

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

April 25, 2016

Amber Griffin Yates Petroleum Corporation 105 South Fourth Street Artesia, NM 88210 TEL: (575) 748-4195 FAX

RE: State CO SWD System (Johnston BE Battery)

OrderNo.: 1604667

Dear Amber Griffin:

Hall Environmental Analysis Laboratory received 24 sample(s) on 4/15/2016 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 <u>www.hallenvironmental.com</u> 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

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

Date Reported: 4/25/2016

4/18/2016 10:27:43 PM 24839

4/18/2016 10:27:43 PM 24839

4/18/2016 10:27:43 PM 24839

Hall Environmental Analysis Laboratory, Inc.

Ethylbenzene

Xylenes, Total

Surr: 4-Bromofluorobenzene

CLIENT: Yates Petroleum Corporation Client Sample ID: 1-1' **Project:** State CO SWD System (Johnston BE Bat Collection Date: 4/13/2016 1:24:00 PM Lab ID: 1604667-001 Matrix: SOIL Received Date: 4/15/2016 9:25:00 AM Analyses Result **PQL** Qual Units **DF** Date Analyzed Batch **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: KJH Diesel Range Organics (DRO) 4/19/2016 2:50:37 PM ND 9.9 mg/Kg 24846 1 Surr: DNOP 77.0 70-130 %Rec 1 4/19/2016 2:50:37 PM 24846 **EPA METHOD 8015D: GASOLINE RANGE** Analyst: NSB Gasoline Range Organics (GRO) ND 4.7 mg/Kg 1 4/18/2016 10:27:43 PM 24839 Surr: BFB 94.2 80-120 %Rec 1 4/18/2016 10:27:43 PM 24839 **EPA METHOD 8021B: VOLATILES** Analyst: NSB Benzene ND 0.024 mg/Kg 1 4/18/2016 10:27:43 PM 24839 4/18/2016 10:27:43 PM 24839 Toluene ND 0.047 mg/Kg 1

0.047

0.095

80-120

mg/Kg

mg/Kg

%Rec

1

1

1

ND

ND

94.5

Qualifiers: *	Value exceeds Maximum Contaminant Level.
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- D Sample Diluted Due to Matrix
- Н 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
- Analyte detected in the associated Method Blank В
- Е Value above quantitation range
- Analyte detected below quantitation limits Page 1 of 29 J
- Р Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Date Reported: 4/25/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Yates Petroleum Corporation Client Sample ID: 1-2' **Project:** State CO SWD System (Johnston BE Bat Collection Date: 4/13/2016 1:27:00 PM Lab ID: 1604667-002 Matrix: SOIL Received Date: 4/15/2016 9:25:00 AM Analyses Result **PQL** Qual Units **DF** Date Analyzed Batch **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: KJH Diesel Range Organics (DRO) 4/19/2016 3:12:00 PM ND 9.7 mg/Kg 24846 1 Surr: DNOP 75.8 70-130 %Rec 1 4/19/2016 3:12:00 PM 24846 **EPA METHOD 8015D: GASOLINE RANGE** Analyst: NSB Gasoline Range Organics (GRO) ND 4.7 mg/Kg 1 4/18/2016 10:51:13 PM 24839 Surr: BFB 95.4 80-120 %Rec 1 4/18/2016 10:51:13 PM 24839 **EPA METHOD 8021B: VOLATILES** Analyst: NSB Benzene ND 0.023 mg/Kg 1 4/18/2016 10:51:13 PM 24839 4/18/2016 10:51:13 PM 24839 Toluene ND 0.047 mg/Kg 1 Ethylbenzene ND 0.047 mg/Kg 4/18/2016 10:51:13 PM 24839 1 Xylenes, Total ND 0.093 mg/Kg 1 4/18/2016 10:51:13 PM 24839 Surr: 4-Bromofluorobenzene 95.0 80-120 %Rec 1 4/18/2016 10:51:13 PM 24839

- D Sample Diluted Due to Matrix
- Н 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
- Analyte detected in the associated Method Blank В
- Е Value above quantitation range
- Analyte detected below quantitation limits Page 2 of 29 J
- Р Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Date Reported: 4/25/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Yates Petroleum Corporation Client Sample ID: 1-3' **Project:** State CO SWD System (Johnston BE Bat Collection Date: 4/13/2016 1:28:00 PM Lab ID: 1604667-003 Matrix: SOIL Received Date: 4/15/2016 9:25:00 AM Analyses Result **PQL** Qual Units **DF** Date Analyzed Batch **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: KJH Diesel Range Organics (DRO) 4/19/2016 3:33:36 PM ND 9.4 mg/Kg 24846 1 Surr: DNOP 76.3 70-130 %Rec 1 4/19/2016 3:33:36 PM 24846 **EPA METHOD 8015D: GASOLINE RANGE** Analyst: NSB Gasoline Range Organics (GRO) ND 4.7 mg/Kg 1 4/18/2016 11:14:44 PM 24839 Surr: BFB 94.3 80-120 %Rec 1 4/18/2016 11:14:44 PM 24839 **EPA METHOD 8021B: VOLATILES** Analyst: NSB Benzene ND 0.023 mg/Kg 1 4/18/2016 11:14:44 PM 24839 4/18/2016 11:14:44 PM 24839 Toluene ND 0.047 mg/Kg 1 Ethylbenzene ND 0.047 mg/Kg 4/18/2016 11:14:44 PM 24839 1 Xylenes, Total ND 0.094 mg/Kg 1 4/18/2016 11:14:44 PM 24839 Surr: 4-Bromofluorobenzene 93.7 80-120 %Rec 1 4/18/2016 11:14:44 PM 24839

D.C to the 00.0 la la gin abaalilist fo ... f1 10014 reconvetion info ation.

Refer to the	QC Summa	ry report and	i sample login	checklist for	magged QC	data and prese	rvation informati

Qualifiers:	*	Valu	e e	exceeds	Maxi	mum C	Contaminant Level.
	_						

- D Sample Diluted Due to Matrix
- Н 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
- Analyte detected in the associated Method Blank В
- Е Value above quantitation range
- Analyte detected below quantitation limits Page 3 of 29 J
- Р Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Date Reported: 4/25/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Yates Petroleum Corporation Client Sample ID: 1-4' **Project:** State CO SWD System (Johnston BE Bat Collection Date: 4/13/2016 1:31:00 PM Lab ID: 1604667-004 Matrix: SOIL Received Date: 4/15/2016 9:25:00 AM Analyses Result **PQL** Qual Units **DF** Date Analyzed Batch **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: KJH Diesel Range Organics (DRO) 4/19/2016 3:55:04 PM ND 9.4 mg/Kg 24846 1 Surr: DNOP 76.2 70-130 %Rec 1 4/19/2016 3:55:04 PM 24846 **EPA METHOD 8015D: GASOLINE RANGE** Analyst: NSB Gasoline Range Organics (GRO) ND 4.6 mg/Kg 1 4/19/2016 12:35:32 PM 24839 Surr: BFB 97.2 80-120 %Rec 1 4/19/2016 12:35:32 PM 24839 **EPA METHOD 8021B: VOLATILES** Analyst: NSB Benzene 0.038 0.023 mg/Kg 1 4/19/2016 12:35:32 PM 24839 4/19/2016 12:35:32 PM 24839 Toluene ND 0.046 mg/Kg 1 Ethylbenzene ND 0.046 mg/Kg 4/19/2016 12:35:32 PM 24839 1 ND Xylenes, Total 0.092 mg/Kg 1 4/19/2016 12:35:32 PM 24839 Surr: 4-Bromofluorobenzene 96.6 80-120 %Rec 1 4/19/2016 12:35:32 PM 24839

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

Oualifiers: * Value exceeds Maximum Contaminant Level. В

- D Sample Diluted Due to Matrix
- Н 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
- Analyte detected in the associated Method Blank
- Е Value above quantitation range
- Analyte detected below quantitation limits Page 4 of 29 J
- Р Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Date Reported: 4/25/2016

4/19/2016 12:59:11 PM 24839

Hall Environmental Analysis Laboratory, Inc.

Surr: 4-Bromofluorobenzene

CLIENT: Yates Petroleum Corporation Client Sample ID: 1-5' **Project:** State CO SWD System (Johnston BE Bat Collection Date: 4/13/2016 1:34:00 PM Lab ID: 1604667-005 Matrix: SOIL Received Date: 4/15/2016 9:25:00 AM Analyses Result **PQL** Qual Units **DF** Date Analyzed Batch **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: KJH Diesel Range Organics (DRO) ND 9.6 mg/Kg 4/19/2016 4:16:43 PM 24846 1 Surr: DNOP 76.9 70-130 %Rec 1 4/19/2016 4:16:43 PM 24846 **EPA METHOD 8015D: GASOLINE RANGE** Analyst: NSB Gasoline Range Organics (GRO) ND 4.7 mg/Kg 1 4/19/2016 12:59:11 PM 24839 Surr: BFB 95.1 80-120 %Rec 1 4/19/2016 12:59:11 PM 24839 **EPA METHOD 8021B: VOLATILES** Analyst: NSB Benzene ND 0.024 mg/Kg 1 4/19/2016 12:59:11 PM 24839 Toluene 4/19/2016 12:59:11 PM 24839 ND 0.047 mg/Kg 1 Ethylbenzene ND 0.047 mg/Kg 4/19/2016 12:59:11 PM 24839 1 Xylenes, Total ND 0.095 mg/Kg 1 4/19/2016 12:59:11 PM 24839

80-120

%Rec

1

94.9

Qualifiers:	*	Value exceeds Maximum Contaminant Level.				
	D	Sample Diluted Due to Matrix				
	Н	Holding times for preparation or analysis exceeded				

- Not Detected at the Reporting Limit ND
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- Analyte detected in the associated Method Blank В
- Е Value above quantitation range
- Analyte detected below quantitation limits Page 5 of 29 J
- Р Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Date Reported: 4/25/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Yates Petroleum Corporation Client Sample ID: 1-6' **Project:** State CO SWD System (Johnston BE Bat Collection Date: 4/13/2016 1:37:00 PM Lab ID: 1604667-006 Matrix: SOIL Received Date: 4/15/2016 9:25:00 AM Analyses Result **PQL** Qual Units **DF** Date Analyzed Batch **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: KJH Diesel Range Organics (DRO) 4/19/2016 4:38:10 PM ND 9.3 mg/Kg 24846 1 Surr: DNOP 73.1 70-130 %Rec 1 4/19/2016 4:38:10 PM 24846 **EPA METHOD 8015D: GASOLINE RANGE** Analyst: NSB Gasoline Range Organics (GRO) ND 4.9 mg/Kg 1 4/19/2016 1:22:52 PM 24839 Surr: BFB 95.3 80-120 %Rec 1 4/19/2016 1:22:52 PM 24839 **EPA METHOD 8021B: VOLATILES** Analyst: NSB Benzene ND 0.025 mg/Kg 1 4/19/2016 1:22:52 PM 24839 Toluene ND 0.049 mg/Kg 1 4/19/2016 1:22:52 PM 24839 Ethylbenzene ND 0.049 mg/Kg 4/19/2016 1:22:52 PM 24839 1 Xylenes, Total ND 0.098 mg/Kg 1 4/19/2016 1:22:52 PM 24839 Surr: 4-Bromofluorobenzene 95.6 80-120 %Rec 1 4/19/2016 1:22:52 PM 24839

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

Oualifiers: * Value exceeds Maximum Contaminant Level. В D Sample Diluted Due to Matrix Е Н

- 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
- Analyte detected in the associated Method Blank
- Value above quantitation range
- Analyte detected below quantitation limits Page 6 of 29 J
- Р Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Date Reported: 4/25/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Yates Petroleum Corporation Client Sample ID: 1-7' **Project:** State CO SWD System (Johnston BE Bat Collection Date: 4/13/2016 1:40:00 PM Lab ID: 1604667-007 Matrix: SOIL Received Date: 4/15/2016 9:25:00 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 1 4/19/2016 4:59:52 PM 24846 Surr: DNOP 75.0 70-130 %Rec 1 4/19/2016 4:59:52 PM 24846 **EPA METHOD 8015D: GASOLINE RANGE** Analyst: NSB Gasoline Range Organics (GRO) ND 5.0 mg/Kg 1 4/19/2016 1:59:04 AM 24840 Surr: BFB 94.6 80-120 %Rec 1 4/19/2016 1:59:04 AM 24840 **EPA METHOD 8021B: VOLATILES** Analyst: NSB Benzene ND 0.025 mg/Kg 1 4/19/2016 1:59:04 AM 24840 Toluene ND 0.050 mg/Kg 1 4/19/2016 1:59:04 AM 24840 Ethylbenzene ND 0.050 mg/Kg 4/19/2016 1:59:04 AM 24840 1 Xylenes, Total ND 0.099 mg/Kg 1 4/19/2016 1:59:04 AM 24840 Surr: 4-Bromofluorobenzene 94.7 80-120 %Rec 1 4/19/2016 1:59:04 AM 24840

Qualifiers:	*	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
	R	RPD outside accepted recovery limits
	S	% Recovery outside of range due to dilution or matrix

- Analyte detected in the associated Method Blank В
- Е Value above quantitation range
- Analyte detected below quantitation limits Page 7 of 29 J
- Р Sample pH Not In Range
- Reporting Detection Limit RL
- W Sample container temperature is out of limit as specified

4/19/2016 2:33:44 PM

Date Reported: 4/25/2016

Analyst: NSB

Analyst: NSB

24840

24840

24840

24840

24840

24840

24840

Hall Environmental Analysis Laboratory, Inc.

Project:

Lab ID:

Analyses

Surr: DNOP

Surr: BFB

Benzene

Toluene

Ethylbenzene

Xylenes, Total

EPA METHOD 8015D: GASOLINE RANGE

Gasoline Range Organics (GRO)

Surr: 4-Bromofluorobenzene

EPA METHOD 8021B: VOLATILES

CLIENT: Yates Petroleum Corporation Client Sample ID: 1-8' State CO SWD System (Johnston BE Bat Collection Date: 4/13/2016 1:45:00 PM 1604667-008 Matrix: SOIL Received Date: 4/15/2016 9:25:00 AM Result **PQL** Qual Units **DF** Date Analyzed Batch **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: KJH Diesel Range Organics (DRO) 4/19/2016 5:21:23 PM ND 9.8 mg/Kg 24846 1 72.9 70-130 %Rec 1 4/19/2016 5:21:23 PM 24846

mg/Kg

%Rec

mg/Kg

mg/Kg

mg/Kg

mg/Kg

%Rec

1

1

1

1

1

1

1

4.9

80-120

0.025

0.049

0.049

0.099

80-120

ND

91.7

ND

ND

ND

ND

92.7

Oualifiers:	*	Value exceeds Maximum Contaminant Level.
Qualifiers:		value exceeds Maximum Containmant Level.

- D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- Not Detected at the Reporting Limit ND
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- В Analyte detected in the associated Method Blank
- Е Value above quantitation range
- Analyte detected below quantitation limits Page 8 of 29 J
- Р Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

4/19/2016 2:45:54 AM

24840

Date Reported: 4/25/2016

Hall Environmental Analysis Laboratory, Inc.

Surr: 4-Bromofluorobenzene

CLIENT: Yates Petroleum Corporation Client Sample ID: 1-9' State CO SWD System (Johnston BE Bat **Project:** Collection Date: 4/13/2016 1:48:00 PM Lab ID: 1604667-009 Matrix: SOIL Received Date: 4/15/2016 9:25:00 AM Analyses Result **PQL** Qual Units **DF** Date Analyzed Batch **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: KJH Diesel Range Organics (DRO) 4/19/2016 5:43:03 PM ND 9.7 mg/Kg 24846 1 Surr: DNOP 72.8 70-130 %Rec 1 4/19/2016 5:43:03 PM 24846 **EPA METHOD 8015D: GASOLINE RANGE** Analyst: NSB Gasoline Range Organics (GRO) ND 5.0 mg/Kg 1 4/19/2016 2:45:54 AM 24840 Surr: BFB 94.9 80-120 %Rec 1 4/19/2016 2:45:54 AM 24840 **EPA METHOD 8021B: VOLATILES** Analyst: NSB Benzene ND 0.025 mg/Kg 1 4/19/2016 2:45:54 AM 24840 Toluene ND 0.050 mg/Kg 1 4/19/2016 2:45:54 AM 24840 24840 Ethylbenzene ND 0.050 mg/Kg 4/19/2016 2:45:54 AM 1 Xylenes, Total ND 0.099 mg/Kg 1 4/19/2016 2:45:54 AM 24840

80-120

%Rec

1

94.3

Qualifiers: *	Value exceeds Maximum Contaminant Level.	
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- D Sample Diluted Due to Matrix
- Н 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
- Analyte detected in the associated Method Blank В
- Е Value above quantitation range
- Analyte detected below quantitation limits Page 9 of 29 J
- Р Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

4/19/2016 3:09:20 AM

24840

Date Reported: 4/25/2016

Hall Environmental Analysis Laboratory, Inc.

Surr: 4-Bromofluorobenzene

CLIENT: Yates Petroleum Corporation Client Sample ID: 1-10' **Project:** State CO SWD System (Johnston BE Bat Collection Date: 4/13/2016 1:53:00 PM Lab ID: 1604667-010 Matrix: SOIL Received Date: 4/15/2016 9:25:00 AM Analyses Result **PQL** Qual Units **DF** Date Analyzed Batch **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: KJH Diesel Range Organics (DRO) 4/19/2016 6:04:37 PM ND 9.6 mg/Kg 24846 1 Surr: DNOP 73.5 70-130 %Rec 1 4/19/2016 6:04:37 PM 24846 **EPA METHOD 8015D: GASOLINE RANGE** Analyst: NSB Gasoline Range Organics (GRO) ND 5.0 mg/Kg 1 4/19/2016 3:09:20 AM 24840 Surr: BFB 93.4 80-120 %Rec 1 4/19/2016 3:09:20 AM 24840 **EPA METHOD 8021B: VOLATILES** Analyst: NSB Benzene ND 0.025 mg/Kg 1 4/19/2016 3:09:20 AM 24840 Toluene ND 0.050 mg/Kg 1 4/19/2016 3:09:20 AM 24840 Ethylbenzene ND 0.050 mg/Kg 4/19/2016 3:09:20 AM 24840 1 Xylenes, Total ND 0.10 mg/Kg 1 4/19/2016 3:09:20 AM 24840

80-120

%Rec

1

91.5

Qualifiers:	*	Valu	e e	exceeds	Maxim	um	I C	ontaminant Level.
	_					_	_	

- D Sample Diluted Due to Matrix
- Н 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
- Analyte detected in the associated Method Blank В
- Е Value above quantitation range
- Analyte detected below quantitation limit Page 10 of 29 J
- Р Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

4/19/2016 3:32:59 AM

24840

Date Reported: 4/25/2016

Hall Environmental Analysis Laboratory, Inc.

Surr: 4-Bromofluorobenzene

CLIENT: Yates Petroleum Corporation Client Sample ID: 2-1' **Project:** State CO SWD System (Johnston BE Bat Collection Date: 4/13/2016 2:10:00 PM Lab ID: 1604667-011 Matrix: SOIL Received Date: 4/15/2016 9:25:00 AM Analyses Result **PQL** Qual Units **DF** Date Analyzed Batch **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: KJH Diesel Range Organics (DRO) 4/20/2016 8:26:22 PM ND 9.9 mg/Kg 24847 1 Surr: DNOP 89.8 70-130 %Rec 1 4/20/2016 8:26:22 PM 24847 **EPA METHOD 8015D: GASOLINE RANGE** Analyst: NSB Gasoline Range Organics (GRO) ND 4.6 mg/Kg 1 4/19/2016 3:32:59 AM 24840 Surr: BFB 101 80-120 %Rec 1 4/19/2016 3:32:59 AM 24840 **EPA METHOD 8021B: VOLATILES** Analyst: NSB Benzene 0.081 0.023 mg/Kg 1 4/19/2016 3:32:59 AM 24840 Toluene 0.15 0.046 mg/Kg 1 4/19/2016 3:32:59 AM 24840 Ethylbenzene 0.11 0.046 mg/Kg 4/19/2016 3:32:59 AM 24840 1 Xylenes, Total ND 0.093 mg/Kg 1 4/19/2016 3:32:59 AM 24840

80-120

%Rec

1

97.6

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

Oualifiers: * Value exceeds Maximum Contaminant Level. В D Sample Diluted Due to Matrix Е

- Н 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
- Analyte detected in the associated Method Blank
- Value above quantitation range
- Analyte detected below quantitation limit Page 11 of 29 J
- Р Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Date Reported: 4/25/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Yates Petroleum Corporation Client Sample ID: 2-2' **Project:** State CO SWD System (Johnston BE Bat Collection Date: 4/13/2016 2:12:00 PM Lab ID: 1604667-012 Matrix: SOIL Received Date: 4/15/2016 9:25:00 AM Analyses Result **PQL** Qual Units **DF** Date Analyzed Batch **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: KJH Diesel Range Organics (DRO) ND 9.5 mg/Kg 4/20/2016 8:48:15 PM 24847 1 Surr: DNOP 87.8 70-130 %Rec 1 4/20/2016 8:48:15 PM 24847 **EPA METHOD 8015D: GASOLINE RANGE** Analyst: NSB Gasoline Range Organics (GRO) ND 4.9 mg/Kg 1 4/19/2016 3:56:34 AM 24840 Surr: BFB 95.7 80-120 %Rec 1 4/19/2016 3:56:34 AM 24840

EPA METHOD 8021B: VOLATILES					Analyst	NSB
Benzene	0.14	0.025	mg/Kg	1	4/19/2016 3:56:34 AM	24840
Toluene	0.12	0.049	mg/Kg	1	4/19/2016 3:56:34 AM	24840
Ethylbenzene	ND	0.049	mg/Kg	1	4/19/2016 3:56:34 AM	24840
Xylenes, Total	ND	0.098	mg/Kg	1	4/19/2016 3:56:34 AM	24840
Surr: 4-Bromofluorobenzene	95.2	80-120	%Rec	1	4/19/2016 3:56:34 AM	24840

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

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*	Value exceeds Maximum Contaminant Level.
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D Sample Diluted Due to Matrix

Oualifiers:

- 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 29
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

4/19/2016 4:20:07 AM

24840

Date Reported: 4/25/2016

Hall Environmental Analysis Laboratory, Inc.

Surr: 4-Bromofluorobenzene

CLIENT: Yates Petroleum Corporation Client Sample ID: 2-3' **Project:** State CO SWD System (Johnston BE Bat Collection Date: 4/13/2016 2:14:00 PM Lab ID: 1604667-013 Matrix: SOIL Received Date: 4/15/2016 9:25:00 AM Analyses Result **PQL** Qual Units **DF** Date Analyzed Batch **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: KJH Diesel Range Organics (DRO) 4/20/2016 9:10:03 PM ND 9.6 mg/Kg 24847 1 Surr: DNOP 89.1 70-130 %Rec 1 4/20/2016 9:10:03 PM 24847 **EPA METHOD 8015D: GASOLINE RANGE** Analyst: NSB Gasoline Range Organics (GRO) ND 4.6 mg/Kg 1 4/19/2016 4:20:07 AM 24840 Surr: BFB 93.9 80-120 %Rec 1 4/19/2016 4:20:07 AM 24840 **EPA METHOD 8021B: VOLATILES** Analyst: NSB Benzene ND 0.023 mg/Kg 1 4/19/2016 4:20:07 AM 24840 Toluene ND 0.046 mg/Kg 1 4/19/2016 4:20:07 AM 24840 Ethylbenzene ND 0.046 mg/Kg 4/19/2016 4:20:07 AM 24840 1 Xylenes, Total ND 0.092 mg/Kg 1 4/19/2016 4:20:07 AM 24840

80-120

%Rec

1

93.1

Qualifiers:	*	Value exceeds Maximum Contaminant Level.
	D	Samula Dilutad Dua ta Matein

- D Sample Diluted Due to Matrix
- Н 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
- Analyte detected in the associated Method Blank В
- Е Value above quantitation range
- Analyte detected below quantitation limit Page 13 of 29 J
- Р Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Date Reported: 4/25/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Yates Petroleum Corporation Client Sample ID: 2-4' **Project:** State CO SWD System (Johnston BE Bat Collection Date: 4/13/2016 2:18:00 PM Lab ID: 1604667-014 Matrix: SOIL Received Date: 4/15/2016 9:25:00 AM Analyses Result **PQL** Qual Units **DF** Date Analyzed Batch **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: KJH Diesel Range Organics (DRO) mg/Kg 4/20/2016 9:31:54 PM ND 9.4 1 24847 Surr: DNOP 87.3 70-130 %Rec 1 4/20/2016 9:31:54 PM 24847 **EPA METHOD 8015D: GASOLINE RANGE** Analyst: NSB Gasoline Range Organics (GRO) ND 4.9 mg/Kg 1 4/19/2016 3:44:11 PM 24840 Surr: BFB 96.2 80-120 %Rec 1 4/19/2016 3:44:11 PM 24840 **EPA METHOD 8021B: VOLATILES** Analyst: **NSB** Benzene 0.028 0.025 mg/Kg 1 4/19/2016 3:44:11 PM 24840 Toluene ND 0.049 mg/Kg 1 4/19/2016 3:44:11 PM 24840 Ethylbenzene ND 0.049 mg/Kg 4/19/2016 3:44:11 PM 24840 1 Xylenes, Total ND 0.098 mg/Kg 1 4/19/2016 3:44:11 PM 24840 Surr: 4-Bromofluorobenzene 99.0 80-120 %Rec 1 4/19/2016 3:44:11 PM 24840

Qualifiers:	*	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
	R	RPD outside accepted recovery limits
	S	% Recovery outside of range due to dilution or matrix

- Analyte detected in the associated Method Blank В
- Е Value above quantitation range
- Analyte detected below quantitation limit Page 14 of 29 J
- Р Sample pH Not In Range
- Reporting Detection Limit RL
- W Sample container temperature is out of limit as specified

4/19/2016 4:07:43 PM

24840

Date Reported: 4/25/2016

Hall Environmental Analysis Laboratory, Inc.

Surr: 4-Bromofluorobenzene

CLIENT: Yates Petroleum Corporation Client Sample ID: 2-5' **Project:** State CO SWD System (Johnston BE Bat Collection Date: 4/13/2016 2:20:00 PM Lab ID: 1604667-015 Matrix: SOIL Received Date: 4/15/2016 9:25:00 AM Analyses Result **PQL** Qual Units **DF** Date Analyzed Batch **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: KJH Diesel Range Organics (DRO) 4/20/2016 9:53:39 PM ND 9.8 mg/Kg 24847 1 Surr: DNOP 87.6 70-130 %Rec 1 4/20/2016 9:53:39 PM 24847 **EPA METHOD 8015D: GASOLINE RANGE** Analyst: NSB Gasoline Range Organics (GRO) ND 4.7 mg/Kg 1 4/19/2016 4:07:43 PM 24840 Surr: BFB 95.2 80-120 %Rec 1 4/19/2016 4:07:43 PM 24840 **EPA METHOD 8021B: VOLATILES** Analyst: **NSB** Benzene ND 0.024 mg/Kg 1 4/19/2016 4:07:43 PM 24840 Toluene ND 0.047 mg/Kg 1 4/19/2016 4:07:43 PM 24840 Ethylbenzene ND 0.047 mg/Kg 4/19/2016 4:07:43 PM 24840 1 Xylenes, Total ND 0.095 mg/Kg 1 4/19/2016 4:07:43 PM 24840

80-120

%Rec

1

96.8

Qualifiers:	*	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
- 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 15 of 29
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Date Reported: 4/25/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Yates Petroleum Corporation Client Sample ID: 2-6' **Project:** State CO SWD System (Johnston BE Bat Collection Date: 4/13/2016 2:22:00 PM Lab ID: 1604667-016 Matrix: SOIL Received Date: 4/15/2016 9:25:00 AM Analyses Result **PQL** Qual Units **DF** Date Analyzed Batch **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: KJH Diesel Range Organics (DRO) ND 9.2 mg/Kg 4/20/2016 10:15:33 PM 24847 1 Surr: DNOP 88.4 70-130 %Rec 1 4/20/2016 10:15:33 PM 24847 **EPA METHOD 8015D: GASOLINE RANGE** Analyst: NSB Gasoline Range Organics (GRO) ND 4.6 mg/Kg 1 4/19/2016 4:31:08 PM 24840 Surr: BFB 95.3 80-120 %Rec 1 4/19/2016 4:31:08 PM 24840 **EPA METHOD 8021B: VOLATILES** Analyst: **NSB** Benzene ND 0.023 mg/Kg 1 4/19/2016 4:31:08 PM 24840 Toluene ND 0.046 mg/Kg 1 4/19/2016 4:31:08 PM 24840 24840 Ethylbenzene ND 0.046 mg/Kg 4/19/2016 4:31:08 PM 1 Xylenes, Total ND 0.092 mg/Kg 1 4/19/2016 4:31:08 PM 24840 Surr: 4-Bromofluorobenzene 96.9 80-120 %Rec 1 4/19/2016 4:31:08 PM 24840

Qualifiers:	*	Value exceeds Maximum Contaminant Level.
	D	Sample Diluted Due to Matrix
	TT	TT-14's - times for any setting on sectoric second

- Holding times for preparation or analysis exceeded Н
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- Analyte detected in the associated Method Blank В
- Е Value above quantitation range
- Analyte detected below quantitation limit Page 16 of 29 J
- Р Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

4/19/2016 8:25:44 PM

24840

Date Reported: 4/25/2016

Hall Environmental Analysis Laboratory, Inc.

Surr: 4-Bromofluorobenzene

CLIENT: Yates Petroleum Corporation Client Sample ID: 2-7' **Project:** State CO SWD System (Johnston BE Bat Collection Date: 4/13/2016 2:26:00 PM Lab ID: 1604667-017 Matrix: SOIL Received Date: 4/15/2016 9:25:00 AM Analyses Result **PQL** Qual Units **DF** Date Analyzed Batch **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: KJH Diesel Range Organics (DRO) 4/20/2016 10:37:15 PM 24847 ND 9.5 mg/Kg 1 Surr: DNOP 80.6 70-130 %Rec 1 4/20/2016 10:37:15 PM 24847 **EPA METHOD 8015D: GASOLINE RANGE** Analyst: NSB Gasoline Range Organics (GRO) ND 4.9 mg/Kg 1 4/19/2016 8:25:44 PM 24840 Surr: BFB 94.4 80-120 %Rec 1 4/19/2016 8:25:44 PM 24840 **EPA METHOD 8021B: VOLATILES** Analyst: **NSB** Benzene ND 0.024 mg/Kg 1 4/19/2016 8:25:44 PM 24840 Toluene ND 0.049 mg/Kg 1 4/19/2016 8:25:44 PM 24840 Ethylbenzene ND 0.049 mg/Kg 4/19/2016 8:25:44 PM 24840 1 Xylenes, Total ND 0.098 mg/Kg 1 4/19/2016 8:25:44 PM 24840

80-120

%Rec

1

95.1

Qualifiers:	*	Value exceeds Maximum Contaminant Level.
	D	Sample Diluted Due to Matrix

- Н Holding times for preparation or analysis exceeded
- Not Detected at the Reporting Limit ND
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- Analyte detected in the associated Method Blank В
- Е Value above quantitation range
- Analyte detected below quantitation limit Page 17 of 29 J
- Р Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

4/19/2016 8:49:09 PM

4/19/2016 8:49:09 PM

24840

24840

Date Reported: 4/25/2016

Hall Environmental Analysis Laboratory, Inc.

Xylenes, Total

Surr: 4-Bromofluorobenzene

CLIENT: Yates Petroleum Corporation Client Sample ID: 2-8' **Project:** State CO SWD System (Johnston BE Bat Collection Date: 4/13/2016 2:29:00 PM Lab ID: 1604667-018 Matrix: SOIL Received Date: 4/15/2016 9:25:00 AM Analyses Result **PQL** Qual Units **DF** Date Analyzed Batch **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: KJH Diesel Range Organics (DRO) mg/Kg ND 10 1 4/20/2016 10:59:01 PM 24847 Surr: DNOP 82.9 70-130 %Rec 1 4/20/2016 10:59:01 PM 24847 **EPA METHOD 8015D: GASOLINE RANGE** Analyst: NSB 4/19/2016 8:49:09 PM Gasoline Range Organics (GRO) ND 4.6 mg/Kg 1 24840 Surr: BFB 94.3 80-120 %Rec 1 4/19/2016 8:49:09 PM 24840 **EPA METHOD 8021B: VOLATILES** Analyst: **NSB** Benzene ND 0.023 mg/Kg 1 4/19/2016 8:49:09 PM 24840 Toluene 24840 ND 0.046 mg/Kg 1 4/19/2016 8:49:09 PM Ethylbenzene ND 0.046 mg/Kg 4/19/2016 8:49:09 PM 24840 1

0.092

80-120

mg/Kg

%Rec

1

1

ND

94.9

Qualifiers:	*	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
	R	RPD outside accepted recovery limits

- S % Recovery outside of range due to dilution or matrix
- Analyte detected in the associated Method Blank В
- Е Value above quantitation range
- Analyte detected below quantitation limit Page 18 of 29 J
- Р Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Date Reported: 4/25/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Yates Petroleum Corporation Client Sample ID: 2-9' **Project:** State CO SWD System (Johnston BE Bat Collection Date: 4/13/2016 2:32:00 PM Lab ID: 1604667-019 Matrix: SOIL Received Date: 4/15/2016 9:25:00 AM Analyses Result **PQL** Qual Units **DF** Date Analyzed Batch **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: KJH Diesel Range Organics (DRO) mg/Kg ND 9.3 1 4/20/2016 11:20:41 PM 24847 Surr: DNOP 85.0 70-130 %Rec 1 4/20/2016 11:20:41 PM 24847 **EPA METHOD 8015D: GASOLINE RANGE** Analyst: NSB Gasoline Range Organics (GRO) ND 4.7 mg/Kg 1 4/19/2016 9:12:43 PM 24840 Surr: BFB 93.6 80-120 %Rec 1 4/19/2016 9:12:43 PM 24840 **EPA METHOD 8021B: VOLATILES** Analyst: **NSB** Benzene 0.024 0.023 mg/Kg 1 4/19/2016 9:12:43 PM 24840 Toluene 4/19/2016 9:12:43 PM 24840 ND 0.047 mg/Kg 1 Ethylbenzene ND 0.047 mg/Kg 4/19/2016 9:12:43 PM 24840 1 ND Xylenes, Total 0.093 mg/Kg 1 4/19/2016 9:12:43 PM 24840 Surr: 4-Bromofluorobenzene 94.0 80-120 %Rec 1 4/19/2016 9:12:43 PM 24840

Qualifiers:	*	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
	R	RPD outside accepted recovery limits
	S	% Recovery outside of range due to dilution or matrix

- Analyte detected in the associated Method Blank В
- Е Value above quantitation range
- Analyte detected below quantitation limit Page 19 of 29 J
- Р Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

4/19/2016 9:36:17 PM

24840

Date Reported: 4/25/2016

Hall Environmental Analysis Laboratory, Inc.

Surr: 4-Bromofluorobenzene

CLIENT: Yates Petroleum Corporation Client Sample ID: 2-10' State CO SWD System (Johnston BE Bat **Project:** Collection Date: 4/13/2016 2:36:00 PM Lab ID: 1604667-020 Matrix: SOIL Received Date: 4/15/2016 9:25:00 AM Analyses Result **PQL** Qual Units **DF** Date Analyzed Batch **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: KJH Diesel Range Organics (DRO) ND 9.8 mg/Kg 4/20/2016 11:42:31 PM 24847 1 Surr: DNOP 83.0 70-130 %Rec 1 4/20/2016 11:42:31 PM 24847 **EPA METHOD 8015D: GASOLINE RANGE** Analyst: NSB Gasoline Range Organics (GRO) ND 4.6 mg/Kg 1 4/19/2016 9:36:17 PM 24840 Surr: BFB 94.4 80-120 %Rec 1 4/19/2016 9:36:17 PM 24840 **EPA METHOD 8021B: VOLATILES** Analyst: **NSB** Benzene 0.040 0.023 mg/Kg 1 4/19/2016 9:36:17 PM 24840 Toluene ND 0.046 mg/Kg 1 4/19/2016 9:36:17 PM 24840 Ethylbenzene ND 0.046 mg/Kg 4/19/2016 9:36:17 PM 24840 1 Xylenes, Total ND 0.093 mg/Kg 1 4/19/2016 9:36:17 PM 24840

80-120

%Rec

1

93.7

Qualifiers: *	Value exceeds Maximum Contaminant Level.	
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- D Sample Diluted Due to Matrix
- Н 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
- Analyte detected in the associated Method Blank В
- Е Value above quantitation range
- Analyte detected below quantitation limit Page 20 of 29 J
- Р Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Date Reported: 4/25/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Yates Petroleum Corporation Client Sample ID: 3-1' **Project:** State CO SWD System (Johnston BE Bat Collection Date: 4/13/2016 2:55:00 PM Lab ID: 1604667-021 Matrix: SOIL Received Date: 4/15/2016 9:25:00 AM Analyses Result **PQL Qual Units DF** Date Analyzed Batch **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: KJH 4/21/2016 12:04:03 AM 24847 **Diesel Range Organics (DRO)** ND 10 mg/Kg 1 Surr: DNOP 84.2 70-130 %Rec 1 4/21/2016 12:04:03 AM 24847 **EPA METHOD 8015D: GASOLINE RANGE** Analyst: NSB Gasoline Range Organics (GRO) ND 4/19/2016 9:59:49 PM 4.8 mg/Kg 1 24840

Surr: BFB	94.6	80-120	%Rec	1	4/19/2016 9:59:49 PM	24840
EPA METHOD 8021B: VOLATILES					Analyst	NSB
Benzene	ND	0.024	mg/Kg	1	4/19/2016 9:59:49 PM	24840
Toluene	ND	0.048	mg/Kg	1	4/19/2016 9:59:49 PM	24840
Ethylbenzene	ND	0.048	mg/Kg	1	4/19/2016 9:59:49 PM	24840
Xylenes, Total	ND	0.096	mg/Kg	1	4/19/2016 9:59:49 PM	24840
Surr: 4-Bromofluorobenzene	94.3	80-120	%Rec	1	4/19/2016 9:59:49 PM	24840

Qualifiers:	*	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
	R	RPD outside accepted recovery limits
	S	% Recovery outside of range due to dilution or matrix

- В Analyte detected in the associated Method Blank
- Е Value above quantitation range
- Analyte detected below quantitation limit Page 21 of 29 J
- Р Sample pH Not In Range
- RL Reporting Detection Limit
- Sample container temperature is out of limit as specified W

Date Reported: 4/25/2016

Hall Environmental Analysis Laboratory, Inc.

Project:

Lab ID:

Analyses

CLIENT: Yates Petroleum Corporation Client Sample ID: 3-2' State CO SWD System (Johnston BE Bat Collection Date: 4/13/2016 2:56:00 PM 1604667-022 Matrix: SOIL Received Date: 4/15/2016 9:25:00 AM Result **PQL** Qual Units **DF** Date Analyzed Batch **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: KJH Diesel Range Organics (DRO) 4/21/2016 12:25:47 AM 24847 ND 10 mg/Kg 1 Surr: DNOP 92.1 70-130 %Rec 1 4/21/2016 12:25:47 AM 24847 **EPA METHOD 8015D: GASOLINE RANGE** Analyst: NSB

Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	4/19/2016 10:23:17 PM 24840
Surr: BFB	95.3	80-120	%Rec	1	4/19/2016 10:23:17 PM 24840
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.025	mg/Kg	1	4/19/2016 10:23:17 PM 24840
Toluene	ND	0.049	mg/Kg	1	4/19/2016 10:23:17 PM 24840
Ethylbenzene	ND	0.049	mg/Kg	1	4/19/2016 10:23:17 PM 24840
Xylenes, Total	ND	0.099	mg/Kg	1	4/19/2016 10:23:17 PM 24840
Surr: 4-Bromofluorobenzene	95.4	80-120	%Rec	1	4/19/2016 10:23:17 PM 24840

Qualifiers:	*	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

- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- Analyte detected in the associated Method Blank В
- Е Value above quantitation range
- Analyte detected below quantitation limit Page 22 of 29 J
- Р Sample pH Not In Range
- Reporting Detection Limit RL
- Sample container temperature is out of limit as specified W

Date Reported: 4/25/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Yates Petroleum Corporation Client Sample ID: 3-3' **Project:** State CO SWD System (Johnston BE Bat Collection Date: 4/13/2016 2:57:00 PM Lab ID: 1604667-023 Matrix: SOIL Received Date: 4/15/2016 9:25:00 AM Analyses Result **PQL** Qual Units **DF** Date Analyzed Batch **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: KJH 4/21/2016 12:47:21 AM 24847 Diesel Range Organics (DRO) ND 9.4 mg/Kg 1 Surr: DNOP 95.3 70-130 %Rec 1 4/21/2016 12:47:21 AM 24847 **EPA METHOD 8015D: GASOLINE RANGE** Analyst: NSB Gasoline Range Organics (GRO) ND 4.7 mg/Kg 1 4/19/2016 10:46:44 PM 24840 Surr: BFB 92.9 80-120 %Rec 1 4/19/2016 10:46:44 PM 24840 **EPA METHOD 8021B: VOLATILES** Analyst: **NSB** Benzene ND 0.024 mg/Kg 1 4/19/2016 10:46:44 PM 24840 4/19/2016 10:46:44 PM 24840 Toluene ND 0.047 mg/Kg 1 Ethylbenzene ND 0.047 mg/Kg 4/19/2016 10:46:44 PM 24840 1 Xylenes, Total ND 0.095 mg/Kg 1 4/19/2016 10:46:44 PM 24840 Surr: 4-Bromofluorobenzene 91.5 80-120 %Rec 1 4/19/2016 10:46:44 PM 24840

Qualifiers:	*	Value exceeds Maximum Contaminant Level.
	D	Sample Diluted Due to Matrix

- Н Holding times for preparation or analysis exceeded
- Not Detected at the Reporting Limit ND
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- В Analyte detected in the associated Method Blank
- Е Value above quantitation range
- Analyte detected below quantitation limit Page 23 of 29 J
- Р Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Date Reported: 4/25/2016

4/19/2016 11:10:15 PM 24840

4/19/2016 11:10:15 PM 24840

Hall Environmental Analysis Laboratory, Inc.

Xylenes, Total

Surr: 4-Bromofluorobenzene

CLIENT: Yates Petroleum Corporation Client Sample ID: 3-4' **Project:** State CO SWD System (Johnston BE Bat Collection Date: 4/13/2016 3:00:00 PM Lab ID: 1604667-024 Matrix: SOIL Received Date: 4/15/2016 9:25:00 AM Analyses Result **PQL** Qual Units **DF** Date Analyzed Batch **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: KJH Diesel Range Organics (DRO) 4/21/2016 1:09:01 AM ND 9.7 mg/Kg 24847 1 Surr: DNOP 100 70-130 %Rec 1 4/21/2016 1:09:01 AM 24847 **EPA METHOD 8015D: GASOLINE RANGE** Analyst: NSB 4/19/2016 11:10:15 PM 24840 Gasoline Range Organics (GRO) ND 5.0 mg/Kg 1 Surr: BFB 93.8 80-120 %Rec 1 4/19/2016 11:10:15 PM 24840 **EPA METHOD 8021B: VOLATILES** Analyst: **NSB** 4/19/2016 11:10:15 PM 24840 Benzene ND 0.025 mg/Kg 1 4/19/2016 11:10:15 PM 24840 Toluene ND 0.050 mg/Kg 1 Ethylbenzene ND 0.050 mg/Kg 4/19/2016 11:10:15 PM 24840 1

0.10

80-120

mg/Kg

%Rec

1

1

ND

93.5

Qualifiers: *		Value exceeds Maximum Contaminant Level.
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- D Sample Diluted Due to Matrix
- Н 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
- Analyte detected in the associated Method Blank В
- Е Value above quantitation range
- Analyte detected below quantitation limit Page 24 of 29 J
- Р Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

	etroleum Corporation O SWD System (Johnston BE I	Battery)		
Sample ID MB-24846	SampType: MBLK		8015M/D: Diesel Range O	rganics
Client ID: PBS	Batch ID: 24846	RunNo: 33618		
Prep Date: 4/18/2016	Analysis Date: 4/19/2016	SeqNo: 1035550	Units: mg/Kg	
Analyte		SPK Ref Val %REC LowLimit	HighLimit %RPD R	PDLimit Qual
Diesel Range Organics (DRO) Surr: DNOP	ND 10 9.2 10.00	92.5 70	130	
Sample ID LCS-24846	SampType: LCS	TestCode: EPA Method	8015M/D: Diesel Range O	rganics
Client ID: LCSS	Batch ID: 24846	RunNo: 33618		
Prep Date: 4/18/2016	Analysis Date: 4/19/2016	SeqNo: 1035611	Units: mg/Kg	
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD R	PDLimit Qual
Diesel Range Organics (DRO)	48 10 50.00	0 95.7 65.8	136	
Surr: DNOP	4.6 5.000	92.5 70	130	
Sample ID LCS-24847	SampType: LCS	TestCode: EPA Method	8015M/D: Diesel Range O	rganics
Client ID: LCSS	Batch ID: 24847	RunNo: 33653		
Prep Date: 4/19/2016	Analysis Date: 4/20/2016	SeqNo: 1036419	Units: mg/Kg	
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD R	PDLimit Qual
Diesel Range Organics (DRO)	44 10 50.00	0 87.3 65.8	136	
Surr: DNOP	3.8 5.000	76.5 70	130	
Sample ID LCS-24873	SampType: LCS	TestCode: EPA Method	8015M/D: Diesel Range O	rganics
Client ID: LCSS	Batch ID: 24873	RunNo: 33653		
Prep Date: 4/19/2016	Analysis Date: 4/20/2016	SeqNo: 1036420	Units: %Rec	
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD R	PDLimit Qual
Surr: DNOP	3.8 5.000	75.2 70	130	
Sample ID LCS-24874	SampType: LCS	TestCode: EPA Method	8015M/D: Diesel Range O	rganics
Client ID: LCSS	Batch ID: 24874	RunNo: 33653		
Prep Date: 4/19/2016	Analysis Date: 4/20/2016	SeqNo: 1036421	Units: %Rec	
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD R	PDLimit Qual
Surr: DNOP	3.7 5.000	74.9 70	130	
Sample ID MB-24847	SampType: MBLK	TestCode: EPA Method	8015M/D: Diesel Range O	rganics
Client ID: PBS	Batch ID: 24847	RunNo: 33653		
Prep Date: 4/19/2016	Analysis Date: 4/20/2016	SeqNo: 1036422	Units: mg/Kg	
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD R	PDLimit Qual
Diesel Range Organics (DRO)	ND 10			
Surr: DNOP	7.4 10.00	73.9 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
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

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Client: Project:		es Petroleum Co e CO SWD Syst	•		Battery)						
Sample ID M	IB-24873	SampT	ype: MI	BLK	Test	tCode: E	PA Method	8015M/D: Die	esel Rang	e Organics	
Client ID: PI	BS	Batch	ID: 24	873	R	unNo: 3	3653				
Prep Date: 4	4/19/2016	Analysis D	ate: 4	/20/2016	S	eqNo: 1	036423	Units: %Re	0		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP		7.3		10.00		72.9	70	130			
Sample ID M	IB-24874	SampT	уре: М	BLK	Test	tCode: E	PA Method	8015M/D: Die	esel Rang	e Organics	
Client ID: PI	BS	Batch	ID: 24	874	R	unNo: 3	3653				
Prep Date: 4	4/19/2016	Analysis D	ate: 4	/20/2016	S	eqNo: 1	036424	Units: %Re	C		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP		8.3		10.00		83.3	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
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

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	Petroleum Corporation CO SWD System (Johnston BE	Battery)		
Sample ID MB-24836	SampType: MBLK	TestCode: EPA Method	8015D: Gasoline Range	9
Client ID: PBS	Batch ID: 24836	RunNo: 33600		
Prep Date: 4/15/2016	Analysis Date: 4/18/2016	SeqNo: 1033974	Units: %Rec	
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD	RPDLimit Qual
Surr: BFB	930 1000	93.4 80	120	
Sample ID LCS-24836	SampType: LCS	TestCode: EPA Method	8015D: Gasoline Range)
Client ID: LCSS	Batch ID: 24836	RunNo: 33600		
Prep Date: 4/15/2016	Analysis Date: 4/18/2016	SeqNo: 1033975	Units: %Rec	
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD	RPDLimit Qual
Surr: BFB	1000 1000	100 80	120	
Sample ID MB-24839	SampType: MBLK	TestCode: EPA Method	8015D: Gasoline Range)
Client ID: PBS	Batch ID: 24839	RunNo: 33600		
Prep Date: 4/15/2016	Analysis Date: 4/18/2016	SeqNo: 1033995	Units: mg/Kg	
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD	RPDLimit Qual
Gasoline Range Organics (GRO) Surr: BFB	ND 5.0 930 1000	93.5 80	120	
Sample ID LCS-24839	SampType: LCS	TestCode: EPA Method	8015D: Gasoline Range)
Client ID: LCSS	Batch ID: 24839	RunNo: 33600	0	
Prep Date: 4/15/2016	Analysis Date: 4/18/2016	SeqNo: 1033996	Units: mg/Kg	
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD	RPDLimit Qual
Gasoline Range Organics (GRO)	22 5.0 25.00	0 86.8 80	120	
Surr: BFB	1000 1000	101 80	120	
Sample ID MB-24840	SampType: MBLK	TestCode: EPA Method	8015D: Gasoline Range	9
Client ID: PBS	Batch ID: 24840	RunNo: 33642		
Prep Date: 4/16/2016	Analysis Date: 4/19/2016	SeqNo: 1035835	Units: mg/Kg	
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD	RPDLimit Qual
Gasoline Range Organics (GRO) Surr: BFB	ND 5.0 930 1000	93.4 80	120	
Sample ID LCS-24840	SampType: LCS	TestCode: EPA Method	8015D: Gasoline Range	9
Client ID: LCSS	Batch ID: 24840	RunNo: 33642	-	
Prep Date: 4/16/2016	Analysis Date: 4/19/2016	SeqNo: 1035836	Units: mg/Kg	
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD	RPDLimit Qual
· · · · · · · · · · · · · · · · · · ·				
Gasoline Range Organics (GRO) Surr: BFB	24 5.0 25.00 1000 1000	0 95.2 80 102 80	120 120	

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
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified
- Page 27 of 29

	Petroleum Corp CO SWD Syster	ooration m (Johnston BE l	Battery)				
Sample ID MB-24836	SampTyp	e: MBLK	Test	Code: EPA Method	8021B: Volatiles		
Client ID: PBS	Batch II	D: 24836	Ru	unNo: 33600			
Prep Date: 4/15/2016	Analysis Date	e: 4/18/2016	Se	eqNo: 1034018	Units: %Rec		
Analyte	Result	PQL SPK value	SPK Ref Val	%REC LowLimit	HighLimit %RI	PD RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.96	1.000		96.3 80	120		
Sample ID LCS-24836	SampTyp	e: LCS	Test	Code: EPA Method	8021B: Volatiles		
Client ID: LCSS	Batch II	D: 24836	Ru	unNo: 33600			
Prep Date: 4/15/2016	Analysis Date	e: 4/18/2016	Se	eqNo: 1034019	Units: %Rec		
Analyte	Result	PQL SPK value	SPK Ref Val	%REC LowLimit	HighLimit %RI	PD RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.0	1.000		101 80	120		
Sample ID MB-24839	SampTyp	e: MBLK	Test	Code: EPA Method	8021B: Volatiles		
Client ID: PBS	Batch II	D: 24839	Ru	unNo: 33600			
Prep Date: 4/15/2016	Analysis Date	e: 4/18/2016	Se	eqNo: 1034033	Units: mg/Kg		
Analyte	Result	PQL SPK value	SPK Ref Val	%REC LowLimit	HighLimit %RI	PD RPDLimit	Qual
Benzene	ND (0.025					
Toluene	ND (0.050					
Ethylbenzene		0.050					
Xylenes, Total	ND	0.10					
Surr: 4-Bromofluorobenzene	0.96	1.000		95.7 80	120		
Sample ID LCS-24839	SampTyp	e: LCS	Test	Code: EPA Method	8021B: Volatiles		
Client ID: LCSS	Batch II	D: 24839	Ru	unNo: 33600			
Prep Date: 4/15/2016	Analysis Date	e: 4/18/2016	Se	eqNo: 1034034	Units: mg/Kg		
Analyte	Result	PQL SPK value	SPK Ref Val	%REC LowLimit	HighLimit %RI	PD RPDLimit	Qual
Benzene	1.0 (0.025 1.000	0	100 75.3	123		
Toluene	0.93 (0.050 1.000	0	93.3 80	124		
Ethylbenzene	0.90 0	0.050 1.000	0	90.0 82.8	121		
Xylenes, Total	2.7	0.10 3.000	0	89.4 83.9	122		
Surr: 4-Bromofluorobenzene	1.0	1.000		101 80	120		
Sample ID MB-24840	SampTyp	e: MBLK	Test	Code: EPA Method	8021B: Volatiles		
Client ID: PBS	Batch II	D: 24840	Ri	unNo: 33642			
Prep Date: 4/16/2016	Analysis Date	e: 4/19/2016	Se	eqNo: 1035876	Units: mg/Kg		
Analyte			SPK Ref Val	%REC LowLimit	HighLimit %R	PD RPDLimit	Qual
Benzene		0.025					
Toluene		0.050					
Ethylbenzene		0.050					
Xylenes, Total	ND	0.10					

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
- W Sample container temperature is out of limit as specified
- Page 28 of 29
- t In Range

WO#:	1604667
	25-Apr-16

	Petroleum Co O SWD Sys	1		Battery)						
Sample ID MB-24840	SampT	ype: ME	BLK	Tes	tCode: El	PA Method	8021B: Vola	tiles		
Client ID: PBS	Batch	n ID: 24	840	F	unNo: 3	3642				
Prep Date: 4/16/2016	Analysis D	ate: 4/	19/2016	S	eqNo: 1	035876	Units: mg/k	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.95		1.000		94.9	80	120			
Sample ID LCS-24840	SampT	ype: LC	S	Tes	tCode: El	PA Method	8021B: Vola	tiles		
Client ID: LCSS	Batch	n ID: 24	840	F	unNo: 3	3642				
Prep Date: 4/16/2016	Analysis D	ate: 4/	19/2016	S	eqNo: 1	035884	Units: mg/H	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.88	0.025	1.000	0	88.1	75.3	123			
Toluene	0.87	0.050	1.000	0	87.4	80	124			
Ethylbenzene	0.89	0.050	1.000	0	88.5	82.8	121			
Kylenes, Total	2.7	0.10	3.000	0	88.6	83.9	122			
Surr: 4-Bromofluorobenzene	0.99		1.000		98.9	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
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

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HALL ENVIRONMENTAL ANALYSIS LABORATORY	Hall Environmental . Albu TEL: 505-345-3975 Website: www.hat	4901 Hawkin querque, NM 8 FAX: 505-345	s NE 7109 Sam 4107	ple Log-In C	heck List
Client Name: Yates Petroleum	Corpora Work Order Number:	1604667		RcptNo	1
Received by/date:	04/15/16				
Logged By: Joe Archuleta	4/15/2016 9:25:00 AM		JC-Ust JC-Ust		
Completed By: Joe Archuleta	4/15/2016 11:14:40 AN	1	n. lat		
Reviewed By: HT 04/15	116				
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?		<u>Courier</u>			
<u>Log In</u>					
4. Was an attempt made to cool the	ne 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 inc	licated test(s)?	Yes 🛃	No 🗌		
8. Are samples (except VOA and 0	ONG) properly preserved?	Yes 🛃	No []		
9. Was preservative added to bottl	es?	Yes 🗔	No 🖈	NA	
10.VOA vials have zero headspace	?	Yes	No []]	No VOA Vials 🛃	
11. Were any sample containers re	ceived broken?	Yes []	No 💌	# of preserved	
12. Does paperwork match bottle la (Note discrepancies on chain of		Yes 🛃	No		or >12 unless noted)
13. Are matrices correctly identified	on Chain of Custody?	Yes 🛃	No []]	Adjusted?	
14. Is it clear what analyses were re		Yes 🛃	No []		
15. Were all holding times able to b (If no, notify customer for author		Yes 🛃	No []	Checked by:	
Special Handling (if applica	ble)				
16. Was client notified of all discrep	ancies with this order?	Yes 📋	No [_]	NA 🛃	
Person Notified:			adala ada da sanata adalah da disah kada da da di		
By Whom:			Phone []] Fax	[_] In Person	
Regarding:	nanta man kanani minani minani di kana minini na manana kan manana manananana perinte wakanti yajakati	. Mallada - Sharada shika kata kata kata kata kata kata kata k	via u dela consectamente a constante que activativa de constante de constante de constante de constante de cons		
Client Instructions: 17. Additional remarks:					
18. Cooler Information					
Cooler NoTemp °CCo14.3Goo		Seal Date	Signed By		

	1 2010	etroleum	Yates Petroleum Corporation	X Standard	Need by: 4/21/2016	21/2016			ANALYSIS	LYS	SI	ABC	YSIS LABORATORY	ORY
				Project Name:					h.www.h	allenvi	ronme	www.hallenvironmental.com		
failing Address:	ess:			State CO SW	D System (State CO SWD System (Johnston BE Battery)	490	4901 Hawkins NE	tins NE		ndnerd	Albuquerque, NM 87109	87109	
05 South 4th Street	th Stre		Artesia, NM 88210	Project #:			Tel.	1. 505-3	505-345-3975		Fax 50	505-345-4107	107	
hone #:		575-513-	575-513-8799 or 575-748-4111		4/12/15 Release	elease				Analy	Analysis Request	quest		
mail or Fax#:		agriffin@	agriffin@yatespetroleum.com	Project Manager:	ger:		_	əsə			_			_
A/QC Package:				5	Amber Griffin	Sriffin		IQ/S					_	_
Standard			Level 4 (Full Validation)		PO # 205-2020	5-2020 A		ea:		_				
ccreditation:				Sampler:	A	Amber Griffin H6			_	1.				_
NELAP		□ Other		On Ice:	X Yes	O No	_		_	_	_		l. r	
EDD (Type)	e)			Sample Temperature:	perature: 4.	3			_	_		(A		
Date	Time	Matrix	Sample Request ID	Container Type and #	Preservativ e Type	1604667	rm + X <mark>ət</mark> ə	TPH Metho TPH Metho	ANG) (PUA ANG) 0168	RCRA 8 M), F) enoinA 9081 Pestid	OV) 80828	m92) 0728	
1/13/2016	1:24 Soil	Soil	1 - 1'	1 - 4oz.	lce	100-	×	×			×			
1/13/2016	1:27 Soil	Soil	1-2'	1 - 4oz.	lce	200-	×	×			×			
/13/2016	1:28 Soil	Soil	1-3'	1 - 4oz.	lce	-003	×	×			×	_		
113/2016	1:31 Soil	Soil	1-4'	1 - 4oz.	lce	-004	×	×			×			
13/2016	1:34 Soil	Soil	1-5'	1 - 4oz.	lce	-005	×	×			×			
13/2016	1:37 Soil	Soil	1-6'	1 - 4oz.	lce	-006	×	×			×			
113/2016	1:40 Soil	Soil	1 - 7'	1 - 4oz.	lce	100-	×	×			×		_	
1/13/2016	1:45 Soil	Soil	1-8'	1 - 4oz.	Ice	-008	×	×	_		×			
/13/2016	1:48 Soil	Soil	1 - 9'	1 - 4oz.	lce	600-	×	×	_		×			
1/13/2016	1:53 Soil	Soil	1 - 10'	1 - 4oz.	lce	-0/0	×	×			×			
1/13/2016	2:10 Soil	Soil	2 - 1'	1 - 4oz.	lce	110-	×	×			×			
1/13/2016	2:12	Soil	2-2'	1 - 4oz.	lce	-210-	×	×			×		_	_
11e	Time: (\$`,0 0	Relinquished by:	ed by: Der Criefta	Received by:	aut	04/15/16 0925	Remarks: TPH: { results as mg/kg.	s: TPH: as mg/kg.	H: 8015 G. Ani	8015B, BTEX: . Anions: Chlo Thank woul B	EX: 8021 Chloride	8021B. Pl ride only, l	0 0	ase show BTEX lease put on a Need analytical
late: T	Time:	Relinquished by:	ed by:	Received by:		Date Time	separate report. Thursday, April 21, 2016.	by Thur	sday, <i>F</i>	vpril 2	1, 2016			aiyuvai

Project Name: Project Name: Project Name: Annonantal commentation state CO SWD System (Joinston BE Battery) State CO SWD System (Joinston BE Battery) 400 1 Hawkins NE - Abuquerque, M strip Street Artesia, NM 88210 Project #: 412151 Release 412151 Release strip Street Artesia, NM 88210 Project Manger 412151 Release 400 1 Hawkins NE - Abuquerque, M strip Street Artesia, NM 88210 Project Manger 412151 Release 412151 Release strip Street Artesia, NM 88210 Project Manger 412151 Release 412151 Release strip Street Artesia, NM 88210 Project Manger 412151 Release 41215 Release strip Street Artesia, NM 88210 Project Manger 41215 Release 41215 Release adot Level 4 (Full Validation) Project Manger (Figl Manger of Release) 400 Figl Mathing (Release) adot Lawei 4 (Full Validation) Propect Manger of Release Annohartic Release Annohartic Release adot Lawei 4 (Full Validation) Propect Manger of Release Annohartic Release Annohartic Release Annohartic Release adot Lawoit 4 (Full Validation) Propect M	VIGUE. Takes Perioteuri Colporation	X Standard	X Standard Need by: 4/21/2016	:1/2016		1	ANALYSIS	IL YS		AB	ANALYSTS LABORATORY	
Time Matrix State CO SWD System (Johnston EE Battery) 4001 Hawkins NE - Albuquerque, N 41h Street Artesia, NM 88210 Project #: 41/21/5 Release 41/21/5 Release 41/21/5 Release 575-513-5799 or 575-748-4111 Project #: 41/21/5 Release 41/21/5 Release 41/21/5 Release Ath Street Artesia, NM 88210 Project #: 41/21/5 Release 41/21/5 Release 41/21/5 Release Ath Street Artesia, NM 88210 Project #: 41/21/5 Release 41/21/5 Release 41/21/5 Release Ath Street Artesia, NM 88210 Project Manager: Anaber Griffin Ac Anaber Griffin Ac Anaber Griffin Ac Ath Street Artesia Anaber Griffin Ac Anaber Griffin Ac Anaber Griffin Ac Anaber Griffin Ac Ath Active Access and		Project Name					WWW	hallenv		ntal.con		
Afth Street Artesia, NM 88210 Project #: Level Artesia, NM 88210 Fax 505-345-5075 Fax 505-345-5075 Fax 505-345-5075 Fax 505-345-5076 Fax 505-345-5070 Artabylis 600000 Artabylis 60000 Artabylis	failing Address:	State CO SM	-	ohnston BE Battery		01 Haw	kins N	E - Alt	nquer	iue, NM	87109	
ST5-512-9789 or 515-748-4111 41/2115 Refletee Addition St5-512-4711 41/215 Refletee Addition St5-512-67 41/2155 Refletee Addition St5-512-67 Addition St5-512-67 Addition St5-512-67 Addition St6-512-68 Addition St75-748-4111 Project Manager: Proservativ Addition St75-748-411 Project Manager: Addition Proservativ Addition St05-5058 Other Addition St05-5058 Other Addition St05-5058 Container Project Manager: Addition Addit 11, 10, 10, 10, 10, 10, 10, 10, 10, 10,	05 South 4th Street Artesia, NM 88210	Project #:			Te	el. 505-	345-39		-ax 50	5-345-4	107	
X#: Confirm@vatespectroleum.com Project Manager: Amber Griffin Amber Grifin Amber Griffin <th< th=""><th>hone #: 575-513-8799 or 575-748-4111</th><th></th><th></th><th>elease</th><th></th><th></th><th></th><th>Analy</th><th>sis Re</th><th>quest</th><th></th><th></th></th<>	hone #: 575-513-8799 or 575-748-4111			elease				Analy	sis Re	quest		
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Image: Contract of the intervention of the intervent of the interven	C Package:			riffin		iQ/s			_			
Difference Sampler: Amber Griffin Amber Griff			PO # 205	-2020		889)	_					
Conternation Matrix Sample Request ID Conticer Matrix Sample Request ID Container Preservativ HEAL No. HEAL No. <th< td=""><td>ditation:</td><td>Sampler:</td><td>Ar</td><td>nber Griffin AG</td><td></td><td></td><td></td><td>()</td><td></td><td></td><td></td><td>(N</td></th<>	ditation:	Sampler:	Ar	nber Griffin AG				()				(N
pel Sample Temperature: 4:3 BE Let Method 0 No.		On Ice:		O No				_	<u>.</u>		(40	JO
Time Matrix Sample Request ID Container Type and # Preservativ e Type HEAL No.	(adv	Sample Tem	4	3		_	_	_	0.00	(\	20-1	Y) :
2:14 Soil 2-3' 1 - 4oz Ice $-0/7$ X X </td <td>Time Matrix</td> <td>Container Type and #</td> <td>Preservativ e Type</td> <td>НЕАL NO. 1004667</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>OV) 80828</td> <td>ma<i>c)</i> 0128</td> <td>Air Bubbles</td>	Time Matrix	Container Type and #	Preservativ e Type	НЕАL NO. 1004667						OV) 80828	ma <i>c)</i> 0128	Air Bubbles
2:18 Soil $2-4^{\circ}$ $1-4oz$ Ice $-0/5$ \times </td <td>2:14 Soil 2</td> <td>1 - 4oz.</td> <td>lce</td> <td>-0/3</td> <td>×</td> <td>×</td> <td></td> <td></td> <td>×</td> <td></td> <td></td> <td></td>	2:14 Soil 2	1 - 4oz.	lce	-0/3	×	×			×			
2:20 Soil 2-5' 1 - 4oz. Ice $-0/5$ X X<	2:18 Soil 2	1 - 4oz.	Ice	~	×	×			×			
2:22 Soil $2 - 6'$ $1 - 4oz$ Ice $-0/6$ X X I X <	2:20 Soil		lce	-015	×	×			×			
2:26 Soil $2 \cdot 7'$ $1 - 402.$ Ice $-D/7$ X X N X	2:22 Soil 2		lce	2/0-	×	×			×			
2:29 Soil 2 - 8' 1 - 402. Ice $-0/9$ X X	2:26 Soil 2	1 - 4oz.	lce	-017	×	×			×			
2:32 Soil 2-9' 1 - 4oz. Ice $-0/4$ X X N X N X N<	2:29 Soil 2	1 - 4oz.	lce	1	×	×			×			
2:36 Soil 2 - 10' 1 - 4oz Ice $-0\ddot{L}0$ X X N X <	2:32 Soil	1 - 4oz.	Ice	~	×	×		_	×			
2:55 Soil 3 - 1' 1 - 4oz. Ice $-02/$ X X I X	2:36 Soil 2	1 - 4oz.	lce	N	×	×		_	×			
2:56Soil $3 \cdot 2'$ $1 \cdot 4oz$ Ice $-\mathcal{OZ}\mathcal{A}$ X	2:55 Soil	1 - 4oz.	lce	120-	×	×			×			
2:57 Soil3 - 3'1 - 4o2.Ice -023 XXXX3:00 Soil3 - 4'1 - 4o2.Ice -024 XXXXTime:Relinquished by:Received by:DateTimeRemarks:TPH:8015B, BTEX:8021B.XooQuark EndQuark EndPateTimeRemarks:TPH:8015B, BTEX:8021B.XooQuark EndQuark EndPateTimeRemarks:TPH:8015B, BTEX:8021B.XooQuark EndQuark EndPateTimeRemarks:TPH:8015B, BTEX:8021B.XooQuark EndQuark EndPateTimeRemarks:TPH:8015B, BTEX:8021B.Time:Relinquished by:Received by:DateTimeReparate report.Thank you!Page 1 of the feature for Thirtector And 21 2016.Time:Relinquished by:Relinquished by:Received by:DateTimeReport.7016.	2:56 Soil	1 - 4oz.	lce	a	×	×	_		×			
3:00Soil3 - 4'1 - 4oz.Ice -0.2 XXXXTime:Relinquished by:Received by:DateTimeRemarks:TPH:8015B, BTEX:8021B. $\bigotimes O$ <t< td=""><td>2:57 Soil</td><td>1 - 4oz.</td><td>lce</td><td>-023</td><td>×</td><td>×</td><td></td><td></td><td>×</td><td></td><td></td><td></td></t<>	2:57 Soil	1 - 4oz.	lce	-023	×	×			×			
Time: Relinquished by: Received by: Date Time Remarks: TPH: 8015B, BTEX: 8021B. <u>SOD</u> <u>Ounder Griffing</u> <u>Received by: Received by: Date Time</u> separate report. Thank you! Page 1 of Time: Relinquished by: Received by: Date Time Date Time received by: Date received by: Dat	3:00 Soil	1 - 4oz.	lce		×	· · · · · · · · · · · · · · · · · · ·			×			
Relinquished by: Received by: Date Time Separate report. Intain you: Fage 1 OI 2 Need	Time: Re	Received by:		li (0	Remark	s: TP as mg/	H: 80' kg. A	l5B, BT lions:	EX: 8 Chlori	de only.	Please show BTEX , please put on a	× -
	άč.	Affectived by:			results	by Thu	rsday,	April 2		5	DAANI	-