

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
1301 W. Grand Avenue, Artesia, NM 88210  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy Minerals and Natural Resources  
Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Form C-141  
Revised October 10, 2003  
Submit 2 Copies to appropriate  
District Office in accordance  
with Rule 116 on back  
side of form

**Release Notification and Corrective Action**

**OPERATOR**

Initial Report  Final Report

Name of Company Yates Petroleum Corporation	OGRID Number 25575	Contact Robert Asher
Address 104 S. 4 <sup>TH</sup> Street	Telephone No. 575-748-1471	
Facility Name Loving AIB State #1	API Number 30-015-22889	Facility Type Battery
Surface Owner Fee	Mineral Owner State	Lease No. V-3346

**LOCATION OF RELEASE**

Unit Letter G	Section 16	Township 23S	Range 28E	Feet from the 1550	North/South Line North	Feet from the 1780	East/West Line East	County Eddy
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Latitude 32.08078 Longitude 104.32211

**NATURE OF RELEASE**

Type of Release Oil & Produced Water	Volume of Release 15 B/O & 100 B/PW	Volume Recovered 13 B/O & 70 B/PW
Source of Release Water Line	Date and Hour of Occurrence 5/1/2013; AM	Date and Hour of Discovery 5/1/2013; AM
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Mike Bratcher/NMOCD District II	
By Whom? Robert Asher/Yates Petroleum Corporation	Date and Hour 5/1/2013; PM	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse. N/A	

If a Watercourse was Impacted, Describe Fully.\*  
N/A

Describe Cause of Problem and Remedial Action Taken.\*  
Water line failed in tinhorn to cause release. Vacuum trucks called.

Describe Area Affected and Cleanup Action Taken.\*  
An approximate area of 25' X 25' & 5' X 200' (west of battery). Impacted soils scraped up (approximately 12" deep) and taken to an NMOCD approved facility. Vertical and horizontal delineation samples will be taken and analysis ran for TPH & BTEX (chlorides for documentation). If initial analytical results for TPH & BTEX are under RRAL's (site ranking is 10) a Final Report, C-141 will be submitted to the OCD requesting closure. If the analytical results are above the RRAL a work plan will be submitted to the OCD. **Depth to Ground Water: 50-99' (50', ChevronTexaco Trend Map), Wellhead Protection Area: No, Distance to Surface Water Body: > 1000', SITE RANKING IS 10. Based on impacted soils excavated/hailed, sample results and area bermed/lined for any future containment, Yates Petroleum Corporation requests closure.**

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature: 	<u>OIL CONSERVATION DIVISION</u>	
Printed Name: Robert Asher	Approved by District Supervisor:	
Title: NM Environmental Regulatory Supervisor	Approval Date:	Expiration Date:
E-mail Address: boba@yatespetroleum.com	Conditions of Approval:	Attached <input type="checkbox"/>
Date: Monday, February 03, 2014      Phone: 575-748-4021	<b>2RP-</b>	

\* Attach Additional Sheets If Necessary

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side of form

### Release Notification and Corrective Action

#### OPERATOR

Initial Report  Final Report

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Address 104 S. 4 <sup>TH</sup> Street		Telephone No. 575-748-1471
Facility Name Loving AIB State #1	API Number 30-015-22889	Facility Type Battery

Surface Owner Fee	Mineral Owner State	Lease No. V-3346
----------------------	------------------------	---------------------

#### LOCATION OF RELEASE

Unit Letter G	Section 16	Township 23S	Range 28E	Feet from the 1550	North/South Line North	Feet from the 1780	East/West Line East	County Eddy
------------------	---------------	-----------------	--------------	-----------------------	---------------------------	-----------------------	------------------------	----------------

Latitude 32.08078 Longitude 104.32211

#### NATURE OF RELEASE

Type of Release Produced Water	Volume of Release 260 B/PW	Volume Recovered 245 B/PW
Source of Release Water Line	Date and Hour of Occurrence 6/4/2013; AM	Date and Hour of Discovery 6/4/2013; AM
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Mike Bratcher/NMOCD District II	
By Whom? Robert Asher/Yates Petroleum Corporation	Date and Hour 6/4/2013; PM	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse. N/A	

If a Watercourse was Impacted, Describe Fully.\*  
N/A

Describe Cause of Problem and Remedial Action Taken.\*  
Water line failed in tinhorn to cause release. Vacuum trucks called.

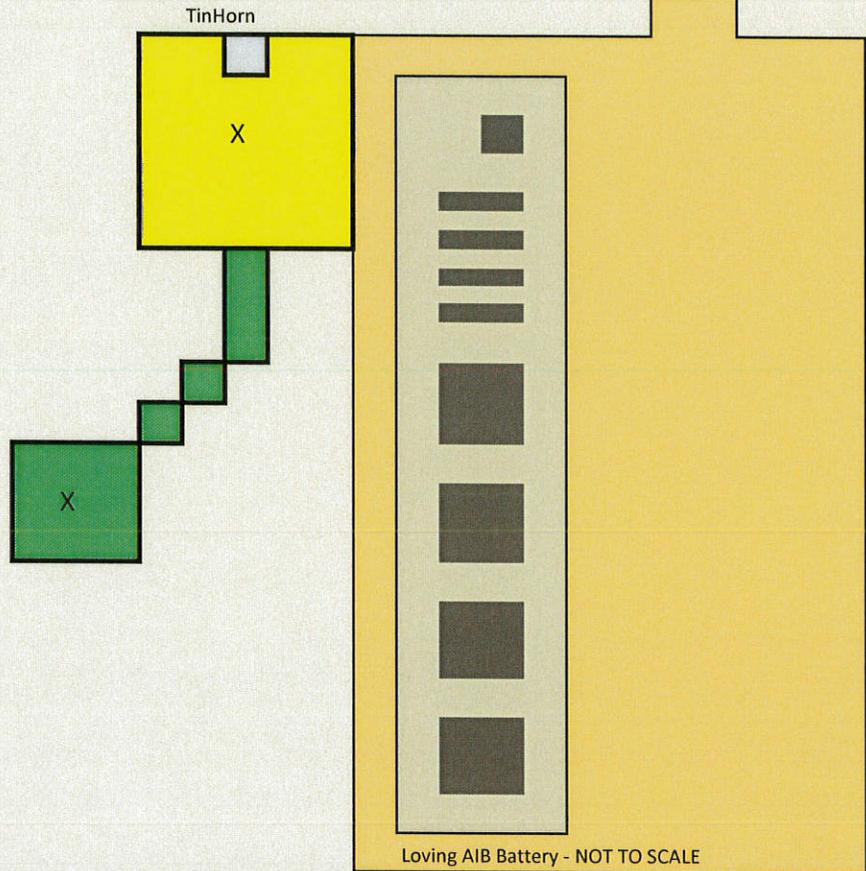
Describe Area Affected and Cleanup Action Taken.\*  
An approximate area of 25' X 25' & 5' X 200' (west of battery). Impacted soils scraped up (an additional 12" deep, total excavated is approximately 24" including 12" of impacted soils removed from 5/1/2014 release) and taken to an NMOCD approved facility. Vertical and horizontal delineation samples will be taken and analysis ran for TPH & BTEX (chlorides for documentation). If initial analytical results for TPH & BTEX are under RRAL's (site ranking is 10) a Final Report, C-141 will be submitted to the OCD requesting closure. If the analytical results are above the RRAL a work plan will be submitted to the OCD. **Depth to Ground Water: 50-99' (50', ChevronTexaco Trend Map), Wellhead Protection Area: No, Distance to Surface Water Body: > 1000', SITE RANKING IS 10. Based on impacted soils excavated/hailed, sample results and area bermed/lined for any future containment, Yates Petroleum Corporation requests closure.**

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature: 	<u>OIL CONSERVATION DIVISION</u>	
Printed Name: Robert Asher	Approved by District Supervisor:	
Title: NM Environmental Regulatory Supervisor	Approval Date:	Expiration Date:
E-mail Address: boba@yatespetroleum.com	Conditions of Approval:	Attached <input type="checkbox"/>
Date: Monday, February 03, 2014      Phone: 575-748-4021	<b>2RP-</b>	

\* Attach Additional Sheets If Necessary

YATES PETROLEUM CORPORATION  
ENVIRONMENTAL DIVISION



Analytical Report-1306B45 (Hall)	Sample Area	Sample Date	Sample Type	Depth	BTEX	GRO	DRO	Chlorides
Comp-01.0	Release Area	6/24/2013	Comp/Backhoe	1'	ND	ND	17	10000
Comp-02.0	Release Area	6/24/2013	Comp/Backhoe	2'	ND	ND	ND	2700
Comp-03.0	Release Area	6/24/2013	Comp/Backhoe	3'	ND	ND	ND	250
Comp-01.0	Release Area	6/24/2013	Comp/Backhoe	1'	ND	ND	ND	16000
Comp-02.0	Release Area	6/24/2013	Comp/Backhoe	2'	ND	ND	ND	20000
Comp-03.0	Release Area	6/24/2013	Comp/Backhoe	3'	ND	ND	ND	22000
Analytical Report-1308395 (Hall)	Sample Area	Sample Date	Sample Type	Depth	BTEX	GRO	DRO	Chlorides
C04.0	Release Area	8/7/2013	Comp/Backhoe	4'				8000
C05.0	Release Area	8/7/2013	Comp/Backhoe	5'				12000
C06.0	Release Area	8/7/2013	Comp/Backhoe	6'				21000
C07.0	Release Area	8/7/2013	Comp/Backhoe	7'				21000
C08.0	Release Area	8/7/2013	Comp/Backhoe	8'				18000
C09.0	Release Area	8/7/2013	Comp/Backhoe	9'				17000
Analytical Report-H302772 (Cardinal)	Sample Area	Sample Date	Sample Type	Depth	BTEX	GRO	DRO	Chlorides
c10.0	Release Area	11/7/2013	Comp/Backhoe	10'				5200
c12.0	Release Area	11/7/2013	Comp/Backhoe	12'				14400
c14.0	Release Area	11/7/2013	Comp/Backhoe	14'				4120
c16.0	Release Area	11/7/2013	Comp/Backhoe	16'				2280
c18.0	Release Area	11/7/2013	Comp/Backhoe	18'				384

**Site Ranking is Ten(10).** DTGW: 50-99' (approx. 50', ChevronTexaco Trend Map). All results are ppm.  
Chloride samples for documentation. Proposed excavation of impacted soil.  
Released: 15 B/O & 100 B/PW; Recovered: 13 B/O & 70 B/PW. Release Date: 5/1/2013  
Released: 260 B/PW; Recovered: 245 B/PW. Release Date: 6/4/2013



Hall Environmental Analysis Laboratory  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: [www.hallenvironmental.com](http://www.hallenvironmental.com)

July 02, 2013

Robert Asher  
Yates Petroleum  
105 South 4th  
Artesia, NM 88210  
TEL: (575) 748-4217  
FAX

RE: Loving AIB State #1

OrderNo.: 1306B45

Dear Robert Asher:

Hall Environmental Analysis Laboratory received 6 sample(s) on 6/26/2013 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to [www.hallenvironmental.com](http://www.hallenvironmental.com) or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a light blue horizontal line.

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order 1306B45

Date Reported: 7/2/2013

**CLIENT:** Yates Petroleum

**Client Sample ID:** Comp-01.0

**Project:** Loving AIB State #1

**Collection Date:** 6/24/2013 9:45:00 AM

**Lab ID:** 1306B45-001

**Matrix:** SOIL

**Received Date:** 6/26/2013 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: JRR
Chloride	16000	750		mg/Kg	500	6/28/2013 9:44:06 PM	8142

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order 1306B45

Date Reported: 7/2/2013

**CLIENT:** Yates Petroleum

**Client Sample ID:** Comp-02.0

**Project:** Loving AIB State #1

**Collection Date:** 6/24/2013 9:50:00 AM

**Lab ID:** 1306B45-002

**Matrix:** SOIL

**Received Date:** 6/26/2013 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: JRR
Chloride	20000	750		mg/Kg	500	6/28/2013 9:56:30 PM	8142

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit



# Hall Environmental Analysis Laboratory, Inc.

Analytical Report  
Lab Order 1306B45  
Date Reported: 7/2/2013

CLIENT: Yates Petroleum

Client Sample ID: Comp-01.0

Project: Loving AIB State #1

Collection Date: 6/24/2013 10:00:00 AM

Lab ID: 1306B45-004

Matrix: SOIL

Received Date: 6/26/2013 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: JRR
Chloride	10000	750		mg/Kg	500	6/28/2013 10:21:19 PM	8142

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report  
Lab Order 1306B45  
Date Reported: 7/2/2013

CLIENT: Yates Petroleum

Client Sample ID: Comp-02.0

Project: Loving AIB State #1

Collection Date: 6/24/2013 10:05:00 AM

Lab ID: 1306B45-005

Matrix: SOIL

Received Date: 6/26/2013 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: JRR
Chloride	2700	750		mg/Kg	500	6/28/2013 10:33:44 PM	8142

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order 1306B45

Date Reported: 7/2/2013

**CLIENT:** Yates Petroleum

**Client Sample ID:** Comp-03.0

**Project:** Loving AIB State #1

**Collection Date:** 6/24/2013 10:10:00 AM

**Lab ID:** 1306B45-006

**Matrix:** SOIL

**Received Date:** 6/26/2013 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: JRR
Chloride	250	150		mg/Kg	100	7/2/2013 4:31:52 AM	8142

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

**Sample Log-In Check List**

Client Name: Yates Petroleum Corporat

Work Order Number: 1306B45

RcptNo: 1

Received by/date: LM 06/20/13

Logged By: Michelle Garcia 6/26/2013 9:00:00 AM *Michelle Garcia*

Completed By: Michelle Garcia 6/27/2013 8:35:14 AM *Michelle Garcia*

Reviewed By: *mg* 06/27/13

**Chain of Custody**

- 1. Custody seals intact on sample bottles? Yes  No  Not Present
- 2. Is Chain of Custody complete? Yes  No  Not Present
- 3. How was the sample delivered? FedEx

**Log In**

- 4. Was an attempt made to cool the samples? Yes  No  NA
- 5. Were all samples received at a temperature of >0° C to 6.0°C Yes  No  NA
- 6. Sample(s) in proper container(s)? Yes  No
- 7. Sufficient sample volume for indicated test(s)? Yes  No
- 8. Are samples (except VOA and ONG) properly preserved? Yes  No
- 9. Was preservative added to bottles? Yes  No  NA
- 10. VOA vials have zero headspace? Yes  No  No VOA Vials
- 11. Were any sample containers received broken? Yes  No
- 12. Does paperwork match bottle labels? (Note discrepancies on chain of custody) Yes  No
- 13. Are matrices correctly identified on Chain of Custody? Yes  No
- 14. Is it clear what analyses were requested? Yes  No
- 15. Were all holding times able to be met? (If no, notify customer for authorization.) Yes  No

# of preserved bottles checked for pH: \_\_\_\_\_  
 (<2 or >12 unless noted)  
 Adjusted? \_\_\_\_\_  
 Checked by: \_\_\_\_\_

**Special Handling (if applicable)**

- 16. Was client notified of all discrepancies with this order? Yes  No  NA

Person Notified: \_\_\_\_\_ Date: \_\_\_\_\_  
 By Whom: \_\_\_\_\_ Via:  eMail  Phone  Fax  In Person  
 Regarding: \_\_\_\_\_  
 Client Instructions: \_\_\_\_\_

17. Additional remarks:

**18. Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.6	Good	Yes			

# HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

## Analysis Request

Client: Yates Petroleum Corporation  
 Mailing Address: 105 S. Fourth Street  
 Artesia, NM 88210  
 Phone #: 575-748-4217  
 email or Fax#: boba@yatespetroleum.com  
 QA/QC Package:  Level 4 (Full Validation)  
 Accreditation:  NELAP  Other  
 EDD (Type)

Project Name: Loving AIB State #1  
 Project #: 30-015-22889  
 Project Manager: Robert Asher

Sampler: Same  
 On Ice:  Yes  No  
 Sample Temperature: 2.6

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No.
6/24/2013	9:45 AM	Soil	Comp-01.0	1 - 4oz.	Ice	13060845-001
6/24/2013	9:50 AM	Soil	Comp-02.0	1 - 4oz.	Ice	-002
6/24/2013	9:55 AM	Soil	Comp-03.0	1 - 4oz.	Ice	-003
6/24/2013	10:00 AM	Soil	Comp-01.0	1 - 4oz.	Ice	-004
6/24/2013	10:05 AM	Soil	Comp-02.0	1 - 4oz.	Ice	-005
6/24/2013	10:10 AM	Soil	Comp-03.0	1 - 4oz.	Ice	-006

Date: 6/25/2013 Time: 3:19 PM  
 Relinquished by: [Signature]  
 Date: 6/25/2013 Time: 3:19 PM  
 Received by: [Signature]  
 Date: 6/25/2013 Time: 3:19 PM

BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F, Cl, NO <sub>3</sub> , NO <sub>2</sub> , PO <sub>4</sub> , SO <sub>4</sub> )	8081 Pesticides / 8082 PCBs	8260B (VOA)	8270 (Semi-VOA)	Air Bubbles (Y/N)
X	X	X	X	X	X	X	X	X	X	X	

Remarks: Please put chloride results on separate report.

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.



Hall Environmental Analysis Laboratory  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: [www.hallenvironmental.com](http://www.hallenvironmental.com)

July 02, 2013

Robert Asher  
Yates Petroleum  
105 South 4th  
Artesia, NM 88210  
TEL: (575) 748-4217  
FAX

RE: Loving AIB State #1

OrderNo.: 1306B45

Dear Robert Asher:

Hall Environmental Analysis Laboratory received 6 sample(s) on 6/26/2013 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to [www.hallenvironmental.com](http://www.hallenvironmental.com) or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

Sincerely,

A handwritten signature in black ink, appearing to read 'Andy Freeman', is written in a cursive style.

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1306B45

Date Reported: 7/2/2013

CLIENT: Yates Petroleum

Client Sample ID: Comp-01.0

Project: Loving AIB State #1

Collection Date: 6/24/2013 9:45:00 AM

Lab ID: 1306B45-001

Matrix: SOIL

Received Date: 6/26/2013 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8015D: DIESEL RANGE ORGANICS</b>							
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	6/28/2013 5:31:52 PM	8095
Surr: DNOP	101	63-147		%REC	1	6/28/2013 5:31:52 PM	8095
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	6/28/2013 4:05:49 PM	8141
Surr: BFB	92.3	80-120		%REC	1	6/28/2013 4:05:49 PM	8141
<b>EPA METHOD 8021B: VOLATILES</b>							
Methyl tert-butyl ether (MTBE)	ND	0.098		mg/Kg	1	6/28/2013 4:05:49 PM	8141
Benzene	ND	0.049		mg/Kg	1	6/28/2013 4:05:49 PM	8141
Toluene	ND	0.049		mg/Kg	1	6/28/2013 4:05:49 PM	8141
Ethylbenzene	ND	0.049		mg/Kg	1	6/28/2013 4:05:49 PM	8141
Xylenes, Total	ND	0.098		mg/Kg	1	6/28/2013 4:05:49 PM	8141
Surr: 4-Bromofluorobenzene	101	80-120		%REC	1	6/28/2013 4:05:49 PM	8141

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1306B45

Date Reported: 7/2/2013

CLIENT: Yates Petroleum

Client Sample ID: Comp-02.0

Project: Loving AIB State #1

Collection Date: 6/24/2013 9:50:00 AM

Lab ID: 1306B45-002

Matrix: SOIL

Received Date: 6/26/2013 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8015D: DIESEL RANGE ORGANICS</b>							Analyst: <b>JME</b>
Diesel Range Organics (DRO)	17	9.9		mg/Kg	1	6/28/2013 5:53:46 PM	8095
Surr: DNOP	104	63-147		%REC	1	6/28/2013 5:53:46 PM	8095
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	6/28/2013 5:36:28 PM	8141
Surr: BFB	96.4	80-120		%REC	1	6/28/2013 5:36:28 PM	8141
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Methyl tert-butyl ether (MTBE)	ND	0.095		mg/Kg	1	6/28/2013 5:36:28 PM	8141
Benzene	ND	0.048		mg/Kg	1	6/28/2013 5:36:28 PM	8141
Toluene	ND	0.048		mg/Kg	1	6/28/2013 5:36:28 PM	8141
Ethylbenzene	ND	0.048		mg/Kg	1	6/28/2013 5:36:28 PM	8141
Xylenes, Total	ND	0.095		mg/Kg	1	6/28/2013 5:36:28 PM	8141
Surr: 4-Bromofluorobenzene	100	80-120		%REC	1	6/28/2013 5:36:28 PM	8141

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:			
*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

**Hall Environmental Analysis Laboratory, Inc.**

**CLIENT:** Yates Petroleum **Client Sample ID:** Comp-03.0  
**Project:** Loving AIB State #1 **Collection Date:** 6/24/2013 9:55:00 AM  
**Lab ID:** 1306B45-003 **Matrix:** SOIL **Received Date:** 6/26/2013 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8015D: DIESEL RANGE ORGANICS</b>							Analyst: <b>JME</b>
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	6/28/2013 6:15:35 PM	8095
Surr: DNOP	102	63-147		%REC	1	6/28/2013 6:15:35 PM	8095
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	6/28/2013 6:06:56 PM	8141
Surr: BFB	93.5	80-120		%REC	1	6/28/2013 6:06:56 PM	8141
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Methyl tert-butyl ether (MTBE)	ND	0.096		mg/Kg	1	6/28/2013 6:06:56 PM	8141
Benzene	ND	0.048		mg/Kg	1	6/28/2013 6:06:56 PM	8141
Toluene	ND	0.048		mg/Kg	1	6/28/2013 6:06:56 PM	8141
Ethylbenzene	ND	0.048		mg/Kg	1	6/28/2013 6:06:56 PM	8141
Xylenes, Total	ND	0.096		mg/Kg	1	6/28/2013 6:06:56 PM	8141
Surr: 4-Bromofluorobenzene	100	80-120		%REC	1	6/28/2013 6:06:56 PM	8141

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b> * Value exceeds Maximum Contaminant Level. E Value above quantitation range J Analyte detected below quantitation limits O RSD is greater than RSDlimit R RPD outside accepted recovery limits	B Analyte detected in the associated Method Blank H Holding times for preparation or analysis exceeded ND Not Detected at the Reporting Limit P Sample pH greater than 2 for VOA and TOC only. RL Reporting Detection Limit
--	---

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1306B45

Date Reported: 7/2/2013

CLIENT: Yates Petroleum

Client Sample ID: Comp-01.0

Project: Loving AIB State #1

Collection Date: 6/24/2013 10:00:00 AM

Lab ID: 1306B45-004

Matrix: SOIL

Received Date: 6/26/2013 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8015D: DIESEL RANGE ORGANICS</b>							Analyst: <b>JME</b>
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	6/28/2013 6:37:27 PM	8095
Surr: DNOP	103	63-147		%REC	1	6/28/2013 6:37:27 PM	8095
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	6/28/2013 6:37:14 PM	8141
Surr: BFB	88.7	80-120		%REC	1	6/28/2013 6:37:14 PM	8141
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Methyl tert-butyl ether (MTBE)	ND	0.095		mg/Kg	1	6/28/2013 6:37:14 PM	8141
Benzene	ND	0.047		mg/Kg	1	6/28/2013 6:37:14 PM	8141
Toluene	ND	0.047		mg/Kg	1	6/28/2013 6:37:14 PM	8141
Ethylbenzene	ND	0.047		mg/Kg	1	6/28/2013 6:37:14 PM	8141
Xylenes, Total	ND	0.095		mg/Kg	1	6/28/2013 6:37:14 PM	8141
Surr: 4-Bromofluorobenzene	98.1	80-120		%REC	1	6/28/2013 6:37:14 PM	8141

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

**Hall Environmental Analysis Laboratory, Inc.**

**Analytical Report**  
 Lab Order **1306B45**  
 Date Reported: **7/2/2013**

**CLIENT:** Yates Petroleum **Client Sample ID:** Comp-02.0  
**Project:** Loving AIB State #1 **Collection Date:** 6/24/2013 10:05:00 AM  
**Lab ID:** 1306B45-005 **Matrix:** SOIL **Received Date:** 6/26/2013 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8015D: DIESEL RANGE ORGANICS</b>							Analyst: <b>JME</b>
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	6/28/2013 6:59:06 PM	8095
Surr: DNOP	79.0	63-147		%REC	1	6/28/2013 6:59:06 PM	8095
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	6/28/2013 7:07:21 PM	8141
Surr: BFB	90.8	80-120		%REC	1	6/28/2013 7:07:21 PM	8141
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Methyl tert-butyl ether (MTBE)	ND	0.096		mg/Kg	1	6/28/2013 7:07:21 PM	8141
Benzene	ND	0.048		mg/Kg	1	6/28/2013 7:07:21 PM	8141
Toluene	ND	0.048		mg/Kg	1	6/28/2013 7:07:21 PM	8141
Ethylbenzene	ND	0.048		mg/Kg	1	6/28/2013 7:07:21 PM	8141
Xylenes, Total	ND	0.096		mg/Kg	1	6/28/2013 7:07:21 PM	8141
Surr: 4-Bromofluorobenzene	99.8	80-120		%REC	1	6/28/2013 7:07:21 PM	8141

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
	O RSD is greater than RSDlimit	P Sample pH greater than 2 for VOA and TOC only.
	R RPD outside accepted recovery limits	RL Reporting Detection Limit



# QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1306B45

02-Jul-13

Client: Yates Petroleum  
Project: Loving AIB State #1

Sample ID	MB-8095	SampType:	MBLK	TestCode:	EPA Method 8015D: Diesel Range Organics					
Client ID:	PBS	Batch ID:	8095	RunNo:	11523					
Prep Date:	6/25/2013	Analysis Date:	6/25/2013	SeqNo:	326782	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Surr: DNOP	8.5		10.00		85.3	63	147			

Sample ID	LCS-8095	SampType:	LCS	TestCode:	EPA Method 8015D: Diesel Range Organics					
Client ID:	LCSS	Batch ID:	8095	RunNo:	11523					
Prep Date:	6/25/2013	Analysis Date:	6/25/2013	SeqNo:	326783	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	46	10	50.00	0	92.1	77.1	128			
Surr: DNOP	4.4		5.000		88.3	63	147			

Sample ID	MB-8058	SampType:	MBLK	TestCode:	EPA Method 8015D: Diesel Range Organics					
Client ID:	PBS	Batch ID:	8058	RunNo:	11523					
Prep Date:	6/21/2013	Analysis Date:	6/25/2013	SeqNo:	327121	Units:	%REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	8.9		10.00		89.0	63	147			

Sample ID	LCS-8058	SampType:	LCS	TestCode:	EPA Method 8015D: Diesel Range Organics					
Client ID:	LCSS	Batch ID:	8058	RunNo:	11523					
Prep Date:	6/21/2013	Analysis Date:	6/25/2013	SeqNo:	327122	Units:	%REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.7		5.000		93.0	63	147			

Sample ID	MB-8150	SampType:	MBLK	TestCode:	EPA Method 8015D: Diesel Range Organics					
Client ID:	PBS	Batch ID:	8150	RunNo:	11622					
Prep Date:	6/28/2013	Analysis Date:	6/28/2013	SeqNo:	330163	Units:	%REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	11		10.00		107	63	147			

Sample ID	LCS-8150	SampType:	LCS	TestCode:	EPA Method 8015D: Diesel Range Organics					
Client ID:	LCSS	Batch ID:	8150	RunNo:	11622					
Prep Date:	6/28/2013	Analysis Date:	6/28/2013	SeqNo:	330219	Units:	%REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	5.7		5.000		114	63	147			

## Qualifiers:

- \* Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1306B45  
02-Jul-13

**Client:** Yates Petroleum  
**Project:** Loving AIB State #1

Sample ID	<b>MB-8141</b>	SampType:	<b>MBLK</b>	TestCode:	<b>EPA Method 8015D: Gasoline Range</b>					
Client ID:	<b>PBS</b>	Batch ID:	<b>R11638</b>	RunNo:	<b>11638</b>					
Prep Date:	<b>6/27/2013</b>	Analysis Date:	<b>6/28/2013</b>	SeqNo:	<b>330852</b>	Units:	<b>%REC</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	880		1000		88.4	80	120			

Sample ID	<b>LCS-8141</b>	SampType:	<b>LCS</b>	TestCode:	<b>EPA Method 8015D: Gasoline Range</b>					
Client ID:	<b>LCSS</b>	Batch ID:	<b>R11638</b>	RunNo:	<b>11638</b>					
Prep Date:	<b>6/27/2013</b>	Analysis Date:	<b>6/28/2013</b>	SeqNo:	<b>330853</b>	Units:	<b>%REC</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	970		1000		97.4	80	120			

Sample ID	<b>MB-8141</b>	SampType:	<b>MBLK</b>	TestCode:	<b>EPA Method 8015D: Gasoline Range</b>					
Client ID:	<b>PBS</b>	Batch ID:	<b>8141</b>	RunNo:	<b>11638</b>					
Prep Date:	<b>6/27/2013</b>	Analysis Date:	<b>6/28/2013</b>	SeqNo:	<b>330854</b>	Units:	<b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	880		1000		88.4	80	120			

Sample ID	<b>LCS-8141</b>	SampType:	<b>LCS</b>	TestCode:	<b>EPA Method 8015D: Gasoline Range</b>					
Client ID:	<b>LCSS</b>	Batch ID:	<b>8141</b>	RunNo:	<b>11638</b>					
Prep Date:	<b>6/27/2013</b>	Analysis Date:	<b>6/28/2013</b>	SeqNo:	<b>330855</b>	Units:	<b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	28	5.0	25.00	0	114	62.6	136			
Surr: BFB	970		1000		97.4	80	120			

### Qualifiers:

- |  |  |
|--|--|
| * Value exceeds Maximum Contaminant Level.   | B Analyte detected in the associated Method Blank    |
| E Value above quantitation range             | H Holding times for preparation or analysis exceeded |
| J Analyte detected below quantitation limits | ND Not Detected at the Reporting Limit               |
| O RSD is greater than RSDlimit               | P Sample pH greater than 2 for VOA and TOC only.     |
| R RPD outside accepted recovery limits       | RL Reporting Detection Limit                         |

# QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1306B45

02-Jul-13

**Client:** Yates Petroleum  
**Project:** Loving AIB State #1

Sample ID: <b>MB-8141</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>PBS</b>	Batch ID: <b>8141</b>	RunNo: <b>11638</b>								
Prep Date: <b>6/27/2013</b>	Analysis Date: <b>6/28/2013</b>	SeqNo: <b>330866</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	ND	0.10								
Benzene	ND	0.050								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.0		1.000		102	80	120			

Sample ID: <b>LCS-8141</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>8141</b>	RunNo: <b>11638</b>								
Prep Date: <b>6/27/2013</b>	Analysis Date: <b>6/28/2013</b>	SeqNo: <b>330867</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	1.1	0.10	1.000	0	110	80	120			
Benzene	0.95	0.050	1.000	0	94.6	80	120			
Toluene	0.92	0.050	1.000	0	91.7	80	120			
Ethylbenzene	0.94	0.050	1.000	0	94.0	80	120			
Xylenes, Total	2.8	0.10	3.000	0	94.8	80	120			
Surr: 4-Bromofluorobenzene	1.0		1.000		103	80	120			

**Qualifiers:**

- |  |  |
|--|--|
| * Value exceeds Maximum Contaminant Level.   | B Analyte detected in the associated Method Blank    |
| E Value above quantitation range             | H Holding times for preparation or analysis exceeded |
| J Analyte detected below quantitation limits | ND Not Detected at the Reporting Limit               |
| O RSD is greater than RSDlimit               | P Sample pH greater than 2 for VOA and TOC only.     |
| R RPD outside accepted recovery limits       | RL Reporting Detection Limit                         |

**Sample Log-In Check List**

Client Name: Yates Petroleum Corporat

Work Order Number: 1306B45

RcptNo: 1

Received by/date: LM 06/26/13

Logged By: **Michelle Garcia** 6/26/2013 9:00:00 AM *Michelle Garcia*

Completed By: **Michelle Garcia** 6/27/2013 8:35:14 AM *Michelle Garcia*

Reviewed By: *mg* 06/27/13

**Chain of Custody**

- 1. Custody seals intact on sample bottles? Yes  No  Not Present
- 2. Is Chain of Custody complete? Yes  No  Not Present
- 3. How was the sample delivered? FedEx

**Log In**

- 4. Was an attempt made to cool the samples? Yes  No  NA
- 5. Were all samples received at a temperature of >0° C to 6.0°C Yes  No  NA
- 6. Sample(s) in proper container(s)? Yes  No
- 7. Sufficient sample volume for indicated test(s)? Yes  No
- 8. Are samples (except VOA and ONG) properly preserved? Yes  No
- 9. Was preservative added to bottles? Yes  No  NA
- 10. VOA vials have zero headspace? Yes  No  No VOA Vials
- 11. Were any sample containers received broken? Yes  No
- 12. Does paperwork match bottle labels? (Note discrepancies on chain of custody) Yes  No
- 13. Are matrices correctly identified on Chain of Custody? Yes  No
- 14. Is it clear what analyses were requested? Yes  No
- 15. Were all holding times able to be met? (If no, notify customer for authorization.) Yes  No

# of preserved bottles checked for pH: \_\_\_\_\_  
 (<2 or >12 unless noted)  
 Adjusted? \_\_\_\_\_  
 Checked by: \_\_\_\_\_

**Special Handling (if applicable)**

- 16. Was client notified of all discrepancies with this order? Yes  No  NA

Person Notified: \_\_\_\_\_ Date: \_\_\_\_\_  
 By Whom: \_\_\_\_\_ Via:  eMail  Phone  Fax  In Person  
 Regarding: \_\_\_\_\_  
 Client Instructions: \_\_\_\_\_

17. Additional remarks:

**18. Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.6	Good	Yes			



Client: Yates Petroleum Corporation

Mailing Address: 105 S. Fourth Street

Artesia, NM 88210

Phone #: 575-748-4217

email or Fax#: boba@yatespetroleum.com

QA/QC Package:

Standard  Level 4 (Full Validation)

Accreditation:

NELAP  Other

EDD (Type)

Standard  Rush

Project Name:

Loving AIB State #1

Project #:

30-015-22889

Project Manager:

Robert Asher

Sampler: Same

On Ice:  Yes  No

Sample Temperature: 2.6

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No.
6/24/2013	9:45 AM	Soil	Comp-01.0	1 - 4oz.	Ice	13060845
6/24/2013	9:50 AM	Soil	Comp-02.0	1 - 4oz.	Ice	-001
6/24/2013	9:55 AM	Soil	Comp-03.0	1 - 4oz.	Ice	-002
6/24/2013	10:00 AM	Soil	Comp-01.0	1 - 4oz.	Ice	-003
6/24/2013	10:05 AM	Soil	Comp-02.0	1 - 4oz.	Ice	-004
6/24/2013	10:10 AM	Soil	Comp-03.0	1 - 4oz.	Ice	-005
						-006

Date: 6/25/2013

Time: 3:19 PM

Date:

Time:

Relinquished by:

*[Signature]*

Relinquished by:

Received by:

*[Signature]*

Date

Time

Date

Time

Received by:

*[Signature]*

Received by:

Date

Time

Remarks: Please put chloride results on separate report.

Analysis Request

BTEX + MTBE + TMB's (8021)	X
BTEX + MTBE + TPH (Gas only)	X
TPH Method 8015B (Gas/Diesel)	X
TPH (Method 418.1)	
EDB (Method 504.1)	
8310 (PNA or PAH)	
RCRA 8 Metals	X
Anions (F, Cl, NO <sub>3</sub> , NO <sub>2</sub> , PO <sub>4</sub> , SO <sub>4</sub> )	X
8081 Pesticides / 8082 PCB's	
8260B (VOA)	
8270 (Semi-VOA)	
Air Bubbles (Y-N)	

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107



Hall Environmental Analysis Laboratory  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: [www.hallenvironmental.com](http://www.hallenvironmental.com)

August 16, 2013

Robert Asher  
Yates Petroleum  
105 South Fourth Street  
Artesia, NM 88210  
TEL: (575) 748-4217  
FAX

RE: Loving AIB Battery

OrderNo.: 1308395

Dear Robert Asher:

Hall Environmental Analysis Laboratory received 6 sample(s) on 8/9/2013 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to [www.hallenvironmental.com](http://www.hallenvironmental.com) or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

A handwritten signature in black ink, appearing to read 'Andy Freeman', is written over a white background.

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report  
 Lab Order: 1308395  
 Date Reported: 8/16/2013

**CLIENT:** Yates Petroleum  
**Project:** Loving AIB Battery

**Lab Order:** 1308395

**Lab ID:** 1308395-001 **Collection Date:** 8/5/2013 9:45:00 AM  
**Client Sample ID:** c04.0 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
<b>EPA METHOD 300.0: ANIONS</b>							
Chloride	8000	750		mg/Kg	500	8/14/2013 10:30:59 PM	8834
							Analyst: JRR

**Lab ID:** 1308395-002 **Collection Date:** 8/5/2013 9:50:00 AM  
**Client Sample ID:** c05.0 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
<b>EPA METHOD 300.0: ANIONS</b>							
Chloride	12000	750		mg/Kg	500	8/14/2013 10:43:23 PM	8834
							Analyst: JRR

**Lab ID:** 1308395-003 **Collection Date:** 8/5/2013 9:55:00 AM  
**Client Sample ID:** c06.0 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
<b>EPA METHOD 300.0: ANIONS</b>							
Chloride	21000	1500		mg/Kg	1E	8/14/2013 10:55:48 PM	8834
							Analyst: JRR

**Lab ID:** 1308395-004 **Collection Date:** 8/5/2013 10:00:00 AM  
**Client Sample ID:** c07.0 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
<b>EPA METHOD 300.0: ANIONS</b>							
Chloride	21000	1500		mg/Kg	1E	8/14/2013 11:08:13 PM	8834
							Analyst: JRR

**Lab ID:** 1308395-005 **Collection Date:** 8/5/2013 10:05:00 AM  
**Client Sample ID:** c08.0 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
<b>EPA METHOD 300.0: ANIONS</b>							
Chloride	18000	750		mg/Kg	500	8/14/2013 11:20:38 PM	8834
							Analyst: JRR

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
	O RSD is greater than RSDlimit	P Sample pH greater than 2 for VOA and TOC only.
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S Spike Recovery outside accepted recovery limits	

**Analytical Report**

Lab Order: 1308395

Date Reported: 8/16/2013

**Hall Environmental Analysis Laboratory, Inc.**

**CLIENT:** Yates Petroleum  
**Project:** Loving AIB Battery

**Lab Order:** 1308395

**Lab ID:** 1308395-006

**Collection Date:** 8/5/2013 10:10:00 AM

**Client Sample ID:** c09.0

**Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: JRR
Chloride	17000	1500		mg/Kg	1E	8/14/2013 11:33:02 PM	8834

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

# QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1308395

16-Aug-13

Client: Yates Petroleum  
Project: Loving AIB Battery

Sample ID	MB-8834	SampType	MBLK	TestCode	EPA Method 300.0: Anions					
Client ID	PBS	Batch ID	8834	RunNo	12612					
Prep Date	8/13/2013	Analysis Date	8/13/2013	SeqNo	359095	Units	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	LCS-8834	SampType	LCS	TestCode	EPA Method 300.0: Anions					
Client ID	LCSS	Batch ID	8834	RunNo	12612					
Prep Date	8/13/2013	Analysis Date	8/13/2013	SeqNo	359096	Units	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	15	1.5	15.00	0	97.1	90	110			

### Qualifiers:

- \* Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

**Sample Log-In Check List**

Client Name: Yates Petroleum Corporat

Work Order Number: 1308395

RcptNo: 1

Received by/date:

LM

08/09/13

Logged By: Michelle Garcia

8/9/2013 9:25:00 AM

Michelle Garcia

Completed By: Michelle Garcia

8/9/2013 9:38:03 AM

Michelle Garcia

Reviewed By: ID

08/09/13

**Chain of Custody**

- 1. Custody seals intact on sample bottles? Yes  No  Not Present
- 2. Is Chain of Custody complete? Yes  No  Not Present
- 3. How was the sample delivered? Client

**Log In**

- 4. Was an attempt made to cool the samples? Yes  No  NA
- 5. Were all samples received at a temperature of. >0° C to 6.0°C Yes  No  NA   
 Not required
- 6. Sample(s) in proper container(s)? Yes  No
- 7. Sufficient sample volume for indicated test(s)? Yes  No
- 8. Are samples (except VOA and ONG) properly preserved? Yes  No
- 9. Was preservative added to bottles? Yes  No  NA
- 10. VOA vials have zero headspace? Yes  No  No VOA Vials
- 11. Were any sample containers received broken? Yes  No
- 12. Does paperwork match bottle labels? Yes  No  # of preserved bottles checked for pH:   
 (Note discrepancies on chain of custody) (<2 or >12 unless noted)
- 13. Are matrices correctly identified on Chain of Custody? Yes  No  Adjusted?
- 14. Is it clear what analyses were requested? Yes  No
- 15. Were all holding times able to be met? Yes  No  Checked by:
- (If no, notify customer for authorization.)

**Special Handling (if applicable)**

- 16. Was client notified of all discrepancies with this order? Yes  No  NA

Person Notified: \_\_\_\_\_ Date: \_\_\_\_\_  
 By Whom: \_\_\_\_\_ Via:  eMail  Phone  Fax  In Person  
 Regarding: \_\_\_\_\_  
 Client Instructions: \_\_\_\_\_

17. Additional remarks:

**18. Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	22.3	Good	Not Present			



# HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Client: Yates Petroleum Corporation  Standard  Rush

Project Name: Loving AIB Battery

Project #: 30-015-22889

Project Manager: Robert Asher  
PO# 103632

Mailing Address: 105 S. Fourth Street  
Artesia, NM 88210

Phone #: 575-748-4217

email or Fax#: boba@yatespetroleum.com

QA/QC Package:  Level 4 (Full Validation)

Accreditation:  Standard  Other

NELAP  Other

EDD (Type)

Sampler: Same  Yes  No

On Ice:  Yes  No

Sample Temperature: 77.3

## Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No.	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F <sup>-</sup> , Cl <sup>-</sup> , NO <sub>3</sub> <sup>-</sup> , NO <sub>2</sub> <sup>-</sup> , PO <sub>4</sub> <sup>-</sup> , SO <sub>4</sub> <sup>-</sup> )	8081 Pesticides / 8082 PCBs	8260B (VOA)	8270 (Semi-VOA)
8/5/13	9:50A	Soil	c04.0	1 - 4oz.	NA	1308395							X	X			
8/5/13	9:50A	Soil	c05.0	1 - 4oz.	NA	-001							X	X			
8/5/13	9:50A	Soil	c06.0	1 - 4oz.	NA	-002							X	X			
8/5/13	10:00	Soil	c07.0	1 - 4oz.	NA	-003							X	X			
8/5/13	10:00A	Soil	c08.0	1 - 4oz.	NA	-004							X	X			
8/5/13	10:10A	Soil	c09.0	1 - 4oz.	NA	-005							X	X			
8/5/13	10:10A	Soil			NA	-006							X	X			

Remarks: Chlorides only.

Date: 8/5/13 9:25  
Time: 9:25

Relinquished by: [Signature]

Date: 8/13/13 09:25  
Time: 09:25

Received by: [Signature]

Date: 08/13/13 09:25  
Time: 09:25

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.



November 19, 2013

ROBERT ASHER

YATES PETROLEUM CORPORATION

105 S 4th Street

Artesia, NM 88210

RE: LOVING AIB BATTERY

Enclosed are the results of analyses for samples received by the laboratory on 11/13/13 11:00.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-13-5. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at [www.tceq.texas.gov/field/qa/lab\\_accred\\_certif.html](http://www.tceq.texas.gov/field/qa/lab_accred_certif.html).

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 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene".

Celey D. Keene

Lab Director/Quality Manager

**Analytical Results For:**

 YATES PETROLEUM CORPORATION  
 ROBERT ASHER  
 105 S 4th Street  
 Artesia NM, 88210  
 Fax To: (505) 748-4635

Received:	11/13/2013	Sampling Date:	11/07/2013
Reported:	11/19/2013	Sampling Type:	Soil
Project Name:	LOVING AIB BATTERY	Sampling Condition:	** (See Notes)
Project Number:	103632	Sample Received By:	Jodi Henson
Project Location:	EDDY COUNTY, NM		

**Sample ID: C10.0 (H302772-01)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	5200	16.0	11/15/2013	ND	416	104	400	3.92		

**Sample ID: C12.0 (H302772-02)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	14400	16.0	11/15/2013	ND	416	104	400	3.92		

**Sample ID: C14.0 (H302772-03)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	4120	16.0	11/15/2013	ND	416	104	400	3.92		

**Sample ID: C16.0 (H302772-04)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	2280	16.0	11/15/2013	ND	416	104	400	3.92		

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

 YATES PETROLEUM CORPORATION  
 ROBERT ASHER  
 105 S 4th Street  
 Artesia NM, 88210  
 Fax To: (505) 748-4635

Received:	11/13/2013	Sampling Date:	11/07/2013
Reported:	11/19/2013	Sampling Type:	Soil
Project Name:	LOVING AIB BATTERY	Sampling Condition:	** (See Notes)
Project Number:	103632	Sample Received By:	Jodi Henson
Project Location:	EDDY COUNTY, NM		

**Sample ID: C18.0 (H302772-05)**

Chloride, SM4500CI-B

mg/kg

Analyzed By: AP

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	384	16.0	11/15/2013	ND	416	104	400	3.92	

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

### Notes and Definitions

- ND Analyte NOT DETECTED at or above the reporting limit
- RPD Relative Percent Difference
- \*\* Samples not received at proper temperature of 6°C or below.
- \*\*\* Insufficient time to reach temperature.
- Chloride by SM4500Cl-B does not require samples be received at or below 6°C  
Samples reported on an as received basis (wet) unless otherwise noted on report

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Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

