

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

April 4, 2016

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

RE: Bryan ME #1
30-015-23097
Section 33, T18S-R26E
Eddy County, New Mexico

Mr. Bratcher or Ms. Patterson,

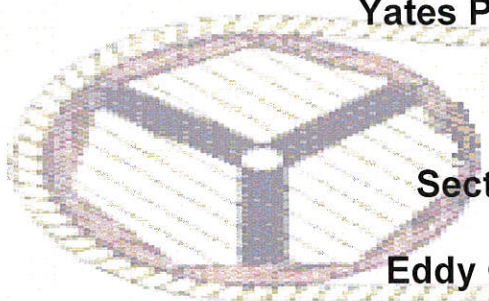
Yates Petroleum Corporation would like to submit the following plan of work to you regarding the release that occurred at the above mentioned facility on July 11, 2015 (2RP-3164). The release was 15 barrels of produced water with 10 barrels of produced water recovered.

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

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

Thank You,

Amber Griffin
Environmental Regulatory Agent
Yates Petroleum Corporation



Yates Petroleum Corporation

Bryan ME #1

Section 33, T18S-R26E

Eddy County, New Mexico

April 4, 2016

I. Location

The release area is located approximately 9.1 miles south of Artesia, NM on Highway 285, 0.6 miles east of Highway 285 on Kincaid Ranch Road and 0.5 miles south of Kincaid Ranch Road on a lease road.

II. Background

On July 11, 2015, Yates had a release of 15 barrels produced water with 10 barrels produced water recovered. The area affected from this release was to the north of the wellhead/pumpjack and is approximately 30' x 40'. At the time of the release, the area was bermed to prevent the release from spreading. An initial Form C-141 was submitted, via e-mail, to the NMOCD District II on July 27, 2015.

On July 15, 2015 Yates visited the site and collected an initial soil sample from the surface using a shovel. The surface soil sample was sent to an approved NMOCD laboratory and tested for BTEX 8021B, TPH 8015M, and Chlorides 300.0. Yates received the analytical results on July 24, 2015 (Report 1507792 attached to this work plan). The analytical results showed that both BTEX and TPH were at levels below NMOCD RRAL's. The analytical results also showed elevated chloride levels, and Yates determined that further vertical delineation of chlorides was needed.

Yates returned to the site again on September 10, 2015 and November 3, 2015 and collected soils samples from the depths of 1' – 8', 10', 12' and 14' below the surface level using a backhoe. Yates received the analytical results on September 28, 2015, October 12, 2015 and November 17, 2015 (Reports 1509894, 1510101 and 1511272 attached to this work plan). Analytical results from these sampling events showed that chloride levels were still elevated.

Yates returned to the site on February 24, 2016 and collected soils samples from the depths of 16', 18' and 20' below the surface level using a trackhoe. Yates received the analytical results on March 4, 2016 (Report 1602B44 attached to this work plan). Analytical results show chloride levels finally delineating to acceptable levels.

III. Surface and Ground Water

Area surface geology is Cenozoic. The ChevronTexaco depth to ground water map shows the depth to groundwater to be approximately 75' feet making the site ranking for this site a ten (10). Watercourses in the area are dry except for infrequent flows in response to major precipitation events.

The ranking for this site is ten (10) based on the following:

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

IV. Soils

The area consists of soils that are caliche and clay seams.

V. Scope of Work

Based off the analytical reports which show complete vertical delineation, Yates proposes to excavate 3' from the release area. The excavation will be approximately 40' long, 30' wide. Once all soils have been excavated, a 20 mil synthetic liner will be placed in the bottom of the excavation. The backfill process of the excavation will then be completed with topsoil.

Contaminated soils that are excavated will be hauled to a NMOCD approved disposal facility – R360 Environmental Solutions Halfway Facility located on Highway 62/180.

Once all excavation and backfill work is complete, Yates will submit a Final Form C-141 to NMOCD requesting closure of this release.



Google earth

Google earth

feet 300
meters 100



Bryan ME #1

	Sample Area	Sample Date	Analytical Report	Sample Type	Depth	BTEX	GRO	DRO	TOTAL	Chlorides
Bryan 1 - Surface	Release Area	7/15/2015	1507792	Grab/Shovel	Surface	ND	ND	ND	ND	7,700
Bryan 1 - 1'	Release Area	9/10/2015	1509894	Grab/Backhoe	1'	-	-	-	-	2,000
Bryan 1 - 2'	Release Area	9/10/2015	1509894	Grab/Backhoe	2'	-	-	-	-	1,800
Bryan 1 - 3'	Release Area	9/10/2015	1509894	Grab/Backhoe	3'	-	-	-	-	2,700
Bryan 1 - 4'	Release Area	9/10/2015	1510101	Grab/Backhoe	4'	-	-	-	-	1,700
Bryan 1 - 5'	Release Area	9/10/2015	1510101	Grab/Backhoe	5'	-	-	-	-	1,900
Bryan 1 - 6'	Release Area	9/10/2015	1510101	Grab/Backhoe	6'	-	-	-	-	1,800
Bryan 1 - 7'	Release Area	11/3/2015	1511272	Grab/Backhoe	7'	-	-	-	-	5,300
Bryan 1 - 8'	Release Area	11/3/2015	1511272	Grab/Backhoe	8'	-	-	-	-	8,200
Bryan 1 - 10'	Release Area	11/3/2015	1511272	Grab/Backhoe	10'	-	-	-	-	8,500
Bryan 1 - 12'	Release Area	11/3/2015	1511272	Grab/Backhoe	12'	-	-	-	-	5,700
Bryan 1 - 14'	Release Area	11/3/2015	1511272	Grab/Backhoe	14'	-	-	-	-	4,100
Bryan 1 - 16'	Release Area	2/24/2016	1602B44	Grab/Backhoe	16'	-	-	-	-	1,100
Bryan 1 - 18'	Release Area	2/24/2016	1602B44	Grab/Backhoe	18'	-	-	-	-	540
Bryan 1 - 20'	Release Area	2/24/2016	1602B44	Grab/Backhoe	20'	-	-	-	-	490

Site Ranking is Ten (10). Depth to Ground Water 50-99' (approx. 75', per ChevronTexaco Trend Map).

All results are ppm.

Released: 15 B/PW; Recovered: 10 B/PW. Release Date: 7/11/2015. 2RP-3164



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

July 24, 2015

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

RE: Bryan ME #1

OrderNo.: 1507792

Dear Amber Griffin:

Hall Environmental Analysis Laboratory received 1 sample(s) on 7/17/2015 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 1507792

Date Reported: 7/24/2015

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Yates Petroleum

Client Sample ID: Bryan 1 - Surface

Project: Bryan ME #1

Collection Date: 7/15/2015 12:50:00 PM

Lab ID: 1507792-001

Matrix: SOIL

Received Date: 7/17/2015 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	7/22/2015 11:18:52 AM	20309
Surr: DNOP	102	57.9-140		%REC	1	7/22/2015 11:18:52 AM	20309
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	7/20/2015 3:38:32 PM	20306
Surr: BFB	92.3	75.4-113		%REC	1	7/20/2015 3:38:32 PM	20306
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.048		mg/Kg	1	7/20/2015 3:38:32 PM	20306
Toluene	ND	0.048		mg/Kg	1	7/20/2015 3:38:32 PM	20306
Ethylbenzene	ND	0.048		mg/Kg	1	7/20/2015 3:38:32 PM	20306
Xylenes, Total	ND	0.096		mg/Kg	1	7/20/2015 3:38:32 PM	20306
Surr: 4-Bromofluorobenzene	101	80-120		%REC	1	7/20/2015 3:38:32 PM	20306

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 4
	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	
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1507792

24-Jul-15

Client: Yates Petroleum

Project: Bryan ME #1

Sample ID	MB-20309	SampType:	MBLK	TestCode:	EPA Method 8015M/D: Diesel Range Organics					
Client ID:	PBS	Batch ID:	20309	RunNo:	27634					
Prep Date:	7/17/2015	Analysis Date:	7/21/2015	SeqNo:	830062	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Surr: DNOP	10		10.00		103	57.9	140			

Sample ID	LCS-20309	SampType:	LCS	TestCode:	EPA Method 8015M/D: Diesel Range Organics					
Client ID:	LCSS	Batch ID:	20309	RunNo:	27634					
Prep Date:	7/17/2015	Analysis Date:	7/21/2015	SeqNo:	830063	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	51	10	50.00	0	102	57.4	139			
Surr: DNOP	5.0		5.000		100	57.9	140			

Sample ID	MB-20378	SampType:	MBLK	TestCode:	EPA Method 8015M/D: Diesel Range Organics					
Client ID:	PBS	Batch ID:	20378	RunNo:	27701					
Prep Date:	7/22/2015	Analysis Date:	7/23/2015	SeqNo:	833319	Units:	%REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	11		10.00		109	57.9	140			

Sample ID	LCS-20378	SampType:	LCS	TestCode:	EPA Method 8015M/D: Diesel Range Organics					
Client ID:	LCSS	Batch ID:	20378	RunNo:	27701					
Prep Date:	7/22/2015	Analysis Date:	7/23/2015	SeqNo:	833320	Units:	%REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	7.3		5.000		147	57.9	140			S

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH Not In Range
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1507792

24-Jul-15

Client: Yates Petroleum

Project: Bryan ME #1

Sample ID	MB-20306	SampType: MBLK			TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	PBS	Batch ID: 20306			RunNo: 27604					
Prep Date:	7/17/2015	Analysis Date: 7/20/2015			SeqNo: 829377		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	910		1000		90.7	75.4	113			

Sample ID	LCS-20306		SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	LCSS		Batch ID: 20306		RunNo: 27604					
Prep Date:	7/17/2015		Analysis Date: 7/20/2015		SeqNo: 829378		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.0	25.00	0	97.1	79.6	122			
Surr: BFB	980		1000		98.1	75.4	113			

Sample ID	MB-20308	SampType:	MBLK		TestCode:	EPA Method 8015D: Gasoline Range				
Client ID:	PBS	Batch ID:	20308		RunNo:	27604				
Prep Date:	7/17/2015	Analysis Date:	7/20/2015		SeqNo:	829387	Units:	%REC		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	900		1000		90.4	75.4	113			

Sample ID	LCS-20308	SampType:	LCS	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	LCSS	Batch ID:	20308	RunNo:	27604					
Prep Date:	7/17/2015	Analysis Date:	7/20/2015	SeqNo:	829388	Units:	%REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	990		1000		98.5	75.4	113			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH Not In Range
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1507792

24-Jul-15

Client: Yates Petroleum

Project: Bryan ME #1

Sample ID	MB-20306	SampType: MBLK		TestCode: EPA Method 8021B: Volatiles						
Client ID:	PBS	Batch ID: 20306		RunNo: 27604						
Prep Date:	7/17/2015	Analysis Date: 7/20/2015		SeqNo: 829405		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	0.97		1.000		96.9	80	120			

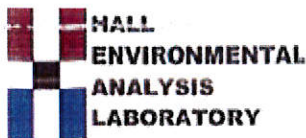
Sample ID	LCS-20306		SampType: LCS		TestCode: EPA Method 8021B: Volatiles					
Client ID:	LCSS		Batch ID: 20306		RunNo: 27604					
Prep Date:	7/17/2015		Analysis Date: 7/20/2015		SeqNo: 829406		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.99	0.050	1.000	0	99.0	76.6	128			
Toluene	0.97	0.050	1.000	0	96.9	75	124			
Ethylbenzene	0.99	0.050	1.000	0	98.7	79.5	126			
Xylenes, Total	2.9	0.10	3.000	0	98.1	78.8	124			
Surr: 4-Bromofluorobenzene	1.1		1.000		107	80	120			

Sample ID	MB-20308		SampType: MBLK		TestCode: EPA Method 8021B: Volatiles					
Client ID:	PBS		Batch ID: 20308		RunNo: 27604					
Prep Date:	7/17/2015		Analysis Date: 7/20/2015		SeqNo: 829414		Units: %REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.97		1.000		96.8	80	120			

Sample ID	LCS-20308		SampType: LCS		TestCode: EPA Method 8021B: Volatiles					
Client ID:	LCSS		Batch ID: 20308		RunNo: 27604					
Prep Date:	7/17/2015		Analysis Date: 7/20/2015		SeqNo: 829419		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			

Qualifiers:

- | | |
|---|--|
| * Value exceeds Maximum Contaminant Level. | B Analyte detected in the associated Method Blank |
| 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 |
| O RSD is greater than RSDlimit | P Sample pH Not In Range |
| R RPD outside accepted recovery limits | RL Reporting Detection Limit |
| S Spike Recovery outside accepted recovery limits | |



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-315-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: Yates Petroleum Corpora

Work Order Number: 1507792

RcptNo: 1

Received by/date:

CS

07/17/15

Logged By: Celina Sessa

7/17/2015 10:00:00 AM

Celina Sessa

Completed By: Celina Sessa

7/17/2015 11:25:02 AM

Celina Sessa

Reviewed By

IO

07/17/15

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 ☒

of preserved
bottles checked
for pH:

(<2 or >12 unless noted)

Adjusted? _____

Checked by: _____

12. Does paperwork match bottle label(s)?

Yes ☒

No ☐

(Note discrepancies on chain of custody)

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?

Yes ☒

No ☐

(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	1.0	Good	Yes			

**HALL ENVIRONMENTAL
ANALYSIS LABORATORY**

4901 Hawkins NE - Albuquerque, NIM 87109
Tel 505-345-3975 Fax 505-345-4107

Chain-of-Custody Record						
Client:		Yates Petroleum Corporation				
Mailing Address:						
105 South 4th Street Artesia, NM 88210						
Phone #:		575-513-8799 or 575-748-4111				
email or Fax#:		acannon@yatespetroleum.com				
CA/QC Package:						
<input type="checkbox"/> Standard		<input type="checkbox"/> Level 4 (Full Validation)				
Accreditation:						
<input type="checkbox"/> NELAP		<input type="checkbox"/> Other _____				
<input type="checkbox"/> EDD (Type) _____						
Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No.
7/15/2015	12:50	Soil	Bryan 1 - Surface	1 - 4oz.	Ice	1507792 - 001
Date:	Time:	Relinquished by:	Received by:		Date	Time
7/16/15		Amber Griffin	Allison Gunn		07/17/15	1000
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

July 24, 2015

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

RE: Bryan ME #1

OrderNo.: 1507792

Dear Amber Griffin:

Hall Environmental Analysis Laboratory received 1 sample(s) on 7/17/2015 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 1507792

Date Reported: 7/24/2015

CLIENT: Yates Petroleum

Client Sample ID: Bryan 1 - Surface

Project: Bryan ME #1

Collection Date: 7/15/2015 12:50:00 PM

Lab ID: 1507792-001

Matrix: SOIL

Received Date: 7/17/2015 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: LGT
Chloride	7700	300		mg/Kg	200	7/23/2015 3:58:02 PM	20356

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 1
	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	
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

Sample Log-In Check List

Client Name: Yates Petroleum Corpora

Work Order Number: 1507792

RcptNo: 1

Received by/date: CS 07/17/15

Logged By: Celina Sessa 7/17/2015 10:00:00 AM

Completed By: Celina Sessa 7/17/2015 11:25:02 AM

Reviewed By: IO 07/17/15

Celina Sessa

Celina Sessa

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	1.0	Good	Yes			



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

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

RE: Bryan ME #1

OrderNo.: 1509894

Dear Amber Griffin:

Hall Environmental Analysis Laboratory received 3 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,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report

Lab Order 1509894

Date Reported: 9/28/2015

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** Yates Petroleum Corporation**Client Sample ID:** Bryan 1 - 1'**Project:** Bryan ME #1**Collection Date:** 9/10/2015 9:35:00 AM**Lab ID:** 1509894-001**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	2000	75		mg/Kg	50	9/24/2015 6:48:20 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 4
	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 1509894

Date Reported: 9/28/2015

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** Yates Petroleum Corporation**Client Sample ID:** Bryan 1 - 2'**Project:** Bryan ME #1**Collection Date:** 9/10/2015 9:40:00 AM**Lab ID:** 1509894-002**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	75		mg/Kg	50	9/24/2015 7:00:45 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		

Analytical Report

Lab Order 1509894

Date Reported: 9/28/2015

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** Yates Petroleum Corporation**Client Sample ID:** Bryan 1 - 3'**Project:** Bryan ME #1**Collection Date:** 9/10/2015 9:45:00 AM**Lab ID:** 1509894-003**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	2700	75		mg/Kg	50	9/24/2015 7:13:10 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 3 of 4
	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#: 1509894

28-Sep-15

Client: Yates Petroleum Corporation

Project: Bryan ME #1

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: 1509894

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 2:24:29 PM

Reviewed By: mg

09/18/15

[Signature]
[Signature]

Chain of Custody

1. Custody seals intact on sample bottles?
2. Is Chain of Custody complete?
3. How was the sample delivered?

Yes ☒

No ☐

Not Present ☐

Yes ☒

No ☐

Not Present ☐

Courier

Log In

4. Was an attempt made to cool the samples?
5. Were all samples received at a temperature of $>0^{\circ}\text{C}$ to 6.0°C ?
6. Sample(s) in proper container(s)?
7. Sufficient sample volume for indicated test(s)?
8. Are samples (except VOA and ONG) properly preserved?
9. Was preservative added to bottles?
10. VOA vials have zero headspace?
11. Were any sample containers received broken?
12. Does paperwork match bottle labels?
(Note discrepancies on chain of custody)
13. Are matrices correctly identified on Chain of Custody?
14. Is it clear what analyses were requested?
15. Were all holding times able to be met?
(If no, notify customer for authorization.)

Yes ☒

No ☐

NA ☐

Yes ☒

No ☐

NA ☐

Yes ☒

No ☐

Yes ☒

No ☐

Yes ☒

No ☐

Yes ☐

No ☒

NA ☐

Yes ☐

No ☐

No VOA Vials ☒

Yes ☐

No ☒

of preserved
bottles checked
for pH:

(<2 or >12 unless noted)

Adjusted?

Yes ☒

No ☐

Yes ☒

No ☐

Yes ☒

No ☐

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	4.2	Good	Yes			

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Mailing Address:

4901 Hawkins NE - Albuquerque, NM 87109

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

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

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

Amber Griffin

PO # 205-2020

Amber (

Yes ☒ No ☐

ature: 5,2-

10

Container
Type and #Container
Type and #Container
Type and #

1-407

1 - 4oz.

1 - 4oz.

10

10

2

Received by:

2

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.

Analysis Request



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

October 12, 2015

Amber Griffin

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

RE: Bryan ME #1

OrderNo.: 1510101

Dear Amber Griffin:

Hall Environmental Analysis Laboratory received 3 sample(s) on 10/2/2015 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,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report

Lab Order: 1510101

Date Reported: 10/12/2015

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Yates Petroleum Corporation
Project: Bryan ME #1

Lab Order: 1510101

Lab ID: 1510101-001

Collection Date: 9/10/2015 9:50:00 AM

Client Sample ID: Bryan 1-4'

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: LGT
Chloride	1700	75		mg/Kg	50	10/8/2015 2:26:57 AM	21662

Lab ID: 1510101-002

Collection Date: 9/10/2015 9:55:00 AM

Client Sample ID: Bryan 1-5'

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: LGT
Chloride	1900	75		mg/Kg	50	10/8/2015 2:39:22 AM	21662

Lab ID: 1510101-003

Collection Date: 9/10/2015 10:00:00 AM

Client Sample ID: Bryan 1-6'

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: LGT
Chloride	1800	75		mg/Kg	50	10/8/2015 3:16:36 AM	21662

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#: 1510101

12-Oct-15

Client: Yates Petroleum Corporation

Project: Bryan ME #1

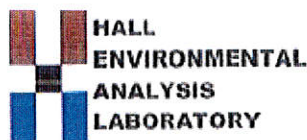
Sample ID	MB-21662	SampType:	MBLK	TestCode:	EPA Method 300.0: Anions					
Client ID:	PBS	Batch ID:	21662	RunNo:	29327					
Prep Date:	10/5/2015	Analysis Date:	10/5/2015	SeqNo:	891486	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	LCS-21662	SampType:	LCS	TestCode:	EPA Method 300.0: Anions					
Client ID:	LCSS	Batch ID:	21662	RunNo:	29327					
Prep Date:	10/5/2015	Analysis Date:	10/5/2015	SeqNo:	891487	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	93.3	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 Hickman 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: 1510101

RecptNo: 1

Received by/date:

SA

10/02/15

Logged By: Lindsay Mangin

10/2/2015 9:40:30 AM

Judy Mangin

Completed By: Lindsay Mangin

10/5/2015 7:41:41 AM

Judy Mangin

Reviewed By:

SA

10/07/15

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)? Approved by client. Yes ☒ No ☐
7. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
8. Are samples (except VOA and CNG) 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	14.4	Good	Yes			



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

November 17, 2015

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

RE: Bryan ME #1

OrderNo.: 1511272

Dear Amber Griffin:

Hall Environmental Analysis Laboratory received 5 sample(s) on 11/6/2015 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".

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order: 1511272

Date Reported: 11/17/2015

CLIENT: Yates Petroleum Corporation
Project: Bryan ME #1

Lab Order: 1511272

Lab ID: 1511272-001

Collection Date: 11/3/2015 9:56:00 AM

Client Sample ID: Bryan 1-7'

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: LGT
Chloride	5300	300		mg/Kg	200	11/14/2015 1:53:54 AM	22299

Lab ID: 1511272-002

Collection Date: 11/3/2015 9:59:00 AM

Client Sample ID: Bryan 1-8'

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: LGT
Chloride	8200	750		mg/Kg	500	11/14/2015 2:06:20 AM	22299

Lab ID: 1511272-003

Collection Date: 11/3/2015 10:04:00 AM

Client Sample ID: Bryan 1-10'

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: LGT
Chloride	8500	750		mg/Kg	500	11/14/2015 2:18:45 AM	22299

Lab ID: 1511272-004

Collection Date: 11/3/2015 10:10:00 AM

Client Sample ID: Bryan 1-12'

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: LGT
Chloride	5700	300		mg/Kg	200	11/14/2015 2:31:09 AM	22299

Lab ID: 1511272-005

Collection Date: 11/3/2015 10:17:00 AM

Client Sample ID: Bryan 1-14'

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: LGT
Chloride	4100	150		mg/Kg	100	11/14/2015 2:43:33 AM	22299

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#: 1511272

17-Nov-15

Client: Yates Petroleum Corporation

Project: Bryan ME #1

Sample ID	MB-22299	SampType:	MBLK	TestCode:	EPA Method 300.0: Anions					
Client ID:	PBS	Batch ID:	22299	RunNo:	30193					
Prep Date:	11/11/2015	Analysis Date:	11/11/2015	SeqNo:	919916	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	LCS-22299	SampType:	LCS	TestCode:	EPA Method 300.0: Anions					
Client ID:	LCSS	Batch ID:	22299	RunNo:	30193					
Prep Date:	11/11/2015	Analysis Date:	11/11/2015	SeqNo:	919917	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	90.9	90	110			

Sample ID	MB-22299	SampType:	MBLK	TestCode:	EPA Method 300.0: Anions					
Client ID:	PBS	Batch ID:	22299	RunNo:	30221					
Prep Date:	11/11/2015	Analysis Date:	11/12/2015	SeqNo:	920917	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	LCS-22299	SampType:	LCS	TestCode:	EPA Method 300.0: Anions					
Client ID:	LCSS	Batch ID:	22299	RunNo:	30221					
Prep Date:	11/11/2015	Analysis Date:	11/12/2015	SeqNo:	920918	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	91.7	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: 1511272

RcptNo: 1

Received by/date:

SA

11/06/15

Logged By: Lindsay Mangin

11/6/2015 9:35:00 AM

Completed By: Lindsay Mangin

11/6/2015 12:21:56 PM

Reviewed By:

[Signature]

11/06/15

Chain of Custody

1. Custody seals intact on sample bottles?
2. Is Chain of Custody complete?
3. How was the sample delivered?

Yes ☒

No ☐

Not Present ☒

Yes ☒

No ☐

Not Present ☐

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	5.3	Good	Yes			



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

March 04, 2016

Amber Griffin

Yates Petroleum Corporation

105 South Fourth Street

Artesia, NM 88210

TEL: (575) 748-4111

FAX

RE: Bryan ME #1

OrderNo.: 1602B44

Dear Amber Griffin:

Hall Environmental Analysis Laboratory received 3 sample(s) on 2/26/2016 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: 1602B44

Date Reported: 3/4/2016

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** Yates Petroleum Corporation
Project: Bryan ME #1**Lab Order:** 1602B44**Lab ID:** 1602B44-001**Collection Date:** 2/24/2016 8:40:00 AM**Client Sample ID:** Bryan 1-16**Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: JRR
Chloride	1100	30		mg/Kg	20	3/3/2016 6:45:47 PM	24065

Lab ID: 1602B44-002**Collection Date:** 2/24/2016 8:47:00 AM**Client Sample ID:** Bryan 1-18**Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: JRR
Chloride	540	30		mg/Kg	20	3/3/2016 6:58:12 PM	24065

Lab ID: 1602B44-003**Collection Date:** 2/24/2016 8:56:00 AM**Client Sample ID:** Bryan 1-20**Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: JRR
Chloride	490	30		mg/Kg	20	3/3/2016 7:10:37 PM	24065

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	W Sample container temperature is out of limit as specified	

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1602B44

04-Mar-16

Client: Yates Petroleum Corporation

Project: Bryan ME #1

Sample ID	MB-24065	SampType:	mblk	TestCode:	EPA Method 300.0: Anions					
Client ID:	PBS	Batch ID:	24065	RunNo:	32563					
Prep Date:	3/3/2016	Analysis Date:	3/3/2016	SeqNo:	996302	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	LCS-24065	SampType:	lcs	TestCode:	EPA Method 300.0: Anions					
Client ID:	LCSS	Batch ID:	24065	RunNo:	32563					
Prep Date:	3/3/2016	Analysis Date:	3/3/2016	SeqNo:	996303	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	95.0	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
W Sample container temperature is out of limit as specified



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1901 Hawkins NE
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Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: Yates Petroleum Corpora

Work Order Number: 1602B44

RcptNo: 1

Received by/date:

Logged By: Ashley Gallegos 2/26/2016 8:55:00 AM

Completed By: Ashley Gallegos 2/26/2016 3:08:09 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 ☐ # 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	3.2	Good	Yes			

