

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

JOHN A. YATES
CHAIRMAN EMERITUS

JOHN A. YATES JR.
CHAIRMAN OF THE BOARD

DOUGLAS E. BROOKS
PRESIDENT
CHIEF EXECUTIVE OFFICER

JOHN D. PERINI
CHIEF FINANCIAL OFFICER

February 5, 2016

Mr. Mike Bratcher/ Ms. Heather Patterson
NMOCD District II
811 S. First St.
Artesia, NM 88210

Re: Torpedo BOW State #1
30-015-37495
Section 11, T25S-R27E
Eddy County, New Mexico

Dear Mr. Bratcher / Ms. Patterson,

Yates Petroleum Corporation is submitting the enclosed work plan for the above captioned well. The plan is being submitted in response to the C-141 report dated August 27, 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 February 20, 2016.

If you have any questions, feel free to call me at (575) 748-4171

Thank you.

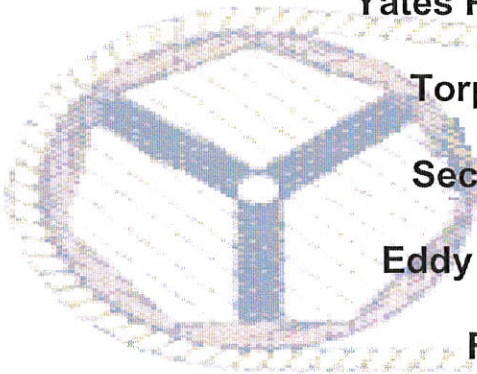
YATES PETROLEUM CORPORATION

Chase Settle
Environmental Regulatory Agent

Enclosure(s)

KATHY H. PORTER
SECRETARY

JAMES D. SCHAFER
TREASURER



Yates Petroleum Corporation

Torpedo BOW State #1

Section 11, T25S-R27E

Eddy County, New Mexico

February 5, 2016

2RP-3227

I. Location

Take Black River Village Road (CR-720) west of Malaga, NM for 2.72 miles, then turn south on Roadrunner Road (CR-774) and go 6.58 miles before turning southeast for .88 mile, the location is to 100 feet to the east.

II. Background

On August 27, 2015, Yates submitted to the NMOCD District II office a Form C-141 for the release of 15 B/O & PW Mix with 15 B/O & PW Mix recovered. The affected area is approximately 35 feet by 40 feet around the wellhead with 40 feet by 10 feet finger running to the southeast on the location pad. Initial delineation samples were taken (08/24/2015) and sent to a NMOCD approved laboratory (09/04/2015, results enclosed). Further sampling was conducted in the S2 release area (09/15/2016) and sent to a NMOCD approved laboratory (09/28/2015, results enclosed). More sampling was conducted in the S2 release area (10/26/2015) and sent to a NMOCD approved laboratory (11/06/2015, results enclosed).

III. Surface and Ground Water

Area surface geology is Paleozoic Permian. The ChevronTexaco Trend Map displays at this location (Section 11, T25S-R27E) that depth to groundwater is approximately 45' feet making the site ranking for this site a twenty (20). Watercourses in the area are dry except for infrequent flows in response to major precipitation events.

The ranking for this site is twenty (20) based on the as following:

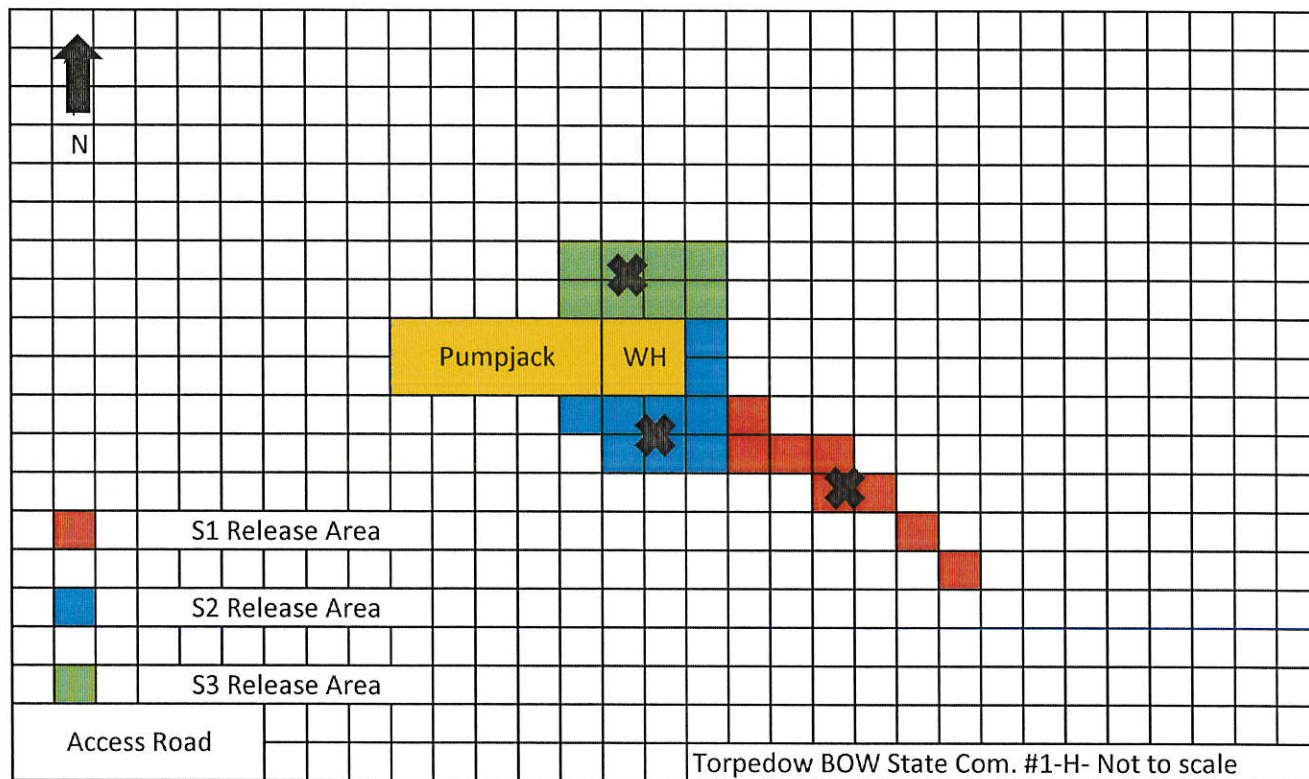
Depth to ground water	> 50'
Wellhead Protection Area	> 1000'
Distance to surface water body	> 1000'

IV. Soils

The area consists of soils that are caliche and loamy top soil that are interspersed with clay seams providing a low permeability barrier to retard vertical percolation of contaminants into the subsurface.

V. Scope of Work

Based on enclosed analytical results, the depth to groundwater (45'), and a decrease in chlorides, Yates Petroleum Corporation proposes to excavate four (4) feet in the S2 area, install a 20 ml synthetic liner, then backfill with the original soil that was excavated to install the liner. The TPH & BTEX are within the RRAL's for BTEX (50 ppm) and TPH (100 ppm) for the Total Ranking Score of zero (0) in the release area, no further analytical testing of TPH and/or BTEX will be conducted (all chloride analytical results are for documentation). When remediation work is completed a C-141 Final Report will be submitted to the NMOCD requesting closure of the site.



Sample ID	Analytical ID	Sample Date	Sample Type	Depth	BTEX	GRO	DRO	Chlorides
S1-1'	1508 E40	8/24/2015	Hand Auger	1'	ND	ND	ND	140
S1-2'	1508 E40	8/24/2015	Hand Auger	2'	ND	ND	ND	100
S2-1'	1508 E40	8/24/2015	Hand Auger	1'	ND	ND	100	1200
S2-2'	1508 E40	8/24/2015	Hand Auger	2'	ND	ND	ND	890
S2-3'	1509873	9/15/2015	Backhoe	3'	N/A	N/A	N/A	1800
S2-4'	1509874	9/15/2015	Backhoe	4'	N/A	N/A	N/A	1700
S2-5'	1509872	9/15/2015	Backhoe	5'	N/A	N/A	N/A	2500
S2-6'	1509870	9/15/2015	Backhoe	6'	N/A	N/A	N/A	3200
S2-7'	1510 E60	10/26/2015	Backhoe	7'	N/A	N/A	N/A	320
S2-8'	1510 E60	10/26/2015	Hand Auger	8'	N/A	N/A	N/A	920
S2-9'	1510 E60	10/26/2015	Hand Auger	9'	N/A	N/A	N/A	210
S3-1'	1508 E40	8/24/2015	Hand Auger	1'	ND	ND	ND	250
S3-2'	1508 E40	8/24/2015	Hand Auger	2'	ND	ND	ND	240

Site Ranking is Twenty (20). DTGW <50' (approx 48', Section 11, T25S-R27E, Trend Map)

All results are ppm, Chlorides for documentation.

Released: 15 B/O & PW Mix Recovered: 15 B/O & PW Mix Release Date: 8/15/2015



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

September 04, 2015

Chase Settle

Yates Petroleum Corporation

105 South Fourth Street

Artesia, NM 88210

TEL: (575) 748-4195

FAX

RE: Torpedo BOW State Com #1-H

OrderNo.: 1508E40

Dear Chase Settle:

Hall Environmental Analysis Laboratory received 6 sample(s) on 8/28/2015 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data 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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1508E40

Date Reported: 9/4/2015

CLIENT: Yates Petroleum Corporation

Client Sample ID: S1-1'

Project: Torpedo BOW State Com #1-H

Collection Date: 8/24/2015 9:02:00 AM

Lab ID: 1508E40-001

Matrix: SOIL

Received Date: 8/28/2015 2:08:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: LGT
Chloride	140	30		mg/Kg	20	9/2/2015 11:57:19 AM	21108
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	9/1/2015 9:05:05 PM	21044
Surr: DNOP	157	57.9-140	S	%REC	1	9/1/2015 9:05:05 PM	21044
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	9/2/2015 12:57:02 AM	21055
Surr: BFB	87.2	75.4-113		%REC	1	9/2/2015 12:57:02 AM	21055
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.047		mg/Kg	1	9/2/2015 12:57:02 AM	21055
Toluene	ND	0.047		mg/Kg	1	9/2/2015 12:57:02 AM	21055
Ethylbenzene	ND	0.047		mg/Kg	1	9/2/2015 12:57:02 AM	21055
Xylenes, Total	ND	0.095		mg/Kg	1	9/2/2015 12:57:02 AM	21055
Surr: 4-Bromofluorobenzene	100	80-120		%REC	1	9/2/2015 12:57:02 AM	21055

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		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1508E40

Date Reported: 9/4/2015

CLIENT: Yates Petroleum Corporation

Client Sample ID: S1-2'

Project: Torpedo BOW State Com #1-H

Collection Date: 8/24/2015 9:06:00 AM

Lab ID: 1508E40-002

Matrix: SOIL

Received Date: 8/28/2015 2:08:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: LGT
Chloride	100	30		mg/Kg	20	9/2/2015 12:09:44 PM	21108
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	9/1/2015 9:33:00 PM	21044
Surr: DNOP	107	57.9-140		%REC	1	9/1/2015 9:33:00 PM	21044
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	9/2/2015 1:22:17 AM	21055
Surr: BFB	85.0	75.4-113		%REC	1	9/2/2015 1:22:17 AM	21055
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.049		mg/Kg	1	9/2/2015 1:22:17 AM	21055
Toluene	ND	0.049		mg/Kg	1	9/2/2015 1:22:17 AM	21055
Ethylbenzene	ND	0.049		mg/Kg	1	9/2/2015 1:22:17 AM	21055
Xylenes, Total	ND	0.097		mg/Kg	1	9/2/2015 1:22:17 AM	21055
Surr: 4-Bromofluorobenzene	97.8	80-120		%REC	1	9/2/2015 1:22:17 AM	21055

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		

Analytical Report

Lab Order 1508E40

Date Reported: 9/4/2015

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Yates Petroleum Corporation

Client Sample ID: S2-1'

Project: Torpedo BOW State Com #1-H

Collection Date: 8/24/2015 9:14:00 AM

Lab ID: 1508E40-003

Matrix: SOIL

Received Date: 8/28/2015 2:08:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: LGT
Chloride	1200	30		mg/Kg	20	9/2/2015 12:22:09 PM	21108
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	100	9.8		mg/Kg	1	9/1/2015 10:00:47 PM	21044
Surr: DNOP	115	57.9-140		%REC	1	9/1/2015 10:00:47 PM	21044
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	9/2/2015 1:47:39 AM	21055
Surr: BFB	86.0	75.4-113		%REC	1	9/2/2015 1:47:39 AM	21055
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.049		mg/Kg	1	9/2/2015 1:47:39 AM	21055
Toluene	ND	0.049		mg/Kg	1	9/2/2015 1:47:39 AM	21055
Ethylbenzene	ND	0.049		mg/Kg	1	9/2/2015 1:47:39 AM	21055
Xylenes, Total	ND	0.098		mg/Kg	1	9/2/2015 1:47:39 AM	21055
Surr: 4-Bromofluorobenzene	98.9	80-120		%REC	1	9/2/2015 1:47:39 AM	21055

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		

Analytical Report

Lab Order 1508E40

Date Reported: 9/4/2015

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Yates Petroleum Corporation

Client Sample ID: S2-2'

Project: Torpedo BOW State Com #1-H

Collection Date: 8/24/2015 9:18:00 AM

Lab ID: 1508E40-004

Matrix: SOIL

Received Date: 8/28/2015 2:08:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: LGT
Chloride	890	30		mg/Kg	20	9/2/2015 12:34:34 PM	21108
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	9/1/2015 10:28:44 PM	21044
Surr: DNOP	106	57.9-140		%REC	1	9/1/2015 10:28:44 PM	21044
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	9/2/2015 2:13:03 AM	21055
Surr: BFB	101	75.4-113		%REC	1	9/2/2015 2:13:03 AM	21055
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.048		mg/Kg	1	9/2/2015 2:13:03 AM	21055
Toluene	ND	0.048		mg/Kg	1	9/2/2015 2:13:03 AM	21055
Ethylbenzene	ND	0.048		mg/Kg	1	9/2/2015 2:13:03 AM	21055
Xylenes, Total	ND	0.095		mg/Kg	1	9/2/2015 2:13:03 AM	21055
Surr: 4-Bromofluorobenzene	100	80-120		%REC	1	9/2/2015 2:13:03 AM	21055

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		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1508E40

Date Reported: 9/4/2015

CLIENT: Yates Petroleum Corporation

Client Sample ID: S3-1'

Project: Torpedo BOW State Com #1-H

Collection Date: 8/24/2015 9:28:00 AM

Lab ID: 1508E40-005

Matrix: SOIL

Received Date: 8/28/2015 2:08:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: LGT
Chloride	250	30		mg/Kg	20	9/2/2015 1:11:48 PM	21108
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	22	10		mg/Kg	1	9/1/2015 10:56:16 PM	21044
Surr: DNOP	107	57.9-140		%REC	1	9/1/2015 10:56:16 PM	21044
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	9/2/2015 10:40:17 AM	21055
Surr: BFB	92.6	75.4-113		%REC	1	9/2/2015 10:40:17 AM	21055
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.048		mg/Kg	1	9/2/2015 10:40:17 AM	21055
Toluene	ND	0.048		mg/Kg	1	9/2/2015 10:40:17 AM	21055
Ethylbenzene	ND	0.048		mg/Kg	1	9/2/2015 10:40:17 AM	21055
Xylenes, Total	ND	0.096		mg/Kg	1	9/2/2015 10:40:17 AM	21055
Surr: 4-Bromofluorobenzene	102	80-120		%REC	1	9/2/2015 10:40:17 AM	21055

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		

Analytical Report

Lab Order 1508E40

Date Reported: 9/4/2015

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Yates Petroleum Corporation

Client Sample ID: S3-2'

Project: Torpedo BOW State Com #1-H

Collection Date: 8/24/2015 9:35:00 AM

Lab ID: 1508E40-006

Matrix: SOIL

Received Date: 8/28/2015 2:08:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: LGT
Chloride	240	30		mg/Kg	20	9/2/2015 1:24:13 PM	21108
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	9/1/2015 11:24:08 PM	21044
Surr: DNOP	102	57.9-140		%REC	1	9/1/2015 11:24:08 PM	21044
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	9/2/2015 11:05:43 AM	21055
Surr: BFB	89.1	75.4-113		%REC	1	9/2/2015 11:05:43 AM	21055
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.047		mg/Kg	1	9/2/2015 11:05:43 AM	21055
Toluene	ND	0.047		mg/Kg	1	9/2/2015 11:05:43 AM	21055
Ethylbenzene	ND	0.047		mg/Kg	1	9/2/2015 11:05:43 AM	21055
Xylenes, Total	ND	0.095		mg/Kg	1	9/2/2015 11:05:43 AM	21055
Surr: 4-Bromofluorobenzene	102	80-120		%REC	1	9/2/2015 11:05:43 AM	21055

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		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1508E40

04-Sep-15

Client: Yates Petroleum Corporation
Project: Torpedo BOW State Com #1-H

Sample ID	MB-21108	SampType:	MBLK	TestCode:	EPA Method 300.0: Anions					
Client ID:	PBS	Batch ID:	21108	RunNo:	28635					
Prep Date:	9/2/2015	Analysis Date:	9/2/2015	SeqNo:	866750	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	LCS-21108	SampType:	LCS	TestCode:	EPA Method 300.0: Anions					
Client ID:	LCSS	Batch ID:	21108	RunNo:	28635					
Prep Date:	9/2/2015	Analysis Date:	9/2/2015	SeqNo:	866751	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	94.7	90	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
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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1508E40

04-Sep-15

Client: Yates Petroleum Corporation
Project: Torpedo BOW State Com #1-H

Sample ID	MB-21044	SampType:	MBLK	TestCode:	EPA Method 8015M/D: Diesel Range Organics					
Client ID:	PBS	Batch ID:	21044	RunNo:	28580					
Prep Date:	8/31/2015	Analysis Date:	9/1/2015	SeqNo:	864619	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	9.6		10.00		95.8	57.9	140			

Sample ID	LCS-21044	SampType:	LCS	TestCode:	EPA Method 8015M/D: Diesel Range Organics					
Client ID:	LCSS	Batch ID:	21044	RunNo:	28580					
Prep Date:	8/31/2015	Analysis Date:	9/1/2015	SeqNo:	864624	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	43	10	50.00	0	86.4	57.4	139			
Surr: DNOP	4.9		5.000		97.7	57.9	140			

Sample ID	MB-21068	SampType:	MBLK	TestCode:	EPA Method 8015M/D: Diesel Range Organics					
Client ID:	PBS	Batch ID:	21068	RunNo:	28606					
Prep Date:	8/31/2015	Analysis Date:	9/2/2015	SeqNo:	866078	Units:	%REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	9.8		10.00		97.7	57.9	140			

Sample ID	LCS-21068	SampType:	LCS	TestCode:	EPA Method 8015M/D: Diesel Range Organics					
Client ID:	LCSS	Batch ID:	21068	RunNo:	28606					
Prep Date:	8/31/2015	Analysis Date:	9/2/2015	SeqNo:	866079	Units:	%REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	5.3		5.000		106	57.9	140			

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1508E40

04-Sep-15

Client: Yates Petroleum Corporation
Project: Torpedo BOW State Com #1-H

Sample ID	MB-21059	SampType:	MBLK	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	PBS	Batch ID:	21059	RunNo:	28590					
Prep Date:	8/31/2015	Analysis Date:	9/1/2015	SeqNo:	865117	Units:	%REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	870		1000		86.7	75.4	113			

Sample ID	LCS-21059	SampType:	LCS	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	LCSS	Batch ID:	21059	RunNo:	28590					
Prep Date:	8/31/2015	Analysis Date:	9/1/2015	SeqNo:	865118	Units:	%REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	940		1000		93.8	75.4	113			

Sample ID	MB-21055	SampType:	MBLK	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	PBS	Batch ID:	21055	RunNo:	28590					
Prep Date:	8/31/2015	Analysis Date:	9/1/2015	SeqNo:	865124	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	890		1000		88.5	75.4	113			

Sample ID	LCS-21055	SampType:	LCS	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	LCSS	Batch ID:	21055	RunNo:	28590					
Prep Date:	8/31/2015	Analysis Date:	9/1/2015	SeqNo:	865125	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	105	79.6	122			
Surr: BFB	1100		1000		112	75.4	113			

Sample ID	MB-21086	SampType:	MBLK	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	PBS	Batch ID:	21086	RunNo:	28617					
Prep Date:	9/1/2015	Analysis Date:	9/2/2015	SeqNo:	866257	Units:	%REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	840		1000		84.1	75.4	113			

Sample ID	LCS-21086	SampType:	LCS	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	LCSS	Batch ID:	21086	RunNo:	28617					
Prep Date:	9/1/2015	Analysis Date:	9/2/2015	SeqNo:	866258	Units:	%REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	930		1000		93.0	75.4	113			

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 | |

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1508E40

04-Sep-15

Client: Yates Petroleum Corporation
Project: Torpedo BOW State Com #1-H

Sample ID	MB-21089	SampType:	MBLK	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	PBS	Batch ID:	21089	RunNo:	28617					
Prep Date:	9/1/2015	Analysis Date:	9/2/2015	SeqNo:	866273	Units:	%REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	880		1000		87.6	75.4	113			

Sample ID	LCS-21089	SampType:	LCS	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	LCSS	Batch ID:	21089	RunNo:	28617					
Prep Date:	9/1/2015	Analysis Date:	9/2/2015	SeqNo:	866274	Units:	%REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	970		1000		97.2	75.4	113			

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 | |

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1508E40

04-Sep-15

Client: Yates Petroleum Corporation
Project: Torpedo BOW State Com #1-H

Sample ID	MB-21059	SampType:	MBLK	TestCode:	EPA Method 8021B: Volatiles					
Client ID:	PBS	Batch ID:	21059	RunNo:	28590					
Prep Date:	8/31/2015	Analysis Date:	9/1/2015	SeqNo:	865148	Units:	%REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.0		1.000		103	80	120			

Sample ID	LCS-21059	SampType:	LCS	TestCode:	EPA Method 8021B: Volatiles					
Client ID:	LCSS	Batch ID:	21059	RunNo:	28590					
Prep Date:	8/31/2015	Analysis Date:	9/1/2015	SeqNo:	865149	Units:	%REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.1		1.000		106	80	120			

Sample ID	MB-21055	SampType:	MBLK	TestCode:	EPA Method 8021B: Volatiles					
Client ID:	PBS	Batch ID:	21055	RunNo:	28590					
Prep Date:	8/31/2015	Analysis Date:	9/1/2015	SeqNo:	865154	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.050								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.0		1.000		104	80	120			

Sample ID	LCS-21055	SampType:	LCS	TestCode:	EPA Method 8021B: Volatiles					
Client ID:	LCSS	Batch ID:	21055	RunNo:	28590					
Prep Date:	8/31/2015	Analysis Date:	9/1/2015	SeqNo:	865155	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.050	1.000	0	102	80	120			
Toluene	0.99	0.050	1.000	0	99.3	80	120			
Ethylbenzene	1.0	0.050	1.000	0	102	80	120			
Xylenes, Total	3.1	0.10	3.000	0	102	80	120			
Surr: 4-Bromofluorobenzene	1.2		1.000		116	80	120			

Sample ID	MB-21086	SampType:	MBLK	TestCode:	EPA Method 8021B: Volatiles					
Client ID:	PBS	Batch ID:	21086	RunNo:	28617					
Prep Date:	9/1/2015	Analysis Date:	9/2/2015	SeqNo:	866291	Units:	%REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.97		1.000		97.3	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 | |

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1508E40

04-Sep-15

Client: Yates Petroleum Corporation
Project: Torpedo BOW State Com #1-H

Sample ID	LCS-21086		SampType: LCS		TestCode: EPA Method 8021B: Volatiles					
Client ID:	LCSS		Batch ID: 21086		RunNo: 28617					
Prep Date:	9/1/2015		Analysis Date: 9/2/2015		SeqNo: 866292		Units: %REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.0		1.000		104	80	120			

Sample ID	MB-21089		SampType:	MBLK		TestCode:	EPA Method 8021B: Volatiles				
Client ID:	PBS		Batch ID:	21089		RunNo:	28617				
Prep Date:	9/1/2015		Analysis Date:	9/2/2015		SeqNo:	866297		Units: %REC		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Surr: 4-Bromofluorobenzene	1.0		1.000		103	80	120				

Sample ID	LCS-21089		SampType: LCS		TestCode: EPA Method 8021B: Volatiles					
Client ID:	LCSS		Batch ID: 21089		RunNo: 28617					
Prep Date:	9/1/2015		Analysis Date: 9/2/2015		SeqNo: 866298		Units: %REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.1		1.000		111	80	120			

Qualifiers:

- | | |
|---|---|
| * Value exceeds Maximum Contaminant Level. | 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 | |



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: 1508E40

RcptNo: 1

Received by/date:

Logged By: Lindsay Mangin

8/28/2015 2:08:00 PM

Completed By: Lindsay Mangin

8/31/2015 6:31:39 AM

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 °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.4	Good	Yes			

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

Torpedo BOW State Com #1-H

4901 Hawkins NE - Albuquerque, NM 87109

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

30-015-37495

Project Manager:

Chase Settle

PO # 205. 0750

PO # 205. 0750

Chase Settle

☒ Yes ☐ No

Temperature: 21.0

<p>  UNIVERSITY OF MICHIGAN PRESS </p>	<p>  UNIVERSITY OF MICHIGAN PRESS </p>
---	---

Preservative

Type

[illegible]

ICE

	L
--	---

701	
-----	--

ICE	
-----	--

ICE

ICE

[illegible]

ICE		
-----	--	--

--	--

--	--

[illegible]

--	--

[illegible]

2

1

155

accredited laboratories. The



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

September 28, 2015

Chase Settle

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

RE: Torpedo BOW State Com #1-H

OrderNo.: 1509870

Dear Chase Settle:

Hall Environmental Analysis Laboratory received 1 sample(s) on 9/18/2015 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data 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 ReportLab Order **1509870**Date Reported: **9/28/2015****Hall Environmental Analysis Laboratory, Inc.****CLIENT:** Yates Petroleum Corporation**Client Sample ID:** S2-6'**Project:** Torpedo BOW State Com #1-H**Collection Date:** 9/15/2015 8:35:00 AM**Lab ID:** 1509870-001**Matrix:** SOIL**Received Date:** 9/18/2015 9:21:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: LGT
Chloride	3200	150		mg/Kg	100	9/24/2015 5:58:42 AM	21444

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		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1509870

28-Sep-15

Client: Yates Petroleum Corporation

Project: Torpedo BOW State Com #1-H

Sample ID	MB-21444	SampType:	MBLK	TestCode:	EPA Method 300.0: Anions					
Client ID:	PBS	Batch ID:	21444	RunNo:	29028					
Prep Date:	9/22/2015	Analysis Date:	9/22/2015	SeqNo:	880818	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	LCS-21444	SampType:	LCS	TestCode:	EPA Method 300.0: Anions					
Client ID:	LCSS	Batch ID:	21444	RunNo:	29028					
Prep Date:	9/22/2015	Analysis Date:	9/22/2015	SeqNo:	880819	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	93.2	90	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
- 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



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: 1509870

RcptNo: 1

Received by/date:

Logged By: Lindsay Mangin

Completed By: Lindsay Mangin

Reviewed By:

09/18/15
9/18/2015 9:21:00 AM

9/18/2015 10:40:23 AM

09/18/15

[Signature]

[Signature]

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	4.2	Good	Yes			

☒ Standard ☐ Rush

www.hallenvironmental.com

Torpedo BOW State Com #1-H

Project #:

30-015-37495

Project Manager:

Chase Settle

PO # 205.0750

Sampler: Chase Settle

On Ice: ☒ Yes ☐ No

Sample Temperature: 5.2-10CF=4.2

Type and #
Container

1 - 407	None
---------	------

1509870

1 - 407	None
---------	------

Received by:

4

Received by:

Remarks:

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.



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

September 28, 2015

Chase Settle

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

RE: Torpedo BOW State Com #1-H

OrderNo.: 1509872

Dear Chase Settle:

Hall Environmental Analysis Laboratory received 1 sample(s) on 9/18/2015 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data 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 1509872

Date Reported: 9/28/2015

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** Yates Petroleum Corporation**Client Sample ID:** S2-5'**Project:** Torpedo BOW State Com #1-H**Collection Date:** 9/15/2015 8:27:00 AM**Lab ID:** 1509872-001**Matrix:** SOIL**Received Date:** 9/18/2015 9:21:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: LGT
Chloride	2500	150		mg/Kg	100	9/24/2015 6:11:06 AM	21444

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		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1509872

28-Sep-15

Client: Yates Petroleum Corporation
Project: Torpedo BOW State Com #1-H

Sample ID	MB-21444	SampType	MBLK	TestCode	EPA Method 300.0: Anions					
Client ID	PBS	Batch ID	21444	RunNo	29028					
Prep Date	9/22/2015	Analysis Date	9/22/2015	SeqNo	880818	Units	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	LCS-21444	SampType	LCS	TestCode	EPA Method 300.0: Anions					
Client ID	LCSS	Batch ID	21444	RunNo	29028					
Prep Date	9/22/2015	Analysis Date	9/22/2015	SeqNo	880819	Units	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	93.2	90	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
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



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: 1509872

RcptNo: 1

Received by/date:

Logged By: Lindsay Mangin

09/18/15
9/18/2015 9:21:00 AM

Completed By: Lindsay Mangin

9/18/2015 10:44:05 AM

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 ☒

of preserved
bottles checked
for pH:

(<2 or >12 unless noted)

12. Does paperwork match bottle labels?

Yes ☒

No ☐

(Note discrepancies on chain of custody)

13. Are matrices correctly identified on Chain of Custody?

Yes ☒

No ☐

Adjusted?

14. Is it clear what analyses were requested?

Yes ☒

No ☐

15. Were all holding times able to be met?

Yes ☒

No ☐

Checked by:

(If no, notify customer for authorization.)

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	4.2	Good	Yes			

☒ Standard ☐ Rush

Name: Torpedo BOW State Com #1-H

Torpedo BOW State Com #1-H

Project #:

30-015-37495

Project Manager:

Chase Settle

PO # 205. 0750

Sampler: Chase Settle

On Ice: ☒ Yes ☐ No

Sample Temperature: 5,2-1.00=4.2

Time	Matrix	Sample Request ID
00:00	Matrix 1	Sample 1
00:05	Matrix 1	Sample 2
00:10	Matrix 1	Sample 3
00:15	Matrix 1	Sample 4
00:20	Matrix 1	Sample 5
00:25	Matrix 1	Sample 6
00:30	Matrix 1	Sample 7
00:35	Matrix 1	Sample 8
00:40	Matrix 1	Sample 9
00:45	Matrix 1	Sample 10
00:50	Matrix 1	Sample 11
00:55	Matrix 1	Sample 12
01:00	Matrix 1	Sample 13
01:05	Matrix 1	Sample 14
01:10	Matrix 1	Sample 15
01:15	Matrix 1	Sample 16
01:20	Matrix 1	Sample 17
01:25	Matrix 1	Sample 18
01:30	Matrix 1	Sample 19
01:35	Matrix 1	Sample 20
01:40	Matrix 1	Sample 21
01:45	Matrix 1	Sample 22
01:50	Matrix 1	Sample 23
01:55	Matrix 1	Sample 24
02:00	Matrix 1	Sample 25
02:05	Matrix 1	Sample 26
02:10	Matrix 1	Sample 27
02:15	Matrix 1	Sample 28
02:20	Matrix 1	Sample 29
02:25	Matrix 1	Sample 30
02:30	Matrix 1	Sample 31
02:35	Matrix 1	Sample 32
02:40	Matrix 1	Sample 33
02:45	Matrix 1	Sample 34
02:50	Matrix 1	Sample 35
02:55	Matrix 1	Sample 36
03:00	Matrix 1	Sample 37
03:05	Matrix 1	Sample 38
03:10	Matrix 1	Sample 39
03:15	Matrix 1	Sample 40
03:20	Matrix 1	Sample 41
03:25	Matrix 1	Sample 42
03:30	Matrix 1	Sample 43
03:35	Matrix 1	Sample 44
03:40	Matrix 1	Sample 45
03:45	Matrix 1	Sample 46
03:50	Matrix 1	Sample 47
03:55	Matrix 1	Sample 48
04:00	Matrix 1	Sample 49
04:05	Matrix 1	Sample 50
04:10	Matrix 1	Sample 51
04:15	Matrix 1	Sample 52
04:20	Matrix 1	Sample 53
04:25	Matrix 1	Sample 54
04:30	Matrix 1	Sample 55
04:35	Matrix 1	Sample 56
04:40	Matrix 1	Sample 57
04:45	Matrix 1	Sample 58
04:50	Matrix 1	Sample 59
04:55	Matrix 1	Sample 60
05:00	Matrix 1	Sample 61
05:05	Matrix 1	Sample 62
05:10	Matrix 1	Sample 63
05:15	Matrix 1	Sample 64
05:20	Matrix 1	Sample 65
05:25	Matrix 1	Sample 66
05:30	Matrix 1	Sample 67
05:35	Matrix 1	Sample 68
05:40	Matrix 1	Sample 69
05:45	Matrix 1	Sample 70
05:50	Matrix 1	Sample 71
05:55	Matrix 1	Sample 72
06:00	Matrix 1	Sample 73
06:05	Matrix 1	Sample 74
06:10	Matrix 1	Sample 75
06:15	Matrix 1	Sample 76
06:20	Matrix 1	Sample 77
06:25	Matrix 1	Sample 78
06:30	Matrix 1	Sample 79
06:35	Matrix 1	Sample 80
06:40	Matrix 1	Sample 81
06:45	Matrix 1	Sample 82
06:50	Matrix 1	Sample 83
06:55	Matrix 1	Sample 84
07:00	Matrix 1	Sample 85
07:05	Matrix 1	Sample 86
07:10	Matrix 1	Sample 87
07:15	Matrix 1	Sample 88
07:20	Matrix 1	Sample 89
07:25	Matrix 1	Sample 90
07:30	Matrix 1	Sample 91
07:35	Matrix 1	Sample 92
07:40	Matrix 1	Sample 93
07:45	Matrix 1	Sample 94
07:50	Matrix 1	Sample 95
07:55	Matrix 1	Sample 96
08:00	Matrix 1	Sample 97
08:05	Matrix 1	Sample 98
08:10	Matrix 1	Sample 99
08:15	Matrix 1	Sample 100
08:20	Matrix 1	Sample 101
08:25	Matrix 1	Sample 102
08:30	Matrix 1	Sample 103
08:35	Matrix 1	Sample 104
08:40	Matrix 1	Sample 105
08:45	Matrix 1	Sample 106
08:50	Matrix 1	Sample 107
08:55	Matrix 1	Sample 108
09:00	Matrix 1	Sample 109
09:05		

HEAL No.

8-27 Soil S2-5'

9

me:	Relinquished by:
-----	------------------

Date _____ Time _____

me:	Relinquished by:
-----	------------------

Date _____ Time _____

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.

HALL ENVIRONMENTAL ANALYSIS LABORATORY

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

30-015-37495

Project Manager:

Chase Settle

Sampler: Chase Settle

On Ice: ☒ Yes ☐ No

Sample Temperature: 5,2-1.00=4.2

HEAL No.

Preservative
Type

1 - 4oz.	None
----------	------

Remarks:

Received by:

Date _____ Time _____

Received by ~~/~~

Date _____ Time _____



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

September 28, 2015

Chase Settle

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

RE: Torpedo BOW State Com #1-H

OrderNo.: 1509873

Dear Chase Settle:

Hall Environmental Analysis Laboratory received 1 sample(s) on 9/18/2015 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data 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 1509873

Date Reported: 9/28/2015

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** Yates Petroleum Corporation**Client Sample ID:** S2-3'**Project:** Torpedo BOW State Com #1-H**Collection Date:** 9/15/2015 8:18:00 AM**Lab ID:** 1509873-001**Matrix:** SOIL**Received Date:** 9/18/2015 9:21:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: LGT
Chloride	1800	150		mg/Kg	100	9/24/2015 6:23:31 AM	21444

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	Page 1 of 2
	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			

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1509873

28-Sep-15

Client: Yates Petroleum Corporation
Project: Torpedo BOW State Com #1-H

Sample ID	MB-21444	SampType:	MBLK	TestCode:	EPA Method 300.0: Anions					
Client ID:	PBS	Batch ID:	21444	RunNo:	29028					
Prep Date:	9/22/2015	Analysis Date:	9/22/2015	SeqNo:	880818	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	LCS-21444	SampType:	LCS	TestCode:	EPA Method 300.0: Anions					
Client ID:	LCSS	Batch ID:	21444	RunNo:	29028					
Prep Date:	9/22/2015	Analysis Date:	9/22/2015	SeqNo:	880819	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	93.2	90	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
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



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: 1509873

RcptNo: 1

Received by/date:

Logged By: Lindsay Mangin

09/18/15
9/18/2015 9:21:00 AM

Completed By: Lindsay Mangin

9/18/2015 10:47:16 AM

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 ☒

of preserved
bottles checked
for pH:

(<2 or >12 unless noted)

12. Does paperwork match bottle labels?

Yes ☒

No ☐

(Note discrepancies on chain of custody)

13. Are matrices correctly identified on Chain of Custody?

Yes ☒

No ☐

Adjusted?

14. Is it clear what analyses were requested?

Yes ☒

No ☐

15. Were all holding times able to be met?

Yes ☒

No ☐

Checked by:

(If no, notify customer for authorization.)

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	4.2	Good	Yes			

Chain-of-Custody Record

Client: Yates Petroleum Corporation

Mailing Address:

105 South 4th Street Artesia, NM 88210

Phone #: 575-703-6537

email or Fax#: csettle@yatespetroleum.com

QA/QC Package:

☐ Standard ☐ Level 4 (Full Validation)

Accreditation:

☐ NELAP ☐ Other

☐ EDD (Type)

Turn-Around Time:

☒ Standard ☐ Rush

Project Name:

Torpedo BOW State Com #1-H

Project #:

30-015-37495

Project Manager:

Chase Settle

PO # 205. 0750

Sampler: Chase Settle

On Ice: ☒ Yes ☐ No

Sample Temperature: 5.2 - 10.2 F = 4.2

Date Time Matrix Sample Request ID

9/15/2015

8:18

Soil

S2-3'

Container Type and #

1 - 4oz.

Preservative Type

None

HEAL No.

1509873

7001

Analysis Request

BTEX + MTBE + TMB's (8021)

BTEX + MTBE + TPH (Gas only)

TPH Method 8015B (Gas/Diesel)

TPH (Method 418.1)

EDB (Method 504.1)

8310 (PNA or PAH)

RCRA 8 Metals

Anions (F, Cl, NO₃, NO₂, PO₄, SO₄)

8081 Pesticides / 8082 PCB's

8260B (VOA)


8270 (Semi-VOA)

Air Bubbles (Y or N)

Remarks:

Received by:  Date: 09/18/15 Time: 0921

Date: 9/17/2015

Date: Relinquished by: 

Received by:  Date: Time:





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

September 28, 2015

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

RE: Torpedo BOW State Com #1-H

OrderNo.: 1509874

Dear Chase Settle:

Hall Environmental Analysis Laboratory received 1 sample(s) on 9/18/2015 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data 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 ReportLab Order **1509874**

Date Reported: 9/28/2015

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** Yates Petroleum Corporation**Client Sample ID:** S2-4'**Project:** Torpedo BOW State Com #1-H**Collection Date:** 9/15/2015 8:21:00 AM**Lab ID:** 1509874-001**Matrix:** SOIL**Received Date:** 9/18/2015 9:21:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: LGT
Chloride	1700	75		mg/Kg	50	9/24/2015 6:35:55 AM	21444

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		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1509874

28-Sep-15

Client: Yates Petroleum Corporation
Project: Torpedo BOW State Com #1-H

Sample ID	MB-21444	SampType:	MBLK	TestCode:	EPA Method 300.0: Anions					
Client ID:	PBS	Batch ID:	21444	RunNo:	29028					
Prep Date:	9/22/2015	Analysis Date:	9/22/2015	SeqNo:	880818	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	LCS-21444	SampType:	LCS	TestCode:	EPA Method 300.0: Anions					
Client ID:	LCSS	Batch ID:	21444	RunNo:	29028					
Prep Date:	9/22/2015	Analysis Date:	9/22/2015	SeqNo:	880819	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	93.2	90	110			

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 | |



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: 1509874

RcptNo: 1

Received by/date:

Logged By: Lindsay Mangin

09/18/15
9/18/2015 9:21:00 AM

Completed By: Lindsay Mangin

9/18/2015 10:49:47 AM

Reviewed By: mg

09/18/15

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	4.2	Good	Yes			

HALL ENVIRONMENTAL ANALYSIS LABORATORY

☒ Standard ☐ Rush

www.hallenvironmental.com

Torpedo BOW State Com #1-H

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

30-015-37495

Project Manager:

Chase Settle

PO # 205. 0750

Sampler: Chase Settle

On Ice: ☒ Yes ☐ No

Sample Temperature: 5, 2-1, OF-4, 2

Container

Ma

Soil

1 - 40Z.

None

HEAL No.

HEAL No.

Preservat

Relinquished by:

Received by:

Date	Time
------	------

Relinquished by:

Received by:

Date Time

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.



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

November 06, 2015

Chase Settle

Yates Petroleum Corporation
105 South Fourth Street
Artesia, NM 88210
TEL: (575) 748-4217
FAX

RE: Torpedo BOW State Com #1-H

OrderNo.: 1510E60

Dear Chase Settle:

Hall Environmental Analysis Laboratory received 3 sample(s) on 10/30/2015 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data 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: 1510E60

Date Reported: 11/6/2015

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** Yates Petroleum Corporation
Project: Torpedo BOW State Com #1-H**Lab Order:** 1510E60**Lab ID:** 1510E60-001**Collection Date:** 10/26/2015 9:43:00 AM**Client Sample ID:** S2-7'**Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: LGT
Chloride	320	30		mg/Kg	20	11/4/2015 2:21:44 PM	22180

Lab ID: 1510E60-002**Collection Date:** 10/26/2015 9:52:00 AM**Client Sample ID:** S2-8'**Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: LGT
Chloride	920	30		mg/Kg	20	11/4/2015 2:34:09 PM	22180

Lab ID: 1510E60-003**Collection Date:** 10/26/2015 10:05:00 AM**Client Sample ID:** S2-9'**Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: LGT
Chloride	210	30		mg/Kg	20	11/4/2015 2:46:34 PM	22180

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	Page 1 of 2
	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			

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1510E60

06-Nov-15

Client: Yates Petroleum Corporation
Project: Torpedo BOW State Com #1-H

Sample ID	MB-22180	SampType	MBLK	TestCode	EPA Method 300.0: Anions					
Client ID	PBS	Batch ID	22180	RunNo	30017					
Prep Date	11/4/2015	Analysis Date	11/4/2015	SeqNo	914569	Units	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	LCS-22180	SampType	LCS	TestCode	EPA Method 300.0: Anions					
Client ID	LCSS	Batch ID	22180	RunNo	30017					
Prep Date	11/4/2015	Analysis Date	11/4/2015	SeqNo	914570	Units	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	92.2	90	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
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

Sample Log-In Check List

Client Name: Yates Petroleum Corpora

Work Order Number: 1510E60

RcptNo: 1

Received by/date:

OS

10/30/15

Logged By: Celina Sessa

10/30/2015 9:45:00 AM

Celina Sessa

Completed By: Celina Sessa

10/30/2015 11:00:26 AM

Celina Sessa

Reviewed By:

[Signature]

10/30/15

Ja 10/30/15

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: _____
(<2 or >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:

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	2.6	Good	Not Present			

