

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

OrderNo.: 1602541

February 18, 2016

Amber Griffin
Yates Petroleum Corporation
105 South Fourth Street
Artesia, NM 88210
TEL: (575) 748-4111

FAX

RE: Juniper BIP Federal Battery

Dear Amber Griffin:

Hall Environmental Analysis Laboratory received 9 sample(s) on 2/12/2016 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

4901 Hawkins NE

Albuquerque, NM 87109

Lab Order 1602541

Date Reported: 2/18/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Yates Petroleum Corporation

Project: Juniper BIP Federal Battery

Lab ID: 1602541-001

Matrix: SOIL

Client Sample ID: 1-1'

Collection Date: 2/9/2016 9:34:00 AM

Received Date: 2/12/2016 9:35:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS	6				Analys	t: KJH
Diesel Range Organics (DRO)	7300	97		mg/Kg	10	2/16/2016 7:03:01 PM	23734
Surr: DNOP	0	70-130	S	%Rec	10	2/16/2016 7:03:01 PM	23734
EPA METHOD 8015D: GASOLINE RAI	NGE					Analys	t: NSB
Gasoline Range Organics (GRO)	3100	230		mg/Kg	50	2/15/2016 12:13:51 PM	1 23710
Surr: BFB	246	66.2-112	S	%Rec	50	2/15/2016 12:13:51 PM	1 23710
EPA METHOD 8021B: VOLATILES						Analys	t: NSB
Benzene	10	2.3		mg/Kg	50	2/15/2016 12:13:51 PM	1 23710
Toluene	120	2.3		mg/Kg	50	2/15/2016 12:13:51 PM	1 23710
Ethylbenzene	37	2.3		mg/Kg	50	2/15/2016 12:13:51 PM	23710
Xylenes, Total	170	4.7		mg/Kg	50	2/15/2016 12:13:51 PM	1 23710
Surr: 4-Bromofluorobenzene	143	80-120	S	%Rec	50	2/15/2016 12:13:51 PM	1 23710

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
- Η Holding times for preparation or analysis exceeded
- 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
- E Value above quantitation range
- Analyte detected below quantitation limits Page 1 of 13 J
- P Sample pH Not In Range
- Reporting Detection Limit
- Sample container temperature is out of limit as specified

Lab Order 1602541

Date Reported: 2/18/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Yates Petroleum Corporation

Project:

Lab ID:

Juniper BIP Federal Battery

1602541-002 Matrix: SOIL

Client Sample ID: 1-2'

Collection Date: 2/9/2016 9:42:00 AM

Received Date: 2/12/2016 9:35:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst	: KJH
Diesel Range Organics (DRO)	900	98		mg/Kg	10	2/17/2016 9:36:56 AM	23734
Surr: DNOP	0	70-130	S	%Rec	10	2/17/2016 9:36:56 AM	23734
EPA METHOD 8015D: GASOLINE RA	NGE					Analyst	: NSB
Gasoline Range Organics (GRO)	530	49		mg/Kg	10	2/15/2016 7:38:53 PM	23710
Surr: BFB	265	66.2-112	S	%Rec	10	2/15/2016 7:38:53 PM	23710
EPA METHOD 8021B: VOLATILES						Analyst	: NSB
Benzene	0.40	0.25		mg/Kg	10	2/15/2016 7:38:53 PM	23710
Toluene	8.7	0.49		mg/Kg	10	2/15/2016 7:38:53 PM	23710
Ethylbenzene	5.6	0.49		mg/Kg	10	2/15/2016 7:38:53 PM	23710
Xylenes, Total	28	0.99		mg/Kg	10	2/15/2016 7:38:53 PM	23710
Surr: 4-Bromofluorobenzene	140	80-120	S	%Rec	10	2/15/2016 7:38:53 PM	23710

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 13
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Lab Order 1602541

Date Reported: 2/18/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Yates Petroleum Corporation

Lab ID:

Juniper BIP Federal Battery

1602541-003 Matrix: SOIL Client Sample ID: 1-3'

Collection Date: 2/9/2016 9:54:00 AM

Received Date: 2/12/2016 9:35:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RA					Analyst	: KJH	
Diesel Range Organics (DRO)	860	98		mg/Kg	10	2/17/2016 9:58:20 AM	23734
Surr: DNOP	0	70-130	S	%Rec	10	2/17/2016 9:58:20 AM	23734
EPA METHOD 8015D: GASOLINE R	ANGE					Analyst	: NSB
Gasoline Range Organics (GRO)	630	49		mg/Kg	10	2/15/2016 8:02:24 PM	23710
Surr: BFB	337	66.2-112	S	%Rec	10	2/15/2016 8:02:24 PM	23710
EPA METHOD 8021B: VOLATILES						Analyst	: NSB
Benzene	0.33	0.25		mg/Kg	10	2/15/2016 8:02:24 PM	23710
Toluene	8.4	0.49		mg/Kg	10	2/15/2016 8:02:24 PM	23710
Ethylbenzene	5.7	0.49		mg/Kg	10	2/15/2016 8:02:24 PM	23710
Xylenes, Total	28	0.98		mg/Kg	10	2/15/2016 8:02:24 PM	23710
Surr: 4-Bromofluorobenzene	144	80-120	S	%Rec	10	2/15/2016 8:02:24 PM	23710

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
- В Analyte detected in the associated Method Blank
- E Value above quantitation range
- Analyte detected below quantitation limits Page 3 of 13 J
- P Sample pH Not In Range
- RL Reporting Detection Limit
- Sample container temperature is out of limit as specified

Lab Order 1602541

Date Reported: 2/18/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Yates Petroleum Corporation

Project:

Juniper BIP Federal Battery

1602541-004

Lab ID:

Client Sample ID: 2-1'

Collection Date: 2/9/2016 10:06:00 AM

Received Date: 2/12/2016 9:35:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RAN			Analyst	: KJH			
Diesel Range Organics (DRO)	5400	94		mg/Kg	10	2/16/2016 9:10:47 PM	23734
Surr: DNOP	0	70-130	S	%Rec	10	2/16/2016 9:10:47 PM	23734
EPA METHOD 8015D: GASOLINE RAN	NGE					Analyst	: NSB
Gasoline Range Organics (GRO)	5100	490		mg/Kg	100	2/15/2016 1:24:15 PM	23710
Surr: BFB	167	66.2-112	S	%Rec	100	2/15/2016 1:24:15 PM	23710
EPA METHOD 8021B: VOLATILES						Analyst	: NSB
Benzene	33	4.9		mg/Kg	100	2/15/2016 1:24:15 PM	23710
Toluene	210	4.9		mg/Kg	100	2/15/2016 1:24:15 PM	23710
Ethylbenzene	52	4.9		mg/Kg	100	2/15/2016 1:24:15 PM	23710
Xylenes, Total	240	9.8		mg/Kg	100	2/15/2016 1:24:15 PM	23710
Surr: 4-Bromofluorobenzene	133	80-120	S	%Rec	100	2/15/2016 1:24:15 PM	23710

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
- В Analyte detected in the associated Method Blank
- E Value above quantitation range
- Analyte detected below quantitation limits Page 4 of 13 J
- P Sample pH Not In Range
- RL Reporting Detection Limit
- Sample container temperature is out of limit as specified

Lab Order 1602541

Date Reported: 2/18/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Yates Petroleum Corporation

Project: Juniper BIP Federal Battery

1602541-005

Lab ID:

Client Sample ID: 2-2'

Collection Date: 2/9/2016 10:13:00 AM

Received Date: 2/12/2016 9:35:00 AM

Analyses	Result	PQL (Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RA	NGE ORGANICS	6				Analys	t: KJH
Diesel Range Organics (DRO)	76	9.6		mg/Kg	1	2/16/2016 9:53:21 PM	23734
Surr: DNOP	85.9	70-130		%Rec	1	2/16/2016 9:53:21 PM	23734
EPA METHOD 8015D: GASOLINE RA	ANGE					Analys	t: NSB
Gasoline Range Organics (GRO)	67	4.9		mg/Kg	1	2/15/2016 8:25:55 PM	23710
Surr: BFB	370	66.2-112	S	%Rec	1	2/15/2016 8:25:55 PM	23710
EPA METHOD 8021B: VOLATILES						Analys	t: NSB
Benzene	0.058	0.049		mg/Kg	1	2/15/2016 8:25:55 PM	23710
Toluene	0.52	0.049		mg/Kg	1	2/15/2016 8:25:55 PM	23710
Ethylbenzene	0.52	0.049		mg/Kg	1	2/15/2016 8:25:55 PM	23710
Xylenes, Total	2.9	0.099		mg/Kg	1	2/15/2016 8:25:55 PM	23710
Surr: 4-Bromofluorobenzene	156	80-120	S	%Rec	1	2/15/2016 8:25:55 PM	23710

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
- E Value above quantitation range
- Analyte detected below quantitation limits Page 5 of 13 J
- P Sample pH Not In Range
- Reporting Detection Limit
- Sample container temperature is out of limit as specified

Lab Order 1602541

Date Reported: 2/18/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Yates Petroleum Corporation

Project: Juniper BIP Federal Battery

Lab ID:

1602541-006 Matrix: SOIL Client Sample ID: 2-3'

Collection Date: 2/9/2016 10:17:00 AM

Received Date: 2/12/2016 9:35:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RA			Analyst	: KJH			
Diesel Range Organics (DRO)	1100	93		mg/Kg	10	2/17/2016 10:19:42 AM	23734
Surr: DNOP	0	70-130	S	%Rec	10	2/17/2016 10:19:42 AM	23734
EPA METHOD 8015D: GASOLINE RA	NGE					Analyst	: NSB
Gasoline Range Organics (GRO)	320	23		mg/Kg	5	2/15/2016 8:49:27 PM	23710
Surr: BFB	301	66.2-112	S	%Rec	5	2/15/2016 8:49:27 PM	23710
EPA METHOD 8021B: VOLATILES						Analyst	: NSB
Benzene	0.25	0.23		mg/Kg	5	2/15/2016 8:49:27 PM	23710
Toluene	6.5	0.23		mg/Kg	5	2/15/2016 8:49:27 PM	23710
Ethylbenzene	3.4	0.23		mg/Kg	5	2/15/2016 8:49:27 PM	23710
Xylenes, Total	16	0.47		mg/Kg	5	2/15/2016 8:49:27 PM	23710
Surr: 4-Bromofluorobenzene	148	80-120	S	%Rec	5	2/15/2016 8:49:27 PM	23710

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
- 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
- В Analyte detected in the associated Method Blank
- E Value above quantitation range
- Analyte detected below quantitation limits Page 6 of 13 J
- P Sample pH Not In Range
- Reporting Detection Limit
- Sample container temperature is out of limit as specified

Lab Order 1602541

Date Reported: 2/18/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Yates Petroleum Corporation

Project: Juniper BIP Federal Battery

Client Sample ID: 3-1'

Collection Date: 2/9/2016 10:25:00 AM Received Date: 2/12/2016 9:35:00 AM

Lab ID: 1602541-007

Matrix: SOIL

PQL Qual Units **Analyses** Result **DF** Date Analyzed Batch **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: KJH Diesel Range Organics (DRO) 11000 mg/Kg 930 100 2/17/2016 10:41:11 AM 23734 Surr: DNOP 0 70-130 S %Rec 100 2/17/2016 10:41:11 AM 23734 **EPA METHOD 8015D: GASOLINE RANGE** Analyst: NSB Gasoline Range Organics (GRO) 6800 470 mg/Kg 100 2/15/2016 6:28:27 PM 23710 Surr: BFB 162 66.2-112 S %Rec 100 2/15/2016 6:28:27 PM 23710 **EPA METHOD 8021B: VOLATILES** Analyst: NSB Benzene 85 4.7 100 2/15/2016 6:28:27 PM mg/Kg 23710 Toluene 360 4.7 mg/Kg 100 2/15/2016 6:28:27 PM 23710 Ethylbenzene 80 4.7 mg/Kg 100 2/15/2016 6:28:27 PM 23710 Xylenes, Total 350 9.5 mg/Kg 100 2/15/2016 6:28:27 PM 23710 Surr: 4-Bromofluorobenzene 132 80-120 S %Rec 100 2/15/2016 6:28:27 PM 23710

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 7 of 13
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Lab Order 1602541

Date Reported: 2/18/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Yates Petroleum Corporation

Project: Juniper BIP Federal Battery

Client Sample ID: 3-2'

Collection Date: 2/9/2016 10:30:00 AM

Lab ID: 1602541-008

Matrix: SOIL

Received Date: 2/12/2016 9:35:00 AM

Analyses	Result	PQL (Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RAI	NGE ORGANIC	S				Analys	t: KJH
Diesel Range Organics (DRO)	28	9.7		mg/Kg	1	2/17/2016 12:00:38 AN	1 23734
Surr: DNOP	93.2	70-130		%Rec	1	2/17/2016 12:00:38 AN	1 23734
EPA METHOD 8015D: GASOLINE RA	NGE					Analys	t: NSB
Gasoline Range Organics (GRO)	29	4.6		mg/Kg	1	2/16/2016 1:36:14 PM	23710
Surr: BFB	213	66.2-112	S	%Rec	1	2/16/2016 1:36:14 PM	23710
EPA METHOD 8021B: VOLATILES						Analys	t: NSB
Benzene	0.054	0.046		mg/Kg	1	2/16/2016 1:36:14 PM	23710
Toluene	0.27	0.046		mg/Kg	1	2/16/2016 1:36:14 PM	23710
Ethylbenzene	0.22	0.046		mg/Kg	1	2/16/2016 1:36:14 PM	23710
Xylenes, Total	1.2	0.092		mg/Kg	1	2/16/2016 1:36:14 PM	23710
Surr: 4-Bromofluorobenzene	123	80-120	S	%Rec	1	2/16/2016 1:36:14 PM	23710

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 8 of 13
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Lab Order 1602541

Date Reported: 2/18/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Yates Petroleum Corporation

Juniper BIP Federal Battery Project:

Lab ID: 1602541-009 Client Sample ID: 3-3'

Collection Date: 2/9/2016 10:35:00 AM

Received Date: 2/12/2016 9:35:00 AM

Analyses	Result	PQL (Qual Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RA	ANGE ORGANIC	S			Analys	t: KJH
Diesel Range Organics (DRO)	50	9.7	mg/Kg	1	2/17/2016 12:42:57 AM	1 23734
Surr: DNOP	114	70-130	%Rec	1	2/17/2016 12:42:57 AM	1 23734
EPA METHOD 8015D: GASOLINE R	ANGE				Analys	t: NSB
Gasoline Range Organics (GRO)	17	4.7	mg/Kg	1	2/16/2016 2:17:20 PM	23710
Surr: BFB	173	66.2-112	S %Rec	1	2/16/2016 2:17:20 PM	23710
EPA METHOD 8021B: VOLATILES					Analys	: NSB
Benzene	ND	0.047	mg/Kg	1	2/16/2016 2:17:20 PM	23710
Toluene	0.087	0.047	mg/Kg	1	2/16/2016 2:17:20 PM	23710
Ethylbenzene	0.090	0.047	mg/Kg	1	2/16/2016 2:17:20 PM	23710
Xylenes, Total	0.56	0.093	mg/Kg	1	2/16/2016 2:17:20 PM	23710
Surr: 4-Bromofluorobenzene	116	80-120	%Rec	1	2/16/2016 2:17:20 PM	23710

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
- E Value above quantitation range
- Analyte detected below quantitation limits Page 9 of 13 J
- P Sample pH Not In Range
- RL Reporting Detection Limit
- Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#:

1602541

18-Feb-16

Client:

Yates Petroleum Corporation

Project:

Juniper BIP Federal Battery

Project: Juniper	BIP Federal Battery	
Sample ID MB-23734	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics
Client ID: PBS	Batch ID: 23734	RunNo: 32179
Prep Date: 2/15/2016	Analysis Date: 2/16/2016	SeqNo: 983681 Units: mg/Kg
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Diesel Range Organics (DRO) Surr: DNOP	ND 10 9.6 10.00	95.7 70 130
Sample ID MB-23739	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics
Client ID: PBS	Batch ID: 23739	RunNo: 32179
Prep Date: 2/15/2016	Analysis Date: 2/16/2016	SeqNo: 983682 Units: %Rec
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Surr: DNOP	8.7 10.00	87.1 70 130
Sample ID LCS-23734	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics
Client ID: LCSS	Batch ID: 23734	RunNo: 32179
Prep Date: 2/15/2016	Analysis Date: 2/16/2016	SeqNo: 983683 Units: mg/Kg
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Diesel Range Organics (DRO)	54 10 50.00	0 108 65.8 136
Surr: DNOP	5.3 5.000	106 70 130
Sample ID LCS-23739	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics
Client ID: LCSS	Batch ID: 23739	RunNo: 32179
Prep Date: 2/15/2016	Analysis Date: 2/16/2016	SeqNo: 983684 Units: %Rec
Analyte		SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Surr: DNOP	4.9 5.000	97.5 70 130
Sample ID MB-23771	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics
Client ID: PBS	Batch ID: 23771	RunNo: 32179
Prep Date: 2/17/2016	Analysis Date: 2/17/2016	SeqNo: 984150 Units: %Rec
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Surr: DNOP	7.3 10.00	73.4 70 130
Sample ID LCS-23771	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics
Client ID: LCSS	Batch ID: 23771	RunNo: 32179
Prep Date: 2/17/2016	Analysis Date: 2/17/2016	SeqNo: 984152 Units: %Rec
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Surr: DNOP	3.7 5.000	73.3 70 130

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

Page 10 of 13

P Sample pH Not In Range

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified

OC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#:

1602541

18-Feb-16

Client:

Yates Petroleum Corporation

Project:

Juniper BIP Federal Battery

Sample ID MB-23710

SampType: MBLK

TestCode: EPA Method 8015D: Gasoline Range

66.2

LowLimit

LowLimit

66.2

79.6

66.2

Client ID: PBS

Batch ID: 23710

RunNo: 32139

Prep Date: 2/12/2016 Analysis Date: 2/15/2016

PQL

5.0

SeqNo: 982929

Units: mg/Kg

Result ND SPK value SPK Ref Val %REC LowLimit

%RPD

Gasoline Range Organics (GRO)

940

25

1000

25.00

1000

1000

94.0

HighLimit 112 **RPDLimit** Qual

Surr: BFB

Sample ID LCS-23710 LCSS

SampType: LCS Batch ID: 23710

TestCode: EPA Method 8015D: Gasoline Range RunNo: 32139

Prep Date: 2/12/2016

0

Units: mg/Kg

Analyte Gasoline Range Organics (GRO)

Analysis Date: 2/15/2016 Result PQL SPK value SPK Ref Val

5.0

SeqNo: 982930

101

100

%REC

HighLimit 122 112

%RPD **RPDLimit** Qual

Surr: BFB Sample ID MB-23733

1000

SampType: MBLK

TestCode: EPA Method 8015D: Gasoline Range

Client ID: Prep Date:

Client ID:

2/15/2016

Batch ID: 23733

Result

950

Analysis Date: 2/16/2016

RunNo: 32174 SeqNo: 983808

94.5

Units: %Rec

HighLimit

%RPD

RPDLimit Qual

Analyte Surr: BFB

SampType: LCS

TestCode: EPA Method 8015D: Gasoline Range

112

Client ID:

LCSS

Sample ID LCS-23733

Batch ID: 23733

RunNo: 32174

Prep Date:

2/15/2016

Analysis Date: 2/16/2016

SeqNo: 983809

Units: %Rec

Qual

Analyte Surr: BFB

Result PQL 990

SPK value SPK Ref Val

SPK value SPK Ref Val %REC

%REC LowLimit 99.5

HighLimit

%RPD **RPDLimit**

Sample ID MB-23727

SampType: MBLK

Batch ID: 23727

PQL

Batch ID: 23727

TestCode: EPA Method 8015D: Gasoline Range

RunNo: 32174

112

112

Analyte

Client ID:

PBS Prep Date: 2/15/2016

Analysis Date: 2/16/2016

Result

920

SeqNo: 983818

91.5

66.2

66.2

Units: %Rec

Qual

Surr: BFB

SPK value SPK Ref Val 1000

%REC LowLimit HighLimit %RPD

RPDLimit

Sample ID LCS-23727

Client ID: LCSS

SampType: LCS

TestCode: EPA Method 8015D: Gasoline Range RunNo: 32174

66.2

112

Prep Date: 2/15/2016

Analysis Date: 2/16/2016

SeqNo: 983819

Units: %Rec

Analyte Surr: BFB Result 1000

1000

SPK value SPK Ref Val %REC LowLimit

101

HighLimit

%RPD

RPDLimit Qual

Page 11 of 13

Qualifiers:

ND

S

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded

% Recovery outside of range due to dilution or matrix

R RPD outside accepted recovery limits

Not Detected at the Reporting Limit

- B
- E Value above quantitation range
- P Sample pH Not In Range
- W Sample container temperature is out of limit as specified

Analyte detected in the associated Method Blank

Analyte detected below quantitation limits

RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#:

1602541

18-Feb-16

Client:

Yates Petroleum Corporation

Project:

Juniper BIP Federal Battery

Sample ID MB-23710	SampType: MBLK			Tes	TestCode: EPA Method 8021B: Volatiles					
Client ID: PBS	Batch	n ID: 23	710	F	RunNo: 32					
Prep Date: 2/12/2016	Analysis D	Date: 2/	15/2016	S	SeqNo: 98	82953	Units: mg/K	(g		
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	1.1		1.000		112	80	120			
Sample ID LCS-23710	SampT	ype: LC	s	Tes	tCode: El	PA Method	8021B: Volat	tiles		
Sample ID LCS-23710 Client ID: LCSS	•	Type: LC			tCode: EF		8021B: Volat	tiles		
	•	h ID: 23	710	F		2139	8021B: Volat			
Client ID: LCSS	Batcl	h ID: 23	710 15/2016	F	RunNo: 3	2139			RPDLimit	Qual
Client ID: LCSS Prep Date: 2/12/2016	Batcl Analysis D	h ID: 23 Date: 2/	710 15/2016	F	RunNo: 3: SeqNo: 9:	2139 82954	Units: mg/K	(g	RPDLimit	Qual
Client ID: LCSS Prep Date: 2/12/2016 Analyte	Batcl Analysis D Result	h ID: 23 Date: 2/ PQL	710 15/2016 SPK value	F S SPK Ref Val	RunNo: 3; SeqNo: 9; %REC	2139 82954 LowLimit	Units: mg/K	(g	RPDLimit	Qual
Client ID: LCSS Prep Date: 2/12/2016 Analyte Benzene	Analysis E Result 1.1	h ID: 23 Date: 2/ PQL 0.050	710 15/2016 SPK value 1.000	SPK Ref Val	RunNo: 3; SeqNo: 9; %REC 110	2139 82954 LowLimit 80	Units: mg/K HighLimit 120	(g	RPDLimit	Qual
Client ID: LCSS Prep Date: 2/12/2016 Analyte Benzene Toluene	Batcl Analysis E Result 1.1 1.2	PQL 0.050 0.050	710 15/2016 SPK value 1.000 1.000	SPK Ref Val 0 0	RunNo: 3; SeqNo: 9; <u>%REC</u> 110 119	2139 82954 LowLimit 80 80	Units: mg/K HighLimit 120 120	(g	RPDLimit	Qual

Sample ID MB-23733	SampT	ype: ME	зьк	Tes	Code: El	PA Method	8021B: Volat	iles		
Client ID: PBS	Batch	ID: 23	733	F	lunNo: 3	2174				
Prep Date: 2/15/2016	Analysis D	ate: 2/	16/2016	S	eqNo: 9	83840	Units: %Red	:		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.1		1.000		115	80	120			The state of the s

Sample ID LCS-23733	SampType: LCS			Tes	tCode: El	PA Method	8021B: Volat	tiles		
Client ID: LCSS	Batch	ID: 23	733	F	RunNo: 3	2174				
Prep Date: 2/15/2016	Analysis D	ate: 2/	16/2016	8	SeqNo: 9	83841	Units: %Re	C		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1 1		1,000		109	80	120			

Sample ID MB-23727	SampT	ype: ME	BLK	Tes	tCode: El	PA Method	8021B: Volat	iles					
Client ID: PBS	Batch	ID: 23	727		RunNo: 3								
Prep Date: 2/15/2016	Prep Date: 2/15/2016 Analysis Date: 2/16/2016						SeqNo: 983846 Units: %Rec						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual			
Surr: 4-Bromofluorobenzene	1.1		1.000		111	80	120						

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 12 of 13

P Sample pH Not In Range

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#:

1602541

18-Feb-16

Client:

Yates Petroleum Corporation

Project:

Analyte

Juniper BIP Federal Battery

Sample ID LCS-23727

SampType: LCS

TestCode: EPA Method 8021B: Volatiles

Client ID:

LCSS

Batch ID: 23727

PQL

RunNo: 32174

Prep Date: 2/15/2016

Analysis Date: 2/16/2016

SeqNo: 983847

Units: %Rec

%RPD **RPDLimit** Qual

Surr: 4-Bromofluorobenzene

Result 1.2

1.000

SPK value SPK Ref Val %REC

118

80

LowLimit

HighLimit 120

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
- В Analyte detected in the associated Method Blank
- Value above quantitation range E
- I Analyte detected below quantitation limits
- P Sample pH Not In Range
- RLReporting Detection Limit
- W Sample container temperature is out of limit as specified

Page 13 of 13



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 Corpora Work Order Number:	1602541		RcptNo: 1	
Received by/date:			***************************************	
Logged By: Ashley Gallegos 2/12/2016 9:35:00 AM		A		
Completed By: Ashley Gallegos 2/12/2016 10:33:43 AM		A		
Reviewed By: TO 02/12/16		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	
3. 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 ☑	# of preserved	
12. Does paperwork match bottle labels?	Yes 🗹	No 🗆	bottles checked for pH:	
(Note discrepancies on chain of custody)				>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 🗆	Charlend hu	
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				
By Whom: Via:	eMail	Phone Tax	☐ In Person	
Regarding:	Property and the state of the s			
Client Instructions:				
17. Additional remarks:				
18. Cooler Information				
	Seal Date	Signed By		
1 1.0 9000 103		L	.I	

ANALYSIS LABORATORY www.hallenvironmental.com 4901 Hawkins NE - Albuquerque, NM 87109	Tel. 505-345-3975 Fax 505-345-4107	se Sign	sas on sales	OS2 I	97 + 2 83108 1.814 1.403 (HAQ (HAQ 01,60V 08\ 29	hod	BTEX + M TPH Meth TPH (Meth 12	×	×	×	×	×	×	×	×	×	H	Remarks: TPH: 8015B, BTEX: 8021B. Please show BTEX results as mg/kg. Thank you!	Time: Relinquished by: Date Time Time: Relinquished by: Received by: Date Time
Turn-Around Time: X Standard □ Rush Project Name:	oumper a	2RP-3501	Project Manager: Amber Griffin	-	Amber Griffin ∤\bigo	Sample Temperature: // /)	Container Preservativ HEAL No. X Type and # e Type //oo354 H	1-4oz. ce -001 x	1-4oz. Ice -003 x	1-4oz. Ice -003 x	1-4oz. Ice -004 x	1-4oz. Ice - 005 x	1-40z. loe -60lp x	1-4oz loe -007 x	1-4oz. loe -008 x	1-4oz. Ice -0091 X		Received by: Date Time R. Second Office 0935 re	Received by: Daite Time
Chain-of-Custody Record Tulient: Yates Petroleum Corporation X	treet Artesia, NM 88210	=	mail or Fax#: agriffin@yatespetroleum.com Pra	Standard	ccreditation:	(ed/	Date Time Matrix Sample Request ID Tr	1-1' 1-1' 1-1'	9:42 Soil 1 - 2'	9:54 Soil 1-3'	10:06 Soil 2 - 1'	10:13 Soil 2-2'	10:17 Soil 2 - 3'	10:25 Soil 3-1'	10:30 Soil 3-2'	10:35 Soil 3-3'		Jate: Time: Relinquished by:	Time: Relinquished by:



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

March 15, 2016

Amber Griffin
Yates Petroleum Corporation
105 South Fourth Street
Artesia, NM 88210
TEL: (575) 748-4111

FAX

RE: Juniper BIP Federal Battery

OrderNo.: 1603548

Dear Amber Griffin:

Hall Environmental Analysis Laboratory received 6 sample(s) on 3/10/2016 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

4901 Hawkins NE

Albuquerque, NM 87109

Lab Order 1603548

Date Reported: 3/15/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Yates Petroleum Corporation

Project: Juniper BIP Federal Battery

Lab ID: 1603548-001

Matrix: SOIL

Client Sample ID: 1-4'

Collection Date: 3/8/2016 9:40:00 AM

Received Date: 3/10/2016 10:05:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RAI	NGE ORGANICS	3			Analyst	: КЈН
Diesel Range Organics (DRO)	ND	9.5	mg/Kg	1	3/11/2016 6:08:03 PM	24190
Surr: DNOP	88.2	70-130	%Rec	1	3/11/2016 6:08:03 PM	24190
EPA METHOD 8015D: GASOLINE RA	NGE				Analyst	: NSB
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	3/11/2016 4:34:02 PM	24193
Surr: BFB	89.6	66.2-112	%Rec	1	3/11/2016 4:34:02 PM	24193
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.025	mg/Kg	1	3/11/2016 4:34:02 PM	24193
Toluene	ND	0.049	mg/Kg	1	3/11/2016 4:34:02 PM	24193
Ethylbenzene	ND	0.049	mg/Kg	1	3/11/2016 4:34:02 PM	24193
Xylenes, Total	ND	0.098	mg/Kg	1	3/11/2016 4:34:02 PM	24193
Surr: 4-Bromofluorobenzene	111	80-120	%Rec	1	3/11/2016 4:34:02 PM	24193

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 1 of 9
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Lab Order 1603548

Date Reported: 3/15/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Yates Petroleum Corporation

Project: Juniper BIP Federal Battery

Lab ID: 1603548-002

Client Sample ID: 1-5'

Collection Date: 3/8/2016 9:43:00 AM

Matrix: SOIL Received Date: 3/10/2016 10:05:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANIC	S		100	Analyst	: KJH
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	3/11/2016 6:30:04 PM	24190
Surr: DNOP	92.2	70-130	%Rec	1	3/11/2016 6:30:04 PM	24190
EPA METHOD 8015D: GASOLINE RAI	NGE				Analyst	: NSB
Gasoline Range Organics (GRO)	ND	4.6	mg/Kg	1	3/11/2016 4:58:33 PM	24193
Surr: BFB	86.5	66.2-112	%Rec	1	3/11/2016 4:58:33 PM	24193
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.023	mg/Kg	1	3/11/2016 4:58:33 PM	24193
Toluene	ND	0.046	mg/Kg	1	3/11/2016 4:58:33 PM	24193
Ethylbenzene	ND	0.046	mg/Kg	1	3/11/2016 4:58:33 PM	24193
Xylenes, Total	ND	0.093	mg/Kg	1	3/11/2016 4:58:33 PM	24193
Surr: 4-Bromofluorobenzene	107	80-120	%Rec	1	3/11/2016 4:58:33 PM	24193

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
- W Sample container temperature is out of limit as specified

Lab Order 1603548

Date Reported: 3/15/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Yates Petroleum Corporation

Project: Juniper BIP Federal Battery

Lab ID: 1603548-003

Client Sample ID: 1-6'

Collection Date: 3/8/2016 9:52:00 AM

Received Date: 3/10/2016 10:05:00 AM

Analyses	Result	PQL Q	ıal Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANIC	S			Analyst	: KJH
Diesel Range Organics (DRO)	ND	9.5	mg/Kg	1	3/11/2016 6:52:09 PM	24190
Surr: DNOP	97.5	70-130	%Rec	1	3/11/2016 6:52:09 PM	24190
EPA METHOD 8015D: GASOLINE RA	NGE				Analyst	: NSB
Gasoline Range Organics (GRO)	ND	4.6	mg/Kg	1	3/11/2016 5:23:03 PM	24193
Surr: BFB	90.7	66.2-112	%Rec	1	3/11/2016 5:23:03 PM	24193
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.023	mg/Kg	1	3/11/2016 5:23:03 PM	24193
Toluene	ND	0.046	mg/Kg	1	3/11/2016 5:23:03 PM	24193
Ethylbenzene	ND	0.046	mg/Kg	1	3/11/2016 5:23:03 PM	24193
Xylenes, Total	ND	0.093	mg/Kg	1	3/11/2016 5:23:03 PM	24193
Surr: 4-Bromofluorobenzene	112	80-120	%Rec	1	3/11/2016 5:23:03 PM	24193

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 3 of 9
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Lab Order 1603548

Date Reported: 3/15/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Yates Petroleum Corporation

Project: Juniper BIP Federal Battery

Lab ID: 1603548-004 Matrix: SOIL

Client Sample ID: 2-4'

Collection Date: 3/8/2016 10:08:00 AM Received Date: 3/10/2016 10:05:00 AM

Analyses Result **PQL Qual Units** DF Date Analyzed Batch **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: KJH Diesel Range Organics (DRO) ND 10 mg/Kg 3/11/2016 7:14:08 PM Surr: DNOP 82.8 70-130 %Rec 1 3/11/2016 7:14:08 PM 24190 **EPA METHOD 8015D: GASOLINE RANGE** Analyst: NSB Gasoline Range Organics (GRO) ND 4.9 mg/Kg 3/11/2016 5:47:30 PM 1 24193 Surr: BFB 86.4 66.2-112 %Rec 1 3/11/2016 5:47:30 PM 24193 **EPA METHOD 8021B: VOLATILES** Analyst: NSB Benzene ND 0.024 3/11/2016 5:47:30 PM mg/Kg 24193 Toluene ND 0.049 mg/Kg 1 3/11/2016 5:47:30 PM 24193 Ethylbenzene ND 0.049 mg/Kg 3/11/2016 5:47:30 PM 1 Xylenes, Total ND 0.097 mg/Kg 3/11/2016 5:47:30 PM 24193 Surr: 4-Bromofluorobenzene 105 80-120 %Rec 3/11/2016 5:47:30 PM 24193

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
- P Sample pH Not In Range
- RL Reporting Detection Limit
- Sample container temperature is out of limit as specified

Lab Order 1603548

Date Reported: 3/15/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Yates Petroleum Corporation

Juniper BIP Federal Battery Project:

1603548-005

Lab ID:

Client Sample ID: 2-5'

Collection Date: 3/8/2016 10:13:00 AM

Received Date: 3/10/2016 10:05:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANIC	S			Analyst	: KJH
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	3/11/2016 7:36:10 PM	24190
Surr: DNOP	79.3	70-130	%Rec	1	3/11/2016 7:36:10 PM	24190
EPA METHOD 8015D: GASOLINE RAI	NGE				Analyst	: NSB
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	3/11/2016 6:11:55 PM	24193
Surr: BFB	91.1	66.2-112	%Rec	1	3/11/2016 6:11:55 PM	24193
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.023	mg/Kg	1	3/11/2016 6:11:55 PM	24193
Toluene	ND	0.047	mg/Kg	1	3/11/2016 6:11:55 PM	24193
Ethylbenzene	ND	0.047	mg/Kg	1	3/11/2016 6:11:55 PM	24193
Xylenes, Total	ND	0.094	mg/Kg	1	3/11/2016 6:11:55 PM	24193
Surr: 4-Bromofluorobenzene	113	80-120	%Rec	1	3/11/2016 6:11:55 PM	24193

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
- Holding times for preparation or analysis exceeded H
- 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
- E Value above quantitation range
- Analyte detected below quantitation limits Page 5 of 9 J
- P Sample pH Not In Range
- Reporting Detection Limit
- Sample container temperature is out of limit as specified

Lab Order 1603548

Date Reported: 3/15/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Yates Petroleum Corporation

Juniper BIP Federal Battery Project:

1603548-006

Lab ID:

Client Sample ID: 2-6'

Collection Date: 3/8/2016 10:19:00 AM

Received Date: 3/10/2016 10:05:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS	3			Analyst	:: KJH
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	3/11/2016 7:58:07 PM	24190
Surr: DNOP	75.7	70-130	%Rec	1	3/11/2016 7:58:07 PM	24190
EPA METHOD 8015D: GASOLINE RAI	NGE				Analyst	: NSB
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	3/11/2016 6:36:17 PM	24193
Surr: BFB	90.8	66.2-112	%Rec	1	3/11/2016 6:36:17 PM	24193
EPA METHOD 8021B: VOLATILES					Analys	: NSB
Benzene	ND	0.025	mg/Kg	1	3/11/2016 6:36:17 PM	24193
Toluene	ND	0.050	mg/Kg	1	3/11/2016 6:36:17 PM	24193
Ethylbenzene	ND	0.050	mg/Kg	1	3/11/2016 6:36:17 PM	24193
Xylenes, Total	ND	0.10	mg/Kg	1	3/11/2016 6:36:17 PM	24193
Surr: 4-Bromofluorobenzene	111	80-120	%Rec	1	3/11/2016 6:36:17 PM	24193

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
- E Value above quantitation range
- Analyte detected below quantitation limits Page 6 of 9 J
- P Sample pH Not In Range
- Reporting Detection Limit
- Sample container temperature is out of limit as specified

OC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#:

1603548

15-Mar-16

Client:

Yates Petroleum Corporation

Project:

Juniper BIP Federal Battery

San	nple ID	MB-24190
207	1000000	2010/06/03/2007

SampType: MBLK

TestCode: EPA Method 8015M/D: Diesel Range Organics

Client ID: **PBS**

Batch ID: 24190

PQL

10

10

RunNo: 32726

Prep Date: 3/10/2016

Analysis Date: 3/11/2016

SeqNo: 1001548

Units: mg/Kg

%RPD

%RPD

Diesel Range Organics (DRO)

ND

SPK value SPK Ref Val %REC LowLimit

RPDLimit Qual

Surr: DNOP

10

10.00

105

130

TestCode: EPA Method 8015M/D: Diesel Range Organics

HighLimit

Sample ID LCS-24190

LCSS

SampType: LCS Batch ID: 24190

RunNo: 32726

Client ID:

Analyte

Prep Date: 3/10/2016

Analysis Date: 3/11/2016

52

5.0

4.1

SeqNo: 1001558

Units: mg/Kg HighLimit

Qual

Sample ID LCS-24212

Diesel Range Organics (DRO)

Result PQL

SPK value SPK Ref Val

50.00

5.000

%REC

104

100

LowLimit

65.8

70

136

130

RPDLimit

Surr: DNOP

SampType: LCS

TestCode: EPA Method 8015M/D: Diesel Range Organics

Client ID: Prep Date:

LCSS

Batch ID: 24212 3/11/2016

Analysis Date: 3/14/2016

0

RunNo: 32764 SeqNo: 1004019

Units: %Rec

Analyte Surr: DNOP

Result

SPK value SPK Ref Val %REC 5.000

LowLimit 82.4

HighLimit 130 %RPD **RPDLimit**

Qual

Sample ID MB-24212

PBS

SampType: MBLK

PQL

TestCode: EPA Method 8015M/D: Diesel Range Organics RunNo: 32764

%REC

70

Client ID: Prep Date: Analyte

Surr: DNOP

3/11/2016

Batch ID: 24212

Result

8.1

Analysis Date: 3/14/2016

SeqNo: 1004020

Units: %Rec

%RPD

RPDLimit Qual

Page 7 of 9

SPK value SPK Ref Val 10.00

81.2

70

LowLimit

HighLimit 130

Qualifiers:

ND

S

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded

% Recovery outside of range due to dilution or matrix

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

- E Value above quantitation range
- RL Reporting Detection Limit W Sample container temperature is out of limit as specified
- B Analyte detected in the associated Method Blank
- Analyte detected below quantitation limits
- P Sample pH Not In Range

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#:

1603548

15-Mar-16

Client:

Yates Petroleum Corporation

Project:

Analyte

Juniper BIP Federal Battery

Sample ID MB-24193

SampType: MBLK

TestCode: EPA Method 8015D: Gasoline Range

Client ID:

PBS

Batch ID: 24193

RunNo: 32759

Prep Date: 3/10/2016

Analysis Date: 3/11/2016

PQL

5.0

SeqNo: 1002860

LowLimit

LowLimit

66.2

Units: mg/Kg

SPK value SPK Ref Val %REC

RPDLimit

%RPD

%RPD

Qual

Gasoline Range Organics (GRO) Surr: BFB

ND 910

Result

1000

91.2

112

HighLimit

Sample ID LCS-24193

LCSS

3/10/2016

SampType: LCS

TestCode: EPA Method 8015D: Gasoline Range

Batch ID: 24193

PQL

Analysis Date: 3/11/2016

RunNo: 32759 SeqNo: 1002861

Units: mg/Kg

RPDLimit

Qual

Analyte Gasoline Range Organics (GRO) Result 25

SPK value SPK Ref Val 5.0 25.00

100

80

HighLimit

Surr: BFB

1000

1000

99.9

%REC

66.2

120

Client ID:

Prep Date:

0

112

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RPD outside accepted recovery limits R
- % Recovery outside of range due to dilution or matrix S
- В Analyte detected in the associated Method Blank
- E Value above quantitation range
- Analyte detected below quantitation limits
- Page 8 of 9

- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#:

1603548

15-Mar-16

Client:

Yates Petroleum Corporation

Project:

Juniper BIP Federal Battery

Sample ID MB-24193 SampType: MBLK TestCode: EPA Method 8021B: Volatiles Client ID: PBS Batch ID: 24193 RunNo: 32759 Prep Date: 3/10/2016 Analysis Date: 3/11/2016 SeqNo: 1002891 Units: mg/Kg Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit %RPD **RPDLimit** HighLimit Qual Benzene ND 0.025 Toluene ND 0.050 Ethylbenzene 0.050 ND Xylenes, Total ND 0.10 Surr: 4-Bromofluorobenzene 1.000 1.1 113 80 120

Sample ID LCS-24193	SampT	ype: LC	s	Tes	tCode: El	PA Method	8021B: Vola	tiles		
Client ID: LCSS	Batch	n ID: 24	193	F	RunNo: 3	2759				
Prep Date: 3/10/2016	Analysis D)ate: 3/	11/2016	S	SeqNo: 1	002892	Units: mg/k	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.89	0.025	1.000	0	88.8	80	120			
Toluene	0.96	0.050	1.000	0	96.4	80	120			
Ethylbenzene	0.98	0.050	1.000	0	98.0	80	120			
Xylenes, Total	3.0	0.10	3.000	0	98.6	80	120			
Surr: 4-Bromofluorobenzene	1.2		1.000		117	80	120			

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 9 of 9

- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified



Hall Fuvironmental Analysis Laboratory 4901 Havkins 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 Corpora Work Order Number:	1503548	AND THE RESIDENCE OF THE PROPERTY OF THE PROPE	RcptNo 1	and management of the control of the
Received by/date: A /31016				
Logged By: Lindsay Mangin 3/10/2016 10:05:00 AM		Sunday Hope		
Completed By: Lindsay Mangin 3/10/2016 10:29:01 AM		Joseph Hope		
		000		
Chain of Custody				
Custody seals intact on sample bottles?	Yes Y	No 🗀	Not Present	
2. Is Chain of Custody complete?	Yes 🗸	No 🗌	Not Present	
How was the sample delivered?	Courier			
<u>Log In</u>	printing	proces	P1	
4. Was an attempt made to cool the samples?	Yes 🗸	No 🗔	NA L	
5. Were all samples received at a temperature of >0° C to 6.0°C	Yes 🔽	No L	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 viele have rece hardeness?	Yes 🗆	No	No VOA Vials	
10:VOA vials have zero headspace?	Yes	No 🗸	10 707 100	
11, Were any sample containers received broken?	Yes -	NO E	# of preserved bottles checked	
12. Does paperwork match bottle labels?	Yes 🗸	No 🗆	for pH:	40 1 1 1
(Note discrepancies on chain of custody)	CO.C.		(<z or<="" td=""><td>>12 unless noted)</td></z>	>12 unless noted)
13, Are matrices correctly identified on Chain of Custody?	Yes 🗸	No L	riajastoo.	
14. Is it clear what analyses were requested?	Yes 🗸	No	Checked by:	
15. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes Y	NV had	Cilculot of	
0 (-1 11				
Special Handling (if applicable)	7.1	ļ		
16. Was client notified of all discrepancies with this order?	Yes 🗌	No 1 1	NA 🗹	
Person Notified: Date			9) B 32	
By Whom: Via:	eMail	Phone Fax	In Person	
Regarding.	THE ADMINISTRATION OF THE PARTY	COPPLIANCE OF THE PROPERTY OF	CONTRACTOR OF THE PROPERTY OF	
Client Instructions:				
17. Additional remarks:				
18. Cooler Information Cooler No Temp °C Condition Seal Intact Seal No	Seal Date	Signed By	I	
Cooler No Temp °C Condition Seal Intact Seal No 1 3.1 Good Yes	Geal Date	ON 100 DY		

	~					Marie		(N	ל סו	() s	Air Bubble		ente.	13910	and the same of th		BURNING	TOWN LAW PROPERTY OF			Separate Sep		<u></u>	** I PRINCIPLE VIA PRINCIPLE LEGISLATI
HALL ENVIRONMENTAL	ANALYSIS LABORATORY	www.hallenvironmental.com	4901 Hawkins NE - Albuquerque, NM 87109	Tel. 505-345-3975 Fax 505-345-4107	Analy	os	' ^b Od	l° ^z C	(H,	418 403 80 4	nod Novi leta leta loid	TPH (Meth 8310 (PNA RCRA 8 M Anions (F, 8081 Pest 8280 (VC 8270 (Sen				4440000							- 2	Remarks: TPH: 8015B, BLEX: 8021B. Please snow blick results as mg/kg. Thank you!	
HON			4901	Tel.							manana	M + X3T8 Melh	×	×	×	×	×	×						Remarks: results as	
			T			(12	08) :	18.8	NT.	+ :	18T	M + X3T8	×	×	×	×	×	×							
According to the second	4		Juniper BIP Federal Battery		501		Sriffin	<	Amber Griffin 110	oN □	1-1.00 F= 3.1	HEAL NO.	3	-005	-03	287	-05	- A.						5/10/16 1005	Cate
Time:	□ Rush		per BIP Fec		2RP-3501	ger	Amber Griffin	PO # 205-2020		X Yes	Temperature: 4.	Preservativ e Type	93	lce	oo Oo	eo loe	eo	eol	AUGUSTON PORT OF THE PROPERTY			u ve		aluto	
Turn-Around Time:	X Standard	Project Name	Juni	Project #:	· ·	Project Manager		all triples	Sampler:	On Ice:	Sample Tem	Container Type and #	1 - 402.	1 - 4oz.	1 - 40z.	1 - 402.	1 - 402.	1 - 402.						Received by:	Received by:
Chain-of-Custody Record	Yates Petroleum Corporation			105 South 4th Street Artesia, NM 88210	575-513-8799 or 575-748-4111	aoriffin@yatespetroleum.com		□ Level 4 (Full Validation)				Sample Request ID	1-4"	1-5	1-6.	2-4"	2 - 6	2 - 6"						Sarthin	
sh-Cus	etroleum			set Artesi	575-513-8	agriffin@)				Other		Matrix	9:40 Soil	Ameronic -	· · · · · · · · · · · · · · · · · · ·						21441442			Relinquished by: Annoco	Relinquished by
nain-c	Yates P		dress:	4th Str		ax#:	:kage:	Б	ion:		ype)	Time								-1443503000000000000000000000000000000000				S ime:	Time:
ਹ	Slent		Mailing Address:	105 South	# enough	amail or Fax#:	DAIOC Package	□ Standard	Accreditation:	O NELAP	☐ EDD (Type)		3/8/2016	3,8/2016	3/8/2016	3/8/2076	3/8/2016	3,8/20~6						Oate: 3/4/7	Date:

if necessary, samples submitted to Hall Environmental may be subcontracted to other accredited