YATES PETROLEUM CORPORATION
105 SOUTH FOURTH STREET
ARTESIA, NEW MEXICO 88210-2118
TELEPHONE (575) 748-1471

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

Amber Cannon
Environmental Regulatory Agent

/anc
Enclosure(s)

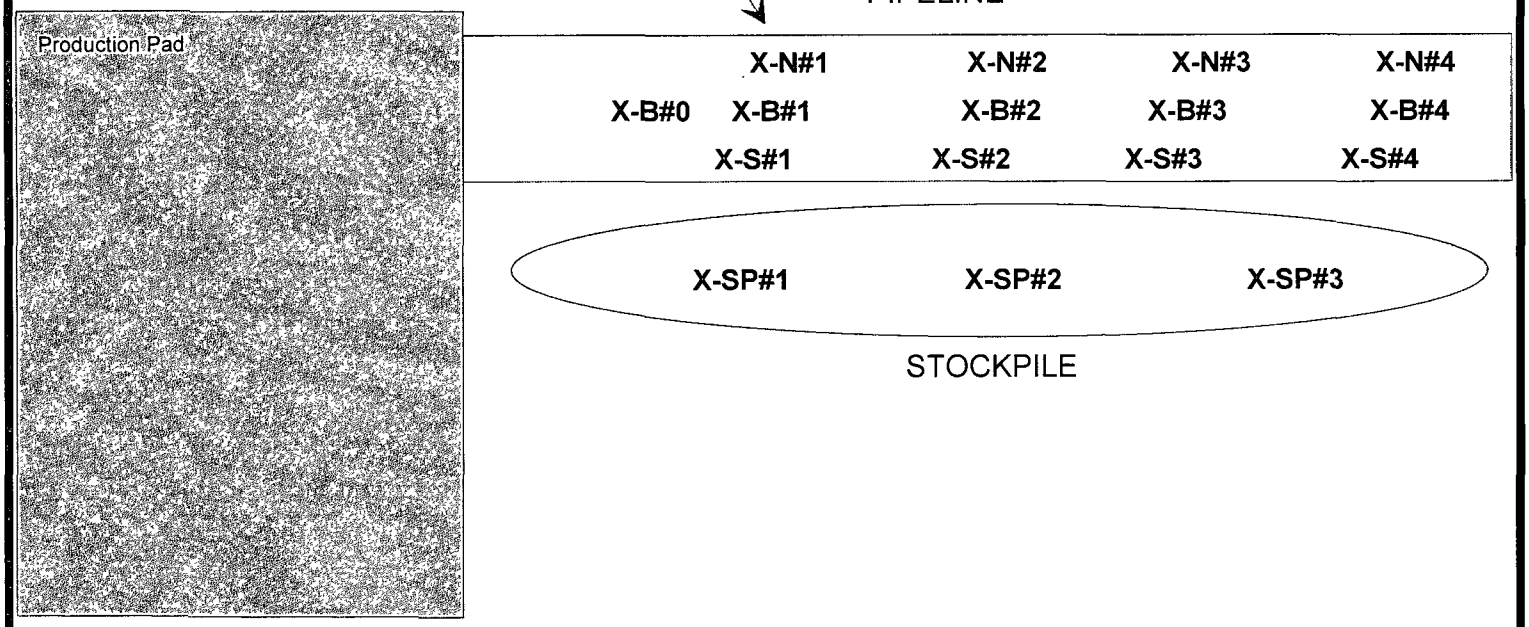
Warren ANW Federal #3 Battery

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



YATES PETROLEUM CORPORATION

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

Celebrating 20 Years of commitment to excellence in Environmental Testing Services

12600 West I-20 East Odessa, Texas 79765

Xenco-Houston (EPA Lab code: TX00122):
Texas (T104704215-10-6-TX), Arizona (AZ0765), Arkansas (08-039-0), Connecticut (PH-0102), Florida (E871002)
Illinois (002082), Indiana (C-TX-02), Iowa (392), Kansas (E-10380), Kentucky (45), Louisiana (03054)
New Hampshire (297408), New Jersey (TX007), New York (11763), Oklahoma (9218), Pennsylvania (68-03610)
Rhode Island (LAO00312), USDA (S-44102)

Xenco-Atlanta (EPA Lab Code: GA00046):
Florida (E87429), North Carolina (483), South Carolina (98015), Utah (AALI1), West Virginia (362), Kentucky (85)
Louisiana (04176), USDA (P330-07-00105)

Xenco-Miami (EPA Lab code: FL01152): Florida (E86678), Maryland (330)
Xenco-Tampa Mobile (EPA Lab code: FL01212): Florida (E84900)
Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400-TX)
Xenco-Dallas (EPA Lab code: TX01468): Texas (T104704295-TX)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona(AZ0757)
Xenco-Phoenix Mobile (EPA Lab code: AZ00901): Arizona (AZM757)
Xenco Tucson (EPA Lab code:AZ000989): Arizona (AZ0758)

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

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*	*Report Date:*	*25-OCT-11*
Work Order Number:	*429584*	*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*	*Report Date:*	*25-OCT-11*
Work Order Number:	*429584*	*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:*												
	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

Brent Barron II
Odessa Laboratory Manager

Final 1.000

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:	429584-007		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:												
	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

Brent Barron II
Odessa Laboratory Manager

Final 1.000

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		

Brent Barron II
Odessa Laboratory Manager

Final 1 000

Flagging Criteria

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

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

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

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

F RPD exceeded lab control limits.

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

U Analyte was not detected.

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

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

K Sample analyzed outside of recommended hold time.

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

BRL Below Reporting Limit.

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

+ Outside XENCO's scope of NELAC Accreditation.

Form 2 - Surrogate Recoveries

Project Name: 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

TPH By SW8015B Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-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

TPH By SW8015B Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-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

TPH By SW8015B Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-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

TPH By SW8015B Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-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

TPH By SW8015B Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-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

TPH By SW8015B Mod Analytes	SURROGATE RECOVERY STUDY 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

TPH By SW8015B Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	104	99.5	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

TPH By SW8015B Mod Analytes	SURROGATE RECOVERY STUDY 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

TPH By SW8015B Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	123	99 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

TPH By SW8015B Mod Analytes	SURROGATE RECOVERY STUDY 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 * 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

TPH By SW8015B Mod Analytes	SURROGATE RECOVERY STUDY 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

TPH By SW8015B Mod Analytes	SURROGATE RECOVERY STUDY 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

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

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

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

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

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

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0264	0.0300	88	80-120	
4-Bromofluorobenzene	0 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

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0238	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

TPH By SW8015B Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
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

TPH By SW8015B Mod Analytes	SURROGATE RECOVERY STUDY 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

TPH By SW8015B Mod Analytes	SURROGATE RECOVERY STUDY 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

TPH By SW8015B Mod Analytes	SURROGATE RECOVERY STUDY 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

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0216	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

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0231	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

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

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0245	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

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

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

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

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

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0296	0.0300	99	80-120	
4-Bromofluorobenzene	0 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

TPH By SW8015B Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
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

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0261	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

TPH By SW8015B Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
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

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0246	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

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

TPH By SW8015B Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
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

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0281	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

TPH By SW8015B Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
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

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

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0279	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

TPH By SW8015B Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
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

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

TPH By SW8015B Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
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

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

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

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

TPH By SW8015B Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
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

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0276	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

TPH By SW8015B Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
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

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0 0275	0.0300	92	80-120	
4-Bromofluorobenzene	0.0281	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

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0 0275	0 0300	92	80-120	
4-Bromofluorobenzene	0.0283	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

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0245	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 **Project ID:** 30-015-28598

Analyst: ASA **Date Prepared:** 10/20/2011 **Date Analyzed:** 10/20/2011

Lab Batch ID: 872871 **Sample:** 612998-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BTEX by EPA 8021B	BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY										
Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0 00100	0.100	0 111	111	0.125	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

BTEX by EPA 8021B	BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY										
Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.00100	0 100	0 101	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 **Project ID:** 30-015-28598

Analyst: ASA **Date Prepared:** 10/24/2011 **Date Analyzed:** 10/24/2011

Lab Batch ID: 873110 **Sample:** 613151-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BTEX by EPA 8021B	BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY										
Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.00100	0 100	0.0906	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

TPH By SW8015B Mod	BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY										
Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
C6-C10 Gasoline Range Hydrocarbons	<15.0	1000	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 **Project ID:** 30-015-28598

Analyst: ASA **Date Prepared:** 10/20/2011 **Date Analyzed:** 10/21/2011

Lab Batch ID: 872983 **Sample:** 613072-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

TPH By SW8015B Mod	BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY										
Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
C6-C10 Gasoline Range Hydrocarbons	<15 0	1000	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

BTEX by EPA 8021B Analytes	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY										
	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.00115	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

BTEX by EPA 8021B Analytes	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY										
	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.00103	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 ApplicableN = See Narrative, EQL = Estimated Quantitation Limit

Final 1 000

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

TPH By SW8015B Mod Analytes	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY										
	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
C6-C10 Gasoline Range Hydrocarbons	<16 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

Final 1 000

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

BTEX by EPA 8021B	SAMPLE / SAMPLE DUPLICATE RECOVERY				
Analyte	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
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: %

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

Percent Moisture	SAMPLE / SAMPLE DUPLICATE RECOVERY				
Analyte	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
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: [X] Standard [ ] TRRP [ ] NPDES
Sampler Signature: Amber Cannon e-mail: acannon@yatespetroleum.com

(lab use only) ORDER #: 429584/429589

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total # of Containers	Preservation & # of Containers: Ice	HNO_3	HCl	H_2SO_4	NaOH	$Na_2S_2O_3$	None	Other (Specify)	Matrix: DW=Drinking Water SL=Sludge	GW = Groundwater S=Soil/Solid	NP=Non-Potable Specify Other	Analyze For: TCLP TOTAL: TPH 418.1 / 8015M	TPH TX 1005 / TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/5030 or BTEX 8260	RCI	N O R M	Chlorides	RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
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
13	PLEASE PUT CHLORIDES																															
14	ON SEPARATE REPORT																															

KB

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

Relinquished by	Date	Time	Received by	Date	Time
Amber Cannon	10/14/11	8 26 AM		10/14/11	8261
Relinquished by	Date	Time	Received by	Date	Time
Relinquished by	Date	Time	Received by ELOT	Date	Time
	10/14/11	1549	Andrea Cam	10.14.11	13:54

Laboratory Comments:

Sample Containers Intact?	Y	N
VOCs Free of Headspace?	Y	N
Labels on container(s)	Y	N
Custody seals on container(s)	Y	N
Custody seals on cooler(s)	Y	N
Sample Hand Delivered	Y	N
by Sampler/Client Rep ?	Y	N

by Courier? UPS DHL FedEx Lone Star 402 918955

Temperature Upon Receipt 2.0 °C

Final 1 000

XENCO-Environmental Lab of Texas

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

12600 West I-20 East
Odessa, Texas 79765

Phone: 432-563-1800
Fax: 432-563-1713

Project Manager: Amber Cannon

Company Name: Yates Petroleum Corporation

Company Address: 105 South 4th Street

City/State/Zip: Artesia, NM 88210

Telephone No: 575-748-4111 Fax No: 575-748-4585

Sampler Signature: Amber Cannon e-mail: acannon@yatespetroleum.com

Project Name: Warren Battery

Project #: 30-015-28598

Project Loc: Eddy County

PO #: 1032020

Report Format: [X] Standard [ ] TRRP [ ] NPDES

(lab use only) ORDER #: 429584/429589

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total # of Containers	Preservation & # of Containers: Ice	HNO_3	HCl	H_2SO_4	NaOH	$Na_2S_2O_3$	None	Other (Specify)	Matrix: DW=Drinking Water SL=Sludge; GW=Groundwater S=Soil/Solid; NP=Non-Potable Specify Other	Analyze For: TCLP TPH 8015B	TCLP TPH 8015M	TCLP TPH TX 1005	TCLP TX 1006	TCLP Cations (Ca, Mg, Na, K)	TCLP Anions (Cl, SO4, Alkalinity)	TCLP SAR / ESP / CEC	TCLP Metals As Ag Ba Cd Cr Pb Hg Se	TCLP Volatiles	TCLP Semivolatiles	TOTAL BTEX 8021B/5030 or BTEX 8260	TOTAL RCI	TOTAL N O R M	TOTAL Chlorides	RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
13	B #0	4'	4'	10/13/2011	4:20 PM		1	X								S	X									X			X		X
14	Stock Pile #1	1'	1'	10/13/2011	4.30 PM		1	X								S	X									X			X		X
15	Stock Pile #2	1'	1'	10/13/2011	4:40 PM		1	X								S	X									X			X		X
16	Stock Pile #3	1'	1'	10/13/2011	4 50 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	Date	Time	Received by	Date	Time
Amber Cannon	10/14/11	8 26 AM		10/14/11	8:26
Relinquished by	Date	Time	Received by	Date	Time
Relinquished by	Date	Time	Received by ELOT	Date	Time
	10/14/11	1545	Andrea Elam	10-14-11	13:54

Laboratory Comments:

Sample Containers Intact?	Y	N
VOCs Free of Headspace?	Y	N
Labels on container(s)	Y	N
Custody seals on container(s)	Y	N
Custody seals on cooler(s)	Y	N
Sample Hand Delivered	Y	N
by Sampler/Client Rep ?	Y	N

by Courier? UPS DHL FedEx Lone Star

402958SS

Temperature Upon Receipt 2.0 °C

XENCO Laboratories	Document Title: Sample Receipt Checklist
Atlanta, Boca Raton, Corpus Christi, Dallas	Document No.: SYS-SRC
Houston, Miami, Odessa, Philadelphia	Revision/Date: No. 01, 5/27/2010
Phoenix, San Antonio, Tampa	Effective Date: 6/1/2010 Page 1 of 1

Prelogin / Nonconformance Report - Sample Log-In

Client: Yates Petroleum

Date/Time: 10.14.11 13:54

Lab ID #: 429584/429589

Initials: HE

Sample Receipt Checklist

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

18. Cooler 1 No.		Cooler 2 No.		Cooler 3 No.		Cooler 4 No.		Cooler 5 No.	
lbs	2.0 °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

Celebrating 20 Years of commitment to excellence in Environmental Testing Services

12600 West I-20 East Odessa, Texas 79765

Xenco-Houston (EPA Lab code: TX00122):
Texas (T104704215-10-6-TX), Arizona (AZ0765), Arkansas (08-039-0), Connecticut (PH-0102), Florida (E871002)
Illinois (002082), Indiana (C-TX-02), Iowa (392), Kansas (E-10380), Kentucky (45), Louisiana (03054)
New Hampshire (297408), New Jersey (TX007), New York (11763), Oklahoma (9218), Pennsylvania (68-03610)
Rhode Island (LAO00312), USDA (S-44102)

Xenco-Atlanta (EPA Lab Code: GA00046):
Florida (E87429), North Carolina (483), South Carolina (98015), Utah (AALI1), West Virginia (362), Kentucky (85)
Louisiana (04176), USDA (P330-07-00105)

Xenco-Miami (EPA Lab code: FL01152): Florida (E86678), Maryland (330)
Xenco-Tampa Mobile (EPA Lab code: FL01212): Florida (E84900)
Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400-TX)
Xenco-Dallas (EPA Lab code: TX01468): Texas (T104704295-TX)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona(AZ0757)
Xenco-Phoenix Mobile (EPA Lab code: AZ00901): Arizona (AZM757)
Xenco Tucson (EPA Lab code:AZ000989): Arizona (AZ0758)

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

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*	*Report Date:*	*25-OCT-11*
Work Order Number:	*429589*	*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 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:	429589-001		429589-002		429589-003		429589-004		429589-005		429589-006	
	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	
Anions by E300	*Extracted:*												
	Analyzed:	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	
	Units/RL:	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	*Extracted:*												
	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

Brent Barron II
Odessa Laboratory Manager

Final 1 000

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

Brent Barron II
Odessa Laboratory Manager

Final 1.000

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				

Brent Barron II
Odessa Laboratory Manager

Final 1.000

Flagging Criteria

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

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

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

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

F RPD exceeded lab control limits.

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

U Analyte was not detected.

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

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

K Sample analyzed outside of recommended hold time.

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

BRL Below Reporting Limit.

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

+ Outside XENCO's scope of NELAC Accreditation.

BS / BSD Recoveries

Project Name: Warren Battery

Work Order #: 429589 **Project ID:** 30-015-28598

Analyst: BRB **Date Prepared:** 10/17/2011 **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 Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	<0.840	20.0	21.7	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 Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	<0.840	20 0	21.5	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 Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	<0 840	20 0	21.5	108	20.0	21.3	107	1	75-125	20	

Relative Percent Difference RPD = 200*|(C-F)/(C+F)|
Blank Spike Recovery [D] = 100*(C)/[B]
Blank Spike Duplicate Recovery [G] = 100*(F)/[E]
All results are based on MDL and Validated for QC Purposes

Form 3 - MS Recoveries

Project Name: Warren Battery

Work Order #: 429589

Lab Batch #: 872546 **Project ID:** 30-015-28598

Date Analyzed: 10/17/2011 **Date Prepared:** 10/17/2011 **Analyst:** BRB

QC- Sample ID: 429589-006 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	Flag
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

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

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

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

Form 3 - MS Recoveries

Project Name: Warren Battery

Work Order #: 429589
Lab Batch #: 872935
Project ID: 30-015-28598
Date Analyzed: 10/21/2011
Date Prepared: 10/21/2011
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	Flag
Chloride	5.96	103	111	102	75-125	

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

BRL - Below Reporting Limit

Sample Duplicate Recovery

Project Name: 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

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

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

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

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

Percent Moisture Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY				
	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
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: [X] Standard [ ] TRRP [ ] NPDES

Sampler Signature: Amber Cannon e-mail: acannon@yatespetroleum.com

(lab use only)
ORDER #: 429584 / 429589

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total # of Containers	Preservation & # of Containers: Ice	HNO3	HCl	H2SO4	NaOH	Na2S2O3	None	Other (Specify)	Matrix: DW=Drinking Water SL=Sludge GW=Groundwater S=Soil/Solid NP=Non-Potable Specify Other	Analyze For: TPH 8015B	TPH 8015M 418.1	TPH TX 1005	TPH TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	TCLP Metals: As Ag Ba Cd Cr Pb Hg Se	TOTAL Volatiles	Semivolatiles	BTEX 8021B/5030 or BTEX 8260	RCI	N O R M	Chlorides	RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
01	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
~~13~~	PLEASE PUT CHLORIDES																															
14	ON SEPARATE REPORT																															

KP

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

Relinquished by	Date	Time	Received by	Date	Time
Amber Cannon	10/14/11	8:26 AM		10/14/11	8261
Relinquished by	Date	Time	Received by	Date	Time
Relinquished by	Date	Time	Received by ELOT	Date	Time
	10/14/11	1549	Andrea Cam	10.14.11	13:54

Laboratory Comments:

Sample Containers Intact?	Y	N
VOCs Free of Headspace?	Y	N
Labels on container(s)	Y	N
Custody seals on container(s)	Y	N
Custody seals on cooler(s)	Y	N
Sample Hand Delivered	Y	N
by Sampler/Client Rep ?	Y	N

by Courier? UPS DHL FedEx Lone Star
402 21955
Temperature Upon Receipt 2.0 °C

Final 1.000

XENCO-Environmental Lab of Texas

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

12600 West I-20 East
Odessa, Texas 79765

Phone: 432-563-1800
Fax: 432-563-1713

Project Manager: Amber Cannon

Company Name: Yates Petroleum Corporation

Company Address: 105 South 4th Street

City/State/Zip: Artesia, NM 88210

Telephone No: 575-748-4111 Fax No: 575-748-4585

Sampler Signature: Amber Cannon e-mail: acannon@yatespetroleum.com

Project Name: **Warren Battery**

Project #: 30-015-28598

Project Loc: Eddy County

PO #: 1032020

Report Format: [X] Standard [ ] TRRP [ ] NPDES

(lab use only) ORDER #: 429584/429589

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total # of Containers	Preservation & # of Containers: Ice	HNO_3	HCl	H_2SO_4	NaOH	$Na_2S_2O_3$	None	Other (Specify)	Matrix: DW=Drinking Water SL=Sludge / GW = Groundwater S=Soil/Solid / NP=Non-Potable Specify Other	Analyze For: TPH 418.1 / 8015M 8015B	TPH TX 1005 TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals As Ag Ba Cd Cr Pb Hg Se (TCLP / TOTAL)	Volatiles	Semivolatiles	BTEX 8021B/5030 or BTEX 8260	RCI	N O R M	Chlorides	RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
13	B #0	4'	4'	10/13/2011	4:20 PM		1	X								S	X								X			X		X
14	Stock Pile #1	1'	1'	10/13/2011	4:30 PM		1	X								S	X								X			X		X
15	Stock Pile #2	1'	1'	10/13/2011	4.40 PM		1	X								S	X								X			X		X
16	Stock Pile #3	1'	1'	10/13/2011	4:50 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	Date	Time	Received by	Date	Time
Amber Cannon	10/14/11	8 26 AM		10/14/11	8:26
Relinquished by	Date	Time	Received by	Date	Time
Relinquished by	Date	Time	Received by ELOT	Date	Time
	10/14/11	1545	Andrea Elam	10-14-11	13:54

Laboratory Comments:

Sample Containers Intact?	Y	N
VOCs Free of Headspace?	Y	N
Labels on container(s)	Y	N
Custody seals on container(s)	Y	N
Custody seals on cooler(s)	Y	N
Sample Hand Delivered	Y	N
by Sampler/Client Rep ?	Y	N

by Courier? UPS DHL FedEx Lone Star

402 GLASS

Temperature Upon Receipt 2.0 °C

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

18. Cooler 1 No.		Cooler 2 No.		Cooler 3 No.		Cooler 4 No.		Cooler 5 No.	
lbs	2.0 °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