



EOG Resources, Inc.
Artesia Division Office
105 S. 4th Street
Artesia, N. M. 88210

February 14, 2017

Mr. Mike Bratcher
NMOCD District II
1625 French Drive
Artesia, NM 88210

Re: Dee State Com Battery
2RP-3134
30-015-21881
Section 36, T19S-R24E
Eddy County, New Mexico

Dear Mr. Bratcher:

EOG Y Resources, Inc. is submitting the enclosed work plan for the above captioned battery. The plan is being submitted to complete remediation of the release that occurred on June 22, 2015.

If there are no objections with the scope of work described in the plan, Yates will have a contractor begin work on or after the week of March 1, 2017.

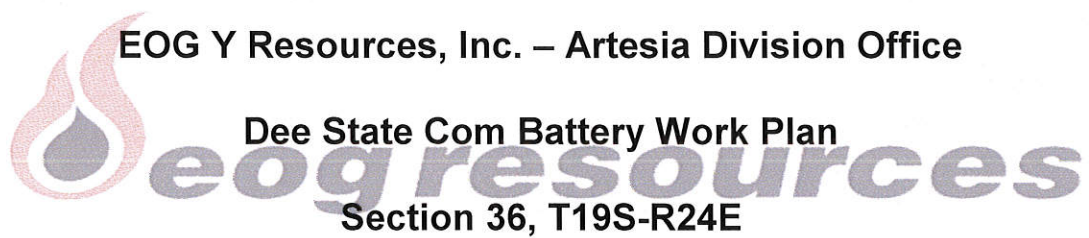
If you have any questions call me at (575) 748-4217

Thank you.

EOG Y Resources, Inc.

Robert Asher
Environmental Supervisor

Enclosure(s)



Eddy County, New Mexico

I. Location

The well is located approximately 23 miles south-southwest of Artesia, NM south of Rock Daisy Road, as represented by the attached Foster Ranch, NM, USGS Quadrangle Map.

II. Background

On June 22, 2015, formerly Yates Petroleum Corporation, now EOG Y submitted to the NMOCD District I office a Form C-141 for a release of 12 B/O with 10 B/O recovered. The total affected area is approximately 50 feet by 100 feet area within an unlined bermed battery. The release was from a hole in a production tank. Cleanup actions included vacuum truck (s) recovering 10 B/O of the 12 B/O released. All tanks (including the tank with the hole) have been moved off of the battery. Delineation samples were taken (3/14/2016) and sent to an NMOCD approved laboratory (results enclosed).

III. Surface and Ground Water

Area surface geology is Cenozoic Alluvium. Groundwater of record is listed on the Chevron Texaco Trend Map shows depth to groundwater approximately 250 feet making the site ranking for this site a zero (0). Groundwater of record is listed on the NMOSE shows depth to groundwater approximately 286 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 as following:

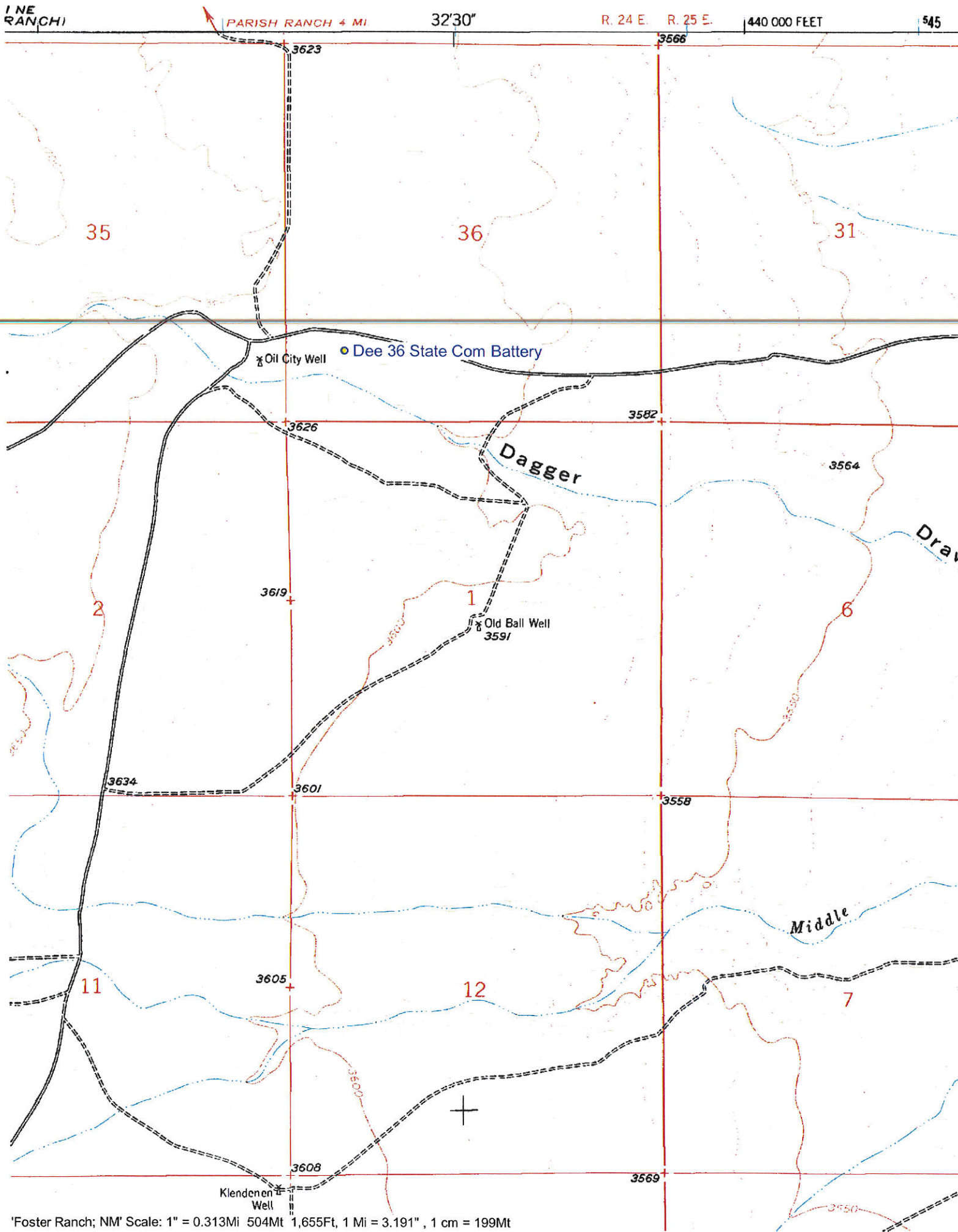
Depth to ground water	> 100'
Wellhead Protection Area	> 1000'
Distance to surface water body	> 1000'

IV. Soils

The area consists of native soils, interspersed with caliche and clay seams providing a low permeability barrier to retard vertical percolation of contaminants into the subsurface.

V. Scope of Work

Based on all analytical results enclosed, EOG Y excavate four (4') feet of impacted soils within the release area designated in yellow and green on the enclosed sample diagram. Those soils will be taken to an approved NMOCD facility. When the excavation work is completed a 20 mil liner will be placed within the excavation to prevent vertical migration of contaminants below and approximately 4' of like soils to backfill the excavation. Once that work is completed the EOG Production department plans to the place a lined containment battery where the original battery was to ensure proper containment/prevention of, if any future releases from impacting the battery area. When the excavation/liner and backfill work is completed a C-141, Final Report will be submitted to the NMOCD and request closure of the site.





New Mexico Office of the State Engineer

Wells with Well Log Information

(A CLW#### in the POD suffix indicates the POD has been replaced & no longer serves a water right)

(R=POD has been replaced,
O=orphaned,
C=the file is closed)

(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are smallest to largest)

(NAD83 UTM in meters)

(in feet)

POD Number	POD		County	Source	q q q				X	Y	Distance	Start Date	Finish Date	Log File Date	Depth Well	Depth Water	Driller	License Number	
	Code	Subbasin			6416 4	1 2	01	20S											24E
RA 05284			ED	Shallow	1	2	01	20S	24E	543220	3607973*	788	09/28/1966	09/30/1966	10/04/1966	282	273	OSBOURN, FLOYD MILTON	353
RA 03085			CH	Shallow	1	01	20S	24E	542613	3607799*	1140	06/24/1953	07/06/1953	11/19/1953	465	300	LONE STAR		
RA 07832			ED	Shallow	4	1	31	19S	25E	544438	3609170*	1280	08/02/1990	08/02/1990	10/23/1990	220	0		982

Record Count: 3

UTMNAD83 Radius Search (in meters):

Easting (X): 543225

Northing (Y): 3608761

Radius: 2000

*UTM location was derived from PLSS - see Help

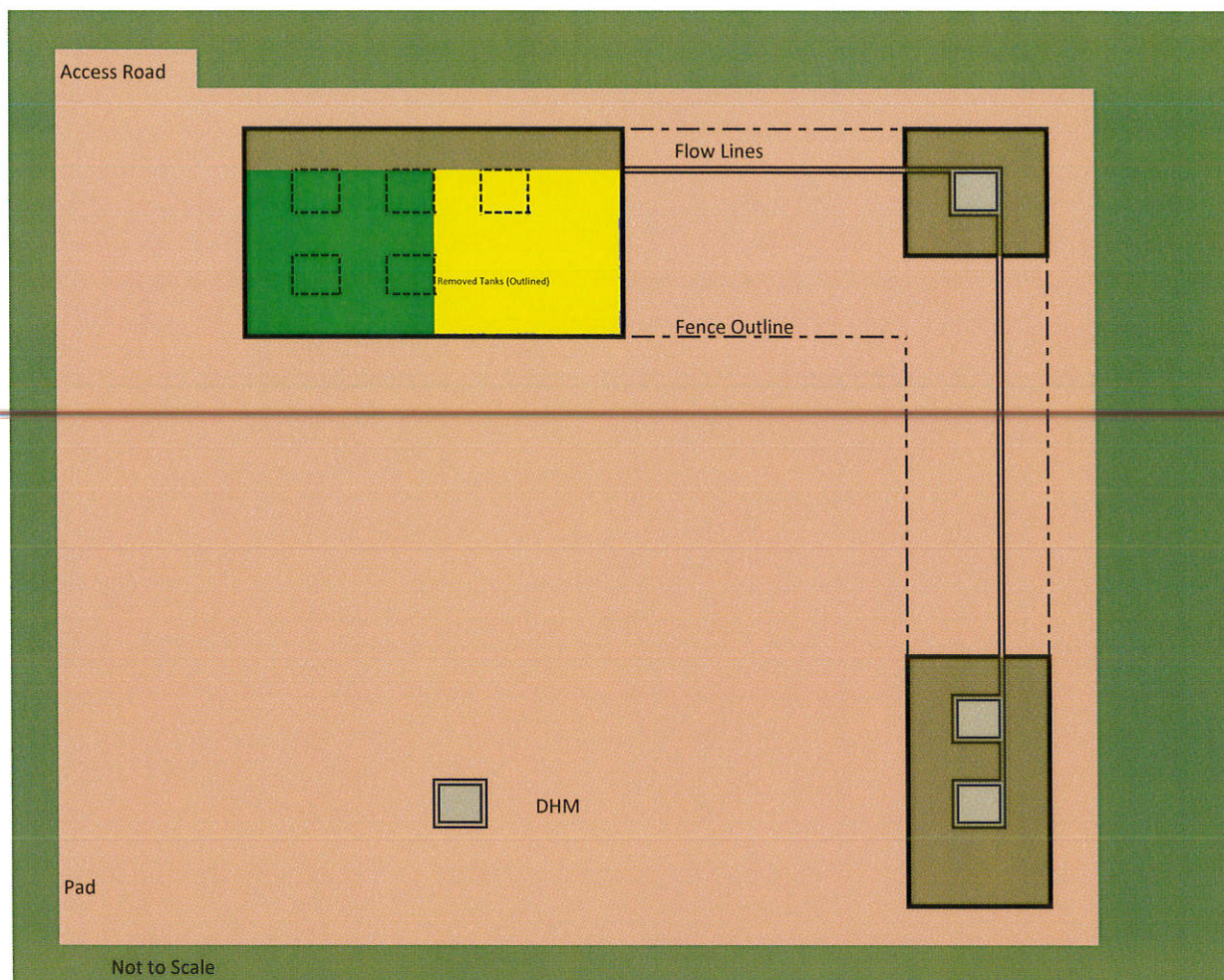
The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability or suitability for any particular purpose of the data.

2/14/17 8:26 AM

WELLS WITH WELL LOG INFORMATION

NW

NE



Key:



Release/Sample Area



Tanks/Production Equipment



Battery and Berm

Analytical Report- 1603844 (H-01)	Sample Area	Sample Date	Sample Type	Depth	Benzene	BTEX	GRO	DRO
E 01.0	Release Area	3/14/2016	Grab/Backhoe	1'	ND	4.67	230	9900
E 02.0	Release Area	3/14/2016	Grab/Backhoe	2'	1.00	83.40	800	10000
E 03.0	Release Area	3/14/2016	Grab/Backhoe	3'	ND	53.50	460	4300
E 04.0	Release Area	3/14/2016	Grab/Backhoe	4'	ND	57.60	530	3300
E 05.0	Release Area	3/14/2016	Grab/Backhoe	5'	ND	44.10	600	2500
E 06.0	Release Area	3/14/2016	Grab/Backhoe	6'	0.130	15.80	180	950
E 08.0	Release Area	3/14/2016	Grab/Backhoe	8'	ND	29.40	330	1700
E 10.0	Release Area	3/14/2016	Grab/Backhoe	10'	ND	30.10	440	2100
E 12.0	Release Area	3/14/2016	Grab/Backhoe	12'	ND	62.40	800	4000
Analytical Report- 1603845 (H-01)	Sample Area	Sample Date	Sample Type	Depth	Benzene	BTEX	GRO	DRO
W 01.0	Release Area	3/14/2016	Grab/Backhoe	1'	ND	54.00	550	5200
W 02.0	Release Area	3/14/2016	Grab/Backhoe	2'	1.5	119.50	850	5300
W 03.0	Release Area	3/14/2016	Grab/Backhoe	3'	ND	29.40	390	2500
W 04.0	Release Area	3/14/2016	Grab/Backhoe	4'	2.1	133.10	960	4100
W 05.0	Release Area	3/14/2016	Grab/Backhoe	5'	ND	42.30	500	2800
W 06.0	Release Area	3/14/2016	Grab/Backhoe	6'	1.8	145.80	1400	8600
W 08.0	Release Area	3/14/2016	Grab/Backhoe	8'	0.99	65.00	680	2700
W 10.0	Release Area	3/14/2016	Grab/Backhoe	10'	13	188.00	2200	7300
W 12.0	Release Area	3/14/2016	Grab/Backhoe	12'	8.1	273.10	2400	7900

Site Ranking is Zero (0). Depth to Ground Water > 100' (approx. 250', per NMOSE).

Soils to be excavated

Released : 12 B/O; Recovered: 10 B/O

SW

SE



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

March 22, 2016

Robert Asher
Yates Petroleum Corporation
105 South Fourth Street
Artesia, NM 88210
TEL: (575) 748-4111
FAX

RE: Dee 36SW State #2 Battery

OrderNo.: 1603844

Dear Robert Asher:

Hall Environmental Analysis Laboratory received 9 sample(s) on 3/16/2016 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 qualifiers 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,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a horizontal line.

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report

Lab Order 1603844

Date Reported: 3/22/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Yates Petroleum Corporation

Client Sample ID: E 01.0

Project: Dee 36SW State #2 Battery

Collection Date: 3/14/2016 9:25:00 AM

Lab ID: 1603844-001

Matrix: SOIL

Received Date: 3/16/2016 9:55:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: KJH
Diesel Range Organics (DRO)	9900	1000		mg/Kg	100	3/21/2016 10:26:20 AM	24293
Surr: DNOP	0	70-130	S	%Rec	100	3/21/2016 10:26:20 AM	24293
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	230	23		mg/Kg	5	3/18/2016 10:26:09 PM	24315
Surr: BFB	360	66.2-112	S	%Rec	5	3/18/2016 10:26:09 PM	24315
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.12		mg/Kg	5	3/18/2016 10:26:09 PM	24315
Toluene	0.57	0.23		mg/Kg	5	3/18/2016 10:26:09 PM	24315
Ethylbenzene	0.30	0.23		mg/Kg	5	3/18/2016 10:26:09 PM	24315
Xylenes, Total	3.8	0.46		mg/Kg	5	3/18/2016 10:26:09 PM	24315
Surr: 4-Bromofluorobenzene	132	80-120	S	%Rec	5	3/18/2016 10:26:09 PM	24315

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

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

Analytical Report

Lab Order 1603844

Date Reported: 3/22/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Yates Petroleum Corporation

Client Sample ID: E 02.0

Project: Dee 36SW State #2 Battery

Collection Date: 3/14/2016 9:30:00 AM

Lab ID: 1603844-002

Matrix: SOIL

Received Date: 3/16/2016 9:55:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: KJH
Diesel Range Organics (DRO)	10000	1000		mg/Kg	100	3/21/2016 10:48:09 AM	24293
Surr: DNOP	0	70-130	S	%Rec	100	3/21/2016 10:48:09 AM	24293
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	800	97		mg/Kg	20	3/18/2016 10:49:36 PM	24315
Surr: BFB	258	66.2-112	S	%Rec	20	3/18/2016 10:49:36 PM	24315
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	1.0	0.48		mg/Kg	20	3/18/2016 10:49:36 PM	24315
Toluene	8.4	0.97		mg/Kg	20	3/18/2016 10:49:36 PM	24315
Ethylbenzene	16	0.97		mg/Kg	20	3/18/2016 10:49:36 PM	24315
Xylenes, Total	58	1.9		mg/Kg	20	3/18/2016 10:49:36 PM	24315
Surr: 4-Bromofluorobenzene	136	80-120	S	%Rec	20	3/18/2016 10:49:36 PM	24315

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

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

Analytical Report

Lab Order 1603844

Date Reported: 3/22/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Yates Petroleum Corporation

Client Sample ID: E 03.0

Project: Dee 36SW State #2 Battery

Collection Date: 3/14/2016 9:35:00 AM

Lab ID: 1603844-003

Matrix: SOIL

Received Date: 3/16/2016 9:55:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: KJH
Diesel Range Organics (DRO)	4300	100		mg/Kg	10	3/18/2016 3:37:44 PM	24293
Surr: DNOP	0	70-130	S	%Rec	10	3/18/2016 3:37:44 PM	24293
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	460	99		mg/Kg	20	3/18/2016 1:16:53 PM	24315
Surr: BFB	209	66.2-112	S	%Rec	20	3/18/2016 1:16:53 PM	24315
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.49		mg/Kg	20	3/18/2016 1:16:53 PM	24315
Toluene	5.5	0.99		mg/Kg	20	3/18/2016 1:16:53 PM	24315
Ethylbenzene	11	0.99		mg/Kg	20	3/18/2016 1:16:53 PM	24315
Xylenes, Total	37	2.0		mg/Kg	20	3/18/2016 1:16:53 PM	24315
Surr: 4-Bromofluorobenzene	152	80-120	S	%Rec	20	3/18/2016 1:16:53 PM	24315

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

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

Analytical Report

Lab Order 1603844

Date Reported: 3/22/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Yates Petroleum Corporation

Client Sample ID: E 04.0

Project: Dee 36SW State #2 Battery

Collection Date: 3/14/2016 9:40:00 AM

Lab ID: 1603844-004

Matrix: SOIL

Received Date: 3/16/2016 9:55:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: KJH
Diesel Range Organics (DRO)	3300	95		mg/Kg	10	3/18/2016 4:20:48 PM	24293
Surr: DNOP	0	70-130	S	%Rec	10	3/18/2016 4:20:48 PM	24293
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	530	97		mg/Kg	20	3/18/2016 1:41:28 PM	24315
Surr: BFB	211	66.2-112	S	%Rec	20	3/18/2016 1:41:28 PM	24315
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.48		mg/Kg	20	3/18/2016 1:41:28 PM	24315
Toluene	8.6	0.97		mg/Kg	20	3/18/2016 1:41:28 PM	24315
Ethylbenzene	12	0.97		mg/Kg	20	3/18/2016 1:41:28 PM	24315
Xylenes, Total	37	1.9		mg/Kg	20	3/18/2016 1:41:28 PM	24315
Surr: 4-Bromofluorobenzene	150	80-120	S	%Rec	20	3/18/2016 1:41:28 PM	24315

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

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

Analytical Report

Lab Order 1603844

Date Reported: 3/22/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Yates Petroleum Corporation

Client Sample ID: E 05.0

Project: Dee 36SW State #2 Battery

Collection Date: 3/14/2016 9:45:00 AM

Lab ID: 1603844-005

Matrix: SOIL

Received Date: 3/16/2016 9:55:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: KJH
Diesel Range Organics (DRO)	2500	97		mg/Kg	10	3/18/2016 5:03:53 PM	24293
Surr: DNOP	0	70-130	S	%Rec	10	3/18/2016 5:03:53 PM	24293
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	600	96		mg/Kg	20	3/20/2016 7:51:44 AM	24315
Surr: BFB	251	66.2-112	S	%Rec	20	3/20/2016 7:51:44 AM	24315
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.48		mg/Kg	20	3/20/2016 7:51:44 AM	24315
Toluene	5.4	0.96		mg/Kg	20	3/20/2016 7:51:44 AM	24315
Ethylbenzene	9.7	0.96		mg/Kg	20	3/20/2016 7:51:44 AM	24315
Xylenes, Total	29	1.9		mg/Kg	20	3/20/2016 7:51:44 AM	24315
Surr: 4-Bromofluorobenzene	129	80-120	S	%Rec	20	3/20/2016 7:51:44 AM	24315

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

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

Analytical Report

Lab Order 1603844

Date Reported: 3/22/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Yates Petroleum Corporation

Client Sample ID: E 06.0

Project: Dee 36SW State #2 Battery

Collection Date: 3/14/2016 9:50:00 AM

Lab ID: 1603844-006

Matrix: SOIL

Received Date: 3/16/2016 9:55:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: KJH
Diesel Range Organics (DRO)	950	100		mg/Kg	10	3/18/2016 5:47:16 PM	24293
Surr: DNOP	0	70-130	S	%Rec	10	3/18/2016 5:47:16 PM	24293
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	180	24		mg/Kg	5	3/20/2016 8:15:18 AM	24315
Surr: BFB	220	66.2-112	S	%Rec	5	3/20/2016 8:15:18 AM	24315
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	0.13	0.12		mg/Kg	5	3/20/2016 8:15:18 AM	24315
Toluene	2.4	0.24		mg/Kg	5	3/20/2016 8:15:18 AM	24315
Ethylbenzene	3.4	0.24		mg/Kg	5	3/20/2016 8:15:18 AM	24315
Xylenes, Total	10	0.47		mg/Kg	5	3/20/2016 8:15:18 AM	24315
Surr: 4-Bromofluorobenzene	135	80-120	S	%Rec	5	3/20/2016 8:15:18 AM	24315

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

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

Analytical Report

Lab Order 1603844

Date Reported: 3/22/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Yates Petroleum Corporation

Client Sample ID: E 08.0

Project: Dee 36SW State #2 Battery

Collection Date: 3/14/2016 9:55:00 AM

Lab ID: 1603844-007

Matrix: SOIL

Received Date: 3/16/2016 9:55:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: KJH
Diesel Range Organics (DRO)	1700	100		mg/Kg	10	3/18/2016 6:30:34 PM	24293
Surr: DNOP	0	70-130	S	%Rec	10	3/18/2016 6:30:34 PM	24293
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	330	99		mg/Kg	20	3/18/2016 4:33:04 PM	24315
Surr: BFB	181	66.2-112	S	%Rec	20	3/18/2016 4:33:04 PM	24315
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.50		mg/Kg	20	3/18/2016 4:33:04 PM	24315
Toluene	2.9	0.99		mg/Kg	20	3/18/2016 4:33:04 PM	24315
Ethylbenzene	6.5	0.99		mg/Kg	20	3/18/2016 4:33:04 PM	24315
Xylenes, Total	20	2.0		mg/Kg	20	3/18/2016 4:33:04 PM	24315
Surr: 4-Bromofluorobenzene	140	80-120	S	%Rec	20	3/18/2016 4:33:04 PM	24315

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

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

Analytical Report

Lab Order 1603844

Date Reported: 3/22/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Yates Petroleum Corporation

Client Sample ID: E 10.0

Project: Dee 36SW State #2 Battery

Collection Date: 3/14/2016 10:00:00 AM

Lab ID: 1603844-008

Matrix: SOIL

Received Date: 3/16/2016 9:55:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: KJH
Diesel Range Organics (DRO)	2100	94		mg/Kg	10	3/18/2016 7:13:46 PM	24293
Surr: DNOP	0	70-130	S	%Rec	10	3/18/2016 7:13:46 PM	24293
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	440	97		mg/Kg	20	3/20/2016 8:38:48 AM	24315
Surr: BFB	213	66.2-112	S	%Rec	20	3/20/2016 8:38:48 AM	24315
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.48		mg/Kg	20	3/20/2016 8:38:48 AM	24315
Toluene	3.4	0.97		mg/Kg	20	3/20/2016 8:38:48 AM	24315
Ethylbenzene	6.7	0.97		mg/Kg	20	3/20/2016 8:38:48 AM	24315
Xylenes, Total	20	1.9		mg/Kg	20	3/20/2016 8:38:48 AM	24315
Surr: 4-Bromofluorobenzene	121	80-120	S	%Rec	20	3/20/2016 8:38:48 AM	24315

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

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

Analytical Report

Lab Order 1603844

Date Reported: 3/22/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Yates Petroleum Corporation

Client Sample ID: E 12.0

Project: Dee 36SW State #2 Battery

Collection Date: 3/14/2016 10:05:00 AM

Lab ID: 1603844-009

Matrix: SOIL

Received Date: 3/16/2016 9:55:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: KJH
Diesel Range Organics (DRO)	4000	96		mg/Kg	10	3/18/2016 7:56:56 PM	24293
Surr: DNOP	0	70-130	S	%Rec	10	3/18/2016 7:56:56 PM	24293
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	800	96		mg/Kg	20	3/20/2016 9:02:21 AM	24315
Surr: BFB	284	66.2-112	S	%Rec	20	3/20/2016 9:02:21 AM	24315
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.48		mg/Kg	20	3/20/2016 9:02:21 AM	24315
Toluene	7.4	0.96		mg/Kg	20	3/20/2016 9:02:21 AM	24315
Ethylbenzene	14	0.96		mg/Kg	20	3/20/2016 9:02:21 AM	24315
Xylenes, Total	41	1.9		mg/Kg	20	3/20/2016 9:02:21 AM	24315
Surr: 4-Bromofluorobenzene	135	80-120	S	%Rec	20	3/20/2016 9:02:21 AM	24315

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

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1603844

22-Mar-16

Client: Yates Petroleum Corporation

Project: Dee 36SW State #2 Battery

Sample ID	LCS-24293		SampType: LCS		TestCode: EPA Method 8015M/D: Diesel Range Organics					
Client ID:	LCSS		Batch ID: 24293		RunNo: 32883					
Prep Date:	3/17/2016		Analysis Date: 3/18/2016		SeqNo: 1008134		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	46	10	50.00	0	91.8	65.8	136			
Surr: DNOP	3.9		5.000		77.0	70	130			

Sample ID	MB-24293	SampType:	MBLK	TestCode:	EPA Method 8015M/D: Diesel Range Organics					
Client ID:	PBS	Batch ID:	24293	RunNo:	32883					
Prep Date:	3/17/2016	Analysis Date:	3/18/2016	SeqNo:	1008136	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Surr: DNOP	8.5		10.00		85.5	70	130			

Sample ID	LCS-24325		SampType: LCS		TestCode: EPA Method 8015M/D: Diesel Range Organics					
Client ID:	LCSS		Batch ID: 24325		RunNo: 32886					
Prep Date:	3/18/2016		Analysis Date: 3/18/2016		SeqNo: 1008166		Units: %Rec			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.3		5.000		85.1	70	130			

Sample ID	MB-24325		SampType: MBLK		TestCode: EPA Method 8015M/D: Diesel Range Organics					
Client ID:	PBS		Batch ID: 24325		RunNo: 32886					
Prep Date:	3/18/2016		Analysis Date: 3/18/2016		SeqNo: 1008167		Units: %Rec			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	8.3		10.00		83.0	70	130			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1603844

22-Mar-16

Client: Yates Petroleum Corporation

Project: Dee 36SW State #2 Battery

Sample ID	MB-24315	SampType:	MBLK	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	PBS	Batch ID:	24315	RunNo:	32910					
Prep Date:	3/17/2016	Analysis Date:	3/18/2016	SeqNo:	1008676	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	940		1000		94.2	66.2	112			

Sample ID	LCS-24315	SampType:	LCS	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	LCSS	Batch ID:	24315	RunNo:	32910					
Prep Date:	3/17/2016	Analysis Date:	3/18/2016	SeqNo:	1008677	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	5.0	25.00	0	99.3	80	120			
Surr: BFB	1000		1000		102	66.2	112			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1603844

22-Mar-16

Client: Yates Petroleum Corporation

Project: Dee 36SW State #2 Battery

Sample ID	MB-24315		SampType:	MBLK		TestCode:	EPA Method 8021B: Volatiles			
Client ID:	PBS		Batch ID:	24315		RunNo:	32910			
Prep Date:	3/17/2016		Analysis Date:	3/18/2016		SeqNo:	1008701	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	1.2		1.000		117	80	120			

Sample ID	LCS-24315		SampType:	LCS		TestCode:	EPA Method 8021B: Volatiles			
Client ID:	LCSS		Batch ID:	24315		RunNo:	32910			
Prep Date:	3/17/2016		Analysis Date:	3/18/2016		SeqNo:	1008702	Units:	mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.90	0.025	1.000	0	89.6	80	120			
Toluene	0.97	0.050	1.000	0	97.2	80	120			
Ethylbenzene	0.98	0.050	1.000	0	98.4	80	120			
Xylenes, Total	3.0	0.10	3.000	0	99.5	80	120			
Surr: 4-Bromofluorobenzene	1.2		1.000		119	80	120			

Qualifiers:

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

Work Order Number: 1603844

RcptNo: 1

Received by/date:

Logged By: Lindsay Mangin

3/16/2016 9:55:00 AM

Completed By: Lindsay Mangin

3/16/2016 2:52:41 PM

Reviewed By:

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 $>0^{\circ}\text{C}$ 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 ☒
12. Does paperwork match bottle labels?
(Note discrepancies on chain of custody) Yes ☒ No ☐
13. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
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 ☐

of preserved
bottles checked
for pH:

(<2 or >12 unless noted)

Adjusted? _____

Checked by: _____

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified: _____

Date: _____

By Whom: _____

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

17. Additional remarks:

18. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.1	Good	Yes			

Chain-of-Custody Record

Client: Yates Petroleum Corporation

Turn-Around Time:

☒ Standard ☐ Rush

Project Name:

Address: 105 South 4th Street

Dee 36SW State #2 Battery

Project #:

4901 Hawkins NE - Albuquerque, NM 87109

Project #:

Phone #: (575) 748-4217

30-015-21881

Email: boba@yatespetroleum.com

Project Manager:

QC Package:

Robert Asher

Standard ☐ Level 4 (Full Validation)

PO# 205632

Creditation:

Sampler: Robert Asher

NELAP ☐ Other

On Ice: ☒ Yes ☐ No

EDD (Type)

Sample Temperature: 2-1 - 10.0 F - 1.1

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No.
3/14/16	9:25 AM	Soil	E 01.0	1 - 4oz.	Ice	16038424
3/14/16	9:30 AM	Soil	E 02.0	1 - 4oz.	Ice	-001
3/14/16	9:35 AM	Soil	E 03.0	1 - 4oz.	Ice	-002
3/14/16	9:40 AM	Soil	E 04.0	1 - 4oz.	Ice	-003
3/14/16	9:45 AM	Soil	E 05.0	1 - 4oz.	Ice	-004
3/14/16	9:50 AM	Soil	E 06.0	1 - 4oz.	Ice	-005
3/14/16	9:55 AM	Soil	E 08.0	1 - 4oz.	Ice	-006
3/14/16	10:00 AM	Soil	E 10.0	1 - 4oz.	Ice	-007
3/14/16	10:05 AM	Soil	E 12.0	1 - 4oz.	Ice	-008

TPH Method 8015B (Gas/Diesel)

BTEX + MTBE + TMBs (8021)

BTEX + MTBE + TMBE + TPH (Gas only)

TPH (Method 418.1)

EDB (Method 504.1)

8310 (PNA or PAH)

RCRA 8 Metals

Anions (CI)

8081 Pesticides / 8082 PCB's

8260B (VOA)

8270 (Semi-VOA)

Air Bubbles (Y or N)

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Received by: [Signature] Date: 03/16/16 Time: 0955

Received by: [Signature] Date: Time:



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

March 22, 2016

Robert Asher

Yates Petroleum Corporation

105 South Fourth Street

Artesia, NM 88210

TEL: (575) 748-4111

FAX

RE: Dee 36SW State #2 Battery

OrderNo.: 1603845

Dear Robert Asher:

Hall Environmental Analysis Laboratory received 9 sample(s) on 3/16/2016 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 qualifiers 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,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a horizontal line.

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

Analytical Report

Lab Order 1603845

Date Reported: 3/22/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Yates Petroleum Corporation

Client Sample ID: W 01.0

Project: Dee 36SW State #2 Battery

Collection Date: 3/14/2016 10:10:00 AM

Lab ID: 1603845-001

Matrix: SOIL

Received Date: 3/16/2016 9:55:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: KJH
Diesel Range Organics (DRO)	5200	93		mg/Kg	10	3/19/2016 11:46:54 AM	24293
Surr: DNOP	0	70-130	S	%Rec	10	3/19/2016 11:46:54 AM	24293
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	550	96		mg/Kg	20	3/18/2016 5:46:51 PM	24315
Surr: BFB	213	66.2-112	S	%Rec	20	3/18/2016 5:46:51 PM	24315
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.48		mg/Kg	20	3/18/2016 5:46:51 PM	24315
Toluene	9.1	0.96		mg/Kg	20	3/18/2016 5:46:51 PM	24315
Ethylbenzene	6.9	0.96		mg/Kg	20	3/18/2016 5:46:51 PM	24315
Xylenes, Total	38	1.9		mg/Kg	20	3/18/2016 5:46:51 PM	24315
Surr: 4-Bromofluorobenzene	142	80-120	S	%Rec	20	3/18/2016 5:46:51 PM	24315

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

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

Analytical Report

Lab Order 1603845

Date Reported: 3/22/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Yates Petroleum Corporation

Client Sample ID: W 02.0

Project: Dee 36SW State #2 Battery

Collection Date: 3/14/2016 10:15:00 AM

Lab ID: 1603845-002

Matrix: SOIL

Received Date: 3/16/2016 9:55:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: KJH
Diesel Range Organics (DRO)	5300	97		mg/Kg	10	3/19/2016 12:29:10 PM	24293
Surr: DNOP	0	70-130	S	%Rec	10	3/19/2016 12:29:10 PM	24293
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	850	95		mg/Kg	20	3/18/2016 6:11:31 PM	24315
Surr: BFB	228	66.2-112	S	%Rec	20	3/18/2016 6:11:31 PM	24315
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	1.5	0.48		mg/Kg	20	3/18/2016 6:11:31 PM	24315
Toluene	30	0.95		mg/Kg	20	3/18/2016 6:11:31 PM	24315
Ethylbenzene	14	0.95		mg/Kg	20	3/18/2016 6:11:31 PM	24315
Xylenes, Total	74	1.9		mg/Kg	20	3/18/2016 6:11:31 PM	24315
Surr: 4-Bromofluorobenzene	150	80-120	S	%Rec	20	3/18/2016 6:11:31 PM	24315

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

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

Analytical Report

Lab Order 1603845

Date Reported: 3/22/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Yates Petroleum Corporation

Client Sample ID: W 03.0

Project: Dee 36SW State #2 Battery

Collection Date: 3/14/2016 10:20:00 AM

Lab ID: 1603845-003

Matrix: SOIL

Received Date: 3/16/2016 9:55:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: KJH
Diesel Range Organics (DRO)	2500	98		mg/Kg	10	3/19/2016 1:11:30 PM	24293
Surr: DNOP	0	70-130	S	%Rec	10	3/19/2016 1:11:30 PM	24293
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	390	96		mg/Kg	20	3/20/2016 9:26:02 AM	24315
Surr: BFB	196	66.2-112	S	%Rec	20	3/20/2016 9:26:02 AM	24315
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.48		mg/Kg	20	3/20/2016 9:26:02 AM	24315
Toluene	4.9	0.96		mg/Kg	20	3/20/2016 9:26:02 AM	24315
Ethylbenzene	4.5	0.96		mg/Kg	20	3/20/2016 9:26:02 AM	24315
Xylenes, Total	20	1.9		mg/Kg	20	3/20/2016 9:26:02 AM	24315
Surr: 4-Bromofluorobenzene	125	80-120	S	%Rec	20	3/20/2016 9:26:02 AM	24315

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

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

Analytical ReportLab Order **1603845**Date Reported: **3/22/2016****Hall Environmental Analysis Laboratory, Inc.****CLIENT:** Yates Petroleum Corporation**Client Sample ID:** W 04.0**Project:** Dee 36SW State #2 Battery**Collection Date:** 3/14/2016 10:25:00 AM**Lab ID:** 1603845-004**Matrix:** SOIL**Received Date:** 3/16/2016 9:55:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: KJH
Diesel Range Organics (DRO)	4100	97		mg/Kg	10	3/19/2016 1:54:02 PM	24293
Surr: DNOP	0	70-130	S	%Rec	10	3/19/2016 1:54:02 PM	24293
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	960	250		mg/Kg	50	3/18/2016 7:00:26 PM	24315
Surr: BFB	150	66.2-112	S	%Rec	50	3/18/2016 7:00:26 PM	24315
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	2.1	1.2		mg/Kg	50	3/18/2016 7:00:26 PM	24315
Toluene	35	2.5		mg/Kg	50	3/18/2016 7:00:26 PM	24315
Ethylbenzene	25	2.5		mg/Kg	50	3/18/2016 7:00:26 PM	24315
Xylenes, Total	71	4.9		mg/Kg	50	3/18/2016 7:00:26 PM	24315
Surr: 4-Bromofluorobenzene	136	80-120	S	%Rec	50	3/18/2016 7:00:26 PM	24315

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1603845

Date Reported: 3/22/2016

CLIENT: Yates Petroleum Corporation

Client Sample ID: W 05.0

Project: Dee 36SW State #2 Battery

Collection Date: 3/14/2016 10:30:00 AM

Lab ID: 1603845-005

Matrix: SOIL

Received Date: 3/16/2016 9:55:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: KJH
Diesel Range Organics (DRO)	2800	97		mg/Kg	10	3/19/2016 2:36:45 PM	24293
Surr: DNOP	0	70-130	S	%Rec	10	3/19/2016 2:36:45 PM	24293
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	500	99		mg/Kg	20	3/20/2016 9:49:39 AM	24315
Surr: BFB	215	66.2-112	S	%Rec	20	3/20/2016 9:49:39 AM	24315
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.50		mg/Kg	20	3/20/2016 9:49:39 AM	24315
Toluene	8.2	0.99		mg/Kg	20	3/20/2016 9:49:39 AM	24315
Ethylbenzene	8.1	0.99		mg/Kg	20	3/20/2016 9:49:39 AM	24315
Xylenes, Total	26	2.0		mg/Kg	20	3/20/2016 9:49:39 AM	24315
Surr: 4-Bromofluorobenzene	133	80-120	S	%Rec	20	3/20/2016 9:49:39 AM	24315

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

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

Analytical Report

Lab Order 1603845

Date Reported: 3/22/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Yates Petroleum Corporation

Client Sample ID: W 06.0

Project: Dee 36SW State #2 Battery

Collection Date: 3/14/2016 10:35:00 AM

Lab ID: 1603845-006

Matrix: SOIL

Received Date: 3/16/2016 9:55:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: KJH
Diesel Range Organics (DRO)	6800	100		mg/Kg	10	3/19/2016 3:19:32 PM	24294
Surr: DNOP	0	70-130	S	%Rec	10	3/19/2016 3:19:32 PM	24294
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	1400	99		mg/Kg	20	3/18/2016 12:14:03 PM	24316
Surr: BFB	317	66.2-112	S	%Rec	20	3/18/2016 12:14:03 PM	24316
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	1.8	0.50		mg/Kg	20	3/18/2016 12:14:03 PM	24316
Toluene	35	0.99		mg/Kg	20	3/18/2016 12:14:03 PM	24316
Ethylbenzene	26	0.99		mg/Kg	20	3/18/2016 12:14:03 PM	24316
Xylenes, Total	83	2.0		mg/Kg	20	3/18/2016 12:14:03 PM	24316
Surr: 4-Bromofluorobenzene	151	80-120	S	%Rec	20	3/18/2016 12:14:03 PM	24316

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

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

Analytical Report

Lab Order 1603845

Date Reported: 3/22/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Yates Petroleum Corporation

Client Sample ID: W 08.0

Project: Dee 36SW State #2 Battery

Collection Date: 3/14/2016 10:40:00 AM

Lab ID: 1603845-007

Matrix: SOIL

Received Date: 3/16/2016 9:55:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: KJH
Diesel Range Organics (DRO)	2700	96		mg/Kg	10	3/19/2016 4:02:26 PM	24294
Surr: DNOP	0	70-130	S	%Rec	10	3/19/2016 4:02:26 PM	24294
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	680	49		mg/Kg	10	3/18/2016 12:37:33 PM	24316
Surr: BFB	330	66.2-112	S	%Rec	10	3/18/2016 12:37:33 PM	24316
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	0.99	0.25		mg/Kg	10	3/18/2016 12:37:33 PM	24316
Toluene	15	0.49		mg/Kg	10	3/18/2016 12:37:33 PM	24316
Ethylbenzene	13	0.49		mg/Kg	10	3/18/2016 12:37:33 PM	24316
Xylenes, Total	37	0.99		mg/Kg	10	3/18/2016 12:37:33 PM	24316
Surr: 4-Bromofluorobenzene	154	80-120	S	%Rec	10	3/18/2016 12:37:33 PM	24316

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

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

Analytical Report

Lab Order 1603845

Date Reported: 3/22/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Yates Petroleum Corporation

Client Sample ID: W 10.0

Project: Dee 36SW State #2 Battery

Collection Date: 3/14/2016 10:45:00 AM

Lab ID: 1603845-008

Matrix: SOIL

Received Date: 3/16/2016 9:55:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: KJH
Diesel Range Organics (DRO)	7300	100		mg/Kg	10	3/19/2016 4:45:24 PM	24294
Surr: DNOP	0	70-130	S	%Rec	10	3/19/2016 4:45:24 PM	24294
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	2200	93		mg/Kg	20	3/18/2016 6:31:31 PM	24316
Surr: BFB	371	66.2-112	S	%Rec	20	3/18/2016 6:31:31 PM	24316
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	13	0.47		mg/Kg	20	3/18/2016 6:31:31 PM	24316
Toluene	77	0.93		mg/Kg	20	3/18/2016 6:31:31 PM	24316
Ethylbenzene	48	0.93		mg/Kg	20	3/18/2016 6:31:31 PM	24316
Xylenes, Total	120	1.9		mg/Kg	20	3/18/2016 6:31:31 PM	24316
Surr: 4-Bromofluorobenzene	150	80-120	S	%Rec	20	3/18/2016 6:31:31 PM	24316

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1603845

Date Reported: 3/22/2016

CLIENT: Yates Petroleum Corporation

Client Sample ID: W 12.0

Project: Dee 36SW State #2 Battery

Collection Date: 3/14/2016 10:50:00 AM

Lab ID: 1603845-009

Matrix: SOIL

Received Date: 3/16/2016 9:55:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: KJH
Diesel Range Organics (DRO)	7900	96		mg/Kg	10	3/19/2016 5:28:33 PM	24294
Surr: DNOP	0	70-130	S	%Rec	10	3/19/2016 5:28:33 PM	24294
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	2400	95		mg/Kg	20	3/18/2016 6:55:00 PM	24316
Surr: BFB	449	66.2-112	S	%Rec	20	3/18/2016 6:55:00 PM	24316
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	8.1	0.48		mg/Kg	20	3/18/2016 6:55:00 PM	24316
Toluene	76	0.95		mg/Kg	20	3/18/2016 6:55:00 PM	24316
Ethylbenzene	49	0.95		mg/Kg	20	3/18/2016 6:55:00 PM	24316
Xylenes, Total	140	1.9		mg/Kg	20	3/18/2016 6:55:00 PM	24316
Surr: 4-Bromofluorobenzene	155	80-120	S	%Rec	20	3/18/2016 6:55:00 PM	24316

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

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1603845

22-Mar-16

Client: Yates Petroleum Corporation

Project: Dee 36SW State #2 Battery

Sample ID	LCS-24293		SampType: LCS		TestCode: EPA Method 8015M/D: Diesel Range Organics					
Client ID:	LCSS		Batch ID: 24293		RunNo: 32883					
Prep Date:	3/17/2016		Analysis Date: 3/18/2016		SeqNo: 1008134		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	46	10	50.00	0	91.8	65.8	136			
Surr: DNOP	3.9		5.000		77.0	70	130			

Sample ID	LCS-24294		SampType: LCS		TestCode: EPA Method 8015M/D: Diesel Range Organics					
Client ID:	LCSS		Batch ID: 24294		RunNo: 32883					
Prep Date:	3/17/2016		Analysis Date: 3/18/2016		SeqNo: 1008135		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	47	10	50.00	0	94.3	65.8	136			
Surr: DNOP	3.8		5.000		76.8	70	130			

Sample ID	MB-24293		SampType:	MBLK		TestCode:	EPA Method 8015M/D: Diesel Range Organics				
Client ID:	PBS		Batch ID:	24293		RunNo:	32883				
Prep Date:	3/17/2016		Analysis Date:	3/18/2016		SeqNo:	1008136		Units: mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Diesel Range Organics (DRO)	ND	10									
Surr: DNOP	8.5		10.00		85.5	70	130				

Sample ID	MB-24294		SampType:	MBLK		TestCode:	EPA Method 8015M/D: Diesel Range Organics				
Client ID:	PBS		Batch ID:	24294		RunNo:	32883				
Prep Date:	3/17/2016		Analysis Date:	3/18/2016		SeqNo:	1008137		Units: mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Diesel Range Organics (DRO)	ND	10									
Surr: DNOP	8.6		10.00		86.1	70	130				

Sample ID	LCS-24325		SampType: LCS		TestCode: EPA Method 8015M/D: Diesel Range Organics					
Client ID:	LCSS		Batch ID: 24325		RunNo: 32886					
Prep Date:	3/18/2016		Analysis Date: 3/18/2016		SeqNo: 1008166		Units: %Rec			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.3		5.000		85.1	70	130			

Sample ID	MB-24325		SampType: MBLK		TestCode: EPA Method 8015M/D: Diesel Range Organics					
Client ID:	PBS		Batch ID: 24325		RunNo: 32886					
Prep Date:	3/18/2016		Analysis Date: 3/18/2016		SeqNo: 1008167		Units: %Rec			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	8.3		10.00		83.0	70	130			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1603845

22-Mar-16

Client: Yates Petroleum Corporation

Project: Dee 36SW State #2 Battery

Sample ID	MB-24316		SampType:	MBLK		TestCode:	EPA Method 8015D: Gasoline Range				
Client ID:	PBS		Batch ID:	24316		RunNo:	32893				
Prep Date:	3/17/2016		Analysis Date:	3/18/2016		SeqNo:	1008621		Units: mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Gasoline Range Organics (GRO)	ND	5.0									
Surr: BFB	1100		1000		106	66.2	112				

Sample ID	LCS-24316		SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	LCSS		Batch ID: 24316		RunNo: 32893					
Prep Date:	3/17/2016		Analysis Date: 3/18/2016		SeqNo: 1008622		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	5.0	25.00	0	103	80	120			
Surr: BFB	1100		1000		114	66.2	112			S

Sample ID	MB-24315		SampType: MBLK		TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	PBS		Batch ID: 24315		RunNo: 32910					
Prep Date:	3/17/2016		Analysis Date: 3/18/2016		SeqNo: 1008676		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	940		1000		94.2	66.2	112			

Sample ID	LCS-24315		SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	LCSS		Batch ID: 24315		RunNo: 32910					
Prep Date:	3/17/2016		Analysis Date: 3/18/2016		SeqNo: 1008677		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	5.0	25.00	0	99.3	80	120			
Surr: BFB	1000		1000		102	66.2	112			

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1603845

22-Mar-16

Client: Yates Petroleum Corporation

Project: Dee 36SW State #2 Battery

Sample ID	MB-24316		SampType:	MBLK		TestCode:	EPA Method 8021B: Volatiles			
Client ID:	PBS		Batch ID:	24316		RunNo:	32893			
Prep Date:	3/17/2016		Analysis Date:	3/18/2016		SeqNo:	1008653		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	1.1		1.000		113	80	120			

Sample ID	LCS-24316		SampType:	LCS		TestCode:	EPA Method 8021B: Volatiles			
Client ID:	LCSS		Batch ID:	24316		RunNo:	32893			
Prep Date:	3/17/2016		Analysis Date:	3/18/2016		SeqNo:	1008654		Units: mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.025	1.000	0	102	80	120			
Toluene	0.98	0.050	1.000	0	97.7	80	120			
Ethylbenzene	0.99	0.050	1.000	0	98.9	80	120			
Xylenes, Total	2.9	0.10	3.000	0	98.1	80	120			
Surr: 4-Bromofluorobenzene	1.2		1.000		116	80	120			

Sample ID	MB-24315		SampType:	MBLK		TestCode:	EPA Method 8021B: Volatiles			
Client ID:	PBS		Batch ID:	24315		RunNo:	32910			
Prep Date:	3/17/2016		Analysis Date:	3/18/2016		SeqNo:	1008701		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	1.2		1.000		117	80	120			

Sample ID	LCS-24315		SampType:	LCS		TestCode:	EPA Method 8021B: Volatiles			
Client ID:	LCSS		Batch ID:	24315		RunNo:	32910			
Prep Date:	3/17/2016		Analysis Date:	3/18/2016		SeqNo:	1008702		Units: mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.90	0.025	1.000	0	89.6	80	120			
Toluene	0.97	0.050	1.000	0	97.2	80	120			
Ethylbenzene	0.98	0.050	1.000	0	98.4	80	120			
Xylenes, Total	3.0	0.10	3.000	0	99.5	80	120			
Surr: 4-Bromofluorobenzene	1.2		1.000		119	80	120			

Qualifiers:

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

Work Order Number: 1603845

RcptNo: 1

Received by/date:

SA *03/16/16*

Logged By: Lindsay Mangin

3/16/2016 9:55:00 AM

Janet Hedges

Completed By: Lindsay Mangin

3/16/2016 2:58:20 PM

Janet Hedges

Reviewed By:

SA *03/17/16*

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 $>0^{\circ}\text{C}$ 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 ☒
12. Does paperwork match bottle labels?
(Note discrepancies on chain of custody) Yes ☒ No ☐ # of preserved bottles checked for pH: _____
13. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐ Adjusted? (<2 or >12 unless noted) _____
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:

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	Good	Yes			

Analysis Request