PERMIAN BASIN ENVIRONMENTAL LAB, LP 1400 Rankin Hwy Midland, TX 79701



Analytical Report

Prepared for:

Aaron Pachlhofer
Fasken Oil and Ranch, LTD
6101 Holiday Hill Road
Midland, TEXAS 79707

Project: Cabot Q SWD
Project Number: None Given
Location: Lea County, NM

Lab Order Number: 6F08001



NELAP/TCEQ # T104704156-13-3

Report Date: 06/08/16

Fasken Oil and Ranch, LTD 6101 Holiday Hill Road Midland TEXAS, 79707 Project Number: Cabot Q SWD

Project Number: None Given

Project Manager: Aaron Pachlhofer

Fax: (432) 687-1777

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
S1	6F08001-01	Soil	06/07/16 14:00	06-08-2016 11:38
S2	6F08001-02	Soil	06/07/16 14:07	06-08-2016 11:38

Fasken Oil and Ranch, LTD
Project: Cabot Q SWD
Fax: (432) 687-1777
6101 Holiday Hill Road
Project Number: None Given
Midland TEXAS, 79707
Project Manager: Aaron Pachlhofer

S1 6F08001-01 (Soil)

		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

Permian Basin Environmental Lab, L.P.

General Chemistry Parameters by EPA / Standard Methods

Chloride	2260	11.9 mg/kg dry	10	P6F0803	06/08/16	06/08/16	EPA 300.0
% Moisture	16.0	0.1 %	1	P6F0804	06/08/16	06/08/16	% calculation

Fasken Oil and Ranch, LTD
Project: Cabot Q SWD
Fax: (432) 687-1777
6101 Holiday Hill Road
Project Number: None Given
Midland TEXAS, 79707
Project Manager: Aaron Pachlhofer

\$2 6F08001-02 (Soil)

		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

Permian Basin Environmental Lab, L.P.

General Chemistry Parameters by EPA / Standard Methods

Chloride	2240	11.2 mg/kg dry	10	P6F0803	06/08/16	06/08/16	EPA 300.0
% Moisture	11.0	0.1 %	1	P6F0804	06/08/16	06/08/16	% calculation

Fasken Oil and Ranch, LTD Project: Cabot Q SWD Fax: (432) 687-1777

6101 Holiday Hill Road Midland TEXAS, 79707 Project Number: None Given
Project Manager: Aaron Pachlhofer

General Chemistry Parameters by EPA / Standard Methods - Quality Control Permian Basin Environmental Lab, L.P.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch P6F0803 - *** DEFAULT PREP ***										
Blank (P6F0803-BLK1)				06/08/16						
Chloride	ND	1.00	mg/kg wet	·						
LCS (P6F0803-BS1)				Prepared & Analyzed: 06/08/16						
Chloride	183	1.00	mg/kg wet	200		91.7	80-120			
LCS Dup (P6F0803-BSD1)	Prepared & Analyzed: 06/08/16									
Chloride	185	1.00	mg/kg wet	200		92.4	80-120	0.793	20	
Duplicate (P6F0803-DUP1)	Sou	rce: 6F08001	-02	Prepared &	k Analyzed:	06/08/16				
Chloride	2290	11.2	mg/kg dry		2240			2.25	20	
Batch P6F0804 - *** DEFAULT PREP ***										
Blank (P6F0804-BLK1)				Prepared &	k Analyzed:	06/08/16				
% Moisture	ND	0.1	%							
Duplicate (P6F0804-DUP1)	Sou	rce: 6F08001	-01	Prepared & Analyzed: 06/08/16						
% Moisture	17.0	0.1	%		16.0			6.06	20	

Fasken Oil and Ranch, LTD
Project: Cabot Q SWD
Fax: (432) 687-1777
6101 Holiday Hill Road
Project Number: None Given
Midland TEXAS, 79707
Project Manager: Aaron Pachlhofer

Notes and Definitions

DET Analyte DETECTED ND Analyte NOT DETECTED at or above the reporting limit Not Reported NR dry Sample results reported on a dry weight basis RPD Relative Percent Difference LCS Laboratory Control Spike Matrix Spike MS Dup Duplicate

	Bren Barron		
Report Approved By:		Date:	6/8/2016

Brent Barron, Laboratory Director/Technical Director

This material is intended only for the use of the individual (s) or entity to whom it is addressed, and may contain information that is privileged and confidential.

If you have received this material in error, please notify us immediately at 432-686-7235.



CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Relinquished by:	Relinquished by:	Relinquished by:	Special Ir								i i	1/2	1	LAB#(lab use only)	ORDER #:	•							
ed by:	ed by:	ad by:	Special Instructions:												# ST		Sampler Signature:	Telephone No:	City/State/Zip:	Company Address:	Company Name	Project Manager:	
		Motor										S2	S1	FIELD CODE	0860		nature:			dress: 6101			
		6/6												DE .				432-687-1777	Midland, Tx 79707	6101 Holiday Hill Road	Fasken Oil and Ranch, Ltd	Aaron Pachlhofer	
Date		N								. :]					Road	anch, Ltd		
Time	Time	Time 1:38		 									<u> </u>	Beginning Depth Ending Depth			7					-	
Rece			1						•			<u>ල</u>	6				1						
PBEL	Received by:	Received by:										6/7/2017	6/7/2017	Date Sampled			\)			
												14:07	14:00	Time Sampled			e-mail:	Fax No:	į			-	
														Field Filtered Total #. of Containers			ည	<u></u>				Midland, Texas	Permian Basin Environmental Lab, LP 10014 S. County Road 1213
											_	×	×	ice			aaronp@forl.com	432-687-1570				nd,	ian B
														HNO ₃	Prese		<u>р</u>	7-15	}	/		Теха	asin Cour
														HCI	ervation		01.0	70		İ		1	, ¥, ₽,
											ļ			H₂SO ₄	л & #		Ö H					79706	viron
			İ	<u>_</u>							ļ		ļ	NaOH	o ဂ							"	mer 112
6		l.		-		-	-			-	-	-	 	Na ₂ S ₂ O ₃	of Containers	.						}	ᅜᆵ
6/8/				-			ļ					-	 	None Other (Specify)	ers								ab,
7	Date	Date		-	-			_				-	-	DW=Drinking Water SL=Sludge	Н			Į.	l	Ι.	J	ı	2
9,								-				S	S	GW = Groundwater S=Soil/Solid	Matrix			Rep					
	_	_		<u></u>										NP=Non-Potable Specify Other			ĺ	Report Format:		P		roje	
1138 1138	lime	Time			ļ	_	ļ					<u> </u>	-		15B	Ш		orm		ojeci	Proj	čť z	
D 70 →	()	005	< 0 F			-	-		ļ			ļ:	-	TPH: <u>TX 1005</u> TX 1006 Cations (Ca, Mg, Na, K)				at:	PO #:	Ĺ	Project #:	lame	
Temperati Received: Adjusted:	amp Jo Jo	abel usto	abol amp OCs	-	-	_	-	-		_		×	×	Anions (CI, SO4, Alkalinity)	-			×	;#F	ا2 ::	**	၂ဂ	
ved:	pple Hand I by Sampler/ by Courier?	s on dy s dy s	Fie C	-	-						-		 	SAR / ESP / CEC	TOTAL			Ş		a C	1	abo	
_ Fe	and nple	eals eals	후 일 경 약 명 ?	-	├	<u> </u>	H			 		├─	╁	Metals: As Ag Ba Cd Cr Pb Hg		1. I		Standard		ount L		ā	Pho
10/2	Sample Hand Delivered by Sampler/Client Rep? by Courier? UPS	Labels on container(s) Custody seals on container(s) Custody seals on cooler(s)	Laboratory Comments: Sample Containers Intact? VOCs Free of Headspace?		\vdash		-				-			Volatiles	-	Analyze		ple		Project Loc: Lea County, New Mexico		Project Name: Cabot Q SWD	Phone: 432-686-7235
r° Re	vered ant Rep _UPS	\$ 500 \$ 500	s inti				 	T -			 		-	Semivolatiles						N We		ď	43
ကို ကို မြို့ မြို့ကို မြို့	လမ်း ရ	ainei	s: act?											BTEX 8021B /5030 or BTEX 826	60	For				/lexic			2-68
Facto	₽.	(S).												RCI]		TRRP		8			6-7:
Or .	Г													N.O.R.M.]		쉼					235
C.	FedEx													Glycol]					-		
celpt: °C °C Factor リンドム		*<6	XX													1					1.		
4	Lone -										_	_	_		· ·	Ц		NPDES					
	N Lone Star	ZZZ	<i>∠ ∠</i>				<u> </u>			ļ	_		<u> </u>	RUSH TAT (Pre-Schedule) 24,	48, 72 hrs			ES		_			
	1					<u> </u>			l		<u> </u>	×	×	Standard TAT	J				1		Pa	age 7	7 of 7