

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



Analytical Report

Prepared for:

Aaron Pachlhofer
Fasken Oil & Ranch, Ltd.
6101 Holiday Hill Road
Midland, TX 79707

Project: El Paso Federal #12

Project Number: [none]

Location: Eddy CO NM

Lab Order Number: 7H24009



NELAP/TCEQ # T104704516-16-7

Report Date: 08/28/17

Fasken Oil & Ranch, Ltd.
6101 Holiday Hill Road
Midland TX, 79707

Project: El Paso Federal #12
Project Number: [none]
Project Manager: Aaron Pachlhofer

Fax: 43-687-1570

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Stockpile A	7H24009-01	Soil	08/23/17 08:38	08-24-2017 09:15
Stockpile B	7H24009-02	Soil	08/23/17 08:41	08-24-2017 09:15

Fasken Oil & Ranch, Ltd.
 6101 Holiday Hill Road
 Midland TX, 79707

Project: El Paso Federal #12
 Project Number: [none]
 Project Manager: Aaron Pachlhofer

Fax: 43-687-1570

Stockpile A
7H24009-01 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	--------	-------

Permian Basin Environmental Lab, L.P.

General Chemistry Parameters by EPA / Standard Methods

% Moisture	4.0	0.1	%	1	P7H2805	08/28/17	08/28/17	ASTM D2216	
-------------------	------------	-----	---	---	---------	----------	----------	------------	--

Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M

C6-C12	ND	26.0	mg/kg dry	1	P7H2515	08/25/17	08/25/17	TPH 8015M	
>C12-C28	142	26.0	mg/kg dry	1	P7H2515	08/25/17	08/25/17	TPH 8015M	
>C28-C35	73.1	26.0	mg/kg dry	1	P7H2515	08/25/17	08/25/17	TPH 8015M	
<i>Surrogate: 1-Chlorooctane</i>		<i>115 %</i>	<i>70-130</i>		<i>P7H2515</i>	<i>08/25/17</i>	<i>08/25/17</i>	<i>TPH 8015M</i>	
<i>Surrogate: o-Terphenyl</i>		<i>108 %</i>	<i>70-130</i>		<i>P7H2515</i>	<i>08/25/17</i>	<i>08/25/17</i>	<i>TPH 8015M</i>	
Total Petroleum Hydrocarbon C6-C35	215	26.0	mg/kg dry	1	[CALC]	08/25/17	08/25/17	calc	

Fasken Oil & Ranch, Ltd.
 6101 Holiday Hill Road
 Midland TX, 79707

Project: El Paso Federal #12
 Project Number: [none]
 Project Manager: Aaron Pachlhofer

Fax: 43-687-1570

Stockpile B
7H24009-02 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	--------	-------

Permian Basin Environmental Lab, L.P.

General Chemistry Parameters by EPA / Standard Methods

% Moisture	1.0	0.1	%	1	P7H2805	08/28/17	08/28/17	ASTM D2216	
-------------------	------------	-----	---	---	---------	----------	----------	------------	--

Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M

C6-C12	ND	25.3	mg/kg dry	1	P7H2515	08/25/17	08/26/17	TPH 8015M	
>C12-C28	610	25.3	mg/kg dry	1	P7H2515	08/25/17	08/26/17	TPH 8015M	
>C28-C35	380	25.3	mg/kg dry	1	P7H2515	08/25/17	08/26/17	TPH 8015M	
<i>Surrogate: 1-Chlorooctane</i>		111 %		70-130	P7H2515	08/25/17	08/26/17	TPH 8015M	
<i>Surrogate: o-Terphenyl</i>		97.7 %		70-130	P7H2515	08/25/17	08/26/17	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	990	25.3	mg/kg dry	1	[CALC]	08/25/17	08/26/17	calc	

Fasken Oil & Ranch, Ltd.
 6101 Holiday Hill Road
 Midland TX, 79707

Project: El Paso Federal #12
 Project Number: [none]
 Project Manager: Aaron Pachlhofer

Fax: 43-687-1570

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P7H2805 - *** DEFAULT PREP ***										
Blank (P7H2805-BLK1)					Prepared & Analyzed: 08/28/17					
% Moisture	ND	0.1	%							
Duplicate (P7H2805-DUP1)					Source: 7H23006-02 Prepared & Analyzed: 08/28/17					
% Moisture	4.0	0.1	%		4.0			0.00	20	
Duplicate (P7H2805-DUP2)					Source: 7H24003-06 Prepared & Analyzed: 08/28/17					
% Moisture	11.0	0.1	%		10.0			9.52	20	
Duplicate (P7H2805-DUP3)					Source: 7H24005-03 Prepared & Analyzed: 08/28/17					
% Moisture	15.0	0.1	%		14.0			6.90	20	
Duplicate (P7H2805-DUP4)					Source: 7H25004-05 Prepared & Analyzed: 08/28/17					
% Moisture	5.0	0.1	%		6.0			18.2	20	

Fasken Oil & Ranch, Ltd.
 6101 Holiday Hill Road
 Midland TX, 79707

Project: El Paso Federal #12
 Project Number: [none]
 Project Manager: Aaron Pachlhofer

Fax: 43-687-1570

Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M - Quality Control
Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch P7H2515 - General Preparation (GC)

Blank (P7H2515-BLK1)

Prepared & Analyzed: 08/25/17

C6-C12	ND	25.0	mg/kg wet							
>C12-C28	ND	25.0	"							
>C28-C35	ND	25.0	"							
Surrogate: 1-Chlorooctane	109		"	100		109	70-130			
Surrogate: o-Terphenyl	49.8		"	50.0		99.7	70-130			

LCS (P7H2515-BS1)

Prepared & Analyzed: 08/25/17

C6-C12	755	25.0	mg/kg wet	1000		75.5	75-125			
>C12-C28	958	25.0	"	1000		95.8	75-125			
Surrogate: 1-Chlorooctane	129		"	100		129	70-130			
Surrogate: o-Terphenyl	48.5		"	50.0		97.0	70-130			

LCS Dup (P7H2515-BSD1)

Prepared & Analyzed: 08/25/17

C6-C12	803	25.0	mg/kg wet	1000		80.3	75-125	6.22	20	
>C12-C28	972	25.0	"	1000		97.2	75-125	1.45	20	
Surrogate: 1-Chlorooctane	130		"	100		130	70-130			
Surrogate: o-Terphenyl	49.3		"	50.0		98.5	70-130			

Matrix Spike (P7H2515-MS1)

Source: 7H24006-04

Prepared: 08/25/17 Analyzed: 08/26/17

C6-C12	1100	27.8	mg/kg dry	1110	21.7	97.4	75-125			
>C12-C28	1270	27.8	"	1110	276	89.5	75-125			
Surrogate: 1-Chlorooctane	137		"	111		123	70-130			
Surrogate: o-Terphenyl	68.0		"	55.6		122	70-130			

Matrix Spike Dup (P7H2515-MSD1)

Source: 7H24006-04

Prepared: 08/25/17 Analyzed: 08/26/17

C6-C12	1100	27.8	mg/kg dry	1110	21.7	96.8	75-125	0.683	20	
>C12-C28	1290	27.8	"	1110	276	91.1	75-125	1.76	20	
Surrogate: 1-Chlorooctane	144		"	111		129	70-130			
Surrogate: o-Terphenyl	68.6		"	55.6		123	70-130			

Fasken Oil & Ranch, Ltd.
6101 Holiday Hill Road
Midland TX, 79707

Project: El Paso Federal #12
Project Number: [none]
Project Manager: Aaron Pachlhofer

Fax: 43-687-1570

Notes and Definitions

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

Report Approved By:



Date:

8/28/2017

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.

