

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

May 13, 2016

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

RE: State CO SWD System (Johnston BE Battery)

OrderNo.: 1605295

Dear Amber Griffin:

Hall Environmental Analysis Laboratory received 5 sample(s) on 5/6/2016 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 <u>www.hallenvironmental.com</u> or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

andy

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

Analytical Report

Lab Order: 1605295

CLIENT:	Yates Petroleum Corr	oration		T.	ab Order: 160529	05
	State CO SWD System		Battery)		ab Order. 10052:	75
Lab ID:	1605295-001			Collection Date:	5/3/2016 9:02:00 AM	
Client Sample ID:	1-12'			Matrix:	SOIL	
Analyses		Result	PQL Qual	Units	DF Date Analyzed	Batch ID
EPA METHOD 30	0.0: ANIONS				Ana	lyst: LGT
Chloride		3600	150	mg/Kg	100 5/12/2016 3:08:08 F	PM 25260
Lab ID:	1605295-002			Collection Date:	5/3/2016 9:12:00 AM	
Client Sample ID:	1-14'			Matrix:	SOIL	
Analyses		Result	PQL Qual	Units	DF Date Analyzed	Batch II
EPA METHOD 30	0.0: ANIONS				Ana	lyst: LGT
Chloride		2700	150	mg/Kg	100 5/12/2016 3:20:32 F	°M 25260
Lab ID:	1605295-003			Collection Date:	5/3/2016 9:19:00 AM	
Client Sample ID:	1-16'			Matrix:	SOIL	
Analyses		Result	PQL Qual	Units	DF Date Analyzed	Batch ID
EPA METHOD 30	0.0: ANIONS				Ana	lyst: LGT
Chloride		2100	75	mg/Kg	50 5/12/2016 3:32:57 F	°M 25260
Lab ID:	1605295-004			Collection Date:	5/3/2016 9:27:00 AM	
Client Sample ID:	1-18'			Matrix:	SOIL	
Analyses		Result	PQL Qual	Units	DF Date Analyzed	Batch II
EPA METHOD 30	0.0: ANIONS				Ana	lyst: LGT
Chloride		700	30	mg/Kg	20 5/11/2016 1:24:24 F	PM 25260
Lab ID:	1605295-005			Collection Date:	5/3/2016 9:32:00 AM	
Client Sample ID:	1-20'			Matrix:	SOIL	
Analyses		Result	PQL Qual	Units	DF Date Analyzed	Batch II
EPA METHOD 30					Ana	lyst: LGT
EFA METHOD 30					7 11 10	.,

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

- Qualifiers: *
 - Value exceeds Maximum Contaminant Level. D Sample Diluted Due to Matrix

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
- Analyte detected in the associated Method Blank В
- Value above quantitation range Е
- J Analyte detected below quantitation limits Page 1 of 2
- Р 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.

Page 2 of 2

Client: Project:		es Petroleum Co CO SWD Sys	•		Battery)						
Sample ID MB-	-25260	SampT	ype: M	BLK	Tes	tCode: EF	PA Method	300.0: Anion	s		
Client ID: PBS	3	Batch	n ID: 25	260	F	RunNo: 3 4	133				
Prep Date: 5/1	10/2016	Analysis D	Date: 5/	11/2016	S	SeqNo: 10	52329	Units: mg/k	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		ND	1.5								
Sample ID LCS	6-25260	SampT	ype: LC	s	Tes	tCode: EF	PA Method	300.0: Anion	s		
Client ID: LCS	SS	Batch	n ID: 25	260	F	RunNo: 3 4	133				
Prep Date: 5/1	10/2016	Analysis D	Date: 5/	11/2016	5	SeqNo: 10	052330	Units: mg/K	ģ		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		14	1.5	15.00	0	90.8	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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	ENVIRONMENTAL
- 22	ANALYSIS
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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:	16052	295		RcptNo:	t
Received by/date:	05/04/16					
Logged By: Lindsay Mangin	5/6/2016 10:30:00 AM			Andythe	D	
Completed By: Lindsay Mangin	5/6/2016 12:00:55 PM			Anderthe	b	
Reviewed By:	5 loche			000		
Chain of Custody	0 110 0/10_					
1. Custody seals intact on sample bottles?		Yes		No 🗌	Not Present V	
2. Is Chain of Custody complete?		Yes		No 🗌	Not Present	
3. How was the sample delivered?		Cour	ier			
Log In						
4. Was an attempt made to cool the sample	s?	Yes	V	No 🗌		
5. Were all samples received at a temperatu	re of >0° C to 6.0°C	Yes		No 🗸	NA	
		App	roved t	by client.		
6. Sample(s) in proper container(s)?		Yes	V	No 🗌		
7, Sufficient sample volume for indicated test	(s)?	Yes	V	No 🗌		
8. Are samples (except VOA and ONG) prop		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 bro	ken?	Yes		No 🔽		
					# of preserved bottles checked	
12. Does paperwork match bottle labels?		Yes	~	No 🗌	for pH:	>12 unless noted
(Note discrepancies on chain of custody) 3. Are matrices correctly identified on Chain	of Custody2	Yes	1	No	Adjusted?	>12 unless noted
4. Is it clear what analyses were requested?	Ji Guatoby /	Yes				
15. Were all holding times able to be met?		Yes		No 🗌	Checked by:	
(If no, notify customer for authorization.)						
and the dian (it and the black						
pecial Handling (if applicable) [6, Was client notified of all discrepancies with	this order?	Yes		No 🗌	NA 🗸	
Person Notified:	-	2.5.2	1.25			
By Whom:	Date Date	eMa	a 🗆	Phone Fax	In Person	
Regarding:	via.	eivia	ш Ц I			
Client Instructions:						
17. Additional remarks:						
18. Cooler Information Ccoler No Temp ^e C Condition :	Seal Intact Seal No S	eal Da	te I	Signed By	L	
			1 C 1	SIGHED DV		

	ain-c	of-Cus	Chain-of-Custody Record	I urn-Around	ime:				HAI		IVN	BO	NME	HALL ENVIRONMENTAL	
Xient: Y	ates P	etroleun	Yates Petroleum Corporation	X Standard	X Standard Need by: 5/12/2016	2/2016		L	ANALYSIS	TX-		A	SOR	LABORATOR	7
				Project Name:	8				WWW.	hallen		ental.c	E		
failing Address:	ress:			State CO SV	VD System (J	ohnston BE Battery)	49	01 Hav	4901 Hawkins NE		uanbno	due, N	Albuquerque, NM 87109	თ	
05 South 4th Street	th Stre		Artesia, NM 88210	Project #:		Project #:	Ť	Tel. 505	505-345-3975		Fax 50	505-345-4107	4107		
hone #:		575-513	575-513-8799 or 575-748-4111		4/12/15 Release	lease				Analysis	sis Re	Request			
mail or Fax#:	书	agriffin@	agriffin@yatespetroleum.com	Project Manager	iger:						_	g	-		
MAC Package:	age:				Amber Griffin	riffin		100000				a)-			
J Standard			Level 4 (Full Validation)		PO # 205-2020	2020		eÐ)				170		_	_
Accreditation:	ä	Other		Sampler:	An	Amber Griffin +16		12B	(1.40			000 /	(4		(N 10
EDD (Type)	(ə(Sample Tem	perature: / Q ,		0.000	08 P	g po		_	_	0/-	_))
Date	Time	Matrix	Sample Request ID	Container Type and #	Preservativ e Type	HEAL No.	TM + XJT8 TM + XJT8	PPH Methow	EDB (Metho	AN9) 0158 9M 8 A975	0,7) anoin/	8081 Pestic	imə2) 0728		≀ir Bubbles
5/3/2016	9:02 Soil	Soil	1-12'	1 - 402		1001	-		3	-	-	-	3		/
5/3/2016	9:12 Soil	Soil	1-14'	1 - 402		-007					×				
5/3/2016	9:19 Soil	Soil	1-16'	1 - 402		-CB					×			_	F
5/3/2016	9:27 Soil	Soil	1-18'	1 - 402		-002/					×				
5/3/2016	9:32 Soil	Soil	1-20'	1 - 402		-105					×				
							+++								
Alle	Rtoold	Relinquished by.	ed by: Der Griffin	Received by:	and of	0 6/1	Remarks: Thursday	s: Ar ay, Ma	Remarks: Anions: Chl Thursday, May 12, 2016	Chlorid 16.	Chloride only. 016.	1	d analy	Need analytical results by	ts by
ate: T	Time:	Relinquished by:	ed by:	Received by:		Date Time									
lf nev	essary. s	amples subr	If necessary. samples submitted to Hall Environmental may be subcontracted to other a	contracted to other a	ocredited laboratori	ocredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.	is possibility	y. Any su	o-contracte	d data wi	I be clear	ly notate	d on the an	alytical report.	