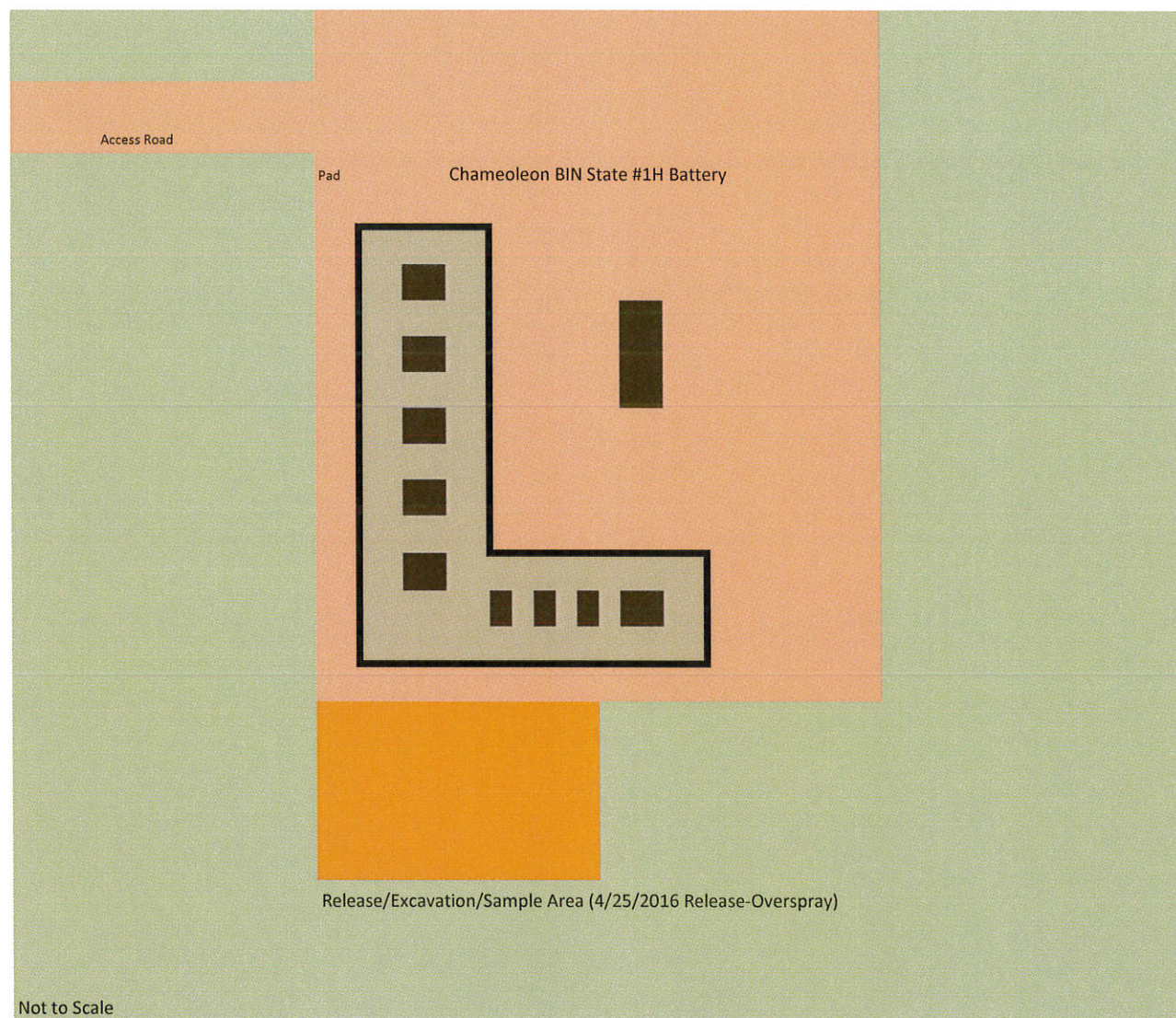


SW

NW



Analytical Report-1605D68 (Hall)	Sample Area	Sample Date	Sample Type	Depth	BTEX	GRO	DRO	TOTAL	Chlorides
S 0.25	Overspray Area	5/25/2016	Grab/Shovel	3"	ND	ND	310	310	3400
S 0.75	Overspray Area	5/25/2016	Grab/Shovel	9"	ND	ND	500	500	1400
Analytical Report-1610D85 (Hall)	Sample Area	Sample Date	Sample Type	Depth	BTEX	GRO	DRO	TOTAL	Chlorides
S 0.50	Overspray Area	10/24/2016	Grab/Shovel	6" (18" BSL)					950
S 0.75	Overspray Area	10/24/2016	Grab/Shovel	12" (24" BSL)					1200
Analytical Report-1701497 (Hall)	Sample Area	Sample Date	Sample Type	Depth	BTEX	GRO	DRO	TOTAL	Chlorides
S 1.50	Overspray Area	1/10/2017	Grab/Auger	18" (30" BSL)					73
S 2.0	Overspray Area	1/10/2017	Grab/Auger	24" (36" BSL)					ND

Site Ranking is Ten (10). Depth to Ground Water 50-99' (approx. 54', per ChevronTexaco Trend Map).

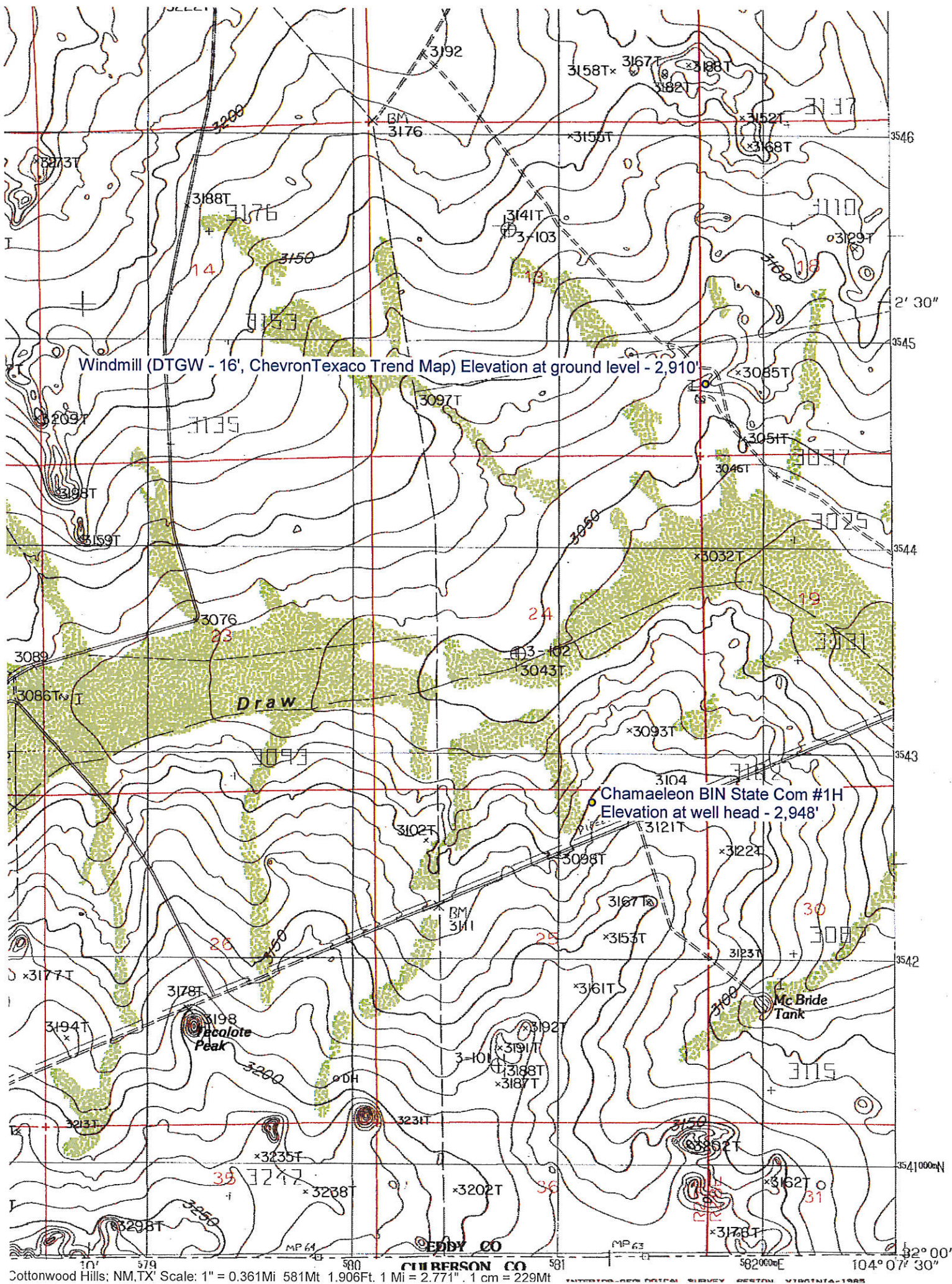
All results are ppm. BSL - Below Surface Level

Released: 15 B/O & 290 B/PW; Recovered: 15 B/O & 290 B/PW. Release Date: 4/25/2016

Impacted soils excavated.

SE

NE





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

January 18, 2017

Robert Asher
EOG Resources
105 South Fourth Street
Artesia, NM 88210
TEL: (575) 748-4111
FAX

RE: Chamaeleon BIN State Com. #1H

OrderNo.: 1701497

Dear Robert Asher:

Hall Environmental Analysis Laboratory received 2 sample(s) on 1/12/2017 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: 1701497

Date Reported: 1/18/2017

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG Resources
Project: Chamaeleon BIN State Com. #1H

Lab Order: 1701497**Lab ID:** 1701497-001**Collection Date:** 1/10/2017 2:34:00 PM**Client Sample ID:** S 1.50**Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: LGT
Chloride	73	30		mg/Kg	20	1/17/2017 12:14:28 AM	29694

Lab ID: 1701497-002**Collection Date:** 1/10/2017 2:44:00 PM**Client Sample ID:** S 2.00**Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: LGT
Chloride	ND	30		mg/Kg	20	1/17/2017 1:16:30 AM	29694

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#: 1701497

18-Jan-17

Client: EOG Resources
Project: Chamaeleon BIN State Com. #1H

Sample ID	MB-29694	SampType:	MBLK	TestCode:	EPA Method 300.0: Anions					
Client ID:	PBS	Batch ID:	29694	RunNo:	40057					
Prep Date:	1/13/2017	Analysis Date:	1/16/2017	SeqNo:	1255401	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	LCS-29694	SampType:	LCS	TestCode:	EPA Method 300.0: Anions					
Client ID:	LCSS	Batch ID:	29694	RunNo:	40057					
Prep Date:	1/13/2017	Analysis Date:	1/16/2017	SeqNo:	1255402	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	15	1.5	15.00	0	97.3	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 | W Sample container temperature is out of limit as specified |



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

Sample Log-In Check List

Client Name: EOG/Yates

Work Order Number: 1701497

RcptNo: 1

Received by/date:

RE

01/12/17

Logged By: Ashley Gallegos

1/12/2017 9:35:00 AM

AG

Completed By: Ashley Gallegos

1/12/2017 12:57:41 PM

AG

Reviewed By:

AG

01/12/17

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:	<input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> 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	3.3	Good	Yes			



BREAKS, SPILLS AND LEAKS REPORT

Person Reporting Aron Acosta

Time Reported: 4:30 am pm

Person Reported to (Field Supervisor) Owen

Time Reported: 4:35 am pm

Environmental Notification Coordinator _____

Time Reported: _____ am pm

1. LOCATION:

Name of well or facility: Abundance battery

Location _____ Section _____ Township _____ Range _____ County: _____

Surface Owner: _____ Mineral Owner: Fee ☐ Federal ☒ State ☐

2. TIME OF INCIDENT:

Date: 01/16/17

Time: N/A am pm

3. SOURCE AND CAUSE: A hammer union had a small hole on the side tha cause the leakage, the hole was cause by the H2S.

4. TYPE OF DISCHARGE

☒ Crude Oil ☐ Condensate ☐ Produced Water ☐ Gas ☐ Other rain water in side barrier

5. QUANTITY:

Estimated Volumes Discharged: 2 Barrels of Oil 2 Barrels of Water
Barrels of _____
MCF Gas _____

Estimated Volumes Recovered: 2 Barrels of Oil 2 Barrels of Water
Barrels of _____

6. SITE CHARACTERISTICS:

Weather Conditions: clear and cool Soil Type and Condition: the barrier is lined with plastic

Distance & Direction to fresh water wells or watercourse: _____

Secondary Containment type & condition: _____

Miscellaneous: _____

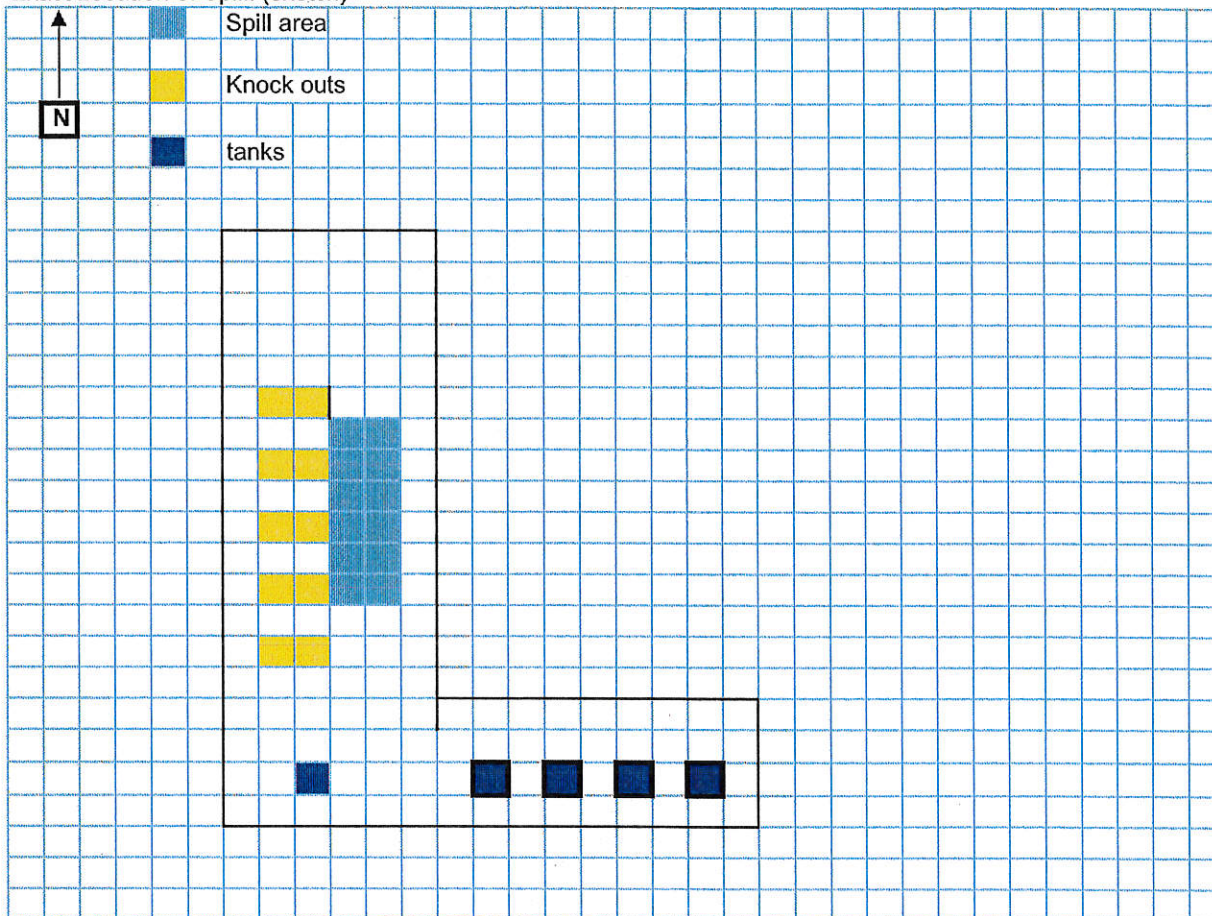
7. IMMEDIATE CORRECTIVE ACTION:

Action and time taken to control incident: Shut wells in preventing more fluid from escaping, also closing valves to the horizontal and vertcal units to isolate the hammer union that was liking.

BREAKS, SPILLS AND LEAKS REPORT

8. SITE ASSESSMENT

Exact Location of Spill: (sketch)



Horizontal Extent: _____ X _____ Estimated Vertical Extent: _____ feet / inches

Degree of Contamination: ☐ Highly Contaminated/Saturated _____
☐ Unsaturated _____

9. REMEDIAL ACTION:

☐ Excavate, and landfarm on location yes

☐ Excavate, remove and replace yes

☐ Treat in place _____



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

November 03, 2016

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

RE: Chamaeleon BIN State Com 1H

OrderNo.: 1610D85

Dear Robert Asher:

Hall Environmental Analysis Laboratory received 2 sample(s) on 10/27/2016 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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order: 1610D85

Date Reported: 11/3/2016

CLIENT: Yates Petroleum Corporation
Project: Chamaeleon BIN State Com 1H

Lab Order: 1610D85

Lab ID: 1610D85-001

Collection Date: 10/24/2016 11:07:00 AM

Client Sample ID: S 0.50

Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: LGT
Chloride	950	30		mg/Kg	20	11/1/2016 8:27:42 PM	28393

Lab ID: 1610D85-002

Collection Date: 10/24/2016 11:17:00 AM

Client Sample ID: S 1.00

Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	1200	75		mg/Kg	50	11/2/2016 5:59:07 PM	28393

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

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1610D85

03-Nov-16

Client: Yates Petroleum Corporation

Project: Chamaeleon BIN State Com 1H

Sample ID	MB-28393	SampType:	mblk	TestCode:	EPA Method 300.0: Anions					
Client ID:	PBS	Batch ID:	28393	RunNo:	38370					
Prep Date:	11/1/2016	Analysis Date:	11/1/2016	SeqNo:	1198745	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	LCS-28393	SampType:	lcs	TestCode:	EPA Method 300.0: Anions					
Client ID:	LCSS	Batch ID:	28393	RunNo:	38370					
Prep Date:	11/1/2016	Analysis Date:	11/1/2016	SeqNo:	1198746	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. | B Analyte detected in the associated Method Blank |
| D Sample Diluted Due to Matrix | E Value above quantitation range |
| H Holding times for preparation or analysis exceeded | J Analyte detected below quantitation limits |
| ND Not Detected at the Reporting Limit | P Sample pH Not In Range |
| R RPD outside accepted recovery limits | RL Reporting Detection Limit |
| S % Recovery outside of range due to dilution or matrix | W Sample container temperature is out of limit as specified |



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

Sample Log-In Check List

Client Name: EOG/Yates

Work Order Number: 1610D85

RcptNo: 1

Received by/date:

cl. @ 10/27/16

Logged By: Ashley Gallegos

10/27/2016 11:00:00 AM

AG

Completed By: Ashley Gallegos

10/27/2016 5:23:30 PM

AG

Reviewed By:

[Signature] 10/28/16

Chain of Custody

1. Custody seals intact on sample bottles? Yes ☐ No ☐ Not Present ☒
2. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
3. How was the sample delivered? Courier

Log In

4. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
5. Were all samples received at a temperature of $>0^{\circ}\text{C}$ to 6.0°C ? Yes ☒ No ☐ NA ☐
6. Sample(s) in proper container(s)? Yes ☒ No ☐
7. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
8. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
9. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
10. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☒
11. Were any sample containers received broken? Yes ☐ No ☒
12. Does paperwork match bottle labels?
(Note discrepancies on chain of custody) Yes ☒ No ☐
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:	<input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> 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	1.8	Good	Yes			

Chain-of-Custody Record

Client: Yates Petroleum Corporation

Mailing Address: 105 South 4th Street

Artesia, NM 88210

Phone #: (575) 748-4217

email: boba@yatespetroleum.com

QA/QC Package:

☐ Standard

☐ Level 4 (Full Validation)

Accreditation:

☐ NELAP

☐ Other

☐ EDD (Type)

Sampler: Robert Asher

Office: ☒ Yes ☐ No

Sample Temperature

Container Type and #

Preservative Type

HEALING

Sample Request ID

Matrix

Time

Date

10/24/16

11:07 AM

Soil

S 0.50

1 - 4oz.

NA

10/24/16

11:17 AM

Soil

S 1.00

1 - 4oz.

NA

Date: 10/24/16

Time: 4:46 PM

Date: 10/24/16

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Chlorides (Cl) only, Please.

Chlorides (Cl) only, Please.

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Chlorides (Cl) only, Please.

Analysis Request

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www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel: 505-345-3975 Fax 505-345-4107

Analysis Request

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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

June 07, 2016

Robert Asher

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

RE: Chamaeleon BIB State Com 1H

OrderNo.: 1605D68

Dear Robert Asher:

Hall Environmental Analysis Laboratory received 2 sample(s) on 5/27/2016 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 1605D68

Date Reported: 6/7/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Yates Petroleum Corporation

Client Sample ID: S 0.25

Project: Chamaeleon BIB State Com 1H

Collection Date: 5/25/2016 11:40:00 AM

Lab ID: 1605D68-001

Matrix: SOIL

Received Date: 5/27/2016 9:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: LGT
Chloride	3400	150		mg/Kg	100	6/6/2016 10:31:44 PM	25664
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	310	9.4		mg/Kg	1	6/2/2016 8:32:28 AM	25585
Surr: DNOP	92.0	70-130		%Rec	1	6/2/2016 8:32:28 AM	25585
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	6/1/2016 8:58:15 PM	25568
Surr: BFB	116	80-120		%Rec	1	6/1/2016 8:58:15 PM	25568
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	0.097		mg/Kg	1	6/1/2016 8:58:15 PM	25568
Benzene	ND	0.024		mg/Kg	1	6/1/2016 8:58:15 PM	25568
Toluene	ND	0.048		mg/Kg	1	6/1/2016 8:58:15 PM	25568
Ethylbenzene	ND	0.048		mg/Kg	1	6/1/2016 8:58:15 PM	25568
Xylenes, Total	ND	0.097		mg/Kg	1	6/1/2016 8:58:15 PM	25568
Surr: 4-Bromofluorobenzene	118	80-120		%Rec	1	6/1/2016 8:58:15 PM	25568

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

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Yates Petroleum Corporation **Client Sample ID:** S 0.75
Project: Chamaeleon BIB State Com 1H **Collection Date:** 5/25/2016 11:50:00 AM
Lab ID: 1605D68-002 **Matrix:** SOIL **Received Date:** 5/27/2016 9:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: LGT
Chloride	1400	75		mg/Kg	50	6/6/2016 10:44:09 PM	25564
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	500	9.9		mg/Kg	1	6/2/2016 8:59:43 AM	25585
Surr: DNOP	103	70-130		%Rec	1	6/2/2016 8:59:43 AM	25585
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	6/1/2016 9:21:38 PM	25568
Surr: BFB	117	80-120		%Rec	1	6/1/2016 9:21:38 PM	25568
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	0.097		mg/Kg	1	6/1/2016 9:21:38 PM	25568
Benzene	ND	0.024		mg/Kg	1	6/1/2016 9:21:38 PM	25568
Toluene	ND	0.048		mg/Kg	1	6/1/2016 9:21:38 PM	25568
Ethylbenzene	ND	0.048		mg/Kg	1	6/1/2016 9:21:38 PM	25568
Xylenes, Total	ND	0.097		mg/Kg	1	6/1/2016 9:21:38 PM	25568
Surr: 4-Bromofluorobenzene	119	80-120		%Rec	1	6/1/2016 9:21:38 PM	25568

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

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1605D68

07-Jun-16

Client: Yates Petroleum Corporation
Project: Chamaeleon BIB State Com 1H

Sample ID	MB-25664	SampType:	MBLK	TestCode:	EPA Method 300.0: Anions					
Client ID:	PBS	Batch ID:	25664	RunNo:	34687					
Prep Date:	6/3/2016	Analysis Date:	6/3/2016	SeqNo:	1069971	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	LCS-25664	SampType:	LCS	TestCode:	EPA Method 300.0: Anions					
Client ID:	LCSS	Batch ID:	25664	RunNo:	34687					
Prep Date:	6/3/2016	Analysis Date:	6/3/2016	SeqNo:	1069973	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	96.5	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 | W Sample container temperature is out of limit as specified |

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1605D68

07-Jun-16

Client: Yates Petroleum Corporation
Project: Chamaeleon BIB State Com 1H

Sample ID	LCS-25585	SampType:	LCS	TestCode:	EPA Method 8015M/D: Diesel Range Organics					
Client ID:	LCSS	Batch ID:	25585	RunNo:	34626					
Prep Date:	5/31/2016	Analysis Date:	6/1/2016	SeqNo:	1068523	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	47	10	50.00	0	93.8	62.6	124			
Surr: DNOP	4.2		5.000		83.9	70	130			

Sample ID	MB-25585	SampType:	MBLK	TestCode:	EPA Method 8015M/D: Diesel Range Organics					
Client ID:	PBS	Batch ID:	25585	RunNo:	34626					
Prep Date:	5/31/2016	Analysis Date:	6/1/2016	SeqNo:	1068524	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Surr: DNOP	8.6		10.00		86.0	70	130			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1605D68

07-Jun-16

Client: Yates Petroleum Corporation
Project: Chamaeleon BIB State Com 1H

Sample ID	MB-25568	SampType	MBLK	TestCode	EPA Method 8015D: Gasoline Range					
Client ID	PBS	Batch ID	25568	RunNo	34598					
Prep Date	5/31/2016	Analysis Date	6/1/2016	SeqNo	1067457	Units	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	1100		1000		112	80	120			

Sample ID	LCS-25568	SampType	LCS	TestCode	EPA Method 8015D: Gasoline Range					
Client ID	LCSS	Batch ID	25568	RunNo	34598					
Prep Date	5/31/2016	Analysis Date	6/1/2016	SeqNo	1067458	Units	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	5.0	25.00	0	91.1	80	120			
Surr: BFB	1200		1000		125	80	120			S

Sample ID	MB-25547	SampType	MBLK	TestCode	EPA Method 8015D: Gasoline Range					
Client ID	PBS	Batch ID	25547	RunNo	34598					
Prep Date	5/27/2016	Analysis Date	6/1/2016	SeqNo	1067478	Units	%Rec			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1200		1000		118	80	120			

Sample ID	LCS-25547	SampType	LCS	TestCode	EPA Method 8015D: Gasoline Range					
Client ID	LCSS	Batch ID	25547	RunNo	34598					
Prep Date	5/27/2016	Analysis Date	6/1/2016	SeqNo	1067479	Units	%Rec			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1300		1000		127	80	120			S

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S % Recovery outside of range due to dilution or matrix

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1605D68

07-Jun-16

Client: Yates Petroleum Corporation
Project: Chamaeleon BIB State Com 1H

Sample ID	MB-25568	SampType: MBLK			TestCode: EPA Method 8021B: Volatiles					
Client ID:	PBS	Batch ID: 25568			RunNo: 34598					
Prep Date:	5/31/2016	Analysis Date: 6/1/2016			SeqNo: 1067503		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	ND	0.10								
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.2		1.000		116	80	120			

Sample ID	LCS-25568		SampType: LCS		TestCode: EPA Method 8021B: Volatiles					
Client ID:	LCSS		Batch ID: 25568		RunNo: 34598					
Prep Date:	5/31/2016		Analysis Date: 6/1/2016		SeqNo: 1067504		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	1.0	0.10	1.000	0	101	61	143			
Benzene	1.0	0.025	1.000	0	103	75.3	123			
Toluene	1.0	0.050	1.000	0	101	80	124			
Ethylbenzene	0.99	0.050	1.000	0	98.9	82.8	121			
Xylenes, Total	3.0	0.10	3.000	0	99.3	83.9	122			
Surr: 4-Bromofluorobenzene	1.2		1.000		124	80	120			S

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 |
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| S % Recovery outside of range due to dilution or matrix | W Sample container temperature is out of limit as specified |



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

Sample Log-In Check List

Client Name: Yates Petroleum Corpora

Work Order Number: 1605D68

RcptNo: 1

Received by/date: JA 05/27/16

Logged By: Anne Thorne 5/27/2016 9:50:00 AM

Completed By: Anne Thorne 5/31/2016

Reviewed By: [Signature] 05/31/16

Chain of Custody

1. Custody seals intact on sample bottles? Yes ☐ No ☐ Not Present ☒
2. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
3. How was the sample delivered? Courier

Log In

4. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
5. Were all samples received at a temperature of $>0^{\circ}\text{C}$ to 6.0°C ? Yes ☒ No ☐ NA ☐
6. Sample(s) in proper container(s)? Yes ☒ No ☐
7. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
8. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
9. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
10. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☒
11. Were any sample containers received broken? Yes ☐ No ☒
12. Does paperwork match bottle labels?
(Note discrepancies on chain of custody) Yes ☒ No ☐
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:	<input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> 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	1.7	Good	Yes			

