

Analytical Report- H401390 (Cardinal)	Sample Area	Sample Date	Sample Type	Depth	BTEX	GRO	DRO
S1-1'	Release Area	12/8/2015	Hand Auger	1'	ND	ND	ND
S1-2'	Release Area	12/8/2015	Hand Auger	2'	ND	ND	ND
S2-1'	Release Area	12/8/2015	Hand Auger	1'	ND	ND	ND
S2-2 ¹	Release Area	12/8/2015	Hand Auger	2'	ND	ND	ND
S3-1 [']	Release Area	12/8/2015	Hand Auger	1'	0.906	ND	ND
S3-2 ¹	Release Area	12/8/2015	Hand Auger	2'	ND	ND	ND

Site Ranking is Zero (0). DTGW >100' (approx 130', Section 25, T21S-R31E, Trend Map)
All results are ppm.

Released: 40 B/0; Recovered: 35 B/O Release Date: 11/20/2015



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

OrderNo.: 1512606

December 18, 2015

Chase Settle
Yates Petroleum Corporation
105 South Fourth Street
Artesia, NM 88210
TEL: (575) 748-4195

FAX

RE: Wolf AJA Federal Battery

Dear Chase Settle:

Hall Environmental Analysis Laboratory received 6 sample(s) on 12/11/2015 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 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 qualifers 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,

Andy Freeman

Laboratory Manager

andyl

4901 Hawkins NE

Albuquerque, NM 87109

Lab Order 1512606

Date Reported: 12/18/2015

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Yates Petroleum Corporation

Project: Wolf AJA Federal Battery

Lab ID: 1512606-001 Client Sample ID: S1-1'

Collection Date: 12/8/2015 1:01:00 PM

Received Date: 12/11/2015 9:40:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANG	GE ORGANIC	S			Analys	st: JME
Diesel Range Organics (DRO)	ND	9.3	mg/Kg	1	12/16/2015 2:24:54 PI	M 22777
Surr: DNOP	102	70-130	%REC	1	12/16/2015 2:24:54 PI	M 22777
EPA METHOD 8015D: GASOLINE RAN	IGE				Analys	t: NSB
Gasoline Range Organics (GRO)	ND	4.6	mg/Kg	1	12/16/2015 2:54:59 PI	M 22788
Surr: BFB	88.3	66.2-112	%REC	1	12/16/2015 2:54:59 PI	M 22788
EPA METHOD 8021B: VOLATILES					Analys	t: NSB
Benzene	ND	0.046	mg/Kg	1	12/16/2015 2:54:59 PI	M 22788
Toluene	ND	0.046	mg/Kg	1	12/16/2015 2:54:59 PI	M 22788
Ethylbenzene	ND	0.046	mg/Kg	1	12/16/2015 2:54:59 PI	M 22788
Xylenes, Total	ND	0.093	mg/Kg	1	12/16/2015 2:54:59 PI	M 22788
Surr: 4-Bromofluorobenzene	115	80-120	%REC	1	12/16/2015 2:54:59 PI	M 22788

Matrix: SOIL

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

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RPD outside accepted recovery limits
- % Recovery outside of range due to dilution or matrix
- Analyte detected in the associated Method Blank
- Value above quantitation range E
- Analyte detected below quantitation limits Page 1 of 9 J
- Sample pH Not In Range
- Reporting Detection Limit

Lab Order 1512606

Date Reported: 12/18/2015

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Yates Petroleum Corporation

Project: Wolf AJA Federal Battery

Lab ID: 1512606-002

Client Sample ID: S1-2'

Collection Date: 12/8/2015 1:06:00 PM

Received Date: 12/11/2015 9:40:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANG	SE ORGANIC	S			Analys	t: JME
Diesel Range Organics (DRO)	ND	9.9	mg/Kg	1	12/16/2015 3:30:12 PM	M 22777
Surr: DNOP	92.3	70-130	%REC	1	12/16/2015 3:30:12 PM	M 22777
EPA METHOD 8015D: GASOLINE RAN	GE				Analys	t: NSB
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	12/16/2015 3:19:27 PI	M 22788
Surr: BFB	83.2	66.2-112	%REC	1	12/16/2015 3:19:27 Pt	M 22788
EPA METHOD 8021B: VOLATILES					Analys	st: NSB
Benzene	ND	0.047	mg/Kg	1	12/16/2015 3:19:27 PI	M 22788
Toluene	ND	0.047	mg/Kg	1	12/16/2015 3:19:27 PI	M 22788
Ethylbenzene	ND	0.047	mg/Kg	1	12/16/2015 3:19:27 PI	M 22788
Xylenes, Total	ND	0.094	mg/Kg	1	12/16/2015 3:19:27 PI	M 22788
Surr: 4-Bromofluorobenzene	105	80-120	%REC	1	12/16/2015 3:19:27 PI	M 22788

Matrix: SOIL

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

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 2 of 9
- P Sample pH Not In Range
- RL Reporting Detection Limit

Lab Order 1512606

Date Reported: 12/18/2015

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Yates Petroleum Corporation

Project: Wolf AJA Federal Battery

1512606-003

Lab ID:

Matrix: SOIL

Client Sample ID: S2-1'

Collection Date: 12/8/2015 1:15:00 PM

Received Date: 12/11/2015 9:40:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANIC	s		0.00	Analyst	: JME
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	12/16/2015 3:51:49 PM	22777
Surr: DNOP	95.5	70-130	%REC	1	12/16/2015 3:51:49 PM	22777
EPA METHOD 8015D: GASOLINE RAM	IGE				Analyst	: NSB
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	12/16/2015 3:44:06 PM	22788
Surr: BFB	86.1	66.2-112	%REC	1	12/16/2015 3:44:06 PM	22788
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.049	mg/Kg	1	12/16/2015 3:44:06 PM	22788
Toluene	ND	0.049	mg/Kg	1	12/16/2015 3:44:06 PM	22788
Ethylbenzene	ND	0.049	mg/Kg	1	12/16/2015 3:44:06 PM	22788
Xylenes, Total	ND	0.099	mg/Kg	1	12/16/2015 3:44:06 PM	22788
Surr: 4-Bromofluorobenzene	108	80-120	%REC	1	12/16/2015 3:44:06 PM	22788

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

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- % Recovery outside of range due to dilution or matrix
- Analyte detected in the associated Method Blank
- Value above quantitation range E
- Analyte detected below quantitation limits Page 3 of 9 J
- Sample pH Not In Range
- Reporting Detection Limit

Lab Order 1512606

Date Reported: 12/18/2015

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Yates Petroleum Corporation

Project: Wolf AJA Federal Battery

1512606-004

Lab ID:

Matrix: SOIL

Client Sample ID: S2-2'

Collection Date: 12/8/2015 1:20:00 PM

Received Date: 12/11/2015 9:40:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RAM	IGE ORGANIC	S			Analyst	: JME
Diesel Range Organics (DRO)	ND	9.6	mg/Kg	1	12/16/2015 4:13:39 PM	22777
Surr: DNOP	96.3	70-130	%REC	1	12/16/2015 4:13:39 PM	22777
EPA METHOD 8015D: GASOLINE RA	NGE				Analyst	: NSB
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	12/16/2015 4:08:35 PM	22788
Surr: BFB	83.7	66.2-112	%REC	1	12/16/2015 4:08:35 PM	22788
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.047	mg/Kg	1	12/16/2015 4:08:35 PM	22788
Toluene	ND	0.047	mg/Kg	1	12/16/2015 4:08:35 PM	22788
Ethylbenzene	ND	0.047	mg/Kg	1	12/16/2015 4:08:35 PM	22788
Xylenes, Total	ND	0.094	mg/Kg	1	12/16/2015 4:08:35 PM	22788
Surr: 4-Bromofluorobenzene	107	80-120	%REC	1	12/16/2015 4:08:35 PM	22788

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

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- % Recovery outside of range due to dilution or matrix
- Analyte detected in the associated Method Blank
- E Value above quantitation range
- Analyte detected below quantitation limits Page 4 of 9 J
- Sample pH Not In Range
- Reporting Detection Limit RL

Lab Order 1512606

Date Reported: 12/18/2015

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Yates Petroleum Corporation

Project: Wolf AJA Federal Battery

Lab ID: 1512606-005

Client Sample ID: S3-1'

Collection Date: 12/8/2015 1:27:00 PM

Received Date: 12/11/2015 9:40:00 AM

Analyses	Result	RL (Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANG	GE ORGANIC	S				Analys	t: JME
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	12/16/2015 4:35:16 PM	A 22777
Surr: DNOP	94.8	70-130		%REC	1	12/16/2015 4:35:16 PM	A 22777
EPA METHOD 8015D: GASOLINE RAN	IGE					Analys	t: NSB
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	12/16/2015 7:48:30 PM	A 22788
Surr: BFB	95.9	66.2-112		%REC	1	12/16/2015 7:48:30 PM	A 22788
EPA METHOD 8021B: VOLATILES						Analys	t: NSB
Benzene	ND	0.047		mg/Kg	1	12/16/2015 7:48:30 PM	A 22788
Toluene	0.096	0.047		mg/Kg	1	12/16/2015 7:48:30 PM	A 22788
Ethylbenzene	0.059	0.047		mg/Kg	1	12/16/2015 7:48:30 PM	A 22788
Xylenes, Total	0.22	0.095		mg/Kg	1	12/16/2015 7:48:30 PM	A 22788
Surr: 4-Bromofluorobenzene	126	80-120	S	%REC	1	12/16/2015 7:48:30 PM	A 22788

Matrix: SOIL

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

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 5 of 9
- P Sample pH Not In Range
- RL Reporting Detection Limit

Lab Order 1512606

Date Reported: 12/18/2015

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Yates Petroleum Corporation

Wolf AJA Federal Battery

Lab ID: 1512606-006 Client Sample ID: S3-2'

Collection Date: 12/8/2015 1:31:00 PM

Received Date: 12/11/2015 9:40:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANIC	S			Analys	t: JME
Diesel Range Organics (DRO)	ND	9.7	mg/Kg	1	12/16/2015 4:56:59 PN	1 22777
Surr: DNOP	95.3	70-130	%REC	1	12/16/2015 4:56:59 PM	1 22777
EPA METHOD 8015D: GASOLINE RAN	IGE				Analys	t: NSB
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	12/16/2015 8:12:52 PM	1 22788
Surr: BFB	86.4	66.2-112	%REC	1	12/16/2015 8:12:52 PM	1 22788
EPA METHOD 8021B: VOLATILES					Analys	t: NSB
Benzene	ND	0.048	mg/Kg	1	12/16/2015 8:12:52 PM	A 22788
Toluene	ND	0.048	mg/Kg	1	12/16/2015 8:12:52 PM	A 22788
Ethylbenzene	ND	0.048	mg/Kg	1	12/16/2015 8:12:52 PM	A 22788
Xylenes, Total	ND	0.095	mg/Kg	1	12/16/2015 8:12:52 PM	A 22788
Surr: 4-Bromofluorobenzene	111	80-120	%REC	1	12/16/2015 8:12:52 PM	A 22788

Matrix: SOIL

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

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- % Recovery outside of range due to dilution or matrix
- Analyte detected in the associated Method Blank
- E Value above quantitation range
- Analyte detected below quantitation limits Page 6 of 9 J
- Sample pH Not In Range
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#:

1512606

18-Dec-15

Client:

Yates Petroleum Corporation

48

4.5

10

50.00

5.000

Project:

Diesel Range Organics (DRO)

Surr: DNOP

Wolf AJA Federal Battery

Sample ID MB-22777	SampType: MBLK	TestCode: EPA Method	Code: EPA Method 8015M/D: Diesel Range Organics					
Client ID: PBS	Batch ID: 22777	RunNo: 30855						
Prep Date: 12/14/2015	Analysis Date: 12/15/2015	SeqNo: 943424	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	8.6 10.00	85.7 70	130					
Sample ID LCS-22777	SampType: LCS	TestCode: EPA Method	8015M/D: Diesel Range Organics					
Client ID: LCSS	Batch ID: 22777	RunNo: 30855						
Prep Date: 12/14/2015	Analysis Date: 12/15/2015	SeqNo: 943440	Units: mg/Kg					
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD RPDLimit Qual					

96.7

89.1

65.8

70

136

130

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit

Page 7 of 9

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#:

1512606

18-Dec-15

Client:

Yates Petroleum Corporation

Project:

Wolf AJA Federal Battery

Sample ID MB-22788	SampType: MBLK	TestCode: EPA Method	8015D: Gasoline Range				
Client ID: PBS	Batch ID: 22788	RunNo: 30861					
Prep Date: 12/14/2015	Analysis Date: 12/15/2015	SeqNo: 943137	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	960 1000	95.8 66.2	112				
Sample ID LCS-22788	SampType: LCS TestCode: EPA Method 8015D: Gasoline Range						
Client ID: LCSS	Batch ID: 22788	RunNo: 30861					
Prep Date: 12/14/2015	Analysis Date: 12/15/2015	SeqNo: 943138	Units: mg/Kg				
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD RPDLimit Qual				
Gasoline Range Organics (GRO)	23 5.0 25.00	0 93.0 79.6	122				
Surr: BFB	1100 1000	107 66.2	112				
	SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range						
Sample ID MB-22811	SampType: MBLK	TestCode: EPA Method	l 8015D: Gasoline Range				
Sample ID MB-22811 Client ID: PBS	SampType: MBLK Batch ID: 22811	TestCode: EPA Metho d RunNo: 30888	l 8015D: Gasoline Range				
100	A Carl		I 8015D: Gasoline Range Units: %REC				
Client ID: PBS	Batch ID: 22811 Analysis Date: 12/16/2015	RunNo: 30888	Units: %REC				
Client ID: PBS Prep Date: 12/15/2015	Batch ID: 22811 Analysis Date: 12/16/2015	RunNo: 30888 SeqNo: 944120	Units: %REC HighLimit %RPD RPDLimit Qual				
Client ID: PBS Prep Date: 12/15/2015 Analyte	Batch ID: 22811 Analysis Date: 12/16/2015 Result PQL SPK value	RunNo: 30888 SeqNo: 944120 SPK Ref Val %REC LowLimit 82.7 66.2	Units: %REC HighLimit %RPD RPDLimit Qual				
Client ID: PBS Prep Date: 12/15/2015 Analyte Surr: BFB	Batch ID: 22811 Analysis Date: 12/16/2015 Result PQL SPK value 830 1000	RunNo: 30888 SeqNo: 944120 SPK Ref Val %REC LowLimit 82.7 66.2	Units: %REC HighLimit %RPD RPDLimit Qual 112				
Client ID: PBS Prep Date: 12/15/2015 Analyte Surr: BFB Sample ID LCS-22811	Batch ID: 22811 Analysis Date: 12/16/2015 Result PQL SPK value 830 1000 SampType: LCS	RunNo: 30888 SeqNo: 944120 SPK Ref Val %REC LowLimit 82.7 66.2 TestCode: EPA Method	Units: %REC HighLimit %RPD RPDLimit Qual 112				
Client ID: PBS Prep Date: 12/15/2015 Analyte Surr: BFB Sample ID LCS-22811 Client ID: LCSS	Batch ID: 22811 Analysis Date: 12/16/2015 Result PQL SPK value 830 1000 SampType: LCS Batch ID: 22811 Analysis Date: 12/16/2015	RunNo: 30888 SeqNo: 944120 SPK Ref Val %REC LowLimit 82.7 66.2 TestCode: EPA Method RunNo: 30888	Units: %REC HighLimit %RPD RPDLimit Qual 112 1 8015D: Gasoline Range Units: %REC				

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits

Page 8 of 9

- P Sample pH Not In Range
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#:

1512606

18-Dec-15

Client:

Yates Petroleum Corporation

Project:

Benzene

Toluene

Analyte

Wolf AJA Federal Battery

Sample ID MB-22788	SampT	SampType: MBLK			TestCode: EPA Method 8021B: Volatiles					
Client ID: PBS	Batch	ID: 22	788	R	RunNo: 30861					
Prep Date: 12/14/2015	Analysis D	Analysis Date: 12/15/2015			SeqNo: 943176 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	1.3		1.000		126	80	120			S
Sample ID LCS-22788	SampT	ype: LC	S	Tes	tCode: El	PA Method	8021B: Volat	tiles		
Client ID: LCSS	Batch	ID: 22	788	F	RunNo: 3	0861				
Prep Date: 12/14/2015	Analysis D	ate: 12	2/15/2015	8	SeqNo: 9	43177	Units: mg/K	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Ethylbenzene	1.1 0.050	1.000	0	105	80	120	
Xylenes, Total	3.0 0.10	3.000	0	101	80	120	
Surr: 4-Bromofluorobenzene	1.4	1.000		142	80	120	S
Sample ID MB-22811	SampType: MB	ype: MBLK TestCode: EPA Method				21B: Volatiles	
Client ID: PBS	Batch ID: 228	11	R	unNo: 3088	8		
Prep Date: 12/15/2015	Analysis Date: 12	/16/2015	S	eqNo: 9441	75 U	nits: %REC	

SPK value SPK Ref Val %REC

0

0

99.4

98.7

80

80

LowLimit

120

120

HighLimit

%RPD

RPDLimit

Qual

Surr: 4-Bromofluorobenzene	1.0	1.000	1.000 104 80				***************************************		V;;;
Sample ID LCS-22811	SampType	e: LCS	Test	Code: EP	A Method	8021B: Volat	tiles		
Client ID: LCSS	Batch ID): 22811	RunNo: 30888						
Prep Date: 12/15/2015	Analysis Date	e: 12/16/2015	Se	eqNo: 94	4176	Units: %RE	С		
Analyte	Result F	PQL SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Surr: 4-Bromofluorobenzene 1.2 1.000 119 80 120

0.050

0.050

1.000

1.000

0.99

0.99

Result

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- Holding times for preparation or analysis exceeded H
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- % Recovery outside of range due to dilution or matrix
- В Analyte detected in the associated Method Blank
- E Value above quantitation range
- Analyte detected below quantitation limits

Page 9 of 9

- Sample pH Not In Range
- Reporting Detection Limit



Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109 TEL: 505-345-3975 FAX: 505-345-4107

Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: Yates Petroleum Corporat Work Order Number:	1512606		RcptNo: 1
Received by/date: 5A 12/LI(15			
Logged By: Lindsay Mangin 12/11/2015 9:40:00 AM		Janely Hleys	i
Completed By: Lindsay Mangin 12/14/2015 8:59:33 AM	- (2	Street Harres	
Reviewed By: /2/14/15	2	000	
Chain of Custody		• n	
Custody seals intact on sample bottles?	Yes 🛃	No 🗆	Not Present
Is Chain of Custody complete?	Yes 🖈	No 🗆	Not Present ☐
How was the sample delivered?	Courier		
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 🏕	N. Conservation
			# of preserved bottles checked
12. Does paperwork match bottle labels?	Yes 🖈	No 🗀	for pH: (<2 or >12 unless noted)
(Note discrepancies on chain of custody) 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.)			ti 1
Conside Handling (if applicable)			
Special Handling (if applicable)	v 🗆	Na 🖂	NA ₩
16. Was client notified of all discrepancies with this order?	Yeş 🗌	No ∐	. INA Ed
Person Notified: Date:			
By Whom: Via:	eMail] Phone 🗌 Fax	In Person
Regarding:		and the second s	TOTAL CONTRACTOR CONTR
Client Instructions:]			
17. Additional remarks:			
18. Cooler Information Cooler No Temp °C Condition Seal Intact Seal No 1 2.3 Good Yes	Seal Date	Signed By	

	hain.	of-Cu	Chain-of-Custody Record	Tum-Around Time:	0.00 No. 10 No.				I	AL	Ш	Ž	RC.	N	HALL ENVIRONMENTAL	إ بـ
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Mailing	Mailing Address:			8	Wolf AJA Federal Battery	ral Battery		4901 F	lawkir	IS NE	- Alb	ndner	ţue, ♪	4901 Hawkins NE - Albuquerque, NM 87109	60	
105 So	uth: 4th S	treet Arte	105 South 4th Street Artesia, NM 88210	Project #:	,	a.	_]	Tel. 505-345-3975	05-34	5-397	1.	Fax 50	5-34	505-345-4107	en '	1
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email or Fax#:	r Fax#:	csettle@	csettle@yatespetroleum.com	Project Manager:	ger:								····			
QA/QC	QA/QC Package:	47	inge e		Chase Settle								an			
☐ Standard	dard	**,	☐ Level 4 (Full Validation)		PO#205.0750	750			÷	-			170			
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Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEALINO	TM + X∃T	TEX + MT	PH (Metho	DB (Meth	CRA 8 Me	O, H) enoin	081 Pestio	mə8) 072		
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12/8/2015		1:20 Soil	S2-2'	1 - 4oz.	ICE	-004	×	×		-			-			
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	7 - 20 20 - 20 - 20 - 20 - 20 - 20 - 20 -	**						*		51 13. 34.4			E)			
	f necessary,	samples subr	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	contracted to other a	scredited laboratori	es. This serves as notice of the	idiseod sii	lity. Any	sub-cont	acted da	ıta will b	clearly r	notated	on the ar	alytical report.	