	10:25 AM		1	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
Amber Cannon	10/24/11	3:30P			
Relinquished by	Date	Time	Received by	Date	Time
Relinquished by	Date	Time	Received by ELOT	Date	Time
			Bill Rahmann	10 25 11	08:40

Laboratory Comments:
Sample Containers Intact? Y N
VOCs Free of Headspace? Y N
Labels on container(s) Y N
Custody seals on container(s) Y N
Custody seals on cooler(s) Y N
Sample Hand Delivered Y N
by Sampler/Client Rep ?
by Courier? UPS DHL FedEx Lone Star
4.0°C
Temperature Upon Receipt. 3.0 °C

Final 1.000

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: ~~10-24-11 15:3~~ AE 10.25.11 8.40

Lab ID # : 430158 / 430159

Initials: WR / 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	30 °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 426981

for

Yates Petroleum Corporation

Project Manager: Amber Cannon

Cigarillo SWD #1

30-015-21643

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

Reference: XENCO Report No: **426981**
Cigarillo SWD #1
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 426981. 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. 426981 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 426981

Yates Petroleum Corporation, Artesia, NM

Cigarillo SWD #1

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
Comp-#1	S	08-30-11 09:33	2 - 2 In	426981-001
Comp-#2	S	08-30-11 09.45	2 - 2 In	426981-002
Comp-#3	S	08-30-11 09:55	2 - 2 In	426981-003
Comp-#4	S	08-30-11 10:06	2 - 2 In	426981-004

CASE NARRATIVE

Client Name: Yates Petroleum Corporation
Project Name: Cigarillo SWD #1

Project ID:	*30-015-21643*	*Report Date:*	*08-SEP-11*
Work Order Number:	*426981*	*Date Received:*	*09/02/2011*

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Certificate of Analysis Summary 426981

Yates Petroleum Corporation, Artesia, NM

Project Name: Cigarillo SWD #1

Project Id: 30-015-21643
Contact: Amber Cannon
Project Location: Eddy County

Date Received in Lab: Fri Sep-02-11 08:00 am
Report Date: 08-SEP-11
Project Manager: Brent Barron II

Analysis Requested													
	Lab Id:	426981-001		426981-002		426981-003		426981-004					
	Field Id:	Comp-#1		Comp-#2		Comp-#3		Comp-#4					
	Depth:	2-2 In		2-2 In		2-2 In		2-2 In					
	Matrix:	SOIL		SOIL		SOIL		SOIL					
	Sampled:	Aug-30-11 09 33		Aug-30-11 09 45		Aug-30-11 09 55		Aug-30-11 10.06					
Anions by E300	*Extracted:*												
	Analyzed:	Sep-07-11 19.40		Sep-07-11 19 40		Sep-07-11 19:40		Sep-07-11 19.40					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Chloride		27400	852	15700	420	17700	423	15300	423				
Percent Moisture	*Extracted:*												
	Analyzed:	Sep-02-11 10.00		Sep-02-11 10:00		Sep-02-11 10·00		Sep-02-11 10·00					
	Units/RL:	%	RL	%	RL	%	RL	%	RL				
Percent Moisture		1 45	1 00	ND	1.00	ND	1 00	ND	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: Cigarillo SWD #1

Work Order #: 426981 **Project ID:** 30-015-21643

Analyst: BRB **Date Prepared:** 09/07/2011 **Date Analyzed:** 09/07/2011

Lab Batch ID: 869363 **Sample:** 869363-1-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	21.1	106	20 0	21 0	105	0	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: Cigarillo SWD #1

Work Order #: 426981
Lab Batch #: 869363
Project ID: 30-015-21643
Date Analyzed: 09/07/2011
Date Prepared: 09/07/2011
Analyst: BRB
QC- Sample ID: 427106-001 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	74 4	100	184	110	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: Cigarillo SWD #1

Work Order #: 426981

Lab Batch #: 869363 **Project ID:** 30-015-21643

Date Analyzed: 09/07/2011 19:40 **Date Prepared:** 09/07/2011 **Analyst:** BRB

QC- Sample ID: 426979-006 D **Batch #:** 1 **Matrix:** Soil

Reporting Units: mg/kg

Anions by E300 Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY				
	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Chloride	13200	13000	2	20	

Lab Batch #: 869363

Date Analyzed: 09/07/2011 19.40 **Date Prepared:** 09/07/2011 **Analyst:** BRB

QC- Sample ID: 427106-001 D **Batch #:** 1 **Matrix:** Soil

Reporting Units: mg/kg

Anions by E300 Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY				
	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Chloride	74 4	76 3	3	20	

Lab Batch #: 869091

Date Analyzed: 09/02/2011 10:00 **Date Prepared:** 09/02/2011 **Analyst:** WRU

QC- Sample ID: 426978-001 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	1.45	1 34	8	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: Amber Cannon
Project Name: Cigarillo SWD #1
Company Name: Yates Petroleum Corporation
Project #: 30-015-21643
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: [x] Standard [ ] TRRP [ ] NPDES
Sampler Signature: Amber Cannon e-mail: acannon@yatespetroleum.com

(lab use only)
ORDER #: 426978/426981 CI

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	TCLP 8015M	TCLP TPH TX 1005	TCLP TX 1006	TOTAL Cations (Ca, Mg, Na, K)	TOTAL Anions (Cl, SO4, Alkalinity)	TOTAL SAR / ESP / CEC	TOTAL Metals As Ag Ba Cd Cr Pb Hg Se	TOTAL Volatiles	TOTAL Semivolatiles	BTEX 8021B/5030 or BTEX 8260	RCI	N O R M	Chlorides	RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
001	Comp-#1	2"	2"	8/30/2011	9:33 AM		1	X								S	X										X			X		X
002	Comp-#2	2"	2"	8/30/2011	9 45 AM		1	X								S	X										X			X		X
003	Comp-#3	2"	2"	8/30/2011	9:55 AM		1	X								S	X										X			X		X
004	Comp-#4	2"	2"	8/30/2011	10:06 AM		1	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.

Relinquished by	Date	Time	Received by	Date	Time
Amber Cannon	09/01/11	3:30 PM			
Relinquished by	Date	Time	Received by	Date	Time
Relinquished by	Date	Time	Received by ELOT	Date	Time
			Lisa Murdock	9-2-11	8:00

Laboratory Comments:
Sample Containers Intact? Y N
VOCs Free of Headspace? Y N NA
Labels on container(s) Y N
Custody seals on container(s) Y N
Custody seals on cooler(s) Y N
Sample Hand Delivered by Sampler/Client Rep ? Y N
by Couner? UPS DHL FedEx Lone Star
Temperature Upon Receipt. 4.1 °C

Final 1.000

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

Date/Time: 9.2.11 8 OC

Lab ID # : 426978 / 426981-C1

Initials: KM

Sample Receipt Checklist

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

18. Cooler 1 No.		Cooler 2 No.		Cooler 3 No.		Cooler 4 No.		Cooler 5 No.	
lbs	4.1 °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 432252

for

Yates Petroleum Corporation

Project Manager: Amber Cannon

Cigarillo SWD # 1

30-015-21643

01-DEC-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)

01-DEC-11

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

Reference: XENCO Report No: **432252**
Cigarillo SWD # 1
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 432252. 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. 432252 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 432252

Yates Petroleum Corporation, Artesia, NM

Cigarillo SWD # 1

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
Grab 1-4	S	11-02-11 09:00	4 - 4 ft	432252-001
Grab 1-5	S	11-02-11 09:05	5 - 5 ft	432252-002
Grab 1-6	S	11-02-11 09:10	6 - 6 ft	432252-003
Grab 2-4	S	11-02-11 09:15	4 - 4 ft	432252-004
Grab 2-5	S	11-02-11 09:20	5 - 5 ft	432252-005
Grab 2-6	S	11-02-11 09:25	6 - 6 ft	432252-006
Grab 3-4	S	11-23-11 09:20	4 - 4 ft	432252-007
Grab 3-5	S	11-23-11 09:25	5 - 5 ft	432252-008
Grab 3-6	S	11-23-11 09:30	6 - 6 ft	432252-009

CASE NARRATIVE

Client Name: Yates Petroleum Corporation
Project Name: Cigarillo SWD # 1

Project ID:	*30-015-21643*	*Report Date:*	*01-DEC-11*
Work Order Number:	*432252*	*Date Received:*	*11/29/2011*

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Certificate of Analysis Summary 432252

Yates Petroleum Corporation, Artesia, NM

Project Name: Cigarillo SWD # 1

Project Id: 30-015-21643
Contact: Amber Cannon
Project Location: Eddy County

Date Received in Lab: Tue Nov-29-11 12 15 pm
Report Date: 01-DEC-11
Project Manager: Brent Barron II

Analysis Requested													
	Lab Id:	432252-001		432252-002		432252-003		432252-004		432252-005		432252-006	
	Field Id:	Grab 1-4		Grab 1-5		Grab 1-6		Grab 2-4		Grab 2-5		Grab 2-6	
	Depth:	4-4 ft		5-5 ft		6-6 ft		4-4 ft		5-5 ft		6-6 ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Nov-02-11 09:00		Nov-02-11 09 05		Nov-02-11 09 10		Nov-02-11 09 15		Nov-02-11 09 20		Nov-02-11 09:25	
Anions by E300	*Extracted:*												
	Analyzed:	Nov-29-11 17 45		Nov-29-11 17 45		Nov-29-11 17.45		Nov-29-11 17.45		Nov-29-11 17.45		Nov-29-11 17 45	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		4730	92 9	4890	92 7	4890	92 6	3890	47.2	1720	23.4	1270	19 2
Percent Moisture	*Extracted:*												
	Analyzed:	Nov-29-11 14:55		Nov-29-11 14:55		Nov-29-11 14:56		Nov-29-11 14:56		Nov-29-11 14 56		Nov-29-11 14 56	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		9.60	1 00	9.40	1.00	9 32	1.00	11.0	1 00	10 3	1.00	12 3	1 00

Houston - Dallas - San Antonio - Atlanta - Tampa - Boca Raton - Latin America - Odessa - Corpus Christi

Brent Barron II
Odessa Laboratory Manager

Final 1.000

Certificate of Analysis Summary 432252

Yates Petroleum Corporation, Artesia, NM

Project Name: Cigarillo SWD # 1

Project Id: 30-015-21643
Contact: Amber Cannon
Project Location: Eddy County

Date Received in Lab: Tue Nov-29-11 12:15 pm
Report Date: 01-DEC-11
Project Manager: Brent Barron II

Analysis Requested											
	Lab Id:	432252-007		432252-008		432252-009					
	Field Id:	Grab 3-4		Grab 3-5		Grab 3-6					
	Depth:	4-4 ft		5-5 ft		6-6 ft					
	Matrix:	SOIL		SOIL		SOIL					
	Sampled:	Nov-23-11 09 20		Nov-23-11 09 25		Nov-23-11 09 30					
Anions by E300	*Extracted:*										
	Analyzed:	Nov-29-11 17 45		Nov-29-11 17 45		Nov-29-11 17 45					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Chloride		443	18 6	497	51 3	1620	49 2				
Percent Moisture	*Extracted:*										
	Analyzed:	Nov-29-11 14 56		Nov-29-11 14:56		Nov-29-11 14:56					
	Units/RL:	%	RL	%	RL	%	RL				
Percent Moisture		9 57	1.00	18 1	1 00	14 6	1.00				

Houston - Dallas - San Antonio - Atlanta - Tampa - Boca Raton - Latin America - Odessa - Corpus Christi

Brent Barron II
Odessa Laboratory Manager

Final 1.000

Flagging Criteria

X In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.

B A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.

D The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.

E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.

F RPD exceeded lab control limits.

J The target analyte was positively identified below the quantiation limit and above the detection limit.

U Analyte was not detected.

L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.

H The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director Data were determined to be valid for reporting.

K Sample analyzed outside of recommended hold time.

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

* Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

+ Outside XENCO's scope of NELAC Accreditation. ^ NELAC or State program does not offer Accreditation at this time.

BS / BSD Recoveries

Project Name: Cigarillo SWD # 1

Work Order #: 432252 **Project ID:** 30-015-21643

Analyst: BRB **Date Prepared:** 11/29/2011 **Date Analyzed:** 11/29/2011

Lab Batch ID: 875947 **Sample:** 875947-1-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	19 9	100	20 0	20.3	102	2	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: Cigarillo SWD # 1

Work Order #: 432252
Lab Batch #: 875947
Project ID: 30-015-21643
Date Analyzed: 11/29/2011
Date Prepared: 11/29/2011
Analyst: BRB
QC- Sample ID: 432251-002 S
Batch #: 1
Matrix: Soil
Reporting Units: mg/kg

Inorganic Anions by EPA 300	MATRIX / MATRIX SPIKE RECOVERY STUDY					
Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	780	205	971	93	75-125	

Lab Batch #: 875947
Date Analyzed: 11/29/2011
Date Prepared: 11/29/2011
Analyst: BRB
QC- Sample ID: 432252-001 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	4730	2210	7220	113	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: Cigarillo SWD # 1

Work Order #: 432252

Lab Batch #: 875947 **Project ID:** 30-015-21643

Date Analyzed: 11/29/2011 17:45 **Date Prepared:** 11/29/2011 **Analyst:** BRB

QC- Sample ID: 432252-001 D **Batch #:** 1 **Matrix:** Soil

Reporting Units: mg/kg

Anions by E300 Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY				
	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Chloride	4730	5430	14	20	

Lab Batch #: 875863

Date Analyzed: 11/29/2011 10:25 **Date Prepared:** 11/29/2011 **Analyst:** BRB

QC- Sample ID: 432217-001 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	1.79	1 94	8	20	

Lab Batch #: 875865

Date Analyzed: 11/29/2011 14.56 **Date Prepared:** 11/29/2011 **Analyst:** BRB

QC- Sample ID: 432252-003 D **Batch #:** 1 **Matrix:** Soil

Reporting Units: %

Percent Moisture Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY				
	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Percent Moisture	9.32	9 53	2	20	

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

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: Amber Cannon
Project Name: Cigarillo SWD #1
Company Name: Yates Petroleum Corporation
Project #: 30-015-21643
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: [x] Standard [ ] TRRP [ ] NPDES
Sampler Signature: Amber Cannon e-mail: acannon@yatespetroleum.com

(lab use only) ORDER #: 432252

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 418.1	TCLP: 8015M	TOTAL: TPH TX 1005	TOTAL: TPH 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	Grab 1-4	4'	4'	11/2/2011	9.00 AM		1									S													X				X
02	Grab 1-5	5'	5'	11/2/2011	9:05 AM		1									S													X				X
03	Grab 1-6	6'	6'	11/2/2011	9:10 AM		1									S													X				X
04	Grab 2-4	4'	4'	11/2/2011	9.15 AM		1									S													X				X
05	Grab 2-5	5'	5'	11/2/2011	9:20 AM		1									S													X				X
06	Grab 2-6	6'	6'	11/2/2011	9:25 AM		1									S													X				X
01	Grab 3-4	4'	4'	11/23/2011	9:20 AM		1									S													X				X
08	Grab 3-5	5'	5'	11/23/2011	9.25 AM		1									S													X				X
09	Grab 3-6	6'	6'	11/23/2011	9:30 AM		1									S													X				X

Special Instructions:

Relinquished by	Date	Time	Received by	Date	Time
Amber Cannon	11/28/11	3:30pm			
Relinquished by	Date	Time	Received by.	Date	Time
Relinquished by	Date	Time	Received by ELOT	Date	Time
Fedex			Andrea Flores	11.29.11	12:15

Laboratory Comments:
Sample Containers Intact? Y N
VOCs Free of Headspace? Y N
Labels on container(s) Y N
Custody seals on container(s) Y N
Custody seals on cooler(s) Y N
Sample Hand Delivered Y N
by Sampler/Client Rep ? Y N
by Courier? UPS DHL FedEx Lone Star
4oz glass
Temperature Upon Receipt. 14.5°C

Final 1.000

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: 11.29.11 12:15

Lab ID #: 432252

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	14.5°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