

**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: Gossett 20
Project Number: [none]
Location: Eddy Co NM

Lab Order Number: 7H24008



NELAP/TCEQ # T104704516-16-7

Report Date: 08/28/17

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

Project: Gossett 20
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	7H24008-01	Soil	08/23/17 09:47	08-24-2017 09:38
Stockpile B	7H24008-02	Soil	08/23/17 09:45	08-24-2017 09:38

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Stockpile A
7H24008-01 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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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
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Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M

C6-C12	139	126	mg/kg dry	5	P7H2515	08/25/17	08/25/17	TPH 8015M
>C12-C28	3520	126	mg/kg dry	5	P7H2515	08/25/17	08/25/17	TPH 8015M
>C28-C35	1180	126	mg/kg dry	5	P7H2515	08/25/17	08/25/17	TPH 8015M
Surrogate: 1-Chlorooctane		117 %	70-130		P7H2515	08/25/17	08/25/17	TPH 8015M
Surrogate: o-Terphenyl		99.4 %	70-130		P7H2515	08/25/17	08/25/17	TPH 8015M
Total Petroleum Hydrocarbon C6-C35	4700	126	mg/kg dry	5	[CALC]	08/25/17	08/25/17	calc

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Stockpile B
7H24008-02 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Permian Basin Environmental Lab, L.P.

General Chemistry Parameters by EPA / Standard Methods

% Moisture	5.0	0.1	%	1	P7H2805	08/28/17	08/28/17	ASTM D2216
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Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M

C6-C12	ND	26.3	mg/kg dry	1	P7H2515	08/25/17	08/25/17	TPH 8015M
>C12-C28	458	26.3	mg/kg dry	1	P7H2515	08/25/17	08/25/17	TPH 8015M
>C28-C35	281	26.3	mg/kg dry	1	P7H2515	08/25/17	08/25/17	TPH 8015M
Surrogate: 1-Chlorooctane		116 %	70-130		P7H2515	08/25/17	08/25/17	TPH 8015M
Surrogate: o-Terphenyl		109 %	70-130		P7H2515	08/25/17	08/25/17	TPH 8015M
Total Petroleum Hydrocarbon C6-C35	739	26.3	mg/kg dry	1	[CALC]	08/25/17	08/25/17	calc

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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
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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

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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
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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	"							
<i>Surrogate: 1-Chlorooctane</i>	<i>109</i>		<i>"</i>	<i>100</i>		<i>109</i>	<i>70-130</i>			
<i>Surrogate: o-Terphenyl</i>	<i>49.8</i>		<i>"</i>	<i>50.0</i>		<i>99.7</i>	<i>70-130</i>			

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			
<i>Surrogate: 1-Chlorooctane</i>	<i>129</i>		<i>"</i>	<i>100</i>		<i>129</i>	<i>70-130</i>			
<i>Surrogate: o-Terphenyl</i>	<i>48.5</i>		<i>"</i>	<i>50.0</i>		<i>97.0</i>	<i>70-130</i>			

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	
<i>Surrogate: 1-Chlorooctane</i>	<i>130</i>		<i>"</i>	<i>100</i>		<i>130</i>	<i>70-130</i>			
<i>Surrogate: o-Terphenyl</i>	<i>49.3</i>		<i>"</i>	<i>50.0</i>		<i>98.5</i>	<i>70-130</i>			

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			
<i>Surrogate: 1-Chlorooctane</i>	<i>137</i>		<i>"</i>	<i>111</i>		<i>123</i>	<i>70-130</i>			
<i>Surrogate: o-Terphenyl</i>	<i>68.0</i>		<i>"</i>	<i>55.6</i>		<i>122</i>	<i>70-130</i>			

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	
<i>Surrogate: 1-Chlorooctane</i>	<i>144</i>		<i>"</i>	<i>111</i>		<i>129</i>	<i>70-130</i>			
<i>Surrogate: o-Terphenyl</i>	<i>68.6</i>		<i>"</i>	<i>55.6</i>		<i>123</i>	<i>70-130</i>			

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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

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