

MARTIN YATES, III
1912-1985

FRANK W. YATES
1936-1986

S.P. YATES
1914-2008



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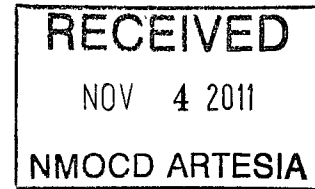
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November 3, 2011

Mr. Mike Bratcher
NMOCD District II
811 S. First Street
Artesia, NM 88210



Re: Warren ANW Federal #3 Battery
30-015-28598
Section 9, T19S-R25E
Eddy County, New Mexico

Dear Mr. Bratcher,

Enclosed please find a Form C-141, Final Report for the above captioned site regarding the release on 9/29/2011 (unknown MCF released and 0 MCF recovered). The C-141 Initial Report was submitted to your office on October 11, 2011. Impacted soils were excavated from the release area and stock piled on a plastic liner on location. Vertical and horizontal delineation samples were taken from the excavation and stock pile on 10/13/2011 and sent to an NMOCD approved laboratory. Enclosed are the analytical reports, results show TPH and BTEX, to be below RRAL's, based on a site ranking of zero (depth to ground water recorded at 260' per NMOSE, Section 9, T19S-R25E); Yates Petroleum Corporation requests closure, using stock piled excavated material as backfill, based on enclosed analytical results.

If you have any questions, please call me at 575-748-4111

Thank you.

YATES PETROLEUM CORPORATION

Amber Cannon
Environmental Regulatory Agent

/anc
Enclosure(s)

Warren ANW Federal #3 Battery

Analytical Report- 429589 & 429584	Sample Area	Sample Date	Sample Type	Depth	BTEX	GRO	DRO	TOTAL	Chlorides
N #1	Release Area	10/13/2011	Grab/Shovel	4'	0.0444	ND	35	35	25.1
N #2	Release Area	10/13/2011	Grab/Shovel	4'	0.179	ND	45.1	45.1	19.3
N #3	Release Area	10/13/2011	Grab/Shovel	4'	0.462	ND	28.8	28.8	221
N #4	Release Area	10/13/2011	Grab/Shovel	4'	ND	ND	ND	ND	160
S #1	Release Area	10/13/2011	Grab/Shovel	4'	ND	ND	58.5	58.5	10.8
S #2	Release Area	10/13/2011	Grab/Shovel	4'	0.0249	ND	37.8	37.8	65
S #3	Release Area	10/13/2011	Grab/Shovel	4'	0.0151	ND	42.8	42.8	313
S #4	Release Area	10/13/2011	Grab/Shovel	4'	ND	ND	ND	ND	264
B #1	Release Area	10/13/2011	Grab/Shovel	4'	1.06	97.1	177	274	24.9
B #2	Release Area	10/13/2011	Grab/Shovel	4'	1.18	84.3	185	269	40.2
B #3	Release Area	10/13/2011	Grab/Shovel	4'	0.00599	ND	72.2	72.2	274
B #4	Release Area	10/13/2011	Grab/Shovel	4'	0.679	32.2	73.8	106	108
B #0	Release Area	10/13/2011	Grab/Shovel	4'	10.3	590	997	1590	99.6
SP #1	Release Area	10/13/2011	Grab/Shovel	1'	0.0133	ND	72.4	72.4	193
SP #2	Release Area	10/13/2011	Grab/Shovel	1'	0.242	163	258	421	36.7
SP #3	Release Area	10/13/2011	Grab/Shovel	1'	0.895	143	235	378	58.8

Site Ranking is Zero (0). Depth to Ground Water >100' (approx. 260', Section 9-19S-25E, per NMOSE).

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

Released: Unknown MCF Gas; Recovered: 0 MCF Gas. Release Date: 9/29/2011

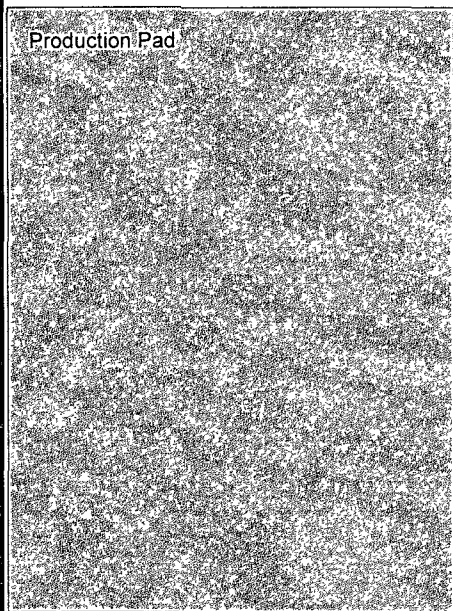


Release/Excavation Area
(contaminated soils scraped from surface)

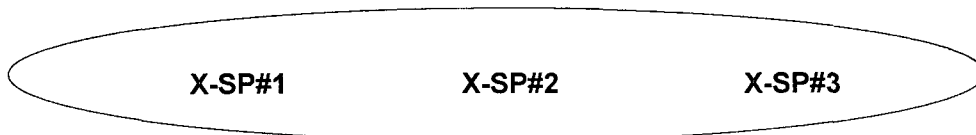


PIPELINE

Production Pad



	X-N#1	X-N#2	X-N#3	X-N#4
X-B#0	X-B#1	X-B#2	X-B#3	X-B#4
X-S#1	X-S#2	X-S#3	X-S#4	



STOCKPILE



Warren ANW Federal Battery

30-015-28598

Section 9, T19S-R25E

Eddy County, NM

SAMPLE DIAGRAM(Not to Scale)

Xenco Laboratories# 429589 & 429584
Report Date: 10/25/2011

Prepared by Amber Cannon
Environmental Regulatory Agent Trainee

Analytical Report 429584

**for
Yates Petroleum Corporation**

Project Manager: Amber Cannon

Warren Battery

30-015-28598

25-OCT-11

Collected By: Client



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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 (AAL11), 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)



25-OCT-11

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

Reference: XENCO Report No: **429584**
Warren Battery
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 429584. 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. 429584 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

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.

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Sample Cross Reference 429584



Yates Petroleum Corporation, Artesia, NM

Warren Battery

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
N #1	S	10-13-11 14:20	4 - 4 ft	429584-001
N #2	S	10-13-11 14:30	4 - 4 ft	429584-002
N #3	S	10-13-11 14:40	4 - 4 ft	429584-003
N #4	S	10-13-11 14:50	4 - 4 ft	429584-004
S #1	S	10-13-11 15:00	4 - 4 ft	429584-005
S #2	S	10-13-11 15:10	4 - 4 ft	429584-006
S #3	S	10-13-11 15:20	4 - 4 ft	429584-007
S #4	S	10-13-11 15:30	4 - 4 ft	429584-008
B #1	S	10-13-11 15:40	4 - 4 ft	429584-009
B #2	S	10-13-11 15:50	4 - 4 ft	429584-010
B #3	S	10-13-11 16:00	4 - 4 ft	429584-011
B #4	S	10-13-11 16:10	4 - 4 ft	429584-012
B #0	S	10-13-11 16:20	4 - 4 ft	429584-013
Stock Pile #1	S	10-13-11 16:30	1 - 1 ft	429584-014
Stock Pile #2	S	10-13-11 16:40	1 - 1 ft	429584-015
Stock Pile #3	S	10-13-11 16:50	1 - 1 ft	429584-016



CASE NARRATIVE

Client Name: Yates Petroleum Corporation

Project Name: Warren Battery



Project ID: 30-015-28598

Work Order Number: 429584

Report Date: 25-OCT-11

Date Received: 10/14/2011

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non nonformances and comments:

Batch: LBA-872871 BTEX by EPA 8021B

SW8021BM

Batch 872871, o-Xylene recovered below QC limits in the Matrix Spike and Matrix Spike Duplicate. Ethylbenzene, Toluene, m_p-Xylenes recovered below QC limits in the Matrix Spike Duplicate.

Samples affected are: 429584-002, -004, -008, -007, -014, -001, -006.

The Laboratory Control Sample for Toluene, o-Xylene, Ethylbenzene, m_p-Xylenes is within laboratory Control Limits

SW8021BM

Batch 872871, 1,4-Difluorobenzene recovered below QC limits . Matrix interferences is suspected; data confirmed by re-analysis

Samples affected are: 429584-014.

Batch: LBA-872885 TPH By SW8015B Mod

SW8015B_NM

Batch 872885, 1-Chlorooctane, o-Terphenyl recovered below QC limits . Matrix interferences is suspected; data confirmed by re-analysis

Samples affected are: 429584-003.

Batch: LBA-872889 Percent Moisture

RPD recoverd outside QC limits between the sample and sample duplicate.



CASE NARRATIVE

Client Name: Yates Petroleum Corporation

Project Name: Warren Battery



Project ID: 30-015-28598

Work Order Number: 429584

Report Date: 25-OCT-11

Date Received: 10/14/2011

*Batch: LBA-872977 BTEX by EPA 8021B
SW8021BM*

Batch 872977, 1,4-Difluorobenzene recovered below QC limits . Matrix interferences is suspected; data confirmed by re-analysis

Samples affected are: 429584-011,429584-012,429584-013.

4-Bromofluorobenzene recovered below QC limits . Matrix interferences is suspected; data confirmed by re-analysis

Samples affected are: 429584-011,429584-015,429584-012.

*Batch: LBA-873110 BTEX by EPA 8021B
SW8021BM*

Batch 873110, 4-Bromofluorobenzene recovered below QC limits . Matrix interferences is suspected; data confirmed by re-analysis

Samples affected are: 429584-009.



Certificate of Analysis Summary 429584

Yates Petroleum Corporation, Artesia, NM

Project Name: Warren Battery



Project Id: 30-015-28598

Contact: Amber Cannon

Project Location: Eddy County

Date Received in Lab: Fri Oct-14-11 01:54 pm

Report Date: 25-OCT-11

Project Manager: Brent Barron II

Analysis Requested	Lab Id:	429584-001	429584-002	429584-003	429584-004	429584-005	429584-006
	Field Id:	N #1	N #2	N #3	N #4	S #1	S #2
	Depth:	4-4 ft	4-4 ft	4-4 ft	4-4 ft	4-4 ft	4-4 ft
	Matrix:	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID
	Sampled:	Oct-13-11 14:20	Oct-13-11 14:30	Oct-13-11 14:40	Oct-13-11 14:50	Oct-13-11 15:00	Oct-13-11 15:10
BTEx by EPA 8021B	Extracted:	Oct-20-11 15:00	Oct-20-11 15:00	Oct-24-11 09:06	Oct-20-11 15:00	Oct-24-11 09:06	Oct-20-11 15:00
	Analyzed:	Oct-20-11 23:52	Oct-21-11 00:15	Oct-24-11 12:01	Oct-21-11 00:38	Oct-24-11 13:09	Oct-21-11 01:01
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		0.00153 0.00101	0.00484 0.00101	ND 0.0254	ND 0.00102	ND 0.0256	ND 0.00101
Toluene		0.00789 0.00203	0.0478 0.00202	ND 0.0508	ND 0.00203	ND 0.0512	0.00510 0.00203
Ethylbenzene		0.00413 0.00101	0.0180 0.00101	ND 0.0254	ND 0.00102	ND 0.0256	0.00207 0.00101
m_p-Xylenes		0.0220 0.00203	0.0854 0.00202	0.139 0.0508	ND 0.00203	ND 0.0512	0.0125 0.00203
o-Xylene		0.00884 0.00101	0.0229 0.00101	0.323 0.0254	ND 0.00102	ND 0.0256	0.00525 0.00101
Total Xylenes		0.0308 0.00101	0.108 0.00101	0.462 0.0254	ND 0.00102	ND 0.0256	0.0178 0.00101
Total BTEx		0.0444 0.00101	0.179 0.00101	0.462 0.0254	ND 0.00102	ND 0.0256	0.0249 0.00101
Percent Moisture	Extracted:	Oct-17-11 14:40	Oct-17-11 14:40	Oct-17-11 14:40	Oct-17-11 14:40	Oct-17-11 14:40	Oct-17-11 14:40
	Analyzed:	Oct-17-11 14:40	Oct-17-11 14:40	Oct-17-11 14:40	Oct-17-11 14:40	Oct-17-11 14:40	Oct-17-11 14:40
	Units/RL:	% RL	% RL	% RL	% RL	% RL	% RL
Percent Moisture		1.97 1.00	2.18 1.00	2.28 1.00	2.10 1.00	2.81 1.00	1.54 1.00
TPH By SW8015B Mod	Extracted:	Oct-20-11 12:45	Oct-19-11 13:45	Oct-19-11 13:45	Oct-19-11 13:45	Oct-19-11 13:45	Oct-19-11 13:45
	Analyzed:	Oct-21-11 17:11	Oct-21-11 08:03	Oct-21-11 08:43	Oct-21-11 09:18	Oct-19-11 22:42	Oct-19-11 23:20
	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 15.3	ND 15.3	ND 15.3	ND 15.3	ND 15.4	ND 15.2
C10-C28 Diesel Range Hydrocarbons		35.0 15.3	45.1 15.3	28.8 15.3	ND 15.3	58.5 15.4	37.8 15.2
Total TPH		35.0 15.3	45.1 15.3	28.8 15.3	ND 15.3	58.5 15.4	37.8 15.2

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Brent Barron II
Odessa Laboratory Manager



Certificate of Analysis Summary 429584

Yates Petroleum Corporation, Artesia, NM



Project Id: 30-015-28598

Contact: Amber Cannon

Project Location: Eddy County

Project Name: Warren Battery

Date Received in Lab: Fri Oct-14-11 01:54 pm

Report Date: 25-OCT-11

Project Manager: Brent Barron II

Analysis Requested	Lab Id:	429584-007	429584-008	429584-009	429584-010	429584-011	429584-012
	Field Id:	S #3	S #4	B #1	B #2	B #3	B #4
	Depth:	4-4 ft	4-4 ft	4-4 ft	4-4 ft	4-4 ft	4-4 ft
	Matrix:	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID
	Sampled:	Oct-13-11 15:20	Oct-13-11 15:30	Oct-13-11 15:40	Oct-13-11 15:50	Oct-13-11 16:00	Oct-13-11 16:10
BTEX by EPA 8021B	Extracted:	Oct-20-11 15:00	Oct-20-11 15:00	Oct-24-11 09:06	Oct-24-11 09:06	Oct-21-11 13:45	Oct-21-11 13:45
	Analyzed:	Oct-21-11 01:23	Oct-21-11 01:47	Oct-24-11 13:55	Oct-24-11 14:41	Oct-22-11 05:06	Oct-22-11 06:15
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		ND 0.00105	ND 0.00105	ND 0.0254	0.0347 0.0253	0.00599 0.00535	0.0474 0.0105
Toluene		0.00234 0.00209	ND 0.00210	0.0979 0.0507	0.223 0.0507	ND 0.0107	0.211 0.0209
Ethylbenzene		ND 0.00105	ND 0.00105	0.0672 0.0254	0.0666 0.0253	ND 0.00535	0.0398 0.0105
m_p-Xylenes		0.00603 0.00209	ND 0.00210	0.444 0.0507	0.392 0.0507	ND 0.0107	0.243 0.0209
o-Xylene		0.00670 0.00105	ND 0.00105	0.448 0.0254	0.468 0.0253	ND 0.00535	0.138 0.0105
Total Xylenes		0.0127 0.00105	ND 0.00105	0.892 0.0254	0.860 0.0253	ND 0.00535	0.381 0.0105
Total BTEX		0.0151 0.00105	ND 0.00105	1.06 0.0254	1.18 0.0253	0.00599 0.00535	0.679 0.0105
Percent Moisture	Extracted:	Oct-17-11 14:40	Oct-17-11 14:40	Oct-17-11 14:40	Oct-17-11 14:40	Oct-17-11 14:52	Oct-17-11 14:52
	Analyzed:	Oct-17-11 14:40	Oct-17-11 14:40	Oct-17-11 14:40	Oct-17-11 14:40	Oct-17-11 14:52	Oct-17-11 14:52
	Units/RL:	% RL	% RL	% RL	% RL	% RL	% RL
Percent Moisture		4.58 1.00	4.16 1.00	1.23 1.00	1.69 1.00	5.72 1.00	3.65 1.00
TPH By SW8015B Mod	Extracted:	Oct-19-11 13:45	Oct-19-11 13:45	Oct-19-11 13:45	Oct-19-11 13:45	Oct-19-11 13:45	Oct-19-11 13:45
	Analyzed:	Oct-19-11 23:56	Oct-20-11 00:32	Oct-20-11 01:07	Oct-20-11 01:42	Oct-20-11 03:26	Oct-20-11 04:00
	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 15.7	ND 15.6	97.1 15.2	84.3 15.3	ND 15.8	32.2 15.6
C10-C28 Diesel Range Hydrocarbons		42.8 15.7	ND 15.6	177 15.2	185 15.3	72.2 15.8	73.8 15.6
Total TPH		42.8 15.7	ND 15.6	274 15.2	269 15.3	72.2 15.8	106 15.6

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Brent Barron II
Odessa Laboratory Manager



Certificate of Analysis Summary 429584

Yates Petroleum Corporation, Artesia, NM

Project Name: Warren Battery



Project Id: 30-015-28598

Contact: Amber Cannon

Project Location: Eddy County

Date Received in Lab: Fri Oct-14-11 01:54 pm

Report Date: 25-OCT-11

Project Manager: Brent Barron II

Analysis Requested	Lab Id:	429584-013	429584-014	429584-015	429584-016		
	Field Id:	B #0	Stock Pile #1	Stock Pile #2	Stock Pile #3		
	Depth:	4-4 ft	1-1 ft	1-1 ft	1-1 ft		
	Matrix:	SOLID	SOLID	SOLID	SOLID		
	Sampled:	Oct-13-11 16:20	Oct-13-11 16:30	Oct-13-11 16:40	Oct-13-11 16:50		
BTEX by EPA 8021B	Extracted:	Oct-21-11 13:45	Oct-20-11 15:00	Oct-21-11 13:45	Oct-21-11 13:45		
	Analyzed:	Oct-22-11 07:23	Oct-21-11 02:09	Oct-22-11 08:09	Oct-22-11 09:40		
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL		
Benzene		0.0577 0.0256	ND 0.00104	ND 0.00510	ND 0.0512		
Toluene		0.683 0.0513	ND 0.00208	0.0156 0.0102	ND 0.102		
Ethylbenzene		0.820 0.0256	ND 0.00104	0.0124 0.00510	0.0635 0.0512		
m_p-Xylenes		5.48 0.0513	0.00514 0.00208	0.0888 0.0102	0.333 0.102		
o-Xylene		3.26 0.0256	0.00820 0.00104	0.125 0.00510	0.498 0.0512		
Total Xylenes		8.74 0.0256	0.0133 0.00104	0.214 0.00510	0.831 0.0512		
Total BTEX		10.3 0.0256	0.0133 0.00104	0.242 0.00510	0.895 0.0512		
Percent Moisture	Extracted:						
	Analyzed:	Oct-17-11 14:52	Oct-17-11 14:52	Oct-17-11 14:52	Oct-17-11 14:52		
	Units/RL:	% RL	% RL	% RL	% RL		
Percent Moisture		2.05 1.00	2.77 1.00	1.26 1.00	1.59 1.00		
TPH By SW8015B Mod	Extracted:	Oct-19-11 13:45	Oct-19-11 13:45	Oct-19-11 13:45	Oct-19-11 13:45		
	Analyzed:	Oct-20-11 04:34	Oct-20-11 05:08	Oct-20-11 05:42	Oct-20-11 06:15		
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL		
C6-C10 Gasoline Range Hydrocarbons		590 76.5	ND 15.5	163 75.9	143 76.3		
C10-C28 Diesel Range Hydrocarbons		997 76.5	72.4 15.5	258 75.9	235 76.3		
Total TPH		1590 76.5	72.4 15.5	421 75.9	378 76.3		

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

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Brent Barron II
Odessa Laboratory Manager



Flagging Criteria

- X** In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.
- B** A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.
- D** The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.
- E** The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.
- F** RPD exceeded lab control limits.
- J** The target analyte was positively identified below the quantitation 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.

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Form 2 - Surrogate Recoveries

Project Name: Warren Battery

Work Orders : 429584,

Project ID: 30-015-28598

Lab Batch #: 872885

Sample: 429584-005 / SMP

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 10/19/11 22:42

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
i-Chlorooctane	108	100	108	70-135	
o-Terphenyl	56.0	50.0	112	70-135	

Lab Batch #: 872885

Sample: 429584-006 / SMP

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 10/19/11 23:20

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
i-Chlorooctane	83.1	99.8	83	70-135	
o-Terphenyl	40.6	49.9	81	70-135	

Lab Batch #: 872885

Sample: 429584-007 / SMP

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 10/19/11 23:56

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
i-Chlorooctane	86.6	100	87	70-135	
o-Terphenyl	44.8	50.0	90	70-135	

Lab Batch #: 872885

Sample: 429584-008 / SMP

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 10/20/11 00:32

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
i-Chlorooctane	90.1	99.6	90	70-135	
o-Terphenyl	46.8	49.8	94	70-135	

Lab Batch #: 872885

Sample: 429584-009 / SMP

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 10/20/11 01:07

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
i-Chlorooctane	82.5	99.8	83	70-135	
o-Terphenyl	41.1	49.9	82	70-135	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

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

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



Form 2 - Surrogate Recoveries

Project Name: Warren Battery

Work Orders : 429584,

Project ID: 30-015-28598

Lab Batch #: 872885

Sample: 429584-010 / SMP

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 10/20/11 01:42

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	91.8	100	92	70-135	
o-Terphenyl	45.2	50.2	90	70-135	

Lab Batch #: 872885

Sample: 429584-011 / SMP

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 10/20/11 03:26

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	104	99.5	105	70-135	
o-Terphenyl	52.5	49.8	105	70-135	

Lab Batch #: 872885

Sample: 429584-012 / SMP

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 10/20/11 04:00

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	104	100	104	70-135	
o-Terphenyl	52.9	50.1	106	70-135	

Lab Batch #: 872885

Sample: 429584-013 / SMP

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 10/20/11 04:34

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	123	99.9	123	70-135	
o-Terphenyl	55.2	50.0	110	70-135	

Lab Batch #: 872885

Sample: 429584-014 / SMP

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 10/20/11 05:08

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	99.6	100	100	70-135	
o-Terphenyl	48.6	50.2	97	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] = $100 \times A / B$

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



Form 2 - Surrogate Recoveries

Project Name: Warren Battery

Work Orders : 429584,

Project ID: 30-015-28598

Lab Batch #: 872885

Sample: 429584-015 / SMP

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 10/20/11 05:42

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	110	99.9	110	70-135	
o-Terphenyl	55.3	50.0	111	70-135	

Lab Batch #: 872885

Sample: 429584-016 / SMP

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 10/20/11 06:15

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	104	100	104	70-135	
o-Terphenyl	52.1	50.1	104	70-135	

Lab Batch #: 872871

Sample: 429584-001 / SMP

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 10/20/11 23:52

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0248	0.0300	83	80-120	
4-Bromofluorobenzene	0.0292	0.0300	97	80-120	

Lab Batch #: 872871

Sample: 429584-002 / SMP

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 10/21/11 00:15

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0245	0.0300	82	80-120	
4-Bromofluorobenzene	0.0303	0.0300	101	80-120	

Lab Batch #: 872871

Sample: 429584-004 / SMP

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 10/21/11 00:38

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0256	0.0300	85	80-120	
4-Bromofluorobenzene	0.0267	0.0300	89	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: Warren Battery

Work Orders : 429584,

Project ID: 30-015-28598

Lab Batch #: 872871

Sample: 429584-006 / SMP

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 10/21/11 01:01

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0247	0.0300	82	80-120	
4-Bromofluorobenzene	0.0296	0.0300	99	80-120	

Lab Batch #: 872871

Sample: 429584-007 / SMP

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 10/21/11 01:23

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0251	0.0300	84	80-120	
4-Bromofluorobenzene	0.0294	0.0300	98	80-120	

Lab Batch #: 872871

Sample: 429584-008 / SMP

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 10/21/11 01:47

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0264	0.0300	88	80-120	
4-Bromofluorobenzene	0.0287	0.0300	96	80-120	

Lab Batch #: 872871

Sample: 429584-014 / SMP

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 10/21/11 02:09

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0238	0.0300	79	80-120	**
4-Bromofluorobenzene	0.0284	0.0300	95	80-120	

Lab Batch #: 872885

Sample: 429584-002 / SMP

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 10/21/11 08:03

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Chlorooctane	106	100	106	70-135	
o-Terphenyl	52.7	50.0	105	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: Warren Battery

Work Orders : 429584,

Project ID: 30-015-28598

Lab Batch #: 872885

Sample: 429584-003 / SMP

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 10/21/11 08:43

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	67.3	100	67	70-135	**
o-Terphenyl	34.2	50.0	68	70-135	**

Lab Batch #: 872885

Sample: 429584-004 / SMP

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 10/21/11 09:18

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	72.2	100	72	70-135	
o-Terphenyl	36.3	50.0	73	70-135	

Lab Batch #: 872983

Sample: 429584-001 / SMP

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 10/21/11 17:11

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	101	100	101	70-135	
o-Terphenyl	47.9	50.1	96	70-135	

Lab Batch #: 872977

Sample: 429584-011 / SMP

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 10/22/11 05:06

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0216	0.0300	72	80-120	**
4-Bromofluorobenzene	0.0167	0.0300	56	80-120	**

Lab Batch #: 872977

Sample: 429584-012 / SMP

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 10/22/11 06:15

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0231	0.0300	77	80-120	**
4-Bromofluorobenzene	0.0233	0.0300	78	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: Warren Battery

Work Orders : 429584,

Project ID: 30-015-28598

Lab Batch #: 872977

Sample: 429584-013 / SMP

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 10/22/11 07:23

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0237	0.0300	79	80-120	**
4-Bromofluorobenzene	0.0819	0.0300	273	80-120	**

Lab Batch #: 872977

Sample: 429584-015 / SMP

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 10/22/11 08:09

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0245	0.0300	82	80-120	
4-Bromofluorobenzene	0.0176	0.0300	59	80-120	**

Lab Batch #: 872977

Sample: 429584-016 / SMP

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 10/22/11 09:40

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0246	0.0300	82	80-120	
4-Bromofluorobenzene	0.0261	0.0300	87	80-120	

Lab Batch #: 873110

Sample: 429584-003 / SMP

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 10/24/11 12:01

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0243	0.0300	81	80-120	
4-Bromofluorobenzene	0.0249	0.0300	83	80-120	

Lab Batch #: 873110

Sample: 429584-005 / SMP

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 10/24/11 13:09

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0257	0.0300	86	80-120	
4-Bromofluorobenzene	0.0277	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: Warren Battery

Work Orders : 429584,

Project ID: 30-015-28598

Lab Batch #: 873110

Sample: 429584-009 / SMP

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 10/24/11 13:55

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0287	0.0300	96	80-120	
4-Bromofluorobenzene	0.0238	0.0300	79	80-120	**

Lab Batch #: 873110

Sample: 429584-010 / SMP

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 10/24/11 14:41

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0296	0.0300	99	80-120	
4-Bromofluorobenzene	0.0246	0.0300	82	80-120	

Lab Batch #: 872885

Sample: 613005-1-BLK / BLK

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 10/19/11 19:30

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Chlorooctane	107	100	107	70-135	
o-Terphenyl	57.0	50.0	114	70-135	

Lab Batch #: 872871

Sample: 612998-1-BLK / BLK

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 10/20/11 22:21

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0261	0.0300	87	80-120	
4-Bromofluorobenzene	0.0262	0.0300	87	80-120	

Lab Batch #: 872983

Sample: 613072-1-BLK / BLK

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 10/21/11 15:07

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Chlorooctane	102	100	102	70-135	
o-Terphenyl	50.8	50.0	102	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: Warren Battery

Work Orders : 429584,

Project ID: 30-015-28598

Lab Batch #: 872977

Sample: 613067-1-BLK / BLK

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 10/21/11 23:01

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0246	0.0300	82	80-120	
4-Bromofluorobenzene	0.0260	0.0300	87	80-120	

Lab Batch #: 873110

Sample: 613151-1-BLK / BLK

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 10/24/11 11:36

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0253	0.0300	84	80-120	
4-Bromofluorobenzene	0.0269	0.0300	90	80-120	

Lab Batch #: 872885

Sample: 613005-1-BKS / BKS

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 10/19/11 18:21

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Chlorooctane	116	100	116	70-135	
o-Terphenyl	49.9	50.0	100	70-135	

Lab Batch #: 872871

Sample: 612998-1-BKS / BKS

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 10/20/11 20:50

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0281	0.0300	94	80-120	
4-Bromofluorobenzene	0.0280	0.0300	93	80-120	

Lab Batch #: 872983

Sample: 613072-1-BKS / BKS

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 10/21/11 14:04

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Chlorooctane	111	100	111	70-135	
o-Terphenyl	50.9	50.0	102	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: Warren Battery

Work Orders : 429584,

Project ID: 30-015-28598

Lab Batch #: 872977

Sample: 613067-1-BKS / BKS

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 10/21/11 21:30

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0272	0.0300	91	80-120	
4-Bromofluorobenzene	0.0277	0.0300	92	80-120	

Lab Batch #: 873110

Sample: 613151-1-BKS / BKS

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 10/24/11 10:04

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0279	0.0300	93	80-120	
4-Bromofluorobenzene	0.0303	0.0300	101	80-120	

Lab Batch #: 872885

Sample: 613005-1-BSD / BSD

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 10/19/11 18:52

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Chlorooctane	115	100	115	70-135	
o-Terphenyl	51.4	50.0	103	70-135	

Lab Batch #: 872871

Sample: 612998-1-BSD / BSD

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 10/20/11 21:13

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0286	0.0300	95	80-120	
4-Bromofluorobenzene	0.0271	0.0300	90	80-120	

Lab Batch #: 872983

Sample: 613072-1-BSD / BSD

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 10/21/11 14:35

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Chlorooctane	112	100	112	70-135	
o-Terphenyl	48.2	50.0	96	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: Warren Battery

Work Orders : 429584,

Project ID: 30-015-28598

Lab Batch #: 872977

Sample: 613067-1-BSD / BSD

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 10/21/11 21:53

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0278	0.0300	93	80-120	
4-Bromofluorobenzene	0.0289	0.0300	96	80-120	

Lab Batch #: 873110

Sample: 613151-1-BSD / BSD

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 10/24/11 10:27

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0276	0.0300	92	80-120	
4-Bromofluorobenzene	0.0302	0.0300	101	80-120	

Lab Batch #: 872871

Sample: 429852-002 S / MS

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 10/21/11 02:32

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0278	0.0300	93	80-120	
4-Bromofluorobenzene	0.0281	0.0300	94	80-120	

Lab Batch #: 872885

Sample: 429591-001 S / MS

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 10/21/11 09:50

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Chlorooctane	124	100	124	70-135	
o-Terphenyl	55.8	50.1	111	70-135	

Lab Batch #: 872977

Sample: 429746-001 S / MS

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 10/22/11 03:12

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0276	0.0300	92	80-120	
4-Bromofluorobenzene	0.0297	0.0300	99	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: Warren Battery

Work Orders : 429584,

Project ID: 30-015-28598

Lab Batch #: 872885

Sample: 429591-001 SD / MSD

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 10/20/11 09:45

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Chlorooctane	113	99.7	113	70-135	
o-Terphenyl	48.1	49.9	96	70-135	

Lab Batch #: 872871

Sample: 429852-002 SD / MSD

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 10/21/11 02:55

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0275	0.0300	92	80-120	
4-Bromofluorobenzene	0.0281	0.0300	94	80-120	

Lab Batch #: 872977

Sample: 429746-001 SD / MSD

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 10/22/11 03:35

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0275	0.0300	92	80-120	
4-Bromofluorobenzene	0.0283	0.0300	94	80-120	

Lab Batch #: 873110

Sample: 429584-003 D / MD

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 10/24/11 12:24

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0245	0.0300	82	80-120	
4-Bromofluorobenzene	0.0257	0.0300	86	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.



BS / BSD Recoveries



Project Name: Warren Battery

Work Order #: 429584

Analyst: ASA

Date Prepared: 10/20/2011

Project ID: 30-015-28598

Date Analyzed: 10/20/2011

Lab Batch ID: 872871

Sample: 612998-1-BKS

Batch #: 1

Matrix: Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes											
Benzene	<0.00100	0.100	0.111	111	0.125	0.128	102	14	70-130	35	
Toluene	<0.00200	0.100	0.114	114	0.125	0.129	103	12	70-130	35	
Ethylbenzene	<0.00100	0.100	0.118	118	0.125	0.135	108	13	71-129	35	
m_p-Xylenes	<0.00200	0.200	0.236	118	0.250	0.270	108	13	70-135	35	
o-Xylene	<0.00100	0.100	0.117	117	0.125	0.136	109	15	71-133	35	

Analyst: ASA

Date Prepared: 10/21/2011

Date Analyzed: 10/21/2011

Lab Batch ID: 872977

Sample: 613067-1-BKS

Batch #: 1

Matrix: Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes											
Benzene	<0.00100	0.100	0.101	101	0.100	0.100	100	1	70-130	35	
Toluene	<0.00200	0.100	0.103	103	0.100	0.101	101	2	70-130	35	
Ethylbenzene	<0.00100	0.100	0.108	108	0.100	0.106	106	2	71-129	35	
m_p-Xylenes	<0.00200	0.200	0.215	108	0.200	0.212	106	1	70-135	35	
o-Xylene	<0.00100	0.100	0.108	108	0.100	0.108	108	0	71-133	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



BS / BSD Recoveries



Project Name: Warren Battery

Work Order #: 429584

Analyst: ASA

Date Prepared: 10/24/2011

Project ID: 30-015-28598

Date Analyzed: 10/24/2011

Lab Batch ID: 873110

Sample: 613151-1-BKS

Batch #: 1

Matrix: Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes											
Benzene	<0.00100	0 100	0.0906	91	0 100	0 0919	92	1	70-130	35	
Toluene	<0 00200	0 100	0.0943	94	0 100	0 0949	95	1	70-130	35	
Ethylbenzene	<0.00100	0.100	0.101	101	0.100	0 101	101	0	71-129	35	
m_p-Xylenes	<0.00200	0.200	0 202	101	0 200	0.201	101	0	70-135	35	
o-Xylene	<0.00100	0.100	0.101	101	0 100	0.101	101	0	71-133	35	

Analyst: ASA

Date Prepared: 10/19/2011

Date Analyzed: 10/19/2011

Lab Batch ID: 872885

Sample: 613005-1-BKS

Batch #: 1

Matrix: Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

TPH By SW8015B Mod	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes											
C6-C10 Gasoline Range Hydrocarbons	<15.0	1000	895	90	1000	891	89	0	70-135	35	
C10-C28 Diesel Range Hydrocarbons	<15.0	1000	870	87	1000	836	84	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



BS / BSD Recoveries



Project Name: Warren Battery

Work Order #: 429584

Analyst: ASA

Date Prepared: 10/20/2011

Project ID: 30-015-28598

Date Analyzed: 10/21/2011

Lab Batch ID: 872983

Sample: 613072-1-BKS

Batch #: 1

Matrix: Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

TPH By SW8015B Mod	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes											
C6-C10 Gasoline Range Hydrocarbons	<15 0	1000	757	76	1000	763	76	1	70-135	35	
C10-C28 Diesel Range Hydrocarbons	<15 0	1000	827	83	1000	781	78	6	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: Warren Battery

Work Order #: 429584

Project ID: 30-015-28598

Lab Batch ID: 872871

QC- Sample ID: 429852-002 S

Batch #: 1 Matrix: Soil

Date Analyzed: 10/21/2011

Date Prepared: 10/20/2011

Analyst: ASA

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY											
BTEX by EPA 8021B Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.00115	0.115	0.0843	73	0.114	0.0812	71	4	70-130	35	
Toluene	<0.00229	0.115	0.0826	72	0.114	0.0775	68	6	70-130	35	X
Ethylbenzene	<0.00115	0.115	0.0826	72	0.114	0.0760	67	8	71-129	35	X
m_p-Xylenes	<0.00229	0.229	0.160	70	0.228	0.146	64	9	70-135	35	X
o-Xylene	<0.00115	0.115	0.0762	66	0.114	0.0686	60	10	71-133	35	X

Lab Batch ID: 872977

QC- Sample ID: 429746-001 S

Batch #: 1 Matrix: Solid

Date Analyzed: 10/22/2011

Date Prepared: 10/21/2011

Analyst: ASA

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY											
BTEX by EPA 8021B Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.00103	0.103	0.0810	79	0.103	0.0822	80	1	70-130	35	
Toluene	<0.00207	0.103	0.0825	80	0.103	0.0830	81	1	70-130	35	
Ethylbenzene	<0.00103	0.103	0.0858	83	0.103	0.0855	83	0	71-129	35	
m_p-Xylenes	<0.00207	0.207	0.169	82	0.205	0.168	82	1	70-135	35	
o-Xylene	<0.00103	0.103	0.0843	82	0.103	0.0833	81	1	71-133	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 Applicable
N = See Narrative, EQL = Estimated Quantitation Limit



Form 3 - MS / MSD Recoveries



Project Name: Warren Battery

Work Order #: 429584

Project ID: 30-015-28598

Lab Batch ID: 872885

QC- Sample ID: 429591-001 S

Batch #: 1 Matrix: Solid

Date Analyzed: 10/21/2011

Date Prepared: 10/19/2011

Analyst: ASA

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY											
TPH By SW8015B Mod Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
C6-C10 Gasoline Range Hydrocarbons	<16 3	1090	1050	96	1080	995	92	5	70-135	35	
C10-C28 Diesel Range Hydrocarbons	<16 3	1090	1060	97	1080	955	88	10	70-135	35	

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

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

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



Sample Duplicate Recovery



Project Name: Warren Battery

Work Order #: 429584

Lab Batch #: 873110

Project ID: 30-015-28598

Date Analyzed: 10/24/2011 12:24

Date Prepared: 10/24/2011

Analyst: ASA

QC- Sample ID: 429584-003 D

Batch #: 1

Matrix: Solid

Reporting Units: mg/kg

SAMPLE / SAMPLE DUPLICATE RECOVERY					
BTEX by EPA 8021B	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Analyte					
Benzene	<0.0254	<0.0254	0	35	U
Toluene	<0.0508	<0.0508	0	35	U
Ethylbenzene	<0.0254	<0.0254	0	35	U
m_p-Xylenes	0.139	0.172	21	35	
o-Xylene	0.323	0.376	15	35	

Lab Batch #: 872551

Date Analyzed: 10/17/2011 14:52

Date Prepared: 10/17/2011

Analyst: WRU

QC- Sample ID: 429584-011 D

Batch #: 1

Matrix: Solid

Reporting Units: %

SAMPLE / SAMPLE DUPLICATE RECOVERY					
Percent Moisture	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Analyte					
Percent Moisture	5.72	5.96	4	20	

Lab Batch #: 872889

Date Analyzed: 10/17/2011 14:40

Date Prepared: 10/17/2011

Analyst: BRB

QC- Sample ID: 429596-001 D

Batch #: 1

Matrix: Solid

Reporting Units: %

SAMPLE / SAMPLE DUPLICATE RECOVERY					
Percent Moisture	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Analyte					
Percent Moisture	4.74	7.06	39	20	F

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: Warren Battery

Company Name: Yates Petroleum Corporation

Project #: 30-015-28598

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: ☒ Standard ☐ TRRP ☐ NPDES

Sampler Signature: Amber Cannon

e-mail: acannon@yatespetroleum.com

LAB # (lab use only)		FIELD CODE		Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total # of Containers	Preservation & # of Containers										Matrix	Analyze For:										RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT		
										Ice	HNO ₃	HCl	H ₂ SO ₄	NaOH	Na ₂ S ₂ O ₃	None	Other (Specify)	DW=Drinking Water SL=Sludge GW=Groundwater S=Soil/Solid NP=Non-Potable Specify Other	TPH 418.1 8015B 8015B	TPH TX 1005 TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO ₄ , Alkalinity)	SAR / ESP / CEC	Metals As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/8030 or BTEX 8280	RCI	NORM	Chlorides				
01	N #1	4'	4'	10/13/2011	2:20 PM			1	X									S	X								X		X				X	
02	N #2	4'	4'	10/13/2011	2:30 PM			1	X									S	X								X		X				X	
03	N #3	4'	4'	10/13/2011	2:40 PM			1	X									S	X								X		X				X	
04	N #4	4'	4'	10/13/2011	2:50 PM			1	X									S	X								X		X				X	
05	S #1	4'	4'	10/13/2011	3:00 PM			1	X									S	X								X		X				X	
06	S #2	4'	4'	10/13/2011	3:10 PM			1	X									S	X								X		X				X	
07	S #3	4'	4'	10/13/2011	3:20 PM			1	X									S	X								X		X				X	
08	S #4	4'	4'	10/13/2011	3:30 PM			1	X									S	X								X		X				X	
09	B #1	4'	4'	10/13/2011	3:40 PM			1	X									S	X								X		X				X	
10	B #2	4'	4'	10/13/2011	3:50 PM			1	X									S	X								X		X				X	
11	B #3	4'	4'	10/13/2011	4:00 PM			1	X									S	X								X		X				X	
12	B #4	4'	4'	10/13/2011	4:10 PM			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 <u>Amber Cannon</u>	Date 10/14/11	Time 8:26 AM	Received by <u>[Signature]</u>	Date 10/14/11	Time 8:26 AM
Relinquished by	Date	Time	Received by	Date	Time
Relinquished by <u>[Signature]</u>	Date 10/14/11	Time 1:54 PM	Received by ELDT <u>Andrea Cam</u>	Date 10/14/11	Time 1:54 PM

Laboratory Comments:
 Sample Containers intact? ☒
 VOCs Free of Headspace? ☒
 Labels on container(s) ☒
 Custody seals on container(s) ☒
 Custody seals on cooler(s) ☒
 Sample Hand Delivered by Sampler/Client Rep? ☒
 by Courier? ☒ UPS ☒ DHL ☒ FedEx ☒ Lone Star
 Temperature Upon Receipt 40.2 °C 2.0 °C

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: **Warren Battery**

Company Name Yates Petroleum Corporation

Project #: 30-015-28598

Company Address 105 South 4th Street

Project Loc: Eddy County

City/State/Zip. Artesia, NM 88210

PO #: 1032020

Telephone No. 575-748-4111

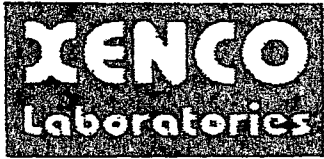
Fax No: 575-748-4585

Report Format: ☒ Standard ☐ TRRP ☐ NPDES

Sampler Signature: Amber Cannon

e-mail: acannon@yatespetroleum.com

[illegible]



XENCO Laboratories
Atlanta, Boca Raton, Corpus Christi, Dallas
Houston, Miami, Odessa, Philadelphia
Phoenix, San Antonio, Tampa

Document Title: Sample Receipt Checklist
Document No.: SYS-SRC
Revision/Date: No. 01, 5/27/2010
Effective Date: 6/1/2010 Page 1 of 1

Prelogin / Nonconformance Report - Sample Log-In

Client: Yates Petroleum
Date/Time: 10-14-11 13:54
Lab ID #: 429584/429589
Initials: ME

Sample Receipt Checklist

1. Samples on ice?	Blue	<u>Water</u>	No	
2. Shipping container in good condition?	<u>Yes</u>	No	None	
3. Custody seals intact on shipping container (cooler) and bottles?	<u>Yes</u>	No	N/A	
4. Chain of Custody present?	<u>Yes</u>	No		
5. Sample instructions complete on chain of custody?	<u>Yes</u>	No		
6. Any missing / extra samples?	Yes	<u>No</u>		
7. Chain of custody signed when relinquished / received?	<u>Yes</u>	No		
8. Chain of custody agrees with sample label(s)?	<u>Yes</u>	No		
9. Container labels legible and intact?	<u>Yes</u>	No		
10. Sample matrix / properties agree with chain of custody?	<u>Yes</u>	No		
11. Samples in proper container / bottle?	<u>Yes</u>	No		
12. Samples properly preserved?	<u>Yes</u>	No	N/A	
13. Sample container intact?	<u>Yes</u>	No		
14. Sufficient sample amount for indicated test(s)?	<u>Yes</u>	No		
15. All samples received within sufficient hold time?	<u>Yes</u>	No		
16. Subcontract of sample(s)?	Yes	No	<u>N/A</u>	
17. VOC sample have zero head space?	<u>Yes</u>	No	N/A	
18. Cooler 1 No.	Cooler 2 No.	Cooler 3 No.	Cooler 4 No.	Cooler 5 No.
lbs <u>2.0</u> °C	lbs °C	lbs °C	lbs °C	lbs °C

Nonconformance Documentation

Contact: _____ Contacted by: _____ Date/Time: _____

Regarding: _____

Corrective Action Taken: _____

Check all that apply: ☐ Cooling process has begun shortly after sampling event and out of temperature condition acceptable by NELAC 5.5.8.3.1.a.1.
☐ Initial and Backup Temperature confirm out of temperature conditions
☐ Client understands and would like to proceed with analysis

Analytical Report 429589

for Yates Petroleum Corporation

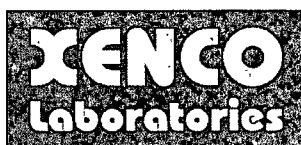
Project Manager: Amber Cannon

Warren Battery

30-015-28598

25-OCT-11

Collected By: Client



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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)



25-OCT-11

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

Reference: XENCO Report No: **429589**
Warren Battery
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 429589. 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. 429589 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 429589



Yates Petroleum Corporation, Artesia, NM
Warren Battery

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
N #1	S	10-13-11 14:20	4 - 4 ft	429589-001
N #2	S	10-13-11 14:30	4 - 4 ft	429589-002
N #3	S	10-13-11 14:40	4 - 4 ft	429589-003
N #4	S	10-13-11 14:50	4 - 4 ft	429589-004
S #1	S	10-13-11 15:00	4 - 4 ft	429589-005
S #2	S	10-13-11 15:10	4 - 4 ft	429589-006
S #3	S	10-13-11 15:20	4 - 4 ft	429589-007
S #4	S	10-13-11 15:30	4 - 4 ft	429589-008
B #1	S	10-13-11 15:40	4 - 4 ft	429589-009
B #2	S	10-13-11 15:50	4 - 4 ft	429589-010
B #3	S	10-13-11 16:00	4 - 4 ft	429589-011
B #4	S	10-13-11 16:10	4 - 4 ft	429589-012
B #0	S	10-13-11 16:20	4 - 4 ft	429589-013
Stock Pile #1	S	10-13-11 16:30	1 - 1 ft	429589-014
Stock Pile #2	S	10-13-11 16:40	1 - 1 ft	429589-015
Stock Pile #3	S	10-13-11 16:50	1 - 1 ft	429589-016



CASE NARRATIVE

Client Name: Yates Petroleum Corporation

Project Name: Warren Battery



Project ID: 30-015-28598

Work Order Number: 429589

Report Date: 25-OCT-11

Date Received: 10/14/2011

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non nonformances and comments:

Batch: LBA-872889 Percent Moisture

RPD recovered outside QC limits between the sample and sample duplicate.



Certificate of Analysis Summary 429589

Yates Petroleum Corporation, Artesia, NM



Project Id: 30-015-28598

Contact: Amber Cannon

Project Location: Eddy County

Project Name: Warren Battery

Date Received in Lab: Fri Oct-14-11 01:54 pm

Report Date: 25-OCT-11

Project Manager: Brent Barron II

<i>Analysis Requested</i>	<i>Lab Id:</i>	429589-001	429589-002	429589-003	429589-004	429589-005	429589-006
	<i>Field Id:</i>	N #1	N #2	N #3	N #4	S #1	S #2
	<i>Depth:</i>	4-4 ft	4-4 ft	4-4 ft	4-4 ft	4-4 ft	4-4 ft
	<i>Matrix:</i>	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID
	<i>Sampled:</i>	Oct-13-11 14.20	Oct-13-11 14.30	Oct-13-11 14.40	Oct-13-11 14.50	Oct-13-11 15.00	Oct-13-11 15.10
Anions by E300	<i>Extracted:</i>						
	<i>Analyzed:</i>	Oct-17-11 18:01	Oct-17-11 18:01	Oct-17-11 18:01	Oct-17-11 18:01	Oct-17-11 18:01	Oct-17-11 18:01
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		25.1 8.57	19.3 8.59	221 8.60	160 8.58	10.8 8.64	65.0 8.53
Percent Moisture	<i>Extracted:</i>						
	<i>Analyzed:</i>	Oct-17-11 14.40	Oct-17-11 14.40	Oct-17-11 14.40	Oct-17-11 14.40	Oct-17-11 14.40	Oct-17-11 14.40
	<i>Units/RL:</i>	% RL	% RL	% RL	% RL	% RL	% RL
Percent Moisture		1.97 1.00	2.18 1.00	2.28 1.00	2.10 1.00	2.81 1.00	1.54 1.00

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



Certificate of Analysis Summary 429589

Yates Petroleum Corporation, Artesia, NM

Project Name: Warren Battery



Project Id: 30-015-28598

Contact: Amber Cannon

Project Location: Eddy County

Date Received in Lab: Fri Oct-14-11 01:54 pm

Report Date: 25-OCT-11

Project Manager: Brent Barron II

Analysis Requested	Lab Id:	429589-007	429589-008	429589-009	429589-010	429589-011	429589-012
	Field Id:	S #3	S #4	B #1	B #2	B #3	B #4
	Depth:	4-4 ft	4-4 ft	4-4 ft	4-4 ft	4-4 ft	4-4 ft
	Matrix:	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID
	Sampled:	Oct-13-11 15:20	Oct-13-11 15:30	Oct-13-11 15:40	Oct-13-11 15:50	Oct-13-11 16:00	Oct-13-11 16:10
Anions by E300	Extracted:						
	Analyzed:	Oct-22-11 02:15	Oct-22-11 02:15	Oct-22-11 02:15	Oct-22-11 02:15	Oct-22-11 02:15	Oct-22-11 02:15
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		313 8.80	264 8.76	24.9 8.50	40.2 8.54	274 8.91	108 8.72
Percent Moisture	Extracted:						
	Analyzed:	Oct-17-11 14:40	Oct-17-11 14:40	Oct-17-11 14:40	Oct-17-11 14:50	Oct-17-11 14:52	Oct-17-11 14:52
	Units/RL:	% RL	% RL	% RL	% RL	% RL	% RL
Percent Moisture		4.58 1.00	4.16 1.00	1.23 1.00	1.69 1.00	5.72 1.00	3.65 1.00

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Brent Barron II
Odessa Laboratory Manager



Certificate of Analysis Summary 429589

Yates Petroleum Corporation, Artesia, NM

Project Name: Warren Battery



Project Id: 30-015-28598

Contact: Amber Cannon

Project Location: Eddy County

Date Received in Lab: Fri Oct-14-11 01:54 pm

Report Date: 25-OCT-11

Project Manager: Brent Barron II

Analysis Requested	Lab Id:	429589-013	429589-014	429589-015	429589-016		
	Field Id:	B #0	Stock Pile #1	Stock Pile #2	Stock Pile #3		
	Depth:	4-4 ft	1-1 ft	1-1 ft	1-1 ft		
	Matrix:	SOLID	SOLID	SOLID	SOLID		
	Sampled:	Oct-13-11 16:20	Oct-13-11 16:30	Oct-13-11 16:40	Oct-13-11 16:50		
Anions by E300	Extracted:						
	Analyzed:	Oct-22-11 02:15	Oct-21-11 14:39	Oct-21-11 14:39	Oct-21-11 14:39		
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL		
Chloride		99.6 8.58	193 8.64	36.7 8.51	58.8 8.54		
Percent Moisture	Extracted:						
	Analyzed:	Oct-17-11 14:52	Oct-17-11 14:52	Oct-17-11 14:52	Oct-17-11 14:52		
	Units/RL:	% RL	% RL	% RL	% RL		
Percent Moisture		2.05 1.00	2.77 1.00	1.26 1.00	1.59 1.00		

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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Odessa Laboratory Manager



Flagging Criteria

- X** In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.
- B** A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.
- D** The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.
- E** The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.
- F** RPD exceeded lab control limits.
- J** The target analyte was positively identified below the quantitation 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.

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 2505 North Falkenburg Rd, Tampa, FL 33619
 5757 NW 158th St, Miami Lakes, FL 33014
 12600 West I-20 East, Odessa, TX 79765
 6017 Financial Drive, Norcross, GA 30071
 3725 E. Atlanta Ave, Phoenix, AZ 85040

Phone	Fax
(281) 240-4200	(281) 240-4280
(214) 902 0300	(214) 351-9139
(210) 509-3334	(210) 509-3335
(813) 620-2000	(813) 620-2033
(305) 823-8500	(305) 823-8555
(432) 563-1800	(432) 563-1713
(770) 449-8800	(770) 449-5477
(602) 437-0330	



BS / BSD Recoveries



Project Name: Warren Battery

Work Order #: 429589

Analyst: BRB

Date Prepared: 10/17/2011

Project ID: 30-015-28598

Date Analyzed: 10/17/2011

Lab Batch ID: 872546

Sample: 872546-1-BKS

Batch #: 1

Matrix: Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Anions by E300	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	21.7	109	20.0	22.2	111	2	75-125	20	

Analyst: BRB

Date Prepared: 10/22/2011

Date Analyzed: 10/22/2011

Lab Batch ID: 872931

Sample: 872931-1-BKS

Batch #: 1

Matrix: Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Anions by E300	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	21.5	108	20.0	21.6	108	0	75-125	20	

Analyst: BRB

Date Prepared: 10/21/2011

Date Analyzed: 10/21/2011

Lab Batch ID: 872935

Sample: 872935-1-BKS

Batch #: 1

Matrix: Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Anions by E300	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	21.5	108	20.0	21.3	107	1	75-125	20	

Relative Percent Difference RPD = $200 \times |(C-F)/(C+F)|$

Blank Spike Recovery [D] = $100 \times (C)/[B]$

Blank Spike Duplicate Recovery [G] = $100 \times (F)/[E]$

All results are based on MDL and Validated for QC Purposes



Form 3 - MS Recoveries



Project Name: Warren Battery

Work Order #: 429589

Lab Batch #: 872546

Date Analyzed: 10/17/2011

Date Prepared: 10/17/2011

Project ID: 30-015-28598

Analyst: BRB

QC- Sample ID: 429589-006 S

Batch #: 1

Matrix: Solid

Reporting Units: mg/kg

MATRIX / MATRIX SPIKE RECOVERY STUDY						
Inorganic Anions by EPA 300	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Analytes						
Chloride	65.0	203	283	107	75-125	

Lab Batch #: 872546

Date Analyzed: 10/17/2011

Date Prepared: 10/17/2011

Analyst: BRB

QC- Sample ID: 429638-001 S

Batch #: 1

Matrix: Soil

Reporting Units: mg/kg

MATRIX / MATRIX SPIKE RECOVERY STUDY						
Inorganic Anions by EPA 300	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Analytes						
Chloride	208	106	322	108	75-125	

Lab Batch #: 872931

Date Analyzed: 10/22/2011

Date Prepared: 10/22/2011

Analyst: BRB

QC- Sample ID: 429589-013 S

Batch #: 1

Matrix: Solid

Reporting Units: mg/kg

MATRIX / MATRIX SPIKE RECOVERY STUDY						
Inorganic Anions by EPA 300	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Analytes						
Chloride	99.6	204	321	109	75-125	

Lab Batch #: 872931

Date Analyzed: 10/22/2011

Date Prepared: 10/22/2011

Analyst: BRB

QC- Sample ID: 429610-003 S

Batch #: 1

Matrix: Solid

Reporting Units: mg/kg

MATRIX / MATRIX SPIKE RECOVERY STUDY						
Inorganic Anions by EPA 300	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Analytes						
Chloride	3340	2280	5730	105	75-125	

Matrix Spike Percent Recovery [D] = $100 \times (C-A)/B$
Relative Percent Difference [E] = $200 \times (C-A)/(C+B)$
All Results are based on MDL and Validated for QC Purposes

BRL - Below Reporting Limit



Form 3 - MS Recoveries



Project Name: Warren Battery

Work Order #: 429589

Lab Batch #: 872935

Date Analyzed: 10/21/2011

Date Prepared: 10/21/2011

Project ID: 30-015-28598

Analyst: BRB

QC- Sample ID: 429746-001 S

Batch #: 1

Matrix: Solid

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
Chloride		5.96	103	111	102	75-125

Matrix Spike Percent Recovery [D] = $100 \times (C-A)/B$
Relative Percent Difference [E] = $200 \times (C-A)/(C+B)$
All Results are based on MDL and Validated for QC Purposes

BRL - Below Reporting Limit



Sample Duplicate Recovery



Project Name: Warren Battery

Work Order #: 429589

Lab Batch #: 872546

Project ID: 30-015-28598

Date Analyzed: 10/17/2011 18:01

Date Prepared: 10/17/2011

Analyst: BRB

QC- Sample ID: 429638-001 D

Batch #: 1

Matrix: Soil

Reporting Units: mg/kg

SAMPLE / SAMPLE DUPLICATE RECOVERY					
Anions by E300	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Analyte					
Chloride	208	208	0	20	

Lab Batch #: 872931

Date Analyzed: 10/22/2011 02:15

Date Prepared: 10/22/2011

Analyst: BRB

QC- Sample ID: 429610-003 D

Batch #: 1

Matrix: Solid

Reporting Units: mg/kg

SAMPLE / SAMPLE DUPLICATE RECOVERY					
Anions by E300	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Analyte					
Chloride	3340	3320	1	20	

Lab Batch #: 872935

Date Analyzed: 10/21/2011 14:39

Date Prepared: 10/21/2011

Analyst: BRB

QC- Sample ID: 429746-001 D

Batch #: 1

Matrix: Solid

Reporting Units: mg/kg

SAMPLE / SAMPLE DUPLICATE RECOVERY					
Anions by E300	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Analyte					
Chloride	5.96	6.01	1	20	

Lab Batch #: 872551

Date Analyzed: 10/17/2011 14:52

Date Prepared: 10/17/2011

Analyst: WRU

QC- Sample ID: 429584-011 D

Batch #: 1

Matrix: Solid

Reporting Units: %

SAMPLE / SAMPLE DUPLICATE RECOVERY					
Percent Moisture	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Analyte					
Percent Moisture	5.72	5.96	4	20	

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

All Results are based on MDL and validated for QC purposes

BRL - Below Reporting Limit



Sample Duplicate Recovery



Project Name: Warren Battery

Work Order #: 429589

Lab Batch #: 872889

Project ID: 30-015-28598

Date Analyzed: 10/17/2011 14:40

Date Prepared: 10/17/2011

Analyst: BRB

QC- Sample ID: 429596-001 D

Batch #: 1

Matrix: Solid

Reporting Units: %

SAMPLE / SAMPLE DUPLICATE RECOVERY					
Percent Moisture	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Analyte					
Percent Moisture	4.74	7.06	39	20	F

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: Warren Battery

Company Name: Yates Petroleum Corporation

Project #: 30-015-28598

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: ☒ Standard ☐ TRRP ☐ NPDES

Sampler Signature: Amber Cannon

e-mail: acannon@yatespetroleum.com

LAB # (lab use only)		FIELD CODE		Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filled	Total # of Containers	Preservation & # of Containers										Matrix	Analyze For										RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
										Ice	HNO ₃	HCl	H ₂ SO ₄	NaOH	Na ₂ SO ₃	None	Other (Specify)	DW=Drinking Water SL=Sludge	CW=Groundwater SS=Soil/Solid	NP=Non-Portable Specify Other	TPH 418 1	TPH 418 2	TPH 418 3	TPH 418 4	TPH 418 5	TPH 418 6	TPH 418 7	TPH 418 8	TPH 418 9	TPH 418 10	TPH 418 11	TPH 418 12	TPH 418 13	TPH 418 14	TPH 418 15	TPH 418 16	TPH 418 17	TPH 418 18	TPH 418 19	TPH 418 20	TPH 418 21	TPH 418 22	TPH 418 23	TPH 418 24	TPH 418 25	TPH 418 26	TPH 418 27	TPH 418 28	TPH 418 29	TPH 418 30	TPH 418 31	TPH 418 32	TPH 418 33	TPH 418 34	TPH 418 35	TPH 418 36	TPH 418 37	TPH 418 38	TPH 418 39	TPH 418 40	TPH 418 41	TPH 418 42	TPH 418 43	TPH 418 44	TPH 418 45	TPH 418 46	TPH 418 47	TPH 418 48	TPH 418 49	TPH 418 50	TPH 418 51	TPH 418 52	TPH 418 53	TPH 418 54	TPH 418 55	TPH 418 56	TPH 418 57	TPH 418 58	TPH 418 59	TPH 418 60	TPH 418 61	TPH 418 62	TPH 418 63	TPH 418 64	TPH 418 65	TPH 418 66	TPH 418 67	TPH 418 68	TPH 418 69	TPH 418 70	TPH 418 71	TPH 418 72	TPH 418 73	TPH 418 74	TPH 418 75	TPH 418 76	TPH 418 77	TPH 418 78	TPH 418 79	TPH 418 80	TPH 418 81	TPH 418 82	TPH 418 83	TPH 418 84	TPH 418 85	TPH 418 86	TPH 418 87	TPH 418 88	TPH 418 89	TPH 418 90	TPH 418 91	TPH 418 92	TPH 418 93	TPH 418 94	TPH 418 95	TPH 418 96	TPH 418 97	TPH 418 98	TPH 418 99	TPH 418 100	TPH 418 101	TPH 418 102	TPH 418 103	TPH 418 104	TPH 418 105	TPH 418 106	TPH 418 107	TPH 418 108	TPH 418 109	TPH 418 110	TPH 418 111	TPH 418 112	TPH 418 113	TPH 418 114	TPH 418 115	TPH 418 116	TPH 418 117	TPH 418 118	TPH 418 119	TPH 418 120	TPH 418 121	TPH 418 122	TPH 418 123	TPH 418 124	TPH 418 125	TPH 418 126	TPH 418 127	TPH 418 128	TPH 418 129	TPH 418 130	TPH 418 131	TPH 418 132	TPH 418 133	TPH 418 134	TPH 418 135	TPH 418 136	TPH 418 137	TPH 418 138	TPH 418 139	TPH 418 140	TPH 418 141	TPH 418 142	TPH 418 143	TPH 418 144	TPH 418 145	TPH 418 146	TPH 418 147	TPH 418 148	TPH 418 149	TPH 418 150	TPH 418 151	TPH 418 152	TPH 418 153	TPH 418 154	TPH 418 155	TPH 418 156	TPH 418 157	TPH 418 158	TPH 418 159	TPH 418 160	TPH 418 161	TPH 418 162	TPH 418 163	TPH 418 164	TPH 418 165	TPH 418 166	TPH 418 167	TPH 418 168	TPH 418 169	TPH 418 170	TPH 418 171	TPH 418 172	TPH 418 173	TPH 418 174	TPH 418 175	TPH 418 176	TPH 418 177	TPH 418 178	TPH 418 179	TPH 418 180	TPH 418 181	TPH 418 182	TPH 418 183	TPH 418 184	TPH 418 185	TPH 418 186	TPH 418 187	TPH 418 188	TPH 418 189	TPH 418 190	TPH 418 191	TPH 418 192	TPH 418 193	TPH 418 194	TPH 418 195	TPH 418 196	TPH 418 197	TPH 418 198	TPH 418 199	TPH 418 200	TPH 418 201	TPH 418 202	TPH 418 203	TPH 418 204	TPH 418 205	TPH 418 206	TPH 418 207	TPH 418 208	TPH 418 209	TPH 418 210	TPH 418 211	TPH 418 212	TPH 418 213	TPH 418 214	TPH 418 215	TPH 418 216	TPH 418 217	TPH 418 218	TPH 418 219	TPH 418 220	TPH 418 221	TPH 418 222	TPH 418 223	TPH 418 224	TPH 418 225	TPH 418 226	TPH 418 227	TPH 418 228	TPH 418 229	TPH 418 230	TPH 418 231	TPH 418 232	TPH 418 233	TPH 418 234	TPH 418 235	TPH 418 236	TPH 418 237	TPH 418 238	TPH 418 239	TPH 418 240	TPH 418 241	TPH 418 242	TPH 418 243	TPH 418 244	TPH 418 245	TPH 418 246	TPH 418 247	TPH 418 248	TPH 418 249	TPH 418 250	TPH 418 251	TPH 418 252	TPH 418 253	TPH 418 254	TPH 418 255	TPH 418 256	TPH 418 257	TPH 418 258	TPH 418 259	TPH 418 260	TPH 418 261	TPH 418 262	TPH 418 263	TPH 418 264	TPH 418 265	TPH 418 266	TPH 418 267	TPH 418 268	TPH 418 269	TPH 418 270	TPH 418 271	TPH 418 272	TPH 418 273	TPH 418 274	TPH 418 275	TPH 418 276	TPH 418 277	TPH 418 278	TPH 418 279	TPH 418 280	TPH 418 281	TPH 418 282	TPH 418 283	TPH 418 284	TPH 418 285	TPH 418 286	TPH 418 287	TPH 418 288	TPH 418 289	TPH 418 290	TPH 418 291	TPH 418 292	TPH 418 293	TPH 418 294	TPH 418 295	TPH 418 296	TPH 418 297	TPH 418 298	TPH 418 299	TPH 418 300	TPH 418 301	TPH 418 302	TPH 418 303	TPH 418 304	TPH 418 305	TPH 418 306	TPH 418 307	TPH 418 308	TPH 418 309	TPH 418 310	TPH 418 311	TPH 418 312	TPH 418 313	TPH 418 314	TPH 418 315	TPH 418 316	TPH 418 317	TPH 418 318	TPH 418 319	TPH 418 320	TPH 418 321	TPH 418 322	TPH 418 323	TPH 418 324	TPH 418 325	TPH 418 326	TPH 418 327	TPH 418 328	TPH 418 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412	TPH 418 413	TPH 418 414	TPH 418 415	TPH 418 416	TPH 418 417	TPH 418 418	TPH 418 419	TPH 418 420	TPH 418 421	TPH 418 422	TPH 418 423	TPH 418 424	TPH 418 425	TPH 418 426	TPH 418 427	TPH 418 428	TPH 418 429	TPH 418 430	TPH 418 431	TPH 418 432	TPH 418 433	TPH 418 434	TPH 418 435	TPH 418 436	TPH 418 437	TPH 418 438	TPH 418 439	TPH 418 440	TPH 418 441	TPH 418 442	TPH 418 443	TPH 418 444	TPH 418 445	TPH 418 446	TPH 418 447	TPH 418 448	TPH 418 449	TPH 418 450	TPH 418 451	TPH 418 452	TPH 418 453	TPH 418 454	TPH 418 455	TPH 418 456	TPH 418 457	TPH 418 458	TPH 418 459	TPH 418 460	TPH 418 461	TPH 418 462	TPH 418 463	TPH 418 464	TPH 418 465	TPH 418 466	TPH 418 467	TPH 418 468	TPH 418 469	TPH 418 470	TPH 418 471	TPH 418 472	TPH 418 473	TPH 418 474	TPH 418 475	TPH 418 476	TPH 418 477	TPH 418 478	TPH 418 479	TPH 418 480	TPH 418 481	TPH 418 482	TPH 418 483	TPH 418 484	TPH 418 485	TPH 418 486	TPH 418 487	TPH 418 488	TPH 418 489	TPH 418 490	TPH 418 491	TPH 418 492	TPH 418 493	TPH 418 494	TPH 418 495	TPH 418 496	TPH 418 497	TPH 418 498	TPH 418 499	TPH 418 500	TPH 418 501	TPH 418 502	TPH 418 503	TPH 418 504	TPH 418 505	TPH 418 506	TPH 418 507	TPH 418 508	TPH 418 509	TPH 418 510	TPH 418 511	TPH 418 512	TPH 418 513	TPH 418 514	TPH 418 515	TPH 418 516	TPH 418 517	TPH 418 518	TPH 418 519	TPH 418 520	TPH 418 521	TPH 418 522	TPH 418 523	TPH 418 524	TPH 418 525	TPH 418 526	TPH 418 527	TPH 418 528	TPH 418 529	TPH 418 530	TPH 418 531	TPH 418 532	TPH 418 533	TPH 418 534	TPH 418 535	TPH 418 536	TPH 418 537	TPH 418 538	TPH 418 539	TPH 418 540	TPH 418 541	TPH 418 542	TPH 418 543	TPH 418 544	TPH 418 545	TPH 418 546	TPH 418 547	TPH 418 548	TPH 418 549	TPH 418 550	TPH 418 551	TPH 418 552	TPH 418 553	TPH 418 554	TPH 418 555	TPH 418 556	TPH 418 557	TPH 418 558	TPH 418 559	TPH 418 560	TPH 418 561	TPH 418 562	TPH 418 563	TPH 418 564	TPH 418 565	TPH 418 566	TPH 418 567	TPH 418 568	TPH 418 569	TPH 418 570	TPH 418 571	TPH 418 572	TPH 418 573	TPH 418 574	TPH 418 575	TPH 418 576	TPH 418 577	TPH 418 578	TPH 418 579	TPH 418 580	TPH 418 581	TPH 418 582	TPH 418 583	TPH 418 584	TPH 418 585	TPH 418 586	TPH 418 587	TPH 418 588	TPH 418 589	TPH 418 590	TPH 418 591	TPH 418 592	TPH 418 593	TPH 418 594	TPH 418 595	TPH 418 596	TPH 418 597	TPH 418 598	TPH 418 599	TPH 418 600	TPH 418 601	TPH 418 602	TPH 418 603	TPH 418 604	TPH 418 605	TPH 418 606	TPH 418 607	TPH 418 608	TPH 418 609	TPH 418 610	TPH 418 611	TPH 418 612	TPH 418 613	TPH 418 614	TPH 418 615	TPH 418 616	TPH 418 617	TPH 418 618	TPH 418 619	TPH 418 620	TPH 418 621	TPH 418 622	TPH 418 623	TPH 418 624	TPH 418 625	TPH 418 626	TPH 418 627	TPH 418 628	TPH 418 629	TPH 418 630	TPH 418 631	TPH 418 632	TPH 418 633	TPH 418 634	TPH 418 635	TPH 418 636	TPH 418 637	TPH 418 638	TPH 418 639	TPH 418 640	TPH 418 641	TPH 418 642	TPH 418 643	TPH 418 644	TPH 418 645	TPH 418 646	TPH 418 647	TPH 418 648	TPH 418 649	TPH 418 650	TPH 418 651	TPH 418 652	TPH 418 653	TPH 418 654	TPH 418 655	TPH 418 656	TPH 418 657	TPH 418 658	TPH 418 659	TPH 418 660	TPH 418 661	TPH 418 662	TPH 418 663	TPH 418 664	TPH 418 665	TPH 418 666	TPH 418 667	TPH 418 668	TPH 418 669	TPH 418 670	TPH 418 671	TPH 418 672	TPH 418 673	TPH 418 674	TPH 418 675	TPH 418 676	TPH 418 677	TPH 418 678	TPH 418 679	TPH 418 680	TPH 418 681	TPH 418 682	TPH 418 683	TPH 418 684	TPH 418 685	TPH 418 686	TPH 418 687	TPH 418 688	TPH 418 689	TPH 418 690	TPH 418 691	TPH 418 692	TPH 418 693	TPH 418 694	TPH 418 695	TPH 418 696	TPH 418 697	TPH 418 698	TPH 418 699	TPH 418 700	

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: **Warren Battery**

Company Name Yates Petroleum Corporation

Project #: 30-015-28598

Company Address: 105 South 4th Street

Project Loc: Eddy County

City/State/Zip. Artesia, NM 88210

PO #: 1032020

Telephone No. 575-748-4111

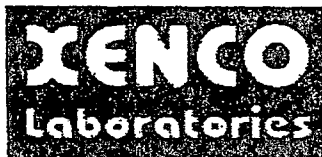
Fax No: 575-748-4585

Report Format: ☒ Standard ☐ TRRP ☐ NPDES

Sampler Signature: Arden Cannon

e-mail: acannon@yatespetroleum.com

[illegible]



XENCO Laboratories
Atlanta, Boca Raton, Corpus Christi, Dallas
Houston, Miami, Odessa, Philadelphia
Phoenix, San Antonio, Tampa

Document Title: Sample Receipt Checklist
Document No.: SYS-SRC
Revision/Date: No. 01, 5/27/2010
Effective Date: 6/1/2010 Page 1 of 1

Prelogin / Nonconformance Report - Sample Log-In

Client: Yates Petroleum
Date/Time: 10-14-11 13:54
Lab ID #: 429584/429589
Initials: HE

Sample Receipt Checklist

1. Samples on ice?	Blue	<u>Water</u>	No	
2. Shipping container in good condition?	<u>Yes</u>	No	None	
3. Custody seals intact on shipping container (cooler) and bottles?	<u>Yes</u>	No	N/A	
4. Chain of Custody present?	<u>Yes</u>	No		
5. Sample instructions complete on chain of custody?	<u>Yes</u>	No		
6. Any missing / extra samples?	Yes	<u>No</u>		
7. Chain of custody signed when relinquished / received?	<u>Yes</u>	No		
8. Chain of custody agrees with sample label(s)?	<u>Yes</u>	No		
9. Container labels legible and intact?	<u>Yes</u>	No		
10. Sample matrix / properties agree with chain of custody?	<u>Yes</u>	No		
11. Samples in proper container / bottle?	<u>Yes</u>	No		
12. Samples properly preserved?	<u>Yes</u>	No	N/A	
13. Sample container intact?	<u>Yes</u>	No		
14. Sufficient sample amount for indicated test(s)?	<u>Yes</u>	No		
15. All samples received within sufficient hold time?	<u>Yes</u>	No		
16. Subcontract of sample(s)?	Yes	No	<u>N/A</u>	
17. VOC sample have zero head space?	<u>Yes</u>	No	N/A	
18. Cooler 1 No.	Cooler 2 No.	Cooler 3 No.	Cooler 4 No.	Cooler 5 No.
lbs <u>2.0</u> °C	lbs °C	lbs °C	lbs °C	lbs °C

Nonconformance Documentation

Contact: _____ Contacted by: _____ Date/Time: _____

Regarding: _____

Corrective Action Taken: _____

Check all that apply: ☐ Cooling process has begun shortly after sampling event and out of temperature condition acceptable by NELAC 5.5.8.3.1.a.1.
☐ Initial and Backup Temperature confirm out of temperature conditions
☐ Client understands and would like to proceed with analysis