Analytical Report 427325

for

Yates Petroleum Corporation

Project Manager: Jeremy Haass

Squires 'ALR' # 2

30-015-34246

22-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)
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Xenco-Phoenix Mobile (EPA Lab code: AZ00901): Arizona (AZM757)
Xenco Tucson (EPA Lab code:AZ000989): Arizona (AZ0758)

22-SEP-11

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

Reference: XENCO Report No: **427325**
Squires 'ALR' # 2
Project Address: Eddy

Jeremy Haass:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number 427325. 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. 427325 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 427325

Yates Petroleum Corporation, Artesia, NM

Squires 'ALR' # 2

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
Sample # 1	S	09-08-11 09:45	1 - 1 ft	427325-001
Sample # 2	S	09-08-11 10:00	1.5 - 1.5 ft	427325-002
Sample # 3	S	09-08-11 10:15	8 - 8 In	427325-003
Sample # 4	S	09-08-11 10:15	6 - 6 In	427325-004
Sample # 5	S	09-08-11 10:30	1 - 1 ft	427325-005
Sample # 6	S	09-08-11 10:45	1 - 1 ft	427325-006

CASE NARRATIVE

Client Name: Yates Petroleum Corporation
Project Name: Squires 'ALR' # 2

Project ID:	*30-015-34246*	*Report Date:*	*22-SEP-11*
Work Order Number:	*427325*	*Date Received:*	*09/09/2011*

Sample receipt non conformances and comments:
None

Sample receipt non conformances and comments per sample:

None

Analytical non nonformances and comments:

Batch: LBA-869713 BTEX by EPA 8021B
SW8021BM

Batch 869713, Ethylbenzene, Toluene, m_p-Xylenes, o-Xylene recovered below QC limits in the Matrix Spike and Matrix Spike Duplicate.
Samples affected are: 427325-002, -001, -006, -003, -004, -005.
The Laboratory Control Sample for Toluene, Ethylbenzene, m_p-Xylenes , o-Xylene is within laboratory Control Limits .

SW8021BM

Batch 869713, 4-Bromofluorobenzene recovered above QC limits . Matrix interferences is suspected; data confirmed by re-analysis
Samples affected are: 427325-002.

Batch: LBA-870524 TPH By SW8015B Mod
SW8015B_NM

Batch 870524, C10-C28 Diesel Range Hydrocarbons recovered above QC limits in the Matrix Spike.
Samples affected are: 427325-002, -001, -003.
The Laboratory Control Sample for C10-C28 Diesel Range Hydrocarbons is within laboratory Control Limits

SW8015B_NM

Batch 870524, C10-C28 Diesel Range Hydrocarbons RPD was outside QC limits.
Samples affected are: 427325-002, -001, -003

Certificate of Analysis Summary 427325

Yates Petroleum Corporation, Artesia, NM

Project Name: Squires 'ALR' # 2

Project Id: 30-015-34246
Contact: Jeremy Haass
Project Location: Eddy

Date Received in Lab: Fri Sep-09-11 10:00 am
Report Date: 22-SEP-11
Project Manager: Brent Barron II

Analysis Requested													
	Lab Id:	427325-001		427325-002		427325-003		427325-004		427325-005		427325-006	
	Field Id:	Sample # 1		Sample # 2		Sample # 3		Sample # 4		Sample # 5		Sample # 6	
	Depth:	1-1 ft		1.5-1.5 ft		8-8 In		6-6 In		1-1 ft		1-1 ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Sep-08-11 09 45		Sep-08-11 10 00		Sep-08-11 10 15		Sep-08-11 10 15		Sep-08-11 10 30		Sep-08-11 10:45	
BTEX by EPA 8021B	*Extracted:*	Sep-09-11 17 00		Sep-09-11 17 00		Sep-09-11 17.00		Sep-09-11 17:00		Sep-09-11 17.00		Sep-09-11 17 00	
	Analyzed:	Sep-10-11 04 01		Sep-10-11 11 17		Sep-10-11 04.23		Sep-10-11 04:46		Sep-10-11 05.09		Sep-10-11 05:32	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		0 00113	0 00113	ND	0.110	ND	0 00109	ND	0 00106	0 00126	0 00106	0 00144	0 00109
Toluene		0 00364	0 00226	0 470	0.220	ND	0 00218	ND	0 00212	ND	0 00211	0 00316	0 00219
Ethylbenzene		0 00929	0 00113	3.44	0.110	ND	0 00109	ND	0 00106	ND	0 00106	ND	0 00109
m_p-Xylenes		0 0284	0 00226	10 4	0 220	0 00305	0 00218	ND	0.00212	ND	0 00211	ND	0 00219
o-Xylene		0 0142	0 00113	4.62	0 110	0 00189	0 00109	ND	0 00106	ND	0 00106	ND	0 00109
Total Xylenes		0 0426	0 00113	15.0	0.110	0 00494	0 00109	ND	0 00106	ND	0 00106	ND	0 00109
Total BTEX		0 0567	0 00113	18.9	0.110	0 00494	0 00109	ND	0 00106	0 00126	0.00106	0 00460	0 00109
Percent Moisture	*Extracted:*												
	Analyzed:	Sep-09-11 15:12		Sep-09-11 15 12		Sep-09-11 15:12		Sep-09-11 15 30		Sep-09-11 15 30		Sep-09-11 15.30	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		12.3	1.00	9.68	1.00	8.99	1 00	5.46	1 00	5.89	1.00	8.62	1 00
TPH By SW8015B Mod	*Extracted:*	Sep-12-11 13.05		Sep-12-11 13 05		Sep-12-11 13:05		Sep-21-11 13.50		Sep-21-11 13.50		Sep-21-11 13.50	
	Analyzed:	Sep-20-11 17:17		Sep-20-11 18.51		Sep-20-11 19:21		Sep-22-11 01:32		Sep-22-11 02:03		Sep-22-11 02.36	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
C6-C10 Gasoline Range Hydrocarbons		ND	17.0	479	16 5	ND	16.5	ND	15 9	ND	15.9	ND	16.4
C10-C28 Diesel Range Hydrocarbons		408	17.0	3480	16.5	231	16 5	612	15 9	41.1	15.9	402	16.4
Total TPH		408	17.0	3960	16.5	231	16.5	612	15 9	41 1	15.9	402	16.4

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.

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: Squires 'ALR' # 2

Work Orders : 427325,

Project ID: 30-015-34246

Lab Batch #: 869713 **Sample:** 427325-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 09/10/11 04:01

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0 0288	0.0300	96	80-120	
4-Bromofluorobenzene	0.0353	0.0300	118	80-120	

Lab Batch #: 869713 **Sample:** 427325-003 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 09/10/11 04:23

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0287	0.0300	96	80-120	
4-Bromofluorobenzene	0.0298	0.0300	99	80-120	

Lab Batch #: 869713 **Sample:** 427325-004 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 09/10/11 04:46

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	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	0.0266	0.0300	89	80-120	

Lab Batch #: 869713 **Sample:** 427325-005 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 09/10/11 05:09

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0290	0.0300	97	80-120	
4-Bromofluorobenzene	0.0262	0.0300	87	80-120	

Lab Batch #: 869713 **Sample:** 427325-006 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 09/10/11 05:32

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0 0288	0.0300	96	80-120	
4-Bromofluorobenzene	0.0287	0.0300	96	80-120	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

Form 2 - Surrogate Recoveries

Project Name: Squires 'ALR' # 2

Work Orders : 427325,

Project ID: 30-015-34246

Lab Batch #: 869713 **Sample:** 427325-002 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 09/10/11 11:17

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 0274	0.0300	91	80-120	
4-Bromofluorobenzene	0 0550	0.0300	183	80-120	**

Lab Batch #: 870524 **Sample:** 427325-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 09/20/11 17:17

TPH By SW8015B Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	109	99.6	109	70-135	
o-Terphenyl	49 3	49.8	99	70-135	

Lab Batch #: 870524 **Sample:** 427325-002 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 09/20/11 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	128	99 6	129	70-135	
o-Terphenyl	46.6	49.8	94	70-135	

Lab Batch #: 870524 **Sample:** 427325-003 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 09/20/11 19:21

TPH By SW8015B Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	107	99.9	107	70-135	
o-Terphenyl	49.1	50 0	98	70-135	

Lab Batch #: 870607 **Sample:** 427325-004 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 09/22/11 01:32

TPH By SW8015B Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	125	100	125	70-135	
o-Terphenyl	60.9	50.1	122	70-135	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes

Form 2 - Surrogate Recoveries

Project Name: Squires 'ALR' # 2

Work Orders : 427325,

Project ID: 30-015-34246

Lab Batch #: 870607 **Sample:** 427325-005 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 09/22/11 02:03

TPH By SW8015B Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	121	99.6	121	70-135	
o-Terphenyl	58 1	49.8	117	70-135	

Lab Batch #: 870607 **Sample:** 427325-006 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 09/22/11 02:36

TPH By SW8015B Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	122	100	122	70-135	
o-Terphenyl	60.4	50.1	121	70-135	

Lab Batch #: 869713 **Sample:** 611226-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 09/10/11 03:38

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0284	0.0300	95	80-120	
4-Bromofluorobenzene	0.0272	0.0300	91	80-120	

Lab Batch #: 870524 **Sample:** 611252-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 09/20/11 12:04

TPH By SW8015B Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	102	99.7	102	70-135	
o-Terphenyl	44.7	49.9	90	70-135	

Lab Batch #: 870607 **Sample:** 611698-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 09/21/11 17:57

TPH By SW8015B Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	116	101	115	70-135	
o-Terphenyl	50 4	50 3	100	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: Squires 'ALR' # 2

Work Orders : 427325,

Project ID: 30-015-34246

Lab Batch #: 869713 **Sample:** 611226-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 09/10/11 02:07

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0 0291	0 0300	97	80-120	
4-Bromofluorobenzene	0 0278	0.0300	93	80-120	

Lab Batch #: 870524 **Sample:** 611252-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 09/20/11 11:02

TPH By SW8015B Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	124	99.9	124	70-135	
o-Terphenyl	55.5	50.0	111	70-135	

Lab Batch #: 870607 **Sample:** 611698-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 09/21/11 16:55

TPH By SW8015B Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	123	100	123	70-135	
o-Terphenyl	52.2	50.0	104	70-135	

Lab Batch #: 869713 **Sample:** 611226-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 09/10/11 02:30

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 0301	0.0300	100	80-120	
4-Bromofluorobenzene	0.0285	0.0300	95	80-120	

Lab Batch #: 870524 **Sample:** 611252-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 09/20/11 11:32

TPH By SW8015B Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	116	99.7	116	70-135	
o-Terphenyl	49 6	49.9	99	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: Squires 'ALR' # 2

Work Orders : 427325,

Project ID: 30-015-34246

Lab Batch #: 870607 **Sample:** 611698-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 09/21/11 17:26

TPH By SW8015B Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	127	99.7	127	70-135	
o-Terphenyl	53.9	49 9	108	70-135	

Lab Batch #: 869713 **Sample:** 427325-006 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 09/10/11 05:55

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 0296	0.0300	99	80-120	
4-Bromofluorobenzene	0.0301	0.0300	100	80-120	

Lab Batch #: 870524 **Sample:** 427255-001 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 09/21/11 08:24

TPH By SW8015B Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	129	99 8	129	70-135	
o-Terphenyl	55 6	49.9	111	70-135	

Lab Batch #: 870607 **Sample:** 427944-012 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 09/22/11 03:07

TPH By SW8015B Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	121	100	121	70-135	
o-Terphenyl	50 1	50.2	100	70-135	

Lab Batch #: 869713 **Sample:** 427325-006 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 09/10/11 06:17

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0293	0.0300	98	80-120	
4-Bromofluorobenzene	0.0271	0.0300	90	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: Squires 'ALR' # 2

Work Orders : 427325,

Project ID: 30-015-34246

Lab Batch #: 870524 **Sample:** 427255-001 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 09/21/11 08:54

TPH By SW8015B Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	117	100	117	70-135	
o-Terphenyl	47 6	50 1	95	70-135	

Lab Batch #: 870607 **Sample:** 427944-012 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 09/22/11 03:41

TPH By SW8015B Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	123	99.5	124	70-135	
o-Terphenyl	49.9	49.8	100	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: Squires 'ALR' # 2

Work Order #: 427325 **Project ID:** 30-015-34246

Analyst: ASA **Date Prepared:** 09/09/2011 **Date Analyzed:** 09/10/2011

Lab Batch ID: 869713 **Sample:** 611226-1-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	0 109	109	0.100	0.109	109	0	70-130	35	
Toluene	<0 00200	0.100	0.0983	98	0.100	0 0978	98	1	70-130	35	
Ethylbenzene	<0.00100	0.100	0.108	108	0.100	0 109	109	1	71-129	35	
m_p-Xylenes	<0 00200	0.200	0 212	106	0.200	0.214	107	1	70-135	35	
o-Xylene	<0.00100	0 100	0.101	101	0.100	0.101	101	0	71-133	35	

Analyst: BBH **Date Prepared:** 09/12/2011 **Date Analyzed:** 09/20/2011

Lab Batch ID: 870524 **Sample:** 611252-1-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	960	96	997	913	92	5	70-135	35	
C10-C28 Diesel Range Hydrocarbons	<15.0	999	1000	100	997	899	90	11	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

Final 1.000

XENCO Laboratories

BS / BSD Recoveries

Project Name: Squires 'ALR' # 2

Work Order #: 427325
Analyst: ASA
Lab Batch ID: 870607
Sample: 611698-1-BKS
Units: mg/kg

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

Project ID: 30-015-34246
Date Analyzed: 09/21/2011
Matrix: Solid

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
C6-C10 Gasoline Range Hydrocarbons	<15.0	1000	923	92	997	934	94	1	70-135	35	
C10-C28 Diesel Range Hydrocarbons	<15.0	1000	824	82	997	823	83	0	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

Final 1.000

Form 3 - MS / MSD Recoveries

Project Name: Squires 'ALR' # 2

Work Order # : 427325 **Project ID:** 30-015-34246

Lab Batch ID: 869713 **QC- Sample ID:** 427325-006 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 09/10/2011 **Date Prepared:** 09/09/2011 **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	0.00144	0.109	0.0940	85	0.110	0 0917	82	2	70-130	35	
Toluene	0.00316	0.109	0 0788	69	0.110	0.0763	66	3	70-130	35	X
Ethylbenzene	<0 00109	0.109	0 0751	69	0.110	0 0746	68	1	71-129	35	X
m_p-Xylenes	<0 00218	0.218	0.143	66	0 221	0.142	64	1	70-135	35	X
o-Xylene	<0 00109	0 109	0.0645	59	0.110	0 0644	59	0	71-133	35	X

Lab Batch ID: 870524 **QC- Sample ID:** 427255-001 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 09/21/2011 **Date Prepared:** 09/12/2011 **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	42 8	1200	1300	105	1210	1130	90	14	70-135	35	
C10-C28 Diesel Range Hydrocarbons	99.7	1200	1910	151	1210	1140	86	50	70-135	35	XF

Lab Batch ID: 870607 **QC- Sample ID:** 427944-012 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 09/22/2011 **Date Prepared:** 09/21/2011 **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	<15 2	1010	928	92	1000	917	92	1	70-135	35	
C10-C28 Diesel Range Hydrocarbons	<15.2	1010	878	87	1000	846	85	4	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: Squires 'ALR' # 2

Work Order #: 427325

Lab Batch #: 869627 **Project ID:** 30-015-34246

Date Analyzed: 09/09/2011 11:15 **Date Prepared:** 09/09/2011 **Analyst:** BRB

QC- Sample ID: 427302-002 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	1.57	1 41	11	20	

Lab Batch #: 869633

Date Analyzed: 09/09/2011 15:30 **Date Prepared:** 09/09/2011 **Analyst:** BRB

QC- Sample ID: 427325-004 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	5.46	5.03	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

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: Jeremy Haass | Project Name: **Squires 'ALR' #2**

Company Name: Yates Petroleum Corporation | Project #: 30-015-34246

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

City/State/Zip: Artesia, NM 88210 | PO #: 103-2636

Telephone No: 575-748-4311 | Fax No: | Report Format: [X] Standard [ ] TRRP [ ] NPDES

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

(lab use only) ORDER #: 427325 / 427326

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/TOTAL: TPH 418.1	8015M	TX 1006	TPH: TX 1005	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/5030 or BTEX 8260	RCI	N O R M	Chlorides	RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
01	Sample #1	1ft	1ft	9/8/2011	9:45am			X								S	X										X			X		X
02	Sample #2	1.5ft	1.5ft	9/8/2011	10:00am			X								S	X										X			X		X
03	Sample #3	8in	8in	9/8/2011	10:15am			X								S	X										X			X		X
04	Sample #4	6in	6in	9/8/2011	10:15am			X								S	X										X			X		X
05	Sample #5	1ft	1ft	9/8/2011	10:30am			X								S	X										X			X		X
06	Sample #6	1ft	1ft	9/8/2011	10:45am			X								S	X										X			X		X
07																																
08																																
	PLEASE PUT CHLORIDES ON SEPARATE REPORT																															

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

Relinquished by	Date	Time	Received by.	Date	Time
	09/08/11	3 02 PM			
Relinquished by	Date	Time	Received by	Date	Time
Relinquished by	Date	Time	Received by ELOT	Date	Time
Fedex			Andrea Elam	9-9-11	10:00

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		
Temperature Upon Receipt.	3.6 °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: Yuko Petroleum

Date/Time: 9-9-11 10:00

Lab ID #: 427325 / 427324

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	3.6 °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