

## Bratcher, Mike, EMNRD

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**From:** Amanda Trujillo [atrujillo@yatespetroleum.com]  
**Sent:** Tuesday, August 03, 2010 5:18 PM  
**To:** Bratcher, Mike, EMNRD  
**Cc:** Jerry Fanning; Joe Palma  
**Subject:** Gissler AV-B Battery S23 T17S 25E  
**Attachments:** 100\_1106.jpg; 100\_1107.jpg; 100\_1108.jpg; 100\_1109.jpg; H20187 YATES.pdf; Rpt\_WO\_383209\_ver\_1\_000.pdf

**Follow Up Flag:** Follow up  
**Flag Status:** Flagged

**Categories:** Orange Category

Mike:

Attached are the results from the witnessed sampling of the Gissler AV-B Battery (S23 T17S 25E). There was one hot spot in which we took a grab sample from, analysis showed it was high so we excavated more soil from there and took additional samples. Attached are lab results and pictures taken at the time of the excavation and sampling. Upon your approval I would like to backfill the hole with the material stockpiled on location. The stockpiled material came from the Achen Frey Battery when it was disassembled. Analyticals from the stockpile are included in the first set of data. There is only about half the required material in the stock pile, therefore it will go in the hole first then the other material will be supplied from a near by caliche pit. Once the hole is backfilled we can begin the second phase of the clean up which is excavating beneath the next tank. Please contact me if you have any questions.

Thank you,

**Amanda N. Trujillo**  
Environmental Scientist  
Yates Petroleum Corporation  
Office 575-748-4310  
Cell 575-703-6537  
Email [atrujillo@yatespetroleum.com](mailto:atrujillo@yatespetroleum.com)



# ARDINAL LABORATORIES

PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

July 1, 2010

Amanda Trujillo  
Yates Petroleum Corporation  
105 South 4<sup>th</sup> Street  
Artesia, NM 88210

Re: Gissler AV-B

Enclosed are the results of analyses for sample number H20187, received by the laboratory on 06/23/10 at 10:25 am.

Cardinal Laboratories is accredited through Texas NELAP for:

Method SW-846 8021	Benzene, Toluene, Ethyl Benzene, and Total Xylenes
Method SW-846 8260	Benzene, Toluene, Ethyl Benzene, and Total Xylenes
Method TX 1005	Total Petroleum Hydrocarbons

Certificate number T104704398-08-TX. Accreditation applies to solid and chemical materials and non-potable water matrices.

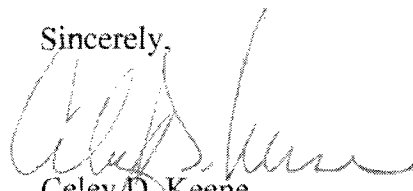
Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.2	Regulated VOCs (V2, V3)

Accreditation applies to public drinking water matrices.

Total Number of Pages of Report: 3 (includes Chain of Custody)

Sincerely,



Celey D. Keene  
Laboratory Director



# ARDINAL LABORATORIES

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ANALYTICAL RESULTS FOR  
YATES PETROLEUM CORPORATION  
ATTN: AMANDA TRUJILLO  
105 SOUTH 4TH STREET  
ARTESIA, NM 88210

Receiving Date: 06/23/10  
Reporting Date: 07/01/10  
Project Number: NOT GIVEN  
Project Name: GISSLER AV-B  
Project Location: GISSLER AV-B

Sampling Date: 06/22/10  
Sample Type: SOIL  
Sample Condition: INTACT @17 °C  
Sample Received By: JH  
Analyzed By: AB/ZL

LAB NO.	SAMPLE ID	GRO (C <sub>6</sub> -C <sub>10</sub> ) (mg/kg)	DRO (C <sub>10</sub> -C <sub>28</sub> ) (mg/kg)	BENZENE (mg/kg)	TOLUENE (mg/kg)	ETHYL BENZENE (mg/kg)	TOTAL XYLENES (mg/kg)	CI* (mg/kg)
ANALYSIS DATE:		06/28/10	06/28/10	06/23/10	06/23/10	06/23/10	06/23/10	06/24/10
H20187-1**	5 POINT COMP BOTTOM	<10.0	14.2	<0.050	<0.050	<0.050	<0.300	208
H20187-2	3 POINT COMP SIDEWALL	<10.0	<10.0	<0.050	<0.050	<0.050	<0.300	32
H20187-3	GRAB SAMPLE	6.070	27.500	0.336	8.27	5.51	31.4	16
H20187-4	5 POINT COMP STOCK PILE	<50.0	690	<0.050	1.24	0.776	4.77	1,230
Quality Control		464	522	0.017	0.016	0.018	0.050	500
True Value QC		500	500	0.020	0.020	0.020	0.060	500
% Recovery		92.8	104	85.0	80.0	90.0	83.3	100
Relative Percent Difference		0.1	0.5	3.1	2.5	2.2	2.4	6.5

METHODS: TPH GRO & DRO - EPA SW-846 8015 M; BTEX - SW-846 8021B; CI-: Std. Methods 4500-CI-B

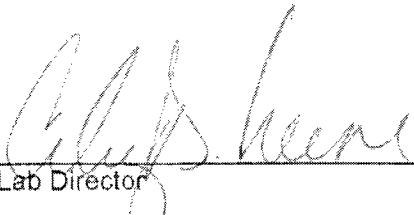
\*Analyses performed on 1:4 w:v aqueous extracts.


Not accredited for Chloride and GRO/DRO.

\*\*One or more TPH surrogates outside historical limits due to matrix interference.

TEXAS NELAP CERTIFICATION T104704398-08-TX FOR BENZENE, TOLUENE, ETHYL BENZENE,  
AND TOTAL XYLENES. Reported on wet weight.

\*\*Samples analyzed outside the EPA recommended hold time.

  
Lab Director

  
Date

H20187 TBCL YATES

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above-stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

## CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Project Manager: Amanda Trujillo

Project Name: Gissler AV-B

Comp: (505) 393-2326 Yates Petroleum Corporation

Project #:

Company Address: 105 South 4th Street

Project Loc: Gissler AV-B

City/State/Zip:           Artesia, NM 88210

PO #:

Telephone No: 575-748-4310

Fax No:

Report Format: ☒ Standard ☐ TRRP ☐ NPDES

Sampler Signature:

e-mail: [atrujillo@yatespetroleum.com](mailto:atrujillo@yatespetroleum.com)

[illegible]

# Analytical Report 383209

for

## Yates Petroleum Corporation

**Project Manager: Amanda Trujillo**

**Gissler AV-B Battery**

**30-JUL-10**



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

Xenco-Houston (EPA Lab code: TX00122):

Texas (T104704215-TX), Arizona (AZ0738), Arkansas (08-039-0), Connecticut (PH-0102), Florida (E871002)  
Illinois (002082), Indiana (C-TX-02), Iowa (392), Kansas (E-10380), Kentucky (45), Louisiana (03054)  
New Hampshire (297408), New Jersey (TX007), New York (11763), Oklahoma (9218), Pennsylvania (68-03610)  
Rhode Island (LAO00312), USDA (S-44102)

Xenco-Atlanta (EPA Lab Code: GA00046):

Florida (E87429), North Carolina (483), South Carolina (98015), Utah (AALI1), West Virginia (362), Kentucky (85)  
Louisiana (04176), USDA (P330-07-00105)

Xenco-Miami (EPA Lab code: FL01152): Florida (E86678), Maryland (330)

Xenco-Tampa Mobile (EPA Lab code: FL01212): Florida (E84900)

Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400-TX)

Xenco-Dallas (EPA Lab code: TX01468): Texas (T104704295-TX)

Xenco-Corpus Christi (EPA Lab code: TX02613): Texas (T104704370)

Xenco-Boca Raton (EPA Lab Code: FL00449):

Florida(E86240),South Carolina(96031001), Louisiana(04154), Georgia(917)

North Carolina(444), Texas(T104704468-TX), Illinois(002295), Florida(E86349)



30-JUL-10

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

Reference: XENCO Report No: **383209**  
**Gissler AV-B Battery**  
Project Address: Gissler AV-B Battery

**Amanda Trujillo:**

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number 383209. 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. 383209 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 383209**



**Yates Petroleum Corporation, Artesia, NM**  
Gissler AV-B Battery

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
Grab Sample North Sidwall	S	Jul-21-10 12:00		383209-001



## CASE NARRATIVE

*Client Name: Yates Petroleum Corporation*

*Project Name: Gissler AV-B Battery*



*Project ID:*  
*Work Order Number: 383209*

*Report Date: 30-JUL-10*  
*Date Received: 07/27/2010*

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**Sample receipt non conformances and Comments:**

*None*

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**Sample receipt Non Conformances and Comments per Sample:**

*None*

**Analytical Non Conformances and Comments:**

*Batch: LBA-816433 Percent Moisture*

*None*

*Batch: LBA-816657 TPH by SW 8015B*

*None*

*Batch: LBA-816830 BTEX by EPA 8021*

*None*





# Certificate of Analysis Summary 383209

Yates Petroleum Corporation, Artesia, NM

Project Name: Gissler AV-B Battery



Project Id:

Contact: Amanda Trujillo

Project Location: Gissler AV-B Battery

Date Received in Lab: Tue Jul-27-10 10:05 am


Report Date: 30-JUL-10

Project Manager: Brent Barron, II

<b>Analysis Requested</b>	<b>Lab Id:</b>	383209-001				
	<b>Field Id:</b>	Grab Sample North Sidwall				
	<b>Depth:</b>					
	<b>Matrix:</b>	SOIL				
	<b>Sampled:</b>	Jul-21-10 12:00				
<b>BTEX by EPA 8021</b>	<b>Extracted:</b>	Jul-28-10 14:55				
	<b>Analyzed:</b>	Jul-29-10 11:13				
	<b>Units/RL:</b>	mg/kg RL				
Benzene		ND 0.0011				
Toluene		ND 0.0023				
Ethylbenzene		ND 0.0011				
m,p-Xylenes		ND 0.0023				
o-Xylene		ND 0.0011				
Xylenes, Total		ND 0.0011				
Total BTEX		ND 0.0011				
<b>Percent Moisture</b>	<b>Extracted:</b>					
	<b>Analyzed:</b>	Jul-28-10 08:15				
	<b>Units/RL:</b>	% RL				
Percent Moisture		12.4 1.00				
<b>TPH by SW 8015B</b>	<b>Extracted:</b>	Jul-28-10 11:43				
	<b>Analyzed:</b>	Jul-28-10 15:26				
	<b>Units/RL:</b>	mg/kg RL				
C6-C10 Gasoline Range Hydrocarbons		ND 17.2				
C10-C28 Diesel Range Hydrocarbons		ND 17.2				
Total TPH		ND 17.2				

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.

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

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

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9701 Harry Hines Blvd , Dallas, TX 75220	(214) 902 0300	(214) 351-9139
5332 Blackberry Drive, San Antonio TX 78238	(210) 509-3334	(210) 509-3335
2505 North Falkenburg Rd, Tampa, FL 33619	(813) 620-2000	(813) 620-2033
5757 NW 158th St, Miami Lakes, FL 33014	(305) 823-8500	(305) 823-8555
12600 West I-20 East, Odessa, TX 79765	(432) 563-1800	(432) 563-1713
842 Cantwell Lane, Corpus Christi, TX 78408	(361) 884-0371	(361) 884-9116



## Form 2 - Surrogate Recoveries

Project Name: Gissler AV-B Battery

Work Orders : 383209,

Project ID:

Lab Batch #: 816830

Sample: 569361-1-BKS / BKS

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 07/29/10 03:38

### SURROGATE RECOVERY STUDY

BTEX by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0308	0.0300	103	80-120	
4-Bromofluorobenzene	0.0290	0.0300	97	80-120	

Lab Batch #: 816830

Sample: 569361-1-BSD / BSD

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 07/29/10 04:01

### SURROGATE RECOVERY STUDY

BTEX by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0311	0.0300	104	80-120	
4-Bromofluorobenzene	0.0292	0.0300	97	80-120	

Lab Batch #: 816830

Sample: 569361-1-BLK / BLK

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 07/29/10 05:08

### SURROGATE RECOVERY STUDY

BTEX by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0254	0.0300	85	80-120	
4-Bromofluorobenzene	0.0287	0.0300	96	80-120	

Lab Batch #: 816830

Sample: 383209-001 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 07/29/10 11:13

### SURROGATE RECOVERY STUDY

BTEX by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0244	0.0300	81	80-120	
4-Bromofluorobenzene	0.0297	0.0300	99	80-120	

Lab Batch #: 816657

Sample: 569258-1-BKS / BKS

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 07/28/10 13:54

### SURROGATE RECOVERY STUDY

TPH by SW 8015B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Chlorooctane	94.0	99.8	94	70-135	
o-Terphenyl	42.4	49.9	85	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: Gissler AV-B Battery

Work Orders : 383209,

Project ID:

Lab Batch #: 816657

Sample: 569258-1-BSD / BSD

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 07/28/10 14:25

### SURROGATE RECOVERY STUDY

TPH by SW 8015B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	117	99.9	117	70-135	
o-Terphenyl	53.7	50.0	107	70-135	

Lab Batch #: 816657

Sample: 569258-1-BLK / BLK

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 07/28/10 14:56

### SURROGATE RECOVERY STUDY

TPH by SW 8015B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	97.4	99.7	98	70-135	
o-Terphenyl	49.5	49.9	99	70-135	

Lab Batch #: 816657

Sample: 383209-001 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 07/28/10 15:26

### SURROGATE RECOVERY STUDY

TPH by SW 8015B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	79.7	100	80	70-135	
o-Terphenyl	40.3	50.2	80	70-135	

Lab Batch #: 816657

Sample: 383209-001 S / MS

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 07/28/10 18:01

### SURROGATE RECOVERY STUDY

TPH by SW 8015B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	105	100	105	70-135	
o-Terphenyl	43.4	50.0	87	70-135	

Lab Batch #: 816657

Sample: 383209-001 SD / MSD

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 07/28/10 18:32

### SURROGATE RECOVERY STUDY

TPH by SW 8015B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	118	100	118	70-135	
o-Terphenyl	49.4	50.0	99	70-135	

\* Surrogate outside of Laboratory QC limits

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

\*\*\* Poor recoveries due to dilution

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

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



## BS / BSD Recoveries



Project Name: Gissler AV-B Battery

Work Order #: 383209

Analyst: ASA

Date Prepared: 07/28/2010

Project ID:

Date Analyzed: 07/29/2010

Lab Batch ID: 816830

Sample: 569361-1-BKS

Batch #: 1

Matrix: Solid

Units: mg/kg

### BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021	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	ND	0.1000	0.1118	112	0.1	0.1089	109	3	70-130	35	
Toluene	ND	0.1000	0.1013	101	0.1	0.0996	100	2	70-130	35	
Ethylbenzene	ND	0.1000	0.1064	106	0.1	0.1045	105	2	71-129	35	
m,p-Xylenes	ND	0.2000	0.2142	107	0.2	0.2106	105	2	70-135	35	
o-Xylene	ND	0.1000	0.1053	105	0.1	0.1038	104	1	71-133	35	

Analyst: BEV

Date Prepared: 07/28/2010

Date Analyzed: 07/28/2010

Lab Batch ID: 816657

Sample: 569258-1-BKS

Batch #: 1

Matrix: Solid

Units: mg/kg

### BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

TPH by SW 8015B	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	ND	998	1060	106	999	1180	118	11	70-135	35	
C10-C28 Diesel Range Hydrocarbons	ND	998	853	85	999	1070	107	23	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: Gissler AV-B Battery

Work Order #: 383209

Project ID:

Lab Batch ID: 816657

QC- Sample ID: 383209-001 S

Batch #: 1 Matrix: Soil

Date Analyzed: 07/28/2010

Date Prepared: 07/28/2010

Analyst: BEV

Reporting Units: mg/kg

### MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

TPH by SW 8015B 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	ND	1140	1240	109	1140	1380	121	11	70-135	35	
C10-C28 Diesel Range Hydrocarbons	ND	1140	993	87	1140	1100	96	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:** Gissler AV-B Battery

**Work Order #:** 383209

**Lab Batch #:** 816433

**Date Analyzed:** 07/28/2010

**QC- Sample ID:** 383138-001 D

**Reporting Units:** %

**Date Prepared:** 07/28/2010

**Batch #:** 1

**Project ID:**

**Analyst:** JLG

**Matrix:** Soil

SAMPLE / SAMPLE DUPLICATE RECOVERY					
Percent Moisture	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Analyte					
Percent Moisture	10.3	10.2	1	20	

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

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

BRL - Below Reporting Limit

## TraceAnalysis, Inc.

email: lab@traceanalysis.com

5002 Basin Street, Suite E  
Midland, Texas 79703  
(432) 689-6301  
Fax (432) 689-6313

Tel

Company Name: Yates Petroleum Corporation		Phone #: 575-748-1471	
Address: (Street, City, Zip) 105 South Fourth Street, Artesia, NM 88210		Fax #: 575-748-4585	
Contact Person: AMANDA TRUJILLO		E-mail: atrujillo@yatespetroleum	
Invoice to: (If different from above)			
Project #:		Project Name: Gissler AV-B Battery	
Project Location: Gissler AV-B Battery		Sampler Signature:	

ANALYSIS REQUEST  
(Circle or Specify Method No.)

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX				PRESERVATIVE METHOD					SAMPLING		MTBE 8021B/602	BTEX 8021B/602	TPH 418.1/TX1005 / TX1005 Extended (C35)	TPH 8015 GRO / DRO / TVHC	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC/MS Vol. 8260B/624	GC/MS Semi. Vol. 8270C/625	PCBs 8082/608	Pesticides 8081A/608	BOD, TSS, pH	Moisture Content	Chlorides	Turn Around Time if different from standard	Hold
				WATER	SOIL	AIR	SLUDGE	HCL	HNO <sub>3</sub>	NaHSO <sub>4</sub>	H <sub>2</sub> SO <sub>4</sub>	ICE	NONE	DATE	TIME																			
	Grab Sample North Sidewall	1		X								X		7/21/2010	12:00 PM	X	X														X			

Relinquished by: Company: Date: Time:	Received by: Company: Date: Time: Temp°c:
<i>Atrejo</i> 7/26/10 4:40pm	<i>Andrea Sam</i> 7-27-10 10:05 9.5°
Relinquished by: Company: Date: Time:	Received by: Company: Date: Time: Temp°c:
Relinquished by: Company: Date: Time:	Received by: Company: Date: Time: Temp°c:

## LAB USE ONLY

Intact	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N
Headspace	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N
Log-in Review	<input type="checkbox"/> Y <input type="checkbox"/> N

## REMARKS:

Received via Fedex

☐ Check If Special Reporting Limits Are Needed



**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: 7-27-10 10:05  
Lab ID #: 383209 / 383210  
Initials: AL

**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 9.5 °C	lbs °C	lbs °C	lbs °C	lbs °C

**Nonconformance Documentation**

Contact: Amanda Trujillo Contacted by: Andrea Lam Date/Time: 7-27-10 / 14:45

Regarding: Temp. out of range when received at lab.

Corrective Action Taken: Client would like to proceed.

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

YATES PET Grissler AU 18 (Btry)

ZRP-420



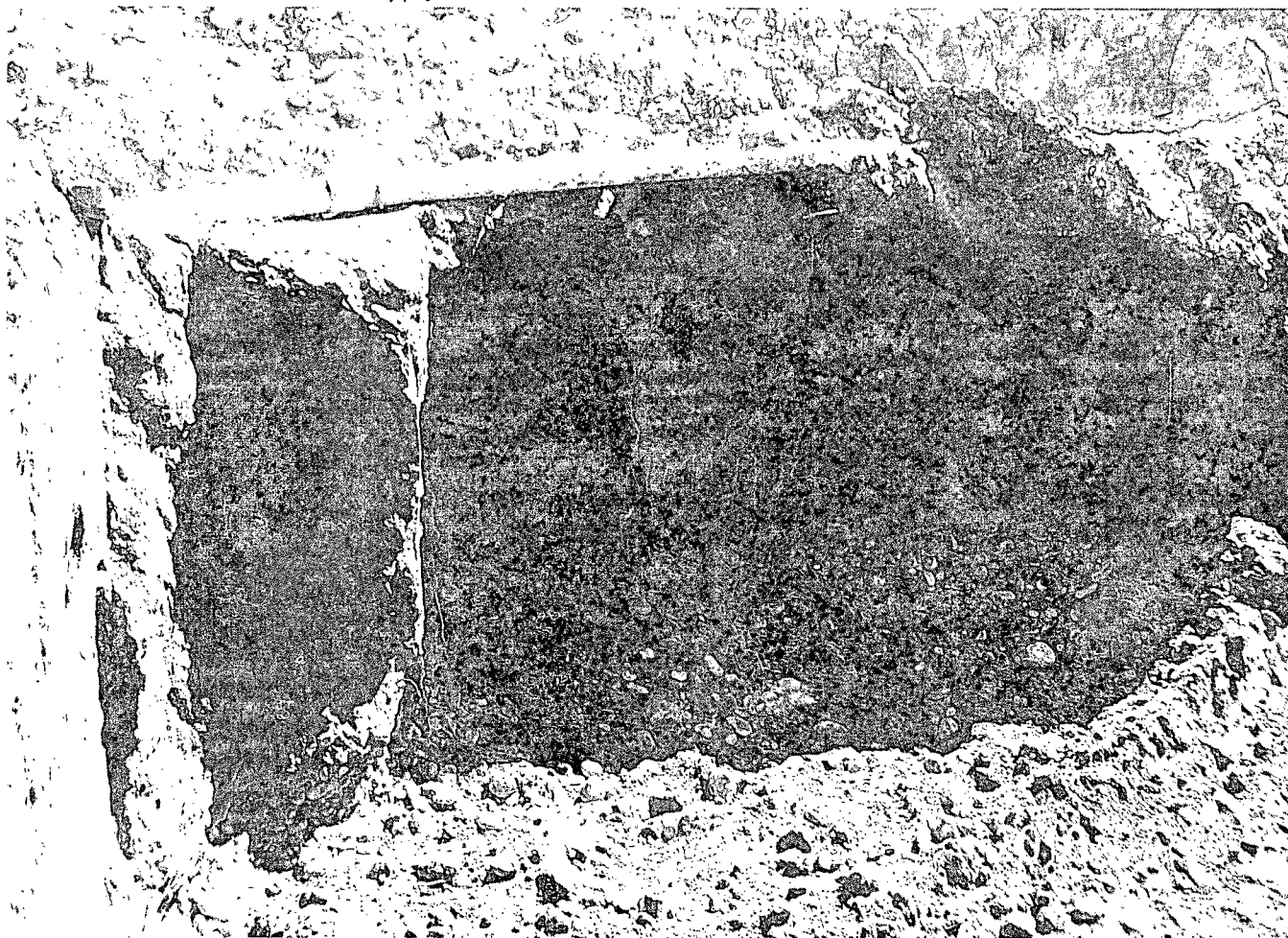
Photo by YATES



YATES PET

Gissler AV 18 (Btrg)

2RP-420



2010/07/20

photo by YATES