

Analytical Report-		Sample				•			
1304B34 (Hall)	Sample Area	Date	Sample Type	Depth	BTEX	GRO	DRO	TOTAL	Chlorides
	Release Area -			•					
Comp-01.0 A	Α	4/18/2013	Comp/Backhoe	12"	ND	ND	ND	ND	14000
	Release Area -		,			,			
Comp-02,0 A	Α	4/18/2013	Comp/Backhoe	24"	ND	ND	ND	ND	4400
	Release Area -								
Comp-03.0 A	Α	4/13/2013	Comp/Backhoe	36"	ND	ND	ND	ND	1300
	Release Area -		1						
Comp-01.0 B	В	4/13/2013	Comp/Backhoe	12"	ND	, ND	ND	ND:	11000
	Release Area -				1				
Comp-02.0 B	В -	4/13/2013	Comp/Backhoe	24"	, ND	ND	ND:	ND	3300
	Release Area -			-		-			
Comp-03.0 B	В	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

May 02, 2013

Robert Asher

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

1LL. (.

**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 <a href="www.hallenvironmental.com">www.hallenvironmental.com</a> 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.

Date Reported: 5/2/2013

**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 Qu	al Units	DF	Date Analyzed
EPA METHOD 8015D: DIESEL RAN	GE ORGANICS				Analyst: GSA
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 R</b>	ANGE				Analyst: NSB
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
EPA METHOD 8021B: VOLATILES					Analyst: NSB
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
EPA METHOD 300.0: ANIONS					Analyst: JRR
Chloride	14000	750	mg/Kg	500	4/30/2013 7:50:32 PM

- 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 1 of 10

## **Analytical Report**

### Lab Order 1304B34

Date Reported: 5/2/2013

# Hall Environmental Analysis Laboratory, Inc.

**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 Qu	al Units	DF	Date Analyzed
EPA METHOD 8015D: DIESEL RANG	GE ORGANICS				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
EPA METHOD 8015D: GASOLINE RA	ANGE				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
EPA METHOD 8021B: VOLATILES					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
EPA METHOD 300.0: ANIONS					Analyst: JRR
Chloride	4400	150	mg/Kg	100	4/30/2013 12:11:15 PM

- 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 2 of 10

### **Analytical Report** Lab Order 1304B34

Date Reported: 5/2/2013

# Hall Environmental Analysis Laboratory, Inc.

**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

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

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015D: DIESEL RANG	GE ORGANICS				Analyst: GSA
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
EPA METHOD 8015D: GASOLINE R	ANGE				Analyst: NSB
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: NSB
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
EPA METHOD 300.0: ANIONS					Analyst: JRR
Chloride	1300	150	mg/Kg	100	4/30/2013 12:23:40 PM

Matrix: SOIL

- Value exceeds Maximum Contaminant Level.
- Ε Value above quantitation range
- Analyte detected below quantitation limits
- P Sample pH greater than 2
- Reporting Detection Limit

- Analyte detected in the associated Method Blank В
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- Spike Recovery outside accepted recovery limits Page 3 of 10

### **Analytical Report** Lab Order 1304B34

Date Reported: 5/2/2013

## Hall Environmental Analysis Laboratory, Inc.

**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 Qu	al Units	DF	Date Analyzed
EPA METHOD 8015D: DIESEL RANG	SE ORGANICS				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
EPA METHOD 8015D: GASOLINE RA	ANGE				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
EPA METHOD 8021B: VOLATILES					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
EPA METHOD 300.0: ANIONS					Analyst: JRR
Chloride	11000	300	mg/Kg	200	4/30/2013 7:13:19 PM

- Value exceeds Maximum Contaminant Level.
- Ε Value above quantitation range
- Analyte detected below quantitation limits
- P Sample pH greater than 2
- Reporting Detection Limit

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

# **Analytical Report**

## Lab Order 1304B34 Date Reported: 5/2/2013

# 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 Qu	al Units	DF	Date Analyzed
EPA METHOD 8015D: DIESEL RAN	GE ORGANICS			-	Analyst: GSA
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
EPA METHOD 8015D: GASOLINE R	ANGE				Analyst: NSB
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
EPA METHOD 8021B: VOLATILES					Analyst: NSB
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
EPA METHOD 300.0: ANIONS					Analyst: JRR
Chloride	3300	300	mg/Kg	200	4/30/2013 1:00:54 PM

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

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

# Analytical Report Lab Order 1304B34

Date Reported: 5/2/2013

# Hall Environmental Analysis Laboratory, Inc.

**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 Qu	al Units	DF	Date Analyzed
EPA METHOD 8015D: DIESEL RAN	GE ORGANICS				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 R</b>	ANGE				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
EPA METHOD 300.0: ANIONS					Analyst: JRR
Chloride	850	30	mg/Kg	20	4/30/2013 8:27:47 PM

- 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.

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:

Batch ID: 7223

RunNo: 10222

Prep Date:

4/30/2013

Analysis Date: 4/30/2013

SeqNo: 291571

Units: mg/Kg

Analyte

**PQL** 

HighLimit

%RPD **RPDLimit** 

Qual

Chloride

ND 1.5

SampType: LCS

TestCode: EPA Method 300.0: Anions

Sample ID LCS-7223

Prep Date: 4/30/2013

Client ID: LCSS

Batch ID: 7223

Analysis Date: 4/30/2013

RunNo: 10222 SeqNo: 291572

96.8

Units: mg/Kg

Analyte

Result

1.5

SPK value SPK Ref Val %REC

HighLimit 90 110 %RPD **RPDLimit** 

Qual

Chloride

15

SampType: MS

TestCode: EPA Method 300.0: Anions

Client ID: **BatchQC** 

Batch ID: 7223

RunNo: 10222

SeqNo: 291590

Units: mg/Kg

%RPD

Analyte

4/30/2013

Sample ID 1304B05-002AMS

Analysis Date: 4/30/2013 Result

93

**PQL** SPK value SPK Ref Val 15.00

15.00

%REC

77.89

SPK value SPK Ref Val %REC LowLimit

LowLimit

HighLimit

117

**RPDLimit** 

Qual

Qual

Chloride

Prep Date:

SampType: MSD

7.5

TestCode: EPA Method 300.0: Anions RunNo: 10222

101

Client ID: Prep Date:

**BatchQC** 4/30/2013

Sample ID 1304B05-002AMSD

Batch ID: 7223 Analysis Date: 4/30/2013

7.5

SeqNo: 291591

Units: mg/Kg HighLimit

%RPD

**RPDLimit** 

Chloride

Analyte

Result **PQL** 93

SPK value

15.00

SPK Ref Val 77 89

%REC 101

64.4

LowLimit

117

0.0387

20

Qualifiers:

RL

Value exceeds Maximum Contaminant Level.

Ε Value above quantitation range

Analyte detected below quantitation limits

Sample pH greater than 2 Reporting Detection Limit

Analyte detected in the associated Method Blank В

Holding times for preparation or analysis exceeded Н

ND Not Detected at the Reporting Limit R RPD outside accepted recovery limits

Spike Recovery outside accepted recovery limits

Page 7 of 10

# Hall Environmental Analysis Laboratory, Inc.

WO#: 1304B34

02-May-13

Client:

Yates Petroleum

Project:

Bonbon BNN State Com. #1-H

Sample ID MB-7211	SampT	ype: M	BLK	Tes	TestCode: EPA Method 8015D: Diesel Range Organics					
Client ID: PBS	Batch	ID: <b>72</b>	11	F	RunNo: 1	0208				
Prep Date: 4/29/2013	Analysis D	ate: 4/	30/2013		SeqNo: 2	91165	Units: mg/l	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	SampT	ype: LC	s	Tes	tCode: El	PA Method	8015D: Dies	el Range (	Organics	
Client ID: LCSS	Batch	ID: 72	11	F	RunNo: 1	0208				
Prep Date: 4/29/2013	Analysis D	ate: 4/	30/2013	\$	SeqNo: 2	91166	Units: mg/k	<b>(</b> g		
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			
, , ,										

Sample ID 1304B05-001AMS	SampT	SampType: MS TestCode: EPA Method 8015D: Diesel Range Organics								
Client ID: BatchQC	Batch	ID: 72	11	F	RunNo: 1	0223				
Prep Date: 4/29/2013	Analysis D	ate: 4/	30/2013	S	SeqNo: 2	91657	Units: mg/k	(g		
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 1304B05-001AN	<b>ISD</b> SampT	ype: MS	SD .	Tes	tCode: E	PA Method	8015D: Dies	el Range (	Organics	•
Client ID: BatchQC	Batch	1D: <b>72</b>	11	F	RunNo: 1	0223				
Prep Date: 4/29/2013	Analysis D	ate: 5/	1/2013	s	SeqNo: 2	91658	Units: mg/M	<b>(</b> g		
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

Page 8 of 10

# Hall Environmental Analysis Laboratory, Inc.

WO#: 1304B34

02-May-13

Client:

Yates Petroleum

Project:

Bonbon BNN State Com. #1-H

Sample ID MB-7205	SampT	ype: MI	BLK	Tes	tCode: E	PA Method	8015D: Gas	oline Rang	je	
Client ID: PBS	Batch	ID: <b>72</b>	05	F	RunNo: 1	0203				
Prep Date: 4/29/2013	Analysis Da	ate: 4	/30/2013	;	SeqNo: 2	91389	Units: mg/l	√g		
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	SampTy	/pe: LC	s	Tes	tCode: E	PA Method	8015D: Gas	oline Rang	e	
Client ID: LCSS	Batch	ID: 72	05	F	RunNo: 1	0203				
Prep Date: 4/29/2013	Analysis Da	ate: 4/	/30/2013	\$	SeqNo: 2	91391	Units: mg/l	<b>(</b> g		
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	SampTy	/pe: <b>M</b> S	<u> </u>	Tes	tCode: El	PA Method	8015D: Gaso	oline Rang	e	
Client ID: BatchQC	Batch	ID: <b>72</b>	05	F	RunNo: 1	0203				
Prep Date: 4/29/2013	Analysis Da	ate: 4/	30/2013	8	SeqNo: 2	91403	Units: mg/l	(g		
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 1304B09-002AM	SD Samp	ype: MS	SD	Tes	tCode: E	PA Method	8015D: Gaso	oline Rang	ie	
Client ID: BatchQC	Batcl	n ID: 72	05	F	RunNo: 1	0203				
Prep Date: 4/29/2013	Analysis D	)ate: 4/	30/2013	\$	SeqNo: 2	91410	Units: mg/k	<b>(</b> g		
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	
Sum: 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

Page 9 of 10

# 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	Batcl	n ID: 72	05	RunNo: 10203						
Prep Date: 4/29/2013	Analysis D	)ate: 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  Batch ID: 7205  Analysis Date: 4/30/2013			TestCode: EPA Method 8021B: Volatiles						
Client ID: LCSS				F						
Prep Date: 4/29/2013				SeqNo: 291445			Units: mg/F	(g		
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 1304B09-001AM	I <b>S</b> Samp	Гуре: <b>М</b> \$	3	TestCode: EPA Method 8021B: Volatiles						
Client ID: BatchQC	Batc	Batch ID: 7205			RunNo: 10203					
Prep Date: 4/29/2013	Analysis Date: 4/30/2013			SeqNo: 291453			Units: mg/k	(g		
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 1304B09-001AN	304B09-001AMSD SampType: MSD				TestCode: EPA Method 8021B: Volatiles							
Client ID: BatchQC	Batch	Batch ID: 7205			RunNo: 10203							
Prep Date: 4/29/2013	013 Analysis Date: 4/30/2013 SeqNo: 291454 Units: mg/Kg					(g						
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.
- 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

Page 10 of 10



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87105
TEL: 505.345-3075 F4Y: 505.345-410

TEL: 505-345-3975 FAX: 505-345-410; Website: www.hallenvironmental.con

# Sample Log-In Check List

Client Name: Yates Petroleum Corporat Work Order Numl	ber: 1304B34		RcptNo:	1
Received by/date: 092413				
Logged By: Ashley Gallegos 4/24/2013 9:00:00 A	AM	A		
Completed By: Ashley Gallegos 4/29/2013 1:59:38 i	PM	A		
Reviewed By: 16 94/29/2013	3	V		
Chain of Custody				
1. Custody seals intact on sample bottles?	Yes 🗌	No 🗆	Not Present	
2. Is Chain of Custody complete?	Yes 🗹	No 🗆	Not Present $\Box$	
3. How was the sample delivered?	<u>FedEx</u>			
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 $\square$	
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 $\square$	
10.VOA vials have zero headspace?	Yes 🗌	No 🗆	No VOA Vials 🗹	
11. Were any sample containers received broken?	Yes $\square$	No 🗹	# of preserved	
12.Does paperwork match bottle labels?	Yes 🗹	No 🗆	bottles checked for pH:	
(Note discrepancies on chain of custody)	Yes 🗹	No 🗆	(<2 o Adjusted?	r >12 unless noted)
13. Are matrices correctly identified on Chain of Custody? 14. Is it clear what analyses were requested?	Yes ☑ Yes ☑	No 🗆	-	
15. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes 🗹	No 🗆	Checked by:	
Special Handling (if applicable)				
16. Was client notified of all discrepancies with this order?	Yes 🗌	No 🗆	na 🗹	
Person Notified: Date:		<del></del>		
By Whom: Via:	eMail E	hone 🔲 Fax	☐ In Person	
Regarding:	a mark a la market	ar 20m of 21 ar		
Client Instructions:				
17. Additional remarks:				
18. Cooler Information  Cooler No Temp °C Condition Seal Intact Seal No 1 4.3 Good Yes	Seal Date	Signed By		