# **Analytical Report 374797**

for

### **Yates Petroleum Corporation**

**Project Manager: Amanda Trujillo** 

**Greasewood BD Battery** 

#### 04-JUN-10





#### 12600 West I-20 East Odessa, Texas 79765

Xenco-Houston (EPA Lab code: TX00122): Texas (T104704215-TX), Arizona (AZ0738), 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-Corpus Christi (EPA Lab code: TX02613): Texas (T104704370)
Xenco-Boca Raton (EPA Lab Code: FL00449):
Florida(E86240),South Carolina(96031001), Louisiana(04154), Georgia(917)
North Carolina(444), Texas(T104704468-TX), Illinois(002295)



04-JUN-10



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

Reference: XENCO Report No: **374797** Greasewood BD Battery Project Address:

#### Amanda Trujillo:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number 374797. 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. 374797 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

Brent Barron, II Odessa Laboratory Manager

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## Sample Cross Reference 374797

. 2014-50

# Yates Petroleum Corporation, Artesia, NM

Greasewood BD Battery

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
Greasewood Quad 1	S	May-27-10 11:00	6 In	374797-001
Greasewood Quad 2	S	May-27-10 11:00	6 In	374797-002
Greasewood Quad 3	S	May-27-10 11:00	6 In	374797-003
Greasewood Quad 4	S	May-27-10 11:00	6 In	374797-004

#### CASE NARRATIVE



Client Name: Yates Petroleum Corporation Project Name: Greasewood BD Battery



Project ID: Work Order Number: 374797 Report Date: 04-JUN-10 Date Received: 05/28/2010

Sample receipt non conformances and Comments: None

Sample receipt Non Conformances and Comments per Sample:

None

Analytical Non Conformances and Comments:

Batch: LBA-808636 Percent Moisture None

Batch: LBA-808708 TPH by SW 8015B None

Batch: LBA-808878 Inorganic Anions by EPA 300 None

Batch: LBA-809297 BTEX by EPA 8021 SW8021BM

Batch 809297, Benzene, Ethylbenzene, Toluene, m,p-Xylenes, o-Xylene recovered below QC limits in the Matrix Spike and Matrix Spike Duplicate. Samples affected are: 374797-004, -002, -003, -001. The Laboratory Control Sample for Toluene, m,p-Xylenes, Benzene, Ethylbenzene, o-Xylene is within laboratory Control Limits

#### SW8021BM

Batch 809297, 1,4-Difluorobenzene recovered below QC limits . Matrix interferences is suspected; data not confirmed by re-analysis Samples affected are: 374797-004.



**Project Location:** 

**Project Id:** 

Contact: Amanda Trujillo

### Certificate of Analysis Summary 374797

Yates Petroleum Corporation, Artesia, NM

Project Name: Greasewood BD Battery



Date Received in Lab: Fri May-28-10 09:55 am

Report Date: 04-JUN-10

Project Manager: Brent Barron, II

	Lab Id:	374797-	001	374797-0	002	374797-	003	374797-	004			
Anglusis Requested	Field Id:	Greasewood	Quad 1	Greasewood (	Quad 2	Greasewood	Quad 3	Greasewood	Quad 4			
Analysis Kequestea	Depth:	6- In		6- In		6- In	ı	6- In				
	Matrix:	SOIL	,	SOIL		SOIL	_	SOIL	,			
	Sampled:	May-27-10	11:00	May-27-10	11:00	May-27-10	11:00	May-27-10	11:00			
Anions in Soil By EPA 300.0	Extracted:											
	Analyzed:	Jun-01-10	15:23	Jun-01-10	15:23	Jun-01-10	15:23	Jun-01-10	15:23			
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL			
Chloride		380	9.05	2440	44.1	3060	46.1	1570	47.6			
BTEX by EPA 8021	Extracted:	Jun-02-10	14:50	Jun-02-10	14:50	Jun-02-10	14:50	Jun-02-10	14:50			
	Analyzed:	Jun-04-10	07:19	Jun-04-10 (	07:41	Jun-04-10	08:04	Jun-04-10	08:27			
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	 		
Benzene		ND	0.0011	ND	0.0011	ND	0.0011	ND	0.0011			
Toluene		ND	0.0022	ND	0.0021	ND	0.0022	ND	0.0023			
Ethylbenzene		ND	0.0011	ND	0.0011	ND	0.0011	ND	0.0011			
m,p-Xylenes		ND	0.0022	ND	0.0021	ND	0.0022	ND	0.0023			
o-Xylene		ND	0.0011	ND	0.0011	ND	0.0011	ND	0.0011	 		
Xylenes, Total		ND	0.0011	ND	0.0011	ND	0.0011	ND	0.0011	 		
Total BTEX		ND	0.0011	ND	0.0011	ND	0.0011	ND	0.0011	 		
Percent Moisture	Extracted:											
	Analyzed:	May-29-10	09:14	May-29-10	09:14	May-29-10	09:14	May-29-10	09:14			
	Units/RL:	%	RL	%	RL	%	RL	%	RL	 		
Percent Moisture	•	7.16	1.00	4.85	1.00	8.88	1.00	11.7	1.00			
TPH by SW 8015B	Extracted:	May-28-10	12:45	May-28-10	12:45	May-28-10	12:45	May-28-10	12:45			
	Analyzed:	May-28-10	16:36	May-28-10	17:03	May-28-10	17:30	May-28-10	17:57			
	Units/RL:	mg/kg	RL	mg/kg	RL.	mg/kg	RL	mg/kg	RL		ĺ	
C6-C10 Gasoline Range Hydrocarbons		ND	16.1	ND	15.7	ND	16.5	ND	17.0			
C10-C28 Diesel Range Hydrocarbons		38.5	16.1	133	15.7	819	16.5	ND	17.0			
Total TPH		38.5	16.1	133	15.7	819	16.5	ND	17.0			

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

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Brent Barron, II

Odessa Laboratory Manager





- 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 effect the recovery of the spike concentration. This condition could also effect the relative percent difference in the MS/MSD.
- **B** A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.
- **D** The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.
- E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.
- F RPD exceeded lab control limits.
- J The target analyte was positively identified below the MQL and above the SQL.
- U Analyte was not detected.
- L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.
- H The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.
- K Sample analyzed outside of recommended hold time.
- **JN** A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.
- BRL Below Reporting Limit.
- RL Reporting Limit
- \* Outside XENCO's scope of NELAC Accreditation.

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(305) 823-8500	(305) 823-8555
(432) 563-1800	(432) 563-1713
(361) 884-0371	(361) 884-9116



Project Name: Greasewood BD Battery

Work Orders : 374797	,		Project II	<b>):</b>		
Lab Batch #: 809297	Sample: 504920-1-BKS7 B	S Batel	RROGATE RE	COVERY S	STUDY	
BTE	X by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
	Analytes			[D]		
1,4-Difluorobenzene		0.0290	0.0300	97	80-120	
4-Bromofluorobenzene		0.0282	0.0300	94	80-120	
Lab Batch #: 809297	Sample: 564920-1-BSD / B	SD Batel	h: <sup>1</sup> Matrix:	Solid		
Units: mg/kg	Date Analyzed: 06/03/10 19:09	SU	RROGATE RE	ECOVERY S	STUDY	
BTE	X by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene		0.0294	0.0300	98	80-120	
4-Bromofluorobenzene		0.0294	0.0300	98	80-120	
Lab Batch #: 809297	Sample: 564920-1-BLK / B	LK Batel	h:   Matrix:	Solid	I	
Units: mg/kg	Date Analyzed: 06/03/10 20:17	SU	RROGATE RE	COVERY	STUDY	
BTE	BTEX by EPA 8021			Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene		0.0243	0.0300	81	80-120	
4-Bromofluorobenzene		0.0291	0.0300	97	80-120	
Lab Batch #: 809297	Sample: 374797-001 / SMP	Bate	h: <sup>1</sup> Matrix:	Soil	<u></u>	<u></u>
Units: mg/kg	Date Analyzed: 06/04/10 07:19	SU	RROGATE RE	ECOVERY	STUDY	
BTE	X by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
	Analytes			נטן		
1,4-Difluorobenzene		0.0241	0.0300	80	80-120	
4-Bromofluorobenzene		0.0304	0.0300	101	80-120	
Lab Batch #: 809297	Sample: 374797-002 / SMP	Bate	h: <sup>1</sup> Matrix:	Soil		
Units: mg/kg	Date Analyzed: 06/04/10 07:41	SU	RROGATE RI	ECOVERY	STUDY	
BTE	X by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene		0.0241	0.0300	80	80-120	
4-Bromofluorobenzene		0.0283	0.0300	94	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 / BAll results are based on MDL and validated for QC purposes.



## Project Name: Greasewood BD Battery

<b>Vork Orders :</b> 374797 Lab Batch #: <sup>809297</sup>	, Sample: 374797-003 / SMP	Batch	Project IE h: <sup> </sup> Matrix:	): Soil		
Units: mg/kg	Date Analyzed: 06/04/10 08:04	SUI	RROGATE RE	COVERY S	STUDY	
ВТЕ	X by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1.4 Difluorohonzono	Analytes	0.0244	0.0300	01	×0.120	, I
4-Bromofluorobenzene		0.0244	0.0300	93	80-120	
		0.0270	0.0000	0.11	00-120	
Lab Batch #: 809297	Sample: 3/4/9/-004/ SMP	Batch	1: Matrix:	SOIL	OTUDV	
Units: mg/kg	Date Analyzed: 06/04/10 08:27	501	KKUGATE KE			
BTE	X by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1.4-Difluorobenzene		0.0238	0.0300	79	80-120	*
4-Bromofluorobenzene		0.0285	0.0300	95	80-120	
Lah Batch #• 809297	Sample: 375058-001 S / MS	Batel	h· 1 Matrix:	Soil	<u> </u>	
Units: mg/kg	Date Analyzed: 06/04/10 11:33	SU	RROGATE RE	ECOVERY S	STUDY _	
		Amount	True		Control	
DIE	A by EPA 8021 Analytes	Found [A]	Amount [B]	Recovery %R [D]	Limits %R	Flags
1,4-Difluorobenzene		0.0278	0.0300	93	80-120	
4-Bromofluorobenzene		0.0294	0.0300	98	80-120	
Lab Batch #: 809297	Sample: 375058-001 SD / N	1SD Batch	h: 1 Matrix:	Soil	Å <b>nnen in det en e</b> n en	
Units: mg/kg	Date Analyzed: 06/04/10 11:55	SU	RROGATE RE	COVERY S	STUDY	
BTE	X by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
	Analytes			נען		
1,4-Difluorobenzene		0.0278	0.0300	93	80-120	
4-Bromofluorobenzene		0.0286	0.0300	95	80-120	
Lab Batch #: 808708	Sample: 564568-1-BKS / BI	KS Batch	n: 1 Matrix:	Solid		
Units: mg/kg	Date Analyzed: 05/28/10 15:15	SU	RROGATE RE	COVERY	STUDY	
ТРН	ł by SW 8015B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane		95.1	99.9	95	70-135	
o-Terphenyl		52.9	50.0	106	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.



# Project Name: Greasewood BD Battery

<b>Work Orders :</b> 374797	7, 0 5(45(0 + DCD / DC		Project II	D:		
Lab Batch #: 808708	Sample: 504508-1-85D7 85	Bate	RROGATE R	: Solid	STUDY	
	H by SW 8015B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
	Analytes					
o-Terphenyl		52.1	50.0	94	70-135	
o-reipiteityi			50.0	~	70-135	
Lab Batch #: 808708	Sample: 564568-1-BLK / BL	K Bate	ch: 1 Matrix	:Solid	COLUDY	
Units: mg/kg	Date Analyzed: 05/28/10 16:09	st	RROGATE R	ECOVERY	STUDY	
TPI	H by SW 8015B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane		95.4	99.8	96	70-135	
o-Terphenyl		57.4	49.9	115	70-135	
Lab Batch #: 808708	Sample: 374797-001 / SMP	Bate	h: <sup>]</sup> Matrix	:Soil	1	
Units: mg/kg	Date Analyzed: 05/28/10 16:36	SU	RROGATE R	ECOVERY	STUDY	
ТРІ	H by SW 8015B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane		07.3	00.5	08	70.135	
o-Terphenyl		58.3	49.8	117	70-135	
Lah Batch #: 808708	Sample: 374797-002 / SMP	Rate	⊥ •h• ] Matrix	·Soil		
Units: mg/kg	Date Analyzed: 05/28/10 17:03	SL	RROGATE R	ECOVERY	STUDY	
TPI	H by SW 8015B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	Analytes	102	00.5	102	70.125	
o-Terphenyl		60.0	49.5	103	70-135	
Lab Batch #: 808708	Sample: 374797-003 / SMP	Bata	h. Matrix	Soil	10-135	
Lab Batch #. 000100	Date Analyzed: 05/28/10 17:30	Bait	RROGATE R	ECOVERY	STUDY	
TPI	H by SW 8015B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane		99.1	100	99	70-135	
o-Terphenyl		58.7	50.0	117	70-135	

\* Surrogate outside of Laboratory QC limits
 \*\* Surrogates outside limits; data and surrogates confirmed by reanalysis

\*\*\* Poor recoveries due to dilution

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

Surrogate Recovery [D] = 100 \* A / B



### Project Name: Greasewood BD Battery

Vork Orders: 374797	,		Project II	):						
Lab Batch #: 808708	Sample: 374797-004 / SMP	Bate	h: l Matrix	:Soil						
Units: mg/kg	Date Analyzed: 05/28/10 17:57	SU	<b>RROGATE RI</b>	ECOVERYS	STUDY					
ТРН	I by SW 8015B	Amount Found [A]	True Amount {B}	Recovery %R	Control Limits %R	Flags				
	Analytes			[U]						
1-Chlorooctane		99.0	100	99	70-135					
o-Terphenyl		58.6	50.0	117	70-135					
Lab Batch #: 808708	Sample: 374802-005 S / MS	Batc	h: <sup>1</sup> Matrix	:Soil						
Units: mg/kg	Date Analyzed: 05/28/10 22:27	SURROGATE RECOVERY STUDY								
TPH	l by SW 8015B	Amount Found [A]	True Amount [B]	Recovery %R fDl	Control Limits %R	Flags				
	Analytes			11						
1-Chlorooctane		98.0	100	98	70-135					
o-Terphenyl		55.2	50.0	110	70-135					
Lab Batch #: 808708	Sample: 374802-005 SD / M	SD Bate	h: l Matrix	:Soil						
Units: mg/kg	Date Analyzed: 05/28/10 22:54	SU	RROGATE R	ECOVERY	STUDY					
TPH	l by SW 8015B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags				
I-Chlorooctane		104	99.9	104	70-135					
o-Terphenyl	`````	58.0	50.0	116	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 / BAll results are based on MDL and validated for QC purposes.





Work Order #: 374797		D	ata Pronar	ed. 06/02/201	0		Project ID: Date Analyzed: 06/03/2010						
Lab Batch ID: 809297	Sample: 564920-1-BI	KS D.	Batel	h #: 1	.0		Matrix: Solid						
Units: mg/kg	[	BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY											
BTEX by EPA Analytes	BTEX by EPA 8021				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		ND	0.1000	0.0994	99	0.1	0.0978	98	2	70-130	35		
Toluene		ND	0.1000	0.0980	98	0.1	0.0963	96	2	70-130	35		
Ethylbenzene		ND	0.1000	0.0995	100	0.1	0.0984	98	1	71-129	35		
m,p-Xylenes		ND	0.2000	0.1988	99	0.2	0.1970	99	1	70-135	35		
o-Xylene		ND	0.1000	0.0988	99	0.1	0.0989	99	0	71-133	35		
Analyst: LATCOR Lab Batch ID: 808878	Sample: 808878-1-BF	D: <s< td=""><td>ate Prepar Batel</td><td>red: 06/01/201 h #: 1</td><td>0</td><td></td><td></td><td>Date A</td><td>nalyzed: ( Matrix: S</td><td>)6/01/2010 Solid</td><td></td><td></td></s<>	ate Prepar Batel	red: 06/01/201 h #: 1	0			Date A	nalyzed: ( Matrix: S	)6/01/2010 Solid			
Units: mg/kg			BLAN	K /BLANK S	SPIKE / E	BLANK S	SPIKE DUPI	LICATE	RECOVE	ERY STUD	Ŷ		
Anions in Soil By E Analytes	PA 300.0	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		ND	10.0	9.28	93	10	9.57	96	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

-





Work Order #: 374797 Analyst: BEV Lab Batch ID: 808708	Sample: 564568-1-BK	D: S	ate Prepar Bate	red: 05/28/201 h #: 1	0		Project ID: Date Analyzed: 05/28/2010 Matrix: Solid						
TPH by SW 8	B015B	Blank Sample Result [A]	Spike Added	Blank Spike Result	Blank Spike %R	k     Spike     Blank     Blk. Spk     Control     Control       e     Added     Spike     Dup.     RPD     Limits     Fi       buplicate     %R     %     %R     %RPD						Flag	
Analytes			[ <b>D</b> ]	ICI	ועו	[E]	Kesun [r]	נטן					
C6-C10 Gasoline Range Hydroca	rbons	ND	999	899	90	999	911	91	1	70-135	35		
C10-C28 Diesel Range Hydrocart	bons	ND	999	737	74	999	867	87	16	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





Work Order #: 374797							
Lab Batch #: 808878		Pr	oject ID:	:			
Date Analyzed: 06/01/2010	Date Prepared: 06/01/2010 Analyst: LATCOR						
QC- Sample ID: 374802-001 S	Batch #: 1 Matrix: Soil						
Reporting Units: mg/kg	MATRIX / MATRIX SPIKE RECOVERY STUDY						
Inorganic Anions by EPA 300	Parent Sample Spike Result Added	Spiked Sample Result ICl	%R [D]	Control Limits %R	Flag		
Analytes	[A] [B]		1-1				
Chloride	69.1 226	289	97	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





Work Order #: 374797						Project II	D:				
Lab Batch ID: 809297 ( Date Analyzed: 06/04/2010	QC- Sample ID: Date Prepared:	375058 06/02/2	-001 S 010	Ba An	tch #: alyst:	l <b>Matri</b> ASA	<b>k:</b> Soil				
Reporting Units: mg/kg		Μ	IATRIX SPIK	E / MAT	RIX SPI	KE DUPLICA	TE REC	OVERY	STUDY		
BTEX by EPA 8021	Parent Sample	Spike	Spiked Sample Result	Spiked Sample	Spike	Duplicate Spiked Sample	Spiked Dup.	RPD	Control Limits	Control Limits	Flag
Analytes	[A]	Added [B]	[C]	%R [D]	Added [E]	Result [F]	%R [G]	%	%R	%RPD	
Benzene	0.0016	0.1206	0.0795	65	0.1206	0.0813	66	2	70-130	35	Х
Toluene	ND	0.1206	0.0788	65	0.1206	0.0803	67	2	70-130	35	X
Ethylbenzene	ND	0.1206	0.0802	67	0.1206	0.0812	67	1	71-129	35	X
m,p-Xylenes	ND	0.2413	0.1594	66	0.2413	0.1615	67	1	70-135	35	Х
o-Xylene	ND	0.1206	0.0783	65	0.1206	0.0797	66	2	71-133	35	х
Lab Batch ID: 808708	C- Sample ID:	374802	-005 S	Ba	tch #:	1 Matrix	: Soil			_	
Date Analyzed: 05/28/2010	Date Prepared:	05/28/2	010	An	alyst:	BEV					
Reporting Units: mg/kg		M	ATRIX SPIK	E / MAT	RIX SPI	KE DUPLICA	TE REC	OVERY S	STUDY	_	
TPH by SW 8015B	Parent Sample Result	Spike Added	Spiked Sample Result [C]	Spiked Sample %R	Spike Added	Duplicate Spiked Sample Result [F]	Spiked Dup. %R	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes	[A]	[ <b>B</b> ]		[D]	[E]		[G]				
C6-C10 Gasoline Range Hydrocarbons	ND	1170	1060	91	1170	1110	95	5	70-135	35	
C10-C28 Diesel Range Hydrocarbons	ND	1170	962	82	1170	1010	86	5	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: Greasewood BD Battery

Work Order #: 374797

Lab Batch #: 808878				Project I	D:	
Date Analyzed: 06/01/2010	Date Prepare	ed: 06/01/2010	) Anal	lyst: LATC	OR	
QC- Sample 1D: 374802-001 D	Batch	#: 1	Mat	rix: Soil		
Reporting Units: mg/kg	[	SAMPLE /	SAMPLE	DUPLIC	ATE REC	OVERY
Anions in Soil By EPA 300.	.0	Parent Sample Result [A]	Sample Duplicate Result	RPD	Control Limits %RPD	Flag
Analyte			[B]			
Chloride		69.1	67.3	3	20	
Lab Batch #: 808636						· · · · ·
Date Analyzed: 05/29/2010	Date Prepare	ed: 05/29/2010	) Ana	lyst:JLG		
QC- Sample ID: 374778-001 D	Batch	#: I	Mat	rix: Soil		
Reporting Units: %	[	SAMPLE	SAMPLE	DUPLIC	ATE REC	OVERY
Percent Moisture Analyte		Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Percent Moisture		3.39	3.14	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

XE	NCO									12 Oc	:600 dess	Wes a, T	CH st (-) exa:	//// 20 E s 79	/ OF ast 765	cus	STO	DY F	REC	ORI	D AI	ŊD	AN/ F	۹L ۲ hoi Fax	<b>'SIS</b> ne: 4 (; 4	RE  32-(  32-!	QUI 563- 563-	ES7 -180 -171	г 0 3				
	Project Manager:	Amanda Truj	110														_	Pr	ojec	t Na	me:	Gre	ase	wor	od B	DB	atte	<u>''</u>					
	Company Name	Yates Petrole	um Corporal	tion													_		P	rojec	:t #:												
	Company Address:	105 South 4tl	n Street														_	;	Proj	ect L	.oc:												
	City/State/Zip:	Artesia, NM	88210														_			P	<b>D #:</b>												
	Telephone No:	··	575-748-431	10			Fax No:	:	57	5-74	8-45	85					_ 1	Repo	rt Fo	rma	Ŀ	X	Star	ıdar	d		<b>٦</b> ד [	RRP	•		]NP	DES	3
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(lab use	only)																		-	_		т	LP:	Ana T	alyze	For:	T	<u> </u>		<u> </u>			
ORDEF	1# 3747	197								<b></b>	Prese	rvatio	¥1 & i	t of (	Contain	ers	Тм	atrix	Ē	1-		TO'	TAL:	<u> </u>	7	$\mp$	]					72 hrs	
R R Ma (ab use only)	FIEL Greasew Greasew Greasew	D CODE vood Quad 1 vood Quad 2 vood Quad 3		ຼາ ຜູ່ຜູ່ຜູ່ Beginning Depth	Ending Depth	5/27/2010 5/27/2010 5/27/2010	ра ше у 11:00 АМ 11.00 АМ 12:00 РМ 11 00 АМ	Field Fitered	Totel #. of Containers	X X IS	HNO	HG	H204	NaOH	Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> None	Other ( Specify)	DVV=Drinking Water SL=Sludge	0 (0 (0 GW ≏ Groundwater S=SoiVSolid NP=Non-Polable Specify Cther	K X X X TPH: 418.1 8015M 80	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	Volatiles Conturbatilae	C X X X BTEX 8021B/5030 or BTEX 826	RCI	N.O.R.M.	c x x x Chlorides	TLCP		RUSH TAT (Pre-Schedule) 24, 4	Standard TAT
	Greasen			Ť		5/21/2010	11.00 / 111	╞	$\uparrow$	Ê			-	-†	+-	+	╞	<u> </u>	Ê		$\neg$	-†	+	+	+	†^	+	┢	f	+	H		Н
Special	Instructions:		····-	l	1			1	1	L				_].			L			$\square$	Lab	orat	öry (	Con	 Imen		1	<u> </u> 3550	<u> </u>				Н
Relinquis Relinquis	hed by:	ll	Date 05/27/10 Date Date	Ti 12:4 Ti Ti	me 6 PM me	Received by: Received by: Received by FI (	DT:				37					Da Da	nte nte		Time	2	VOC Cusi Cusi Sam	S E Sody ody ple S C L	ree o seal seal deal Hanc ample ourier	He s.on i De r/Ci	iadsp i cont cont i cont livent lient F Uf	ace? alne: alne: d lep: 1	r(s) DH		6		Lon	N N N N Sta	ar
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- 38-



に前にいたの時間

XENCO Laboratories Atlanta, Corpus Christi, Dallas, Houston, Miami, Midland, Philadelphia, San Antonio, Tampa Document Title: Sample Receipt Checklist Document No.: SYS - SRC Revision/Date : No.00, 05/18/10 Effective Date: 05/20/10 Page No.: 1 of 1

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

Client:	lates Petrole	'um
Date/Time:	5.28.10 9	55
Lab ID #:	374797	
Initials:	AL	

#### Sample Receipt Checklist

1. Sample on ice?				Blue	Water	No	
2. Shipping containe	r in good condition?		$\sim$	Yes	No	None	
3. Custody seals inta	act on shipping contair	ner (cooler) ar	nd bottles?	Yes	No	N/A	
4. Chain of Custody	present?			Yeg	No		
5. Sample instruction	ns complete on chain o	of custody?		(CES)	No		
6. Any missing / extr	a samples?			Yes	Ø		
7. Chain of custody	signed when relinquist	ned / received	?	<y<b>∂s</y<b>	No		
8. Chain of custody	agrees with sample la	ble(s)?		Yes	No		
9. Container labels I	egible legible and intac	ct?		Yes	No		
10. Sample matrix /	properties agree with	chain of custo	dy?	Yes	No		
11. Samples in prop	er container / bottle?	**************************************		Yes	No		<u> </u>
12. Samples proper	y preserved?			Yes	No	N/A	
13. Sample containe	er intact?		*	Yes	No		
14. Sufficient sample	e amount for indicated	test(s)?		Yes	No		
15. All samples rece	eived within sufficient h	old time?		Yes	No		
16. Subcontract of s	ample(s)?			Yes	No		
17. Voc sample have	e zero head space?			(es)	No	N/A	
18. Cooler 1 No.	Cooler 2 No.	Cooler 3	No.	Cooler 4	No.	Cooler 5	No.
Ibs 4.1°C	lbs	°C lbs	°C	lbs	°C	lbs	°C
	Nenser	farman Da		*****		·	

Nonconformance Documentation
\_\_\_\_Contacted by:\_\_\_\_\_Date/Time:\_\_\_\_\_

Regarding: 8) Sample, time For -03 (UC states: 12:00pm container states 11:00 am. Sample oz Lid was broken when received.

Corrective ActionTaken:\_\_\_

Contact:

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

					Page 1 of 1	
				<b>n</b> **	and and An an airte airte	
Andre	a Lam			1.1		e na stra sta
From	"Amanda Taullin"	afacasteria en orma	· · ·			
To:	"Andrea Lam" <andino@ya "Andrea Lam" <andrea.lam@< td=""><td>xesperoleum.com&gt; xesco.com&gt; +cs ptt</td><td>r</td><td></td><td></td><td></td></andrea.lam@<></andino@ya 	xesperoleum.com> xesco.com> +cs ptt	r			
Subjec	t: RE: Greasewood BD Battery	and the				
: Andree:						
P	m very sorry for all the confusion, 11	had an intern fill out the paperworl	cand I thin	k he got i	a little confused.	
Please n	ote the time on the Greasewood as	11:00 am.			•	
Thank yo	pu,					
Amarida	a N. Trujillo					· .
Environn	nental Scientist					
Yates Pe	troleum-Conporation	1				
Cell 575	575-748-4310 -703-6537					
Emàil atr	rujillo@yotespetroleum.com					
· · ·	mmOnipipal Maccore	2			. •	
, i	From: Andrea Lam [mailto:andrea.la	am@xenco.com}				<u>с</u>
, , , , , , , , , , , , , , , , , , ,	Sent: Friday, May 28, 2010 10:50 A	M				
	Subject: Greasewood BD Battery				•	
: 2			•			•
	emanda,			. 14 - 1	1.4	
	,					
1	We recoived your samples for the Gre	asewood BD Battery and the sample	r time tor 6	reasawoj	d Quad 3 does	
1	We received your samples for the Grea not match the COC.	asewood BD Buttery and the sample	e time tor 6	ireasewo	d Quad 3 does	
	We recoived your samples for the Grean termination the COC.	asewood 8D Bultery and the sample	e time tọr G	ireasewoç	d Quad 3 does	
	We recoived your samples for the Grean natimatich the COC. COC: Container: 12:00 PM 11:00 AM	asewood AD Bultery and the sample	time log 6	ireasawoç	d Quad 3 does	
	We received your samples for the Grean natimatch the COC. COC: COC: COC: Container: 11:00 PM 11:00 AM Please let me know which time you wi	asewood 8D Buttery and the sample	time tor 6	reasewo(	d Quad 3 floes	
	We received your samples for the Grea natimatch the COC. COC: Container: 12:00 PM 11:00 AM Please let me know which time you wi	asewood AD Brittery and the sample	e time tor 6	reasawoç *	d Quad 3 does	
	We recoived your samples for the Grea natimatch the COC. COC: Container: 12:00 PM 11:00 AM Please let me know which time you wi	asewood AD Brittery and the sample	> time tog 6	reasawoç	d Quad 3 does	
	We received your samples for the Gre natimatch the COC. COC: Container 12:00 PM 11:00 AM Please let me know which time you wi Thank You. Andrea Lam	asewood AD Builtery and the sample	s time tog 6	reasawoç *	d Quad 3 dòes	
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	We recolved your samples for the Gre natimatch the COC. COC: Container 12:00 PM 11:00 AM Please let me know which time you wi Thank You, Andrea Lorn Sample Receiving / Project Assistant Environmental Lab of Texas	asewood AD Builtery and the sample	e time tọ <u>r</u> 6	ireðsæwög	d Quad 3 flocs	
	We recoived your samples for the Gre natimatch the COC. COC: COC: Container 12:00 PM Please let me know which time you wi Please let me know which time you wi Thank You, Andrea Larn Sample Receiving / Project Assistant Environmental Lab of Texas A Xenco Company 12600 W 1-20 E	asewood AD Builtery and the sample	e tîme fog 6	ireðsæwög	d Quad 3 floes	
	We recoived your samples for the Gre natimatch the COC. COC: COC: Container L2:00 PM Please let me know which time you wi Please let me know which time you wi Andrea Larn Sample Receiving / Project Assistant Environmental Lab of Texas A Xenco Company L2600 W 1-20 E Ddessa, TX, 79765 32-563-1800	asewood AD Builtery and the sample	a timu log 6	(re38@wóć	d Quad 3 thees	
	We received your samples for the Gre natimatch the COC. COC: Container: 12:00 PM 11:00 AM Please let me know which time you wi Thank You. Andrea Lorn Sample Receiving / Project Assistant Environmental Lab of Texas A Xence Company 12600 W 1-20 E Odessa, TX 79765 322-563-1800	asewood AD Builtery and the sample	timu log 6	(reð8@wð(	d Quad 3 dòes	
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	We received your samples for the Gre natimatch the COC. COC: Container: 12:00 PM 11:00 AM Please let me know which time you wi Andrea Lom Sample Receiving / Project Assistant Environmental Lab of Texas A Xence Company 12600 W 1-20 E Odessa, TX 79765 432-563-1800	asewood 8D Builtery and the sample	- time 10g 6	(rc, 858.w0)	6/2/2010	

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