MARTIN YATES, III 1912-1985 FRANK W. YATES 1936-1986

> S.P YATES 1914-2008



105 SOUTH FOURTH STREET ARTESIA, NEW MEXICO 88210-2118

TELEPHONE (575) 748-1471

www.yatespetroleum.com

PRESIDENT

DOUGLAS E. BROOKS CHIEF EXECUTIVE OFFICER

JOHN A. YATES

CHAIRMAN EMERITUS

JOHN A. YATES JR.

JOHN D. PERINI CHIEF FINANCIAL OFFICER

June 24, 2016

Mr. Mike Bratcher or Ms. Heather Patterson NMOCD District II 811 South First Artesia, NM 88210

RE: Donahue Federal SWD #1

30-015-00087

Section 10, T20S-R24E Eddy County, New Mexico

Mr. Bratcher or Ms. Patterson,

Yates Petroleum Corporation would like to submit the following plan of work to you regarding the release that occurred at the above mentioned facility on June 1, 2016 (2RP-3737). The release was 6 barrels of produced water with 5 barrels of produced water recovered.

With NMOCD approval of this work plan, Yates will hold a bid meeting allowing several contractors the opportunity to submit bids on this remediation project. Bids that are received will be forwarded to Yates Management for review. Once Yates Management reviews the bids and gives approval, the remediation project will be awarded to a contractor for work to commence.

If you have any questions or concerns, I can be reached at (575) 748-4111 or by email at agriffin@yatespetroleum.com.

Thank You,

Amber Griffin

Environmental Regulatory Agent

mber Griffin

Yates Petroleum Corporation

Yates Petroleum Corporation

Donahue Federal SWD #1

Section 10, T20S-R24E

Eddy County, New Mexico

June 24, 2016

I. Location

Travel south of Artesia to Rock Daisy Road. Turn right and go approximately 8.5 miles to the curve and continue south on pavement for approximately 2 miles. Turn right on a lease road and go approximately 1.5 miles to location.

II. Background

On June 1, 2016, Yates had a release of 6 barrels produced water with 5 barrels produced water recovered. The area affected from this release was on the south, west and north sides of the pump house on location. The pump house also has a berm around it, which prevented the released fluids from spreading horizontally. An initial Form C-141 was submitted, via email, to the NMOCD District II on June 10, 2016.

On June 13, 2016 Yates visited the site and collected soil samples from the release area. The release area was split into three sections – Section 1 (south), Section 2 (west) and Section 3 (north) from around the pump house. The soil samples were sent to an approved NMOCD laboratory and tested for BTEX 8021B, TPH 8015M, and Chlorides 300.0. Yates received the analytical results on June 23, 2016 (Report 1606762 attached to this work plan).

- Section 1 samples were taken from the surface and from the depths of 1' 5' below
 the surface level. Analytical results show that both TPH and BTEX are at levels
 below NMOCD RRAL's. Chloride levels are shown to be fully delineated.
- Section 2 samples were taken only from the surface. An impenetrable rock layer was
 encountered and the backhoe, after many attempts, was unable to break through the
 naturally occurring barrier. Analytical results show that both TPH and BTEX are at
 levels below NMOCD RRAL's. Chloride levels are elevated, but further delineation
 is impracticable due to the solid rock that layer that was encountered.
- Section 3 samples were taken from the surface and from the depths of 1' 3' below the surface level. A solid rock layer was encountered and the backhoe, after many attempts, was unable to break through the naturally occurring barrier. Analytical results show that both TPH and BTEX are at levels below NMOCD RRAL's. Chloride levels are shown to be decreasing with a result of 1,800 ppm at 3' below the surface level, just prior to encountering the impenetrable rock layer.

III. Surface and Ground Water

Area surface geology is Cenozoic. The ChevronTexaco depth to ground water map shows the depth to groundwater to be approximately 225' feet making the site ranking for this site a zero (0). Watercourses in the area are dry except for infrequent flows in response to major precipitation events.

The ranking for this site is zero (0) based on the following:

Depth to ground water 50-99'
Wellhead Protection Area > 1000'

Distance to surface water body > 1000'

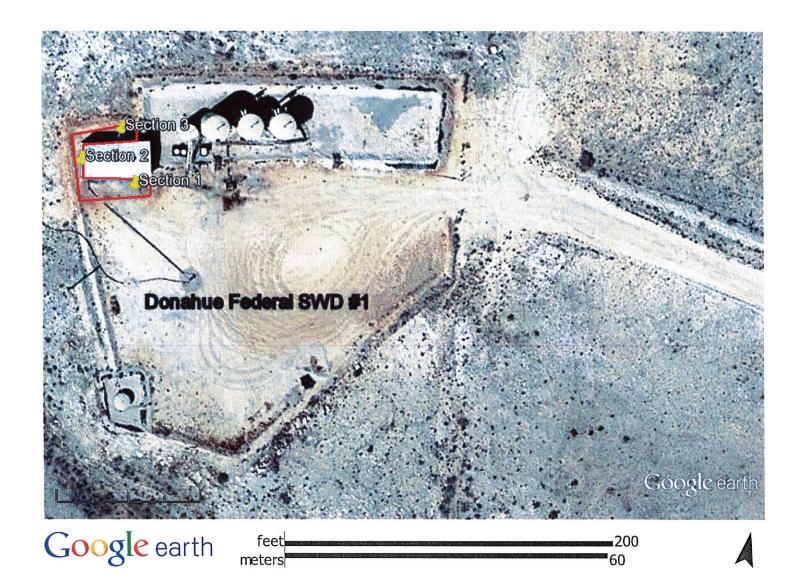
IV. Soils

The area consists of soils that are rock.

V. Scope of Work

Based on the enclosed analytical reports and an impermeable rock layer, Yates proposes the following excavation work:

- Section 1 Excavate 4' of soils and backfill with caliche.
- Section 2 Excavate all soils above the rock layer. The solid rock layer at this
 location has served, and will serve as a natural barrier to any future releases that may
 occur.
- Section 3 Excavate 3' of soils and backfill with caliche. The solid rock layer at this location has served, and will serve as a natural barrier to any future releases that may occur.
- Contaminated soils that are excavated will be hauled to a NMOCD approved disposal facility.
- Once all excavation and backfill work is complete, Yates will submit a Final Form C-141 to NMOCD requesting closure of this release.



Donahue Federal SWD #1

	Sample Area	Sample Date	Analytical Report	Sample Type	Depth	BTEX	GRO	DRO	BTEX GRO DRO TOTAL	Chlorides
1 - Surface	Release Area	6/13/2016	1606762	Grab/Backhoe	Surface	ND	ND	540	540	3,100
1-1	Release Area	6/13/2016	1606762	Grab/Backhoe	1.	Q	N	130	130	9,500
1-2'	Release Area	6/13/2016	1606762	Grab/Backhoe	2.	Q	QN	Q	ND	6,000
1-3'	Release Area	6/13/2016	1606762	Grab/Backhoe	3,	Q	ND	16	16	4,600
1-4	Release Area	6/13/2016	1606762	Grab/Backhoe	.4	Q	Q	240	240	2,300
1-5	Release Area	6/13/2016	1606762	Grab/Backhoe	5,	Q	ND	Q	ND	290
2 - Surface	Release Area	6/13/2016	1606762	Grab/Backhoe	Surface	ND	ΩN	28	28	4,900
3 - Surface	Release Area	6/13/2016	1606762	Grab/Backhoe	Surface	ND	38	4800	4838	6,400
3-1	Release Area	6/13/2016	1606762	Grab/Backhoe	1.	ND	ND	210	210	4,000
3-2'	Release Area	6/13/2016	1606762	Grab/Backhoe	2'	Q	N	Q	ND	2,600
3-3'	Release Area	6/13/2016	1606762	Grab/Backhoe	3'	Ð	ND	16	16	1,800
	The state of the s		THE REAL PROPERTY AND PERSONS ASSESSED.	The same of the sa						

Site Ranking is Zero (0). Depth to Ground Water >100' (approx. 225', per ChevronTexaco Trend Map).

All results are ppm.

Released: 6 B/PW; Recovered: 5 B/PW. Release Date: 6/1/2016. 2RP-3737



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

June 23, 2016

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

FAX

RE: Donahue Federal SWD 1 OrderNo.: 1606762

Dear Amber Griffin:

Hall Environmental Analysis Laboratory received 11 sample(s) on 6/14/2016 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

andel

4901 Hawkins NE

Albuquerque, NM 87109

Lab Order: 1606762

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 6/23/2016

CLIENT: Yates Petroleum Corporation Lab Order: 1606762 Project: Donahue Federal SWD 1 Lab ID: 1606762-001 Collection Date: 6/13/2016 8:08:00 AM Client Sample ID: 1-Surface Matrix: SOIL Result Analyses PQL Qual Units DF Date Analyzed **Batch ID EPA METHOD 300.0: ANIONS** Analyst: LGT Chloride 3100 150 mg/Kg 100 6/16/2016 5:03:24 PM 25885 Lab ID: 1606762-002 Collection Date: 6/13/2016 8:11:00 AM Client Sample ID: 1-1' Matrix: SOIL Analyses Result **PQL Qual Units DF** Date Analyzed **Batch ID EPA METHOD 300.0: ANIONS** Analyst: LGT Chloride 9500 300 mg/Kg 200 6/16/2016 5:15:49 PM 25885 Lab ID: 1606762-003 Collection Date: 6/13/2016 8:14:00 AM Client Sample ID: Matrix: SOIL Result PQL Qual Units Analyses **DF** Date Analyzed **Batch ID EPA METHOD 300.0: ANIONS** Analyst: LGT Chloride 6000 300 200 6/16/2016 5:28:13 PM mg/Kg 25885 Lab ID: 1606762-004 Collection Date: 6/13/2016 8:18:00 AM Client Sample ID: 1-3' Matrix: SOIL Analyses Result PQL Qual Units DF Date Analyzed **Batch ID EPA METHOD 300.0: ANIONS** Analyst: LGT Chloride 4600 150 mg/Kg 100 6/16/2016 5:40:38 PM 25885 Lab ID: 1606762-005 Collection Date: 6/13/2016 8:30:00 AM Client Sample ID: Matrix: SOIL Analyses Result **PQL Qual Units DF** Date Analyzed **Batch ID EPA METHOD 300.0: ANIONS** Analyst: LGT Chloride 2300 75 mg/Kg 50 6/16/2016 5:53:02 PM 25885

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 4
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Lab Order: 1606762

Date Reported: 6/23/2016

1606762

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Project:

Yates Petroleum Corporation

Client Sample ID: 1-5'

Donahue Federal SWD 1

Lab ID:

1606762-006

Collection Date: 6/13/2016 8:36:00 AM

Lab Order:

Matrix: SOIL

Analyses

Result

Result

4900

PQL Qual Units

DF Date Analyzed

Batch ID

Analyst: LGT

EPA METHOD 300.0: ANIONS

Chloride

290 30 mg/Kg

20 6/15/2016 1:43:15 PM 25885

Lab ID:

1606762-007

Collection Date: 6/13/2016 8:56:00 AM

Client Sample ID: 2-Surface

Matrix: SOIL

Batch ID

Analyses

EPA METHOD 300.0: ANIONS

PQL Qual Units

DF Date Analyzed

Analyst: LGT

Chloride

1606762-008

150

mg/Kg

100 6/16/2016 6:05:27 PM 25885

Lab ID:

Matrix: SOIL

Collection Date: 6/13/2016 9:05:00 AM

Analyses

Client Sample ID: 3-Surface

Result

PQL Qual Units

DF Date Analyzed

DF Date Analyzed

Batch ID

EPA METHOD 300.0: ANIONS

Chloride

6400

Result

4000

300

mg/Kg

200 6/16/2016 6:17:51 PM

Analyst: LGT 25885

Lab ID:

Analyses

1606762-009

Collection Date: 6/13/2016 9:10:00 AM

Client Sample ID: 3-1'

PQL Qual Units

Matrix: SOIL

Batch ID

EPA METHOD 300.0: ANIONS

150

Analyst: LGT 100 6/16/2016 6:30:15 PM 25885

Lab ID:

Chloride

1606762-010

mg/Kg

Collection Date: 6/13/2016 9:18:00 AM Matrix: SOIL

Client Sample ID: Analyses

Result

Batch ID

EPA METHOD 300.0: ANIONS

PQL Qual Units

DF Date Analyzed

Chloride

2600

75

mg/Kg

50 6/16/2016 6:42:39 PM 25885

Analyst: LGT

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

Qualifiers:

Value exceeds Maximum Contaminant Level.

Sample Diluted Due to Matrix D

Η 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 Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

Page 2 of 4

P Sample pH Not In Range

Reporting Detection Limit RL

Sample container temperature is out of limit as specified

Lab Order: 1606762

Date Reported: 6/23/2016

1606762

Hall Environmental Analysis Laboratory, Inc.

CLIENT:

Yates Petroleum Corporation

Project:

Lab ID:

Donahue Federal SWD 1

1606762-011

Collection Date: 6/13/2016 9:28:00 AM

Lab Order:

Matrix: SOIL

Analyses

Client Sample ID: 3-3'

Result

PQL Qual Units

DF Date Analyzed

Batch ID

Analyst: LGT

EPA METHOD 300.0: ANIONS

Chloride

1800

75

mg/Kg

6/16/2016 6:55:05 PM 25885

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

Qualifiers:

- 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
- 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 J

Page 3 of 4

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

Hall Environmental Analysis Laboratory, Inc.

WO#: 1606762

23-Jun-16

Client:

Yates Petroleum Corporation

Project:

Donahue Federal SWD 1

Sample ID MB-25885

SampType: mblk

TestCode: EPA Method 300.0: Anions

LowLimit

Client ID:

PBS

Batch ID: 25885

PQL

PQL

1.5

RunNo: 34957

Prep Date: 6/15/2016

Analysis Date: 6/15/2016

Result

ND

Units: mg/Kg

Analyte

SeqNo: 1080065

HighLimit

%RPD **RPDLimit** Qual

Chloride

SampType: Ics

TestCode: EPA Method 300.0: Anions

Sample ID LCS-25885 Client ID:

LCSS

Batch ID: 25885

RunNo: 34957

Units: mg/Kg

Prep Date: 6/15/2016

Analysis Date: 6/15/2016

SeqNo: 1080066

HighLimit

%RPD **RPDLimit**

Analyte

Result

SPK value SPK Ref Val %REC 1.5

SPK value SPK Ref Val %REC

96.0

Qual

15.00

90

LowLimit

Chloride

14

110

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 % Recovery outside of range due to dilution or matrix

В Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

Page 4 of 4

Sample pH Not In Range P

RL Reporting Detection Limit Sample container temperature is out of limit as specified



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

Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: Yates Petroleum Corporat	Work Order	Number:	1606762		RcptNo: 1	
Received by/date: Logged By: Lindsay Mangin	OG /14/10 6/14/2016 10:	J 00:00 AM		Standay Albertige		
Completed By: Lindsay Mangin	6/14/2016 3:0	5:20 PM		Junely Hlefy		į
	06/15/16	6		0 . 0		8
Chain of Custody	יון כון טו					- "
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						
Was an attempt made to cool the sample	s?		Yes 🗹	No 🗆	na 🗆	
5. Were all samples received at a temperature	ure 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 tea	st(s)?		Yes 🐼	No 🗆		
8. Are samples (except VOA and ONG) pro			Yes 🕏	No 🗆	Brings	
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 br	roken?		Yes 🗆	No 🗹	# of preserved	
					bottles checked	
12.Does paperwork match bottle labels?			Yes 🏕	No 🗆	for pH: (<2 (or >12 unless noted)
(Note discrepancies on chain of custody)			Yes 🏚	No □	Adjusted?	
13. Are matrices correctly identified on Chair 14. Is it clear what analyses were requested			Yes 🗹			
15. Were all holding times able to be met? (If no, notify customer for authorization.)			Yes 🗹		Checked by:	
Special Handling (if applicable)					na 🐼	
16. Was client notified of all discrepancies v	vith this order?		Yes 🗆] No []	NA 💆	i .
Person Notified:		Date:				!
By Whom:		Via:	eMail	☐ Phone ☐ Fax	In Person	1
Regarding:						I
Client Instructions:						
17. Additional remarks:						
18. Cooler Information						
Cooler No Temp °C Condition		Seal No	Seal Date	Signed By		
1 1.7 Good	Yes					

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HAII ENVIDONMENTAI	LABORATORY		Albuquerque, NM 87109	20																					Please show BTEX	Anions: Chloride only, please show on a	
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			49	Te					-			BTEX + MT													Remarks:	results as mg/kg.	separate report.
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Time:	□ Rush	ë	Donahue Federal SWD #1		6/1/2016 Release	iger:	Amber Griffin	PO # 205-2020	Am	X Yes	perature: / , ^r	Preservativ e Type	Ice	lce	lce	lce	lce ez	lce	lce	lce	9 <u>0</u>	lce	lce			ut 091	
Tum-Around Time:	□ Standard	Project Name:	Õ	Project #:		Project Manager:			Sampler:	On Ice:	Sample Temperature:	Container Type and #	1 - 4 oz.	1 - 4 02	1 - 4 oz.	1 - 4 oz.	1-402.	1 - 4 02.	1 - 4 02.	1 - 4 oz.	1 - 4 oz.	1 - 4 oz.	1 - 4 oz.		Received by:	INE. A	Received by:
Chain-of-Custody Record	Yates Petroleum Corporation			05 South 4th Street Artesia, NM 88210	575-513-8799 or 575-748-4111	agriffin@yatespetroleum.com		☐ Level 4 (Full Validation)		□ Other		Matrix Sample Request ID	1 - Surface	1-1,	1-2'	1-3'	1-4'	1-5	2 - Surface	3 - Surface	3-1,	3-2'	3-3		Relinquished by:	limber 6 within	Relinquished by:
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hain-c	Yates F		ddress:	h 4th Str		ax#:	ckage:	<u>r</u> d	ion:		ype)	Тіте	8:08 Soil	8:11 Soil	8:14 Soil	8:18 Soil	8:30 Soil	8:36 Soil	8:56 Soil	9:05 Soil	9:10 Soil	9:18 Soil			Time:	2:00	Тіте:
ਹ	lient:		falling Address:	05 South	hone #:	mail or Fax#:	MQC Package:	1 Standard	ccreditation:	1 NELAP	1 EDD (Type)	Date	/13/2016	113/2016	/13/2016	/13/2016	/13/2016	/13/2016	/13/2016	/13/2016	/13/2016	/13/2016	/13/2016		ate:	(13)/6	ate:



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

OrderNo.: 1606762

June 23, 2016

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

FAX

RE: Donahue Federal SWD 1

Dear Amber Griffin:

Hall Environmental Analysis Laboratory received 11 sample(s) on 6/14/2016 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

andel

4901 Hawkins NE

Albuquerque, NM 87109

Lab Order 1606762

Date Reported: 6/23/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Yates Petroleum Corporation

Project: Donahue Federal SWD 1

Lab ID: 1606762-001

Client Sample ID: 1-Surface

Collection Date: 6/13/2016 8:08:00 AM

Received Date: 6/14/2016 10:00:00 AM

Analyses	Result	PQL (Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RAN	IGE ORGANICS					Analys	: JME
Diesel Range Organics (DRO)	540	97		mg/Kg	10	6/16/2016 2:05:52 PM	25834
Surr: DNOP	0	70-130	S	%Rec	10	6/16/2016 2:05:52 PM	25834
EPA METHOD 8015D: GASOLINE RA	NGE					Analys	: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	6/16/2016 5:12:49 PM	25868
Surr: BFB	106	80-120		%Rec	1	6/16/2016 5:12:49 PM	25868
EPA METHOD 8021B: VOLATILES						Analys	: NSB
Benzene	ND	0.025		mg/Kg	1	6/16/2016 5:12:49 PM	25868
Toluene	ND	0.049		mg/Kg	1	6/16/2016 5:12:49 PM	25868
Ethylbenzene	ND	0.049		mg/Kg	1	6/16/2016 5:12:49 PM	25868
Xylenes, Total	ND	0.098		mg/Kg	1	6/16/2016 5:12:49 PM	25868
Surr: 4-Bromofluorobenzene	102	80-120		%Rec	1	6/16/2016 5:12:49 PM	25868

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 1 of 14
- P Sample pH Not In Range
- RL Reporting Detection Limit
 - W Sample container temperature is out of limit as specified

Lab Order 1606762

Date Reported: 6/23/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Yates Petroleum Corporation

Client Sample ID: 1-1'

Matrix: SOIL

Donahue Federal SWD 1 Project: 1606762-002

Lab ID:

Collection Date: 6/13/2016 8:11:00 AM Received Date: 6/14/2016 10:00:00 AM

Analyses	Result	PQL Qu	al Units	DF Date Analyzed Bat	tch
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS			Analyst: JM	IE
Diesel Range Organics (DRO)	130	100	mg/Kg	10 6/16/2016 2:49:20 PM 258	334
Surr: DNOP	0	70-130	S %Rec	10 6/16/2016 2:49:20 PM 258	334
EPA METHOD 8015D: GASOLINE RA	NGE			Analyst: NS	В
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1 6/16/2016 5:36:18 PM 258	868
Surr: BFB	105	80-120	%Rec	1 6/16/2016 5:36:18 PM 258	868
EPA METHOD 8021B: VOLATILES				Analyst: NS	В
Benzene	ND	0.025	mg/Kg	1 6/16/2016 5:36:18 PM 258	868
Toluene	ND	0.050	mg/Kg	1 6/16/2016 5:36:18 PM 258	868
Ethylbenzene	ND	0.050	mg/Kg	1 6/16/2016 5:36:18 PM 258	868
Xylenes, Total	ND	0.099	mg/Kg	1 6/16/2016 5:36:18 PM 258	868
Surr: 4-Bromofluorobenzene	102	80-120	%Rec	1 6/16/2016 5:36:18 PM 258	868

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
- Analyte detected in the associated Method Blank
- Value above quantitation range
- Analyte detected below quantitation limits Page 2 of 14
- P Sample pH Not In Range
- Reporting Detection Limit
- Sample container temperature is out of limit as specified

Lab Order 1606762

Date Reported: 6/23/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Yates Petroleum Corporation

Donahue Federal SWD 1 Project:

Lab ID: 1606762-003 Client Sample ID: 1-2'

Collection Date: 6/13/2016 8:14:00 AM

Received Date: 6/14/2016 10:00:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS				Analyst	: JME
Diesel Range Organics (DRO)	ND	9.7	mg/Kg	1	6/16/2016 3:32:47 PM	25834
Surr: DNOP	104	70-130	%Rec	1	6/16/2016 3:32:47 PM	25834
EPA METHOD 8015D: GASOLINE RAM	NGE				Analyst	: NSB
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	6/16/2016 5:59:53 PM	25868
Surr: BFB	108	80-120	%Rec	1	6/16/2016 5:59:53 PM	25868
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.025	mg/Kg	1	6/16/2016 5:59:53 PM	25868
Toluene	ND	0.050	mg/Kg	1	6/16/2016 5:59:53 PM	25868
Ethylbenzene	ND	0.050	mg/Kg	1	6/16/2016 5:59:53 PM	25868
Xylenes, Total	ND	0.099	mg/Kg	1	6/16/2016 5:59:53 PM	25868
Surr: 4-Bromofluorobenzene	105	80-120	%Rec	1	6/16/2016 5:59:53 PM	25868

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
- Н Holding times for preparation or analysis exceeded
- Not Detected at the Reporting Limit ND
- RPD outside accepted recovery limits
- % 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 3 of 14
- P Sample pH Not In Range
- RL Reporting Detection Limit
- Sample container temperature is out of limit as specified

Lab Order 1606762

Date Reported: 6/23/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Yates Petroleum Corporation

Project: Donahue Federal SWD 1

Lab ID: 1606762-004

Client Sample ID: 1-3'

Collection Date: 6/13/2016 8:18:00 AM

Received Date: 6/14/2016 10:00:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RAI	NGE ORGANICS				Analyst	:: JME
Diesel Range Organics (DRO)	16	9.6	mg/Kg	1	6/16/2016 3:54:32 PM	25834
Surr: DNOP	104	70-130	%Rec	1	6/16/2016 3:54:32 PM	25834
EPA METHOD 8015D: GASOLINE RA	ANGE				Analyst	: NSB
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	6/16/2016 6:23:24 PM	25868
Surr: BFB	107	80-120	%Rec	1	6/16/2016 6:23:24 PM	25868
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.024	mg/Kg	1	6/16/2016 6:23:24 PM	25868
Toluene	ND	0.048	mg/Kg	1	6/16/2016 6:23:24 PM	25868
Ethylbenzene	ND	0.048	mg/Kg	1	6/16/2016 6:23:24 PM	25868
Xylenes, Total	ND	0.095	mg/Kg	1	6/16/2016 6:23:24 PM	25868
Surr: 4-Bromofluorobenzene	103	80-120	%Rec	1	6/16/2016 6:23:24 PM	25868

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 4 of 14
- P Sample pH Not In Range
- RL Reporting Detection Limit
 - W Sample container temperature is out of limit as specified

Lab Order 1606762

Date Reported: 6/23/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Yates Petroleum Corporation

Project: Donahue Federal SWD 1

Lab ID: 1606762-005

Client Sample ID: 1-4'

Collection Date: 6/13/2016 8:30:00 AM

Received Date: 6/14/2016 10:00:00 AM

Analyses	Result	PQL Q	ual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANG	GE ORGANICS					Analys	: JME
Diesel Range Organics (DRO)	240	94		mg/Kg	10	6/16/2016 4:37:48 PM	25834
Surr: DNOP	0	70-130	s	%Rec	10	6/16/2016 4:37:48 PM	25834
EPA METHOD 8015D: GASOLINE RAN	IGE					Analys	t: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	6/16/2016 11:27:49 PM	1 25868
Surr: BFB	120	80-120		%Rec	1	6/16/2016 11:27:49 PM	1 25868
EPA METHOD 8021B: VOLATILES						Analys	t: NSB
Benzene	ND	0.024		mg/Kg	1	6/16/2016 11:27:49 PM	1 25868
Toluene	ND	0.049		mg/Kg	1	6/16/2016 11:27:49 PM	1 25868
Ethylbenzene	ND	0.049		mg/Kg	1	6/16/2016 11:27:49 PM	1 25868
Xylenes, Total	ND	0.097		mg/Kg	1	6/16/2016 11:27:49 PM	1 25868
Surr: 4-Bromofluorobenzene	106	80-120		%Rec	1	6/16/2016 11:27:49 PM	1 25868

Matrix: SOIL

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

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 5 of 14
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Lab Order 1606762

Date Reported: 6/23/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Yates Petroleum Corporation

Project: Donahue Federal SWD 1

Lab ID: 1606762-006

Client Sample ID: 1-5'

Collection Date: 6/13/2016 8:36:00 AM

Received Date: 6/14/2016 10:00:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RAM	IGE ORGANICS				Analyst	: JME
Diesel Range Organics (DRO)	ND	9.6	mg/Kg	1	6/16/2016 5:21:14 PM	25834
Surr: DNOP	105	70-130	%Rec	1	6/16/2016 5:21:14 PM	25834
EPA METHOD 8015D: GASOLINE RA	NGE				Analyst	: NSB
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	6/16/2016 11:51:10 PM	25868
Surr: BFB	108	80-120	%Rec	1	6/16/2016 11:51:10 PM	25868
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.025	mg/Kg	1	6/16/2016 11:51:10 PM	25868
Toluene	ND	0.049	mg/Kg	1	6/16/2016 11:51:10 PM	25868
Ethylbenzene	ND	0.049	mg/Kg	1	6/16/2016 11:51:10 PM	25868
Xylenes, Total	ND	0.099	mg/Kg	1	6/16/2016 11:51:10 PM	25868
Surr: 4-Bromofluorobenzene	105	80-120	%Rec	1	6/16/2016 11:51:10 PM	25868

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 6 of 14
- P Sample pH Not In Range
- RL Reporting Detection Limit
 - W Sample container temperature is out of limit as specified

Lab Order 1606762

Date Reported: 6/23/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Yates Petroleum Corporation

Project: Donahue Federal SWD 1

Lab ID: 1606762-007 Client Sample ID: 2-Surface

Collection Date: 6/13/2016 8:56:00 AM

Received Date: 6/14/2016 10:00:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RAN	IGE ORGANICS	i			Analy	st: JME
Diesel Range Organics (DRO)	28	9.4	mg/Kg	1	6/17/2016 10:32:28 A	M 25855
Surr: DNOP	116	70-130	%Rec	1	6/17/2016 10:32:28 A	M 25855
EPA METHOD 8015D: GASOLINE RA	NGE				Analy	st: NSB
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	6/17/2016 12:14:31 A	M 25868
Surr: BFB	105	80-120	%Rec	1	6/17/2016 12:14:31 A	M 25868
EPA METHOD 8021B: VOLATILES					Analy	st: NSB
Benzene	ND	0.024	mg/Kg	1	6/17/2016 12:14:31 A	M 25868
Toluene	ND	0.048	mg/Kg	1	6/17/2016 12:14:31 A	M 25868
Ethylbenzene	ND	0.048	mg/Kg	1	6/17/2016 12:14:31 A	M 25868
Xylenes, Total	ND	0.096	mg/Kg	1	6/17/2016 12:14:31 A	M 25868
Surr: 4-Bromofluorobenzene	98.6	80-120	%Rec	1	6/17/2016 12:14:31 A	M 25868

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
- 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
- Е Value above quantitation range
- Analyte detected below quantitation limits Page 7 of 14
- P Sample pH Not In Range
- RLReporting Detection Limit
- Sample container temperature is out of limit as specified

Lab Order 1606762

Date Reported: 6/23/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Yates Petroleum Corporation

Client Sample ID: 3-Surface

Project: Donahue Federal SWD 1

Collection Date: 6/13/2016 9:05:00 AM

Lab ID: 1606762-008

Received Date: 6/14/2016 10:00:00 AM

Analyses	Result	PQL Q)ual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RA	NGE ORGANICS					Analys	t: JME
Diesel Range Organics (DRO)	4800	990		mg/Kg	100	6/16/2016 6:26:44 PM	25855
Surr: DNOP	0	70-130	S	%Rec	100	6/16/2016 6:26:44 PM	25855
EPA METHOD 8015D: GASOLINE R	ANGE					Analys	t: NSB
Gasoline Range Organics (GRO)	38	23		mg/Kg	5	6/17/2016 12:37:52 AI	J 25868
Surr: BFB	178	80-120	S	%Rec	5	6/17/2016 12:37:52 AI	M 25868
EPA METHOD 8021B: VOLATILES						Analys	t: NSB
Benzene	ND	0.12		mg/Kg	5	6/17/2016 12:37:52 AI	J 25868
Toluene	ND	0.23		mg/Kg	5	6/17/2016 12:37:52 AI	J 25868
Ethylbenzene	ND	0.23		mg/Kg	5	6/17/2016 12:37:52 AI	M 25868
Xylenes, Total	ND	0.47		mg/Kg	5	6/17/2016 12:37:52 AI	M 25868
Surr: 4-Bromofluorobenzene	108	80-120		%Rec	5	6/17/2016 12:37:52 AI	M 25868

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 8 of 14
- P Sample pH Not In Range
- RL Reporting Detection Limit
 - W Sample container temperature is out of limit as specified

Lab Order 1606762

Date Reported: 6/23/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Yates Petroleum Corporation

Project: Donahue Federal SWD 1

Lab ID: 1606762-009 Client Sample ID: 3-1'

Collection Date: 6/13/2016 9:10:00 AM

Received Date: 6/14/2016 10:00:00 AM

Analyses	Result	PQL (Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RAM	IGE ORGANICS					Analys	: JME
Diesel Range Organics (DRO)	210	97		mg/Kg	10	6/16/2016 7:10:36 PM	25855
Surr: DNOP	0	70-130	S	%Rec	10	6/16/2016 7:10:36 PM	25855
EPA METHOD 8015D: GASOLINE RA	NGE					Analys	t: NSB
Gasoline Range Organics (GRO)	ND	9.8		mg/Kg	2	6/17/2016 1:01:10 AM	25868
Surr: BFB	147	80-120	S	%Rec	2	6/17/2016 1:01:10 AM	25868
EPA METHOD 8021B: VOLATILES						Analys	t: NSB
Benzene	ND	0.049		mg/Kg	2	6/17/2016 1:01:10 AM	25868
Toluene	ND	0.098		mg/Kg	2	6/17/2016 1:01:10 AM	25868
Ethylbenzene	ND	0.098		mg/Kg	2	6/17/2016 1:01:10 AM	25868
Xylenes, Total	ND	0.20		mg/Kg	2	6/17/2016 1:01:10 AM	25868
Surr: 4-Bromofluorobenzene	107	80-120		%Rec	2	6/17/2016 1:01:10 AM	25868

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
- 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
- Value above quantitation range
- Analyte detected below quantitation limits Page 9 of 14
- P Sample pH Not In Range
- RLReporting Detection Limit
 - Sample container temperature is out of limit as specified

Analytical Report Lab Order 1606762

Date Reported: 6/23/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Yates Petroleum Corporation

Client Sample ID: 3-2'

Donahue Federal SWD 1 Project:

Collection Date: 6/13/2016 9:18:00 AM

Lab ID: 1606762-010

Matrix: SOIL

Received Date: 6/14/2016 10:00:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RA	NGE ORGANICS				Analys	t: JME
Diesel Range Organics (DRO)	ND	9.2	mg/Kg	1	6/16/2016 7:54:48 PM	25855
Surr: DNOP	102	70-130	%Rec	1	6/16/2016 7:54:48 PM	25855
EPA METHOD 8015D: GASOLINE RA	ANGE				Analys	t: NSB
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	6/17/2016 1:24:34 AM	25868
Surr: BFB	109	80-120	%Rec	1	6/17/2016 1:24:34 AM	25868
EPA METHOD 8021B: VOLATILES					Analys	t: NSB
Benzene	ND	0.024	mg/Kg	1	6/17/2016 1:24:34 AM	25868
Toluene	ND	0.048	mg/Kg	1	6/17/2016 1:24:34 AM	25868
Ethylbenzene	ND	0.048	mg/Kg	1	6/17/2016 1:24:34 AM	25868
Xylenes, Total	ND	0.096	mg/Kg	1	6/17/2016 1:24:34 AM	25868
Surr: 4-Bromofluorobenzene	105	80-120	%Rec	1	6/17/2016 1:24:34 AM	25868

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 R
- % 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 10 of 14
- P Sample pH Not In Range
- RL Reporting Detection Limit
 - Sample container temperature is out of limit as specified

Analytical Report Lab Order 1606762

Date Reported: 6/23/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Yates Petroleum Corporation

Client Sample ID: 3-3'

Donahue Federal SWD 1 Project:

Collection Date: 6/13/2016 9:28:00 AM

Lab ID: 1606762-011 Received Date: 6/14/2016 10:00:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS				Analys	t: JME
Diesel Range Organics (DRO)	16	10	mg/Kg	1	6/17/2016 10:54:15 AM	A 25855
Surr: DNOP	96.1	70-130	%Rec	1	6/17/2016 10:54:15 AM	A 25855
EPA METHOD 8015D: GASOLINE RAI	NGE				Analys	t: NSB
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	6/17/2016 1:48:03 AM	25868
Surr: BFB	109	80-120	%Rec	1	6/17/2016 1:48:03 AM	25868
EPA METHOD 8021B: VOLATILES					Analys	t: NSB
Benzene	ND	0.024	mg/Kg	1	6/17/2016 1:48:03 AM	25868
Toluene	ND	0.048	mg/Kg	1	6/17/2016 1:48:03 AM	25868
Ethylbenzene	ND	0.048	mg/Kg	1	6/17/2016 1:48:03 AM	25868
Xylenes, Total	ND	0.095	mg/Kg	1	6/17/2016 1:48:03 AM	25868
Surr: 4-Bromofluorobenzene	104	80-120	%Rec	1	6/17/2016 1:48:03 AM	25868

Matrix: SOIL

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

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- % Recovery outside of range due to dilution or matrix
- Analyte detected in the associated Method Blank
- E Value above quantitation range
- Analyte detected below quantitation limits Page 11 of 14
- P Sample pH Not In Range
- RL Reporting Detection Limit
- Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

WO#: 1606762

23-Jun-16

Client:

Yates Petroleum Corporation

Project:	Donahue Federal S	1.7%	on												
Troject.	Bonande i ederar i														
Sample ID MB-25	5834 Samp	Туре: М	BLK	TestCode: EPA Method 8015M/D: Diesel Range Organics											
Client ID: PBS	Bate	ch ID: 25	834	RunNo: 34958											
Prep Date: 6/14/	2016 Analysis	Date: 6/	/16/2016	S	SeqNo: 10	080383	Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual					
Diesel Range Organics	(DRO) ND	10													
Surr: DNOP	10		10.00		101	70	130		·						
Sample ID MB-25855 SampType: MBLK TestCode: EPA Method 8015M/D: Diesel Range Orga															
Client ID: PBS	Bat	ch ID: 25	855	F	RunNo: 34	4958									
Prep Date: 6/15/	2016 Analysis	Date: 6	/16/2016	8	SeqNo: 10	080384	Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual					
Diesel Range Organics		10								A STATE OF THE STA					
Surr: DNOP	9.2	atematica, processor	10.00		92.4	70	130	eliste tarihin service de consecue a seri							
Sample ID LCS-2	.5834 Samp	Type: LC	cs	Tes	tCode: EF	PA Method	8015M/D: Di	esel Rang	e Organics						
Client ID: LCSS	Bat	ch ID: 25	834	F											
Prep Date: 6/14/	2016 Analysis	Date: 6	/16/2016	8	SeqNo: 1	080385	Units: mg/k								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual					
Diesel Range Organics	(DRO) 45	10	50.00	0	91.0	62.6	124		7-05						
Surr: DNOP	4.2		5.000		84.7	70	130								
Sample ID LCS-2	.5855 Samp	Type: LO	cs	Tes	tCode: El	PA Method	8015M/D: Di	esel Rang	e Organics						
Client ID: LCSS	Bat	ch ID: 25	855	F	RunNo: 3	4958									
Prep Date: 6/15	2016 Analysis	Date: 6	/16/2016	5	SeqNo: 1	080386	Units: mg/k								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual					
Diesel Range Organics	550 S	10		0	93.0	62.6	124								
Surr: DNOP	4.2		5.000		84.9	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

Page 12 of 14

P Sample pH Not In Range

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

WO#: 1606762

23-Jun-16

Client:

Yates Petroleum Corporation

Project:

Donahue Federal SWD 1

Sample ID	
Client ID:	PBS

SampType: MBLK

TestCode: EPA Method 8015D: Gasoline Range

Prep Date: 6/15/2016

Batch ID: 25868 Analysis Date: 6/16/2016 RunNo: 34963 SeqNo: 1080626

%RPD

Analyte Gasoline Range Organics (GRO) Result PQL ND 5.0 1100

SPK value SPK Ref Val

1000

%REC LowLimit

80

Units: mg/Kg

120

HighLimit

RPDLimit Qual

Surr: BFB

SampType: LCS

TestCode: EPA Method 8015D: Gasoline Range

106

Sample ID LCS-25868 Client ID: LCSS

Batch ID: 25868

RunNo: 34963

Analyte

Prep Date: 6/15/2016 Analysis Date: 6/16/2016 SeqNo: 1080627

Units: mg/Kg

Gasoline Range Organics (GRO) Surr: BFB

Result 25 5.0 SPK value SPK Ref Val %REC 25.00 98.8 1000 117

LowLimit HighLimit 80 120 80 120 %RPD **RPDLimit** Qual

Sample ID LCS-25906

Sample ID MB-25906

SampType: LCS

TestCode: EPA Method 8015D: Gasoline Range RunNo: 35018

Client ID: LCSS Prep Date: 6/16/2016

Batch ID: 25906 Analysis Date: 6/17/2016

1200

SeqNo: 1082494

Units: %Rec

120

Analyte

Result SPK value SPK Ref Val

%REC LowLimit

HighLimit

%RPD **RPDLimit** Qual

Surr: BFB

1100 SampType: MBLK

111

TestCode: EPA Method 8015D: Gasoline Range

Client ID: PBS Prep Date:

Batch ID: 25906 6/16/2016

RunNo: 35018

Units: %Rec

Analyte

Analysis Date: 6/17/2016 Result POL

SPK value SPK Ref Val

SeqNo: 1082495 %REC LowLimit

HighLimit 120

%RPD **RPDLimit**

Surr: BFB

1000

1000

1000

104

80

Qual

Qualifiers:

Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

Holding times for preparation or analysis exceeded H

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits S % Recovery outside of range due to dilution or matrix В Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

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P Sample pH Not In Range

RI. Reporting Detection Limit

W Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

WO#: 1606762

23-Jun-16

Client: Yates Petroleum Corporation
Project: Donahue Federal SWD 1

Sample ID MB-25868 SampType: MBLK TestCode: EPA Method 8021B: Volatiles Client ID: **PBS** Batch ID: 25868 RunNo: 34963 Prep Date: 6/15/2016 Analysis Date: 6/16/2016 SeqNo: 1080654 Units: mg/Kg Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Benzene ND 0.025 Toluene ND 0.050 Ethylbenzene ND 0.050 Xylenes, Total ND 0.10 Surr: 4-Bromofluorobenzene 1.0 1.000 102 80 120

Sample ID LCS-25868	SampT	ype: LC	S	Tes	tCode: El					
Client ID: LCSS	Batch	n ID: 25	868	F	RunNo: 3					
Prep Date: 6/15/2016	Analysis D	ate: 6/	16/2016	8	SeqNo: 1080655 Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit Hig		HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.025	1.000	0	102	75.3	123			
Toluene	0.93	0.050	1.000	0	93.1	80	124			
Ethylbenzene	0.90	0.050	1.000	0	0 89.8 82.8		121			
Xylenes, Total	2.7	0.10	3.000	0	89.8	83.9	122			
Surr: 4-Bromofluorobenzene	1.1		1.000		106	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 14 of 14

P Sample pH Not In Range

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified



Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109

TEL: 505-345-3975 FAX: 505-345-4107 Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: Yates Petroleum Corporat Work Order Number:	1606762		RcptNo: 1	
Received by/date: Logged By: Lindsay Mangin 6/14/2016 10:00:00 AM Completed By: Lindsay Mangin 6/14/2016 3:05:20 PM		Jourley Hengso Jourley Hengso		
Reviewed By: Qa 06/15/16				i
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	
	Yes 🗹	No □	bottles checked for pH:	
12.Does paperwork match bottle labels? (Note discrepancies on chain of custody)	165 📼		(<2 0	r >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 🔲 !		
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:	The second secon	Marie Marie A Carolin M. Walland or Carolin M.]
By Whom: Via:	eMail [Phone Fax	In Person	
Regarding:				
Client Instructions:				
17. Additional remarks:				
18. Cooler Information Cooler No Temp °C Condition Seal Intact Seal No	Seal Date	Signed By	1	
1 1.7 Good Yes			1	

TAI	ORY								(N	00	A)	selddu8 iA													w BTEX	ом оп а	
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			al SWD #1		lease		Iffin	1020	Amber Griffin	<u>9</u>		HEAL NO.) <i>O</i> D-	-002	-003	4004	-005	-000	-7007	-00	400	-010	-011		Date Time	14/16/000	Date Time
Time:	Rush	ö	Donahue Federal SWD #1		6/1/2016 Release	anager:	Amber Griffin	PO # 205-2020	1	X Yes	emperature: / , ^r /	Preservativ e Type	lce	lce	lce	lce	lce	lce	<u>o</u>	lce	oo	lce ez	lce			14 06/1	
Tum-Around Time:	□ Standard	Project Nam		Project #:		Project Mana			Sampler:	On Ice:	Sample Tem	Container Type and #	1 - 4 oz.	1 - 4 02	1 - 4 oz.	1 - 4 oz.	1 - 4 oz.	1 - 4 02.	1 - 4 oz.	1 - 4 oz.	1 - 4 oz.	1 - 4 oz.	1 - 4 oz.		Received by:	IM. a	Received by:
Chain-of-Custody Record	Yates Petroleum Corporation			05 South 4th Street Artesia, NM 88210	575-513-8799 or 575-748-4111	agriffin@yatespetroleum.com		□ Level 4 (Full Validation)				Sample Request ID	1 - Surface	1-1	1-2'	1-3'	1-4'	1-5'	2 - Surface	3 - Surface	3-1	3-2'	3-3'		d by:	lubu britin	d by:
of-Cus	etroleum			eet Artes	575-513-	agriffin@				□ Other		Matrix	8:08 Soil	8:11 Soil	8:14 Soil	8:18 Soil	8:30 Soil	8:36 Soil	8:56 Soil						Relinquished by:	amp	Relinquished by:
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ប	lient:		failing Address:	05 South	hone #:	mail or Fax#:	A/QC Package:	1 Standard	ccreditation:	1 NEL AP	1 EDD (Type)	Date	/13/2016	113/2016	/13/2016	/13/2016	/13/2016	/13/2016	/13/2016	/13/2016	/13/2016	/13/2016	/13/2016		ate:	113/16	ate:

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.