



Analytical Report- 1304B34 (Hall)	Sample Area	Sample Date	Sample Type	Depth	BTEX	GRO	DRO	TOTAL	Chlorides
Comp-01.0 A	Release Area - A	4/18/2013	Comp/Backhoe	12"	ND	ND	ND	ND	14000
Comp-02.0 A	Release Area - A	4/18/2013	Comp/Backhoe	24"	ND	ND	ND	ND	4400
Comp-03.0 A	Release Area - A	4/13/2013	Comp/Backhoe	36"	ND	ND	ND	ND	1300
Comp-01.0 B	Release Area - B	4/13/2013	Comp/Backhoe	12"	ND	ND	ND	ND	11000
Comp-02.0 B	Release Area - B	4/13/2013	Comp/Backhoe	24"	ND	ND	ND	ND	3300
Comp-03.0 B	Release Area - B	4/13/2013	Comp/Backhoe	36"	ND	ND	ND	ND	850

Site Ranking is Ten (10). Depth to Ground Water 50-99' (approx. 90', per Trend Map).

All results are ppm. X - Sample Points BLS - Below Surface Level

Impacted soils to be excavated

Released (2 releases): 130 B/PW; Recovered: 119 B/PW. Release Date: 3/22/2013 & 4/1/2013



Bonbon BNNState Com.#1-H

30-015-36913

Section 27, T25S-R28E

Eddy County, NM

SAMPLE DIAGRAM (Not to Scale)

Xenco Laboratories# 1304B34  
Report Date: 5/2/2013

Prepared by Robert Asher  
Environmental Regulatory Agent



*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)*

May 02, 2013

Robert Asher

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

RE: Bonbon BNN State Com. #1-H

OrderNo.: 1304B34

Dear Robert Asher:

Hall Environmental Analysis Laboratory received 6 sample(s) on 4/24/2013 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. 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. 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,

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Yates Petroleum **Client Sample ID:** Comp-01.0A  
**Project:** Bonbon BNN State Com. #1-H **Collection Date:** 4/18/2013 10:40:00 AM  
**Lab ID:** 1304B34-001 **Matrix:** SOIL **Received Date:** 4/24/2013 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015D: DIESEL RANGE ORGANICS</b>						Analyst: <b>GSA</b>
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	5/1/2013 5:09:58 AM
Surr: DNOP	116	63-147		%REC	1	5/1/2013 5:09:58 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	4/30/2013 2:08:12 PM
Surr: BFB	91.0	80-120		%REC	1	4/30/2013 2:08:12 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>NSB</b>
Benzene	ND	0.047		mg/Kg	1	4/30/2013 2:08:12 PM
Toluene	ND	0.047		mg/Kg	1	4/30/2013 2:08:12 PM
Ethylbenzene	ND	0.047		mg/Kg	1	4/30/2013 2:08:12 PM
Xylenes, Total	ND	0.095		mg/Kg	1	4/30/2013 2:08:12 PM
Surr: 4-Bromofluorobenzene	101	80-120		%REC	1	4/30/2013 2:08:12 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JRR</b>
Chloride	14000	750		mg/Kg	500	4/30/2013 7:50:32 PM

<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
	P	Sample pH greater than 2	R	RPD outside accepted recovery limits
	RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order 1304B34

Date Reported: 5/2/2013

CLIENT: Yates Petroleum

Client Sample ID: Comp-02.0A

Project: Bonbon BNN State Com. #1-H

Collection Date: 4/18/2013 10:50:00 AM

Lab ID: 1304B34-002

Matrix: SOIL

Received Date: 4/24/2013 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015D: DIESEL RANGE ORGANICS</b>						Analyst: GSA
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	5/1/2013 5:37:23 AM
Surr: DNOP	144	63-147		%REC	1	5/1/2013 5:37:23 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	4/30/2013 2:36:58 PM
Surr: BFB	90.1	80-120		%REC	1	4/30/2013 2:36:58 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: NSB
Benzene	ND	0.047		mg/Kg	1	4/30/2013 2:36:58 PM
Toluene	ND	0.047		mg/Kg	1	4/30/2013 2:36:58 PM
Ethylbenzene	ND	0.047		mg/Kg	1	4/30/2013 2:36:58 PM
Xylenes, Total	ND	0.094		mg/Kg	1	4/30/2013 2:36:58 PM
Surr: 4-Bromofluorobenzene	99.5	80-120		%REC	1	4/30/2013 2:36:58 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: JRR
Chloride	4400	150		mg/Kg	100	4/30/2013 12:11:15 PM

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order 1304B34

Date Reported: 5/2/2013

**CLIENT:** Yates Petroleum

**Client Sample ID:** Comp-03.0A

**Project:** Bonbon BNN State Com. #1-H

**Collection Date:** 4/18/2013 11:00:00 AM

**Lab ID:** 1304B34-003

**Matrix:** SOIL

**Received Date:** 4/24/2013 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015D: DIESEL RANGE ORGANICS</b>						Analyst: <b>GSA</b>
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	5/1/2013 6:04:29 AM
Surr: DNOP	110	63-147		%REC	1	5/1/2013 6:04:29 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	4/30/2013 3:05:33 PM
Surr: BFB	89.9	80-120		%REC	1	4/30/2013 3:05:33 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>NSB</b>
Benzene	ND	0.047		mg/Kg	1	4/30/2013 3:05:33 PM
Toluene	ND	0.047		mg/Kg	1	4/30/2013 3:05:33 PM
Ethylbenzene	ND	0.047		mg/Kg	1	4/30/2013 3:05:33 PM
Xylenes, Total	ND	0.094		mg/Kg	1	4/30/2013 3:05:33 PM
Surr: 4-Bromofluorobenzene	99.3	80-120		%REC	1	4/30/2013 3:05:33 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JRR</b>
Chloride	1300	150		mg/Kg	100	4/30/2013 12:23:40 PM

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

**Hall Environmental Analysis Laboratory, Inc.**

Analytical Report

Lab Order 1304B34

Date Reported: 5/2/2013

**CLIENT:** Yates Petroleum**Client Sample ID:** Comp-01.0B**Project:** Bonbon BNN State Com. #1-H**Collection Date:** 4/18/2013 11:20:00 AM**Lab ID:** 1304B34-004**Matrix:** SOIL**Received Date:** 4/24/2013 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015D: DIESEL RANGE ORGANICS</b>						Analyst: GSA
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	5/1/2013 6:31:48 AM
Surr: DNOP	139	63-147		%REC	1	5/1/2013 6:31:48 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	4/30/2013 3:34:11 PM
Surr: BFB	90.3	80-120		%REC	1	4/30/2013 3:34:11 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: NSB
Benzene	ND	0.047		mg/Kg	1	4/30/2013 3:34:11 PM
Toluene	ND	0.047		mg/Kg	1	4/30/2013 3:34:11 PM
Ethylbenzene	ND	0.047		mg/Kg	1	4/30/2013 3:34:11 PM
Xylenes, Total	ND	0.095		mg/Kg	1	4/30/2013 3:34:11 PM
Surr: 4-Bromofluorobenzene	99.7	80-120		%REC	1	4/30/2013 3:34:11 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: JRR
Chloride	11000	300		mg/Kg	200	4/30/2013 7:13:19 PM

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Yates Petroleum **Client Sample ID:** Comp-02.0B  
**Project:** Bonbon BNN State Com. #1-H **Collection Date:** 4/18/2013 11:20:00 AM  
**Lab ID:** 1304B34-005 **Matrix:** SOIL **Received Date:** 4/24/2013 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015D: DIESEL RANGE ORGANICS</b>						Analyst: <b>GSA</b>
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	5/1/2013 6:58:58 AM
Surr: DNOP	136	63-147		%REC	1	5/1/2013 6:58:58 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	4/30/2013 4:02:48 PM
Surr: BFB	89.3	80-120		%REC	1	4/30/2013 4:02:48 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>NSB</b>
Benzene	ND	0.049		mg/Kg	1	4/30/2013 4:02:48 PM
Toluene	ND	0.049		mg/Kg	1	4/30/2013 4:02:48 PM
Ethylbenzene	ND	0.049		mg/Kg	1	4/30/2013 4:02:48 PM
Xylenes, Total	ND	0.098		mg/Kg	1	4/30/2013 4:02:48 PM
Surr: 4-Bromofluorobenzene	98.0	80-120		%REC	1	4/30/2013 4:02:48 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>JRR</b>
Chloride	3300	300		mg/Kg	200	4/30/2013 1:00:54 PM

<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
	P	Sample pH greater than 2	R	RPD outside accepted recovery limits
	RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report  
Lab Order 1304B34  
Date Reported: 5/2/2013

CLIENT: Yates Petroleum

Client Sample ID: Comp-03.0B

Project: Bonbon BNN State Com. #1-H

Collection Date: 4/18/2013 11:30:00 AM

Lab ID: 1304B34-006

Matrix: SOIL

Received Date: 4/24/2013 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015D: DIESEL RANGE ORGANICS</b>						Analyst: GSA
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	5/1/2013 7:25:55 AM
Surr: DNOP	86.8	63-147		%REC	1	5/1/2013 7:25:55 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	4/30/2013 4:31:28 PM
Surr: BFB	89.1	80-120		%REC	1	4/30/2013 4:31:28 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: NSB
Benzene	ND	0.047		mg/Kg	1	4/30/2013 4:31:28 PM
Toluene	ND	0.047		mg/Kg	1	4/30/2013 4:31:28 PM
Ethylbenzene	ND	0.047		mg/Kg	1	4/30/2013 4:31:28 PM
Xylenes, Total	ND	0.094		mg/Kg	1	4/30/2013 4:31:28 PM
Surr: 4-Bromofluorobenzene	99.0	80-120		%REC	1	4/30/2013 4:31:28 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: JRR
Chloride	850	30		mg/Kg	20	4/30/2013 8:27:47 PM

Qualifiers: \* Value exceeds Maximum Contaminant Level.  
E Value above quantitation range  
J Analyte detected below quantitation limits  
P Sample pH greater than 2  
RL Reporting Detection Limit

B Analyte detected in the associated Method Blank  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
R RPD outside accepted recovery limits  
S Spike Recovery outside accepted recovery limits



# QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1304B34

02-May-13

Client: Yates Petroleum

Project: Bonbon BNN State Com. #1-H

Sample ID	MB-7223	SampType:	MBLK	TestCode:	EPA Method 300.0: Anions					
Client ID:	PBS	Batch ID:	7223	RunNo:	10222					
Prep Date:	4/30/2013	Analysis Date:	4/30/2013	SeqNo:	291571	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	LCS-7223	SampType:	LCS	TestCode:	EPA Method 300.0: Anions					
Client ID:	LCSS	Batch ID:	7223	RunNo:	10222					
Prep Date:	4/30/2013	Analysis Date:	4/30/2013	SeqNo:	291572	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	15	1.5	15.00	0	96.8	90	110			

Sample ID	1304B05-002AMS	SampType:	MS	TestCode:	EPA Method 300.0: Anions					
Client ID:	BatchQC	Batch ID:	7223	RunNo:	10222					
Prep Date:	4/30/2013	Analysis Date:	4/30/2013	SeqNo:	291590	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	93	7.5	15.00	77.89	101	64.4	117			

Sample ID	1304B05-002AMSD	SampType:	MSD	TestCode:	EPA Method 300.0: Anions					
Client ID:	BatchQC	Batch ID:	7223	RunNo:	10222					
Prep Date:	4/30/2013	Analysis Date:	4/30/2013	SeqNo:	291591	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	93	7.5	15.00	77.89	101	64.4	117	0.0387	20	

## Qualifiers:

\* Value exceeds Maximum Contaminant Level.  
E Value above quantitation range  
J Analyte detected below quantitation limits  
P Sample pH greater than 2  
RL Reporting Detection Limit

B Analyte detected in the associated Method Blank  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
R RPD outside accepted recovery limits  
S Spike Recovery outside accepted recovery limits

# QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1304B34

02-May-13

Client: Yates Petroleum

Project: Bonbon BNN State Com. #1-H

Sample ID	MB-7211	SampType:	MBLK	TestCode:	EPA Method 8015D: Diesel Range Organics					
Client ID:	PBS	Batch ID:	7211	RunNo:	10208					
Prep Date:	4/29/2013	Analysis Date:	4/30/2013	SeqNo:	291165	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	9.6		10.00		95.8	63	147			

Sample ID	LCS-7211	SampType:	LCS	TestCode:	EPA Method 8015D: Diesel Range Organics					
Client ID:	LCSS	Batch ID:	7211	RunNo:	10208					
Prep Date:	4/29/2013	Analysis Date:	4/30/2013	SeqNo:	291166	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	49	10	50.00	0	97.9	47.4	122			
Surr: DNOP	4.8		5.000		96.1	63	147			

Sample ID	1304B05-001AMS	SampType:	MS	TestCode:	EPA Method 8015D: Diesel Range Organics					
Client ID:	BatchQC	Batch ID:	7211	RunNo:	10223					
Prep Date:	4/29/2013	Analysis Date:	4/30/2013	SeqNo:	291657	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	74	10	50.40	12.21	123	12.6	148			
Surr: DNOP	7.5		5.040		148	63	147			S

Sample ID	1304B05-001AMSD	SampType:	MSD	TestCode:	EPA Method 8015D: Diesel Range Organics					
Client ID:	BatchQC	Batch ID:	7211	RunNo:	10223					
Prep Date:	4/29/2013	Analysis Date:	5/1/2013	SeqNo:	291658	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	68	10	50.25	12.21	112	12.6	148	7.96	22.5	
Surr: DNOP	6.8		5.025		135	63	147	0	0	

## Qualifiers:

\* Value exceeds Maximum Contaminant Level.  
E Value above quantitation range  
J Analyte detected below quantitation limits  
P Sample pH greater than 2  
RL Reporting Detection Limit

B Analyte detected in the associated Method Blank  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
R RPD outside accepted recovery limits  
S Spike Recovery outside accepted recovery limits

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1304B34

02-May-13

**Client:** Yates Petroleum  
**Project:** Bonbon BNN State Com. #1-H

Sample ID	MB-7205	SampType:	MBLK	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	PBS	Batch ID:	7205	RunNo:	10203					
Prep Date:	4/29/2013	Analysis Date:	4/30/2013	SeqNo:	291389	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	910		1000		91.2	80	120			

Sample ID	LCS-7205	SampType:	LCS	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	LCSS	Batch ID:	7205	RunNo:	10203					
Prep Date:	4/29/2013	Analysis Date:	4/30/2013	SeqNo:	291391	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	5.0	25.00	0	99.5	62.6	136			
Surr: BFB	990		1000		99.3	80	120			

Sample ID	1304B09-002AMS	SampType:	MS	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	BatchQC	Batch ID:	7205	RunNo:	10203					
Prep Date:	4/29/2013	Analysis Date:	4/30/2013	SeqNo:	291403	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	28	4.8	23.97	0	115	70	130			
Surr: BFB	950		958.8		99.1	80	120			

Sample ID	1304B09-002AMSD	SampType:	MSD	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	BatchQC	Batch ID:	7205	RunNo:	10203					
Prep Date:	4/29/2013	Analysis Date:	4/30/2013	SeqNo:	291410	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	4.8	23.95	0	108	70	130	6.70	22.1	
Surr: BFB	960		957.9		101	80	120	0	0	

### Qualifiers:

\* Value exceeds Maximum Contaminant Level.  
E Value above quantitation range  
J Analyte detected below quantitation limits  
P Sample pH greater than 2  
RL Reporting Detection Limit

B Analyte detected in the associated Method Blank  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
R RPD outside accepted recovery limits  
S Spike Recovery outside accepted recovery limits

# QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1304B34

02-May-13

Client: Yates Petroleum

Project: Bonbon BNN State Com. #1-H

Sample ID	MB-7205	SampType: MBLK		TestCode: EPA Method 8021B: Volatiles						
Client ID:	PBS	Batch ID: 7205		RunNo: 10203						
Prep Date:	4/29/2013	Analysis Date: 4/30/2013		SeqNo: 291444		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
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	LCS-7205	SampType: LCS			TestCode: EPA Method 8021B: Volatiles					
Client ID:	LCSS	Batch ID: 7205			RunNo: 10203					
Prep Date:	4/29/2013	Analysis Date: 4/30/2013			SeqNo: 291445		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.050	1.000	0	105	80	120			
Toluene	1.0	0.050	1.000	0	103	80	120			
Ethylbenzene	1.0	0.050	1.000	0	102	80	120			
Xylenes, Total	3.1	0.10	3.000	0	102	80	120			
Surr: 4-Bromofluorobenzene	1.1		1.000		105	80	120			

Sample ID	1304B09-001AMS	SampType:	MS	TestCode: EPA Method 8021B: Volatiles						
Client ID:	BatchQC	Batch ID:	7205	RunNo: 10203						
Prep Date:	4/29/2013	Analysis Date:	4/30/2013	SeqNo:	291453	Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.049	0.9766	0.01522	109	67.2	113			
Toluene	1.1	0.049	0.9766	0	110	62.1	116			
Ethylbenzene	1.1	0.049	0.9766	0	112	67.9	127			
Xylenes, Total	3.2	0.098	2.930	0	110	60.6	134			
Surr: 4-Bromofluorobenzene	1.0		0.9766		107	80	120			

Sample ID	1304B09-001AMSD	SampType:	MSD	TestCode: EPA Method 8021B: Volatiles						
Client ID:	BatchQC	Batch ID:	7205	RunNo: 10203						
Prep Date:	4/29/2013	Analysis Date:	4/30/2013	SeqNo:	291454	Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.049	0.9737	0.01522	108	67.2	113	1.80	14.3	
Toluene	1.1	0.049	0.9737	0	109	62.1	116	1.19	15.9	
Ethylbenzene	1.1	0.049	0.9737	0	109	67.9	127	2.89	14.4	
Xylenes, Total	3.1	0.097	2.921	0	108	60.6	134	2.79	12.6	
Surr: 4-Bromofluorobenzene	1.0		0.9737		105	80	120	0	0	

## 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               |
| P Sample pH greater than 2                   | R RPD outside accepted recovery limits               |
| RL Reporting Detection Limit                 | S Spike Recovery outside accepted recovery limits    |



Hall Environmental Analysis Laboratory  
4901 Hawkins NE  
Albuquerque, NM 87105  
TEL: 505-345-3975 FAX: 505-345-4101  
Website: www.hallenvironmental.com

## Sample Log-In Check List

Client Name: Yates Petroleum Corporat

Work Order Number: 1304B34

ReptNo: 1

Received by/date:

*LM 04/24/13*

Logged By:

Ashley Gallegos

4/24/2013 9:00:00 AM

*AG*

Completed By:

Ashley Gallegos

4/29/2013 1:59:38 PM

*AG*

Reviewed By:

*IO*

*04/29/2013*

### 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  $>0^{\circ}\text{C}$  to  $6.0^{\circ}\text{C}$ ? 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 $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	4.3	Good	Yes			



[www.hallenvironmental.com](http://www.hallenvironmental.com)

4901 Hawkins NE - Albuquerque, NM 87109

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

Client: Yates Petroleum Corporation		<input checked="" type="checkbox"/> Standard <input type="checkbox"/> Rush Project Name:				
Mailing Address: 105 S. Fourth Street		Bonbon BNN State Com., #1-H				
Artesia, NM 88210		Project #:				
Phone #: 575-748-4217		30-015-36913				
email or Fax#: boba@yatespetroleum.com		Project Manager:				
QA/QC Package:		Robert Asher				
<input type="checkbox"/> Standard <input type="checkbox"/> Level 4 (Full Validation)		PO# 103632    250/490				
Accreditation:		Sampler: Same				
<input type="checkbox"/> NELAP <input type="checkbox"/> Other		On Ice: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No				
<input type="checkbox"/> EDD (Type)		Sample Temperature: 43				
Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No.
4/18/13	10:40A	Soil	Comp-01.0 A	1 - 4oz.	NA	-001
4/18/13	10:50A	Soil	Comp-02.0 A	1 - 4oz.	NA	-002
4/18/13	11:00AM	Soil	Comp-03.0 A	1 - 4oz.	NA	-003
4/18/13	11:20A	Soil	Comp-01.0 B	1 - 4oz.	NA	-004
4/18/13	11:20AM	Soil	Comp-02.0 B	1 - 4oz.	NA	-005
4/18/13	11:30A	Soil	Comp-03.0 B	1 - 4oz.	NA	-006
Relinquished by: <i>[Signature]</i>		Received by: <i>[Signature]</i>				
Date: 4/22/13	Time: 3:52P	Relinquished by: <i>[Signature]</i>		Date: 04/24/13		
Date:	Time:	Relinquished by:		Date: Time		

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.