HALL ENVIRONMENTAL ANALYSIS LABORATORY

May 19, 2016

Chase Settle

Yates Petroleum Corporation

105 South Fourth Street

Artesia, NM 88210

TEL: (575) 748-4111

FAX

RE: Spunky BUK State Com #1-H   OrderNo.:   1605560

Dear Chase Settle:

Hall Environmental Analysis Laboratory received 3 sample(s) on 5/12/2016 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 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 Freeman

Laboratory Manager

4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Yates Petroleum Corporation	**Client Sample ID:** S2-4'
Project: Spunky BUK State Com #1-H	**Collection Date:** 5/9/2016 9:55:00 AM
Lab ID: 1605560-001 **Matrix:** SOIL	**Received Date:** 5/12/2016 10:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **LGT**	
Chloride	88	30		mg/Kg	20	5/17/2016 8:02:25 PM	25365

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:** S2-4.5'
Project:	Spunky BUK State Com #1-H	**Collection Date:** 5/9/2016 10:13:00 AM
Lab ID:	1605560-002 **Matrix:** SOIL	**Received Date:** 5/12/2016 10:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **LGT**	
Chloride	ND	30		mg/Kg	20	5/17/2016 8:14:49 PM	25365

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:** S2-5'
Project: Spunky BUK State Com #1-H	**Collection Date:** 5/9/2016 10:30:00 AM
Lab ID: 1605560-003 **Matrix:** SOIL	**Received Date:** 5/12/2016 10:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **LGT**	
Chloride	ND	30		mg/Kg	20	5/17/2016 8:27:14 PM	25365

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.

Client: Yates Petroleum Corporation

Project: Spunky BUK State Com #1-H

Sample ID **MB-25365**	SampType: **mblk**			TestCode: **EPA Method 300.0: Anions**						
Client ID: **PBS**	Batch ID: **25365**			RunNo: **34316**						
Prep Date: **5/17/2016**	Analysis Date: **5/17/2016**			SeqNo: **1058043**		Units: **mg/Kg**				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID **LCS-25365**	SampType: **lcs**			TestCode: **EPA Method 300.0: Anions**						
Client ID: **LCSS**	Batch ID: **25365**			RunNo: **34316**						
Prep Date: **5/17/2016**	Analysis Date: **5/17/2016**			SeqNo: **1058044**		Units: **mg/Kg**				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	93.5	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

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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: 1605560	RcptNo: 1

Received by/date:	JA 05/12/16	
Logged By:	Michelle Garcia 5/12/2016 10:00:00 AM	Michell Garcia
Completed By:	Michelle Garcia 5/12/2016 10:34:30 AM	Michell Garcia
Reviewed By:	JD 05/12/16	

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° 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? 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.)

# of preserved bottles checked for pH: _____
(<2 or >12 unless noted)
Adjusted? _____
Checked by: _____

Special Handling (if applicable)

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

Person Notified:		Date	
By Whom:		Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person	
Regarding:			
Client Instructions:			

17. Additional remarks:

18. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.2	Good	Yes			

Chain-of-Custody Record

Client: Yates Petroleum Corporation

Turnaround Time:

X Standard ☐ Rush

Mailing Address:

105 South 4th Street Artesia, NM 88210

Phone #: 575-703-6537

email or Fax#: csettle@yatespetroleum.com

QA/QC Package:
☐ Standard   ☐ Level 4 (Full Validation)

Accreditation:
☐ NELAP   ☐ Other
☐ EDD (Type)

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

Project Name: Spunky BUK State Com #1-H

Project #: 30-015-42304

Project Manager: Chase Settle

PO # 205. 0750

Sampler: Chase Settle

On Ice: ☒ Yes ☐ No

Sample Temperature: 2.2

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No.	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F,Cl,NO₃,NO₂,PO₄,SO₄)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	Air Bubbles (Y or N)
5/9/2016	9:55A	SOIL	S2-4'	1-4 oz	None	1605560-001								X				
5/9/2016	10:13A	SOIL	S2-4.5'	1-4 oz	None	-002								X				
5/9/2016	10:30A	SOIL	S2-5'	1-4 oz	None	-003								X				

Remarks:

	Date	Time		Date	Time
Relinquished by:	11-16	8:30 Am	Received by:	05/9/16	1000
Relinquished by:			Received by:		

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.