



6101 Holiday Hill Road
Midland, TX 79707
(432) 687-1777
(432) 687-1570 (FAX)

July 19, 2017

Crystal Weaver
Environmental Specialist
OCD – Artesia District II
811 S. 1st Street
Artesia, NM 88210

James Amos
Supervisory Petroleum Engineering Tech
Bureau of Land Management
620 East Greene Street
Carlsbad, NM 88220-6292

Closure request: El Paso Federal No 12 Spill and Potential Oil Theft, API No. 30-015-30634

Ms. Weaver and Mr. Amos,

Incident Description

On March 25, 2017 a spill was discovered at Fasken's El Paso Federal No. 12 Battery by Fasken personnel arriving for routine daily work. At the time of discovery, oil staining was present on the tanks and catwalks, inside the firewall around two oil tanks, on the firewall, and a small area just outside the firewall in the drive area on the pad. According to Fasken production records, 31 barrels of crude oil was missing. No recoverable oil was present and no produced water was released. The area affected by the spilled crude oil was immediately determined to be too small for the volume of crude oil missing. The New Mexico OCD Artesia District office was notified via phone on March 25th in the late afternoon. A form C-141 was submitted to Mike Bratcher on March 28th via electronic mail. After additional internal investigation, Fasken also reported the loss to New Mexico law enforcement as a theft. See attached pictures of spill upon discovery.

Spill Response

On March 30th, Fasken Environmental Coordinator Aaron Pachlhofer supervised a work crew and a backhoe on site to perform an immediate response to stabilize and clean up the release. All affected soils were removed from around the two affected tanks until visually and olfactorally clean. However, the affected soil were not removed from under the tanks since the tanks are in service and cannot be moved. The affected section of the firewall was completely removed until level with the pad. The small affected area on the pad was scraped until it appears clean. All materials removed were placed on 20-mil thick plastic on the eastern edge of the pad edge of the pad. Fasken estimates the volume of the stockpile at about 20 cubic yards. Two samples were collected around the tanks and one sample was collected from the pad area. A sample was not collected from the firewall since it was fully removed. The stockpile was not sampled; instead it was scheduled to be sampled 90 days after excavation.

After materials were removed and stockpiled, the excavated portion of the firewall was replaced with new, clean soil that was already stockpiled on site. The interior of the firewall around the tanks was backfilled with new pea gravel after sample analysis was received and no further material needed to be removed around the tanks.

Sample Results

Sample results after the initial removal were:

| | Benzene | Total BTEX | TPH |
|-----------|---------|------------|--------|
| S-1 | <0.0220 | <0.154 | 222.96 |
| S-2 | <0.0220 | <0.154 | 795.82 |
| S-3 (PAD) | <0.0208 | 1.461 | 4385 |

After receipt of the analytical results, Mike Bratcher agreed to allow Fasken to re-sample S-3 (Pad) in order to confirm the concentration remaining on the drive area of the pad. On May 31, 2017, Aaron Pachlhofer collected a new sample from the pad area; and the stockpile was also sampled at this time.

Confirmation and stockpile sample results were:

| | Benzene | Total BTEX | TPH |
|------------------|---------|------------|--------|
| PAD Confirmation | <0.0208 | <0.154 | 661.8 |
| Stockpile | <0.0106 | 0.0052 | 2185.3 |

Please note all results in mg/kg and that since no produced water was spilled, chloride analysis was not requested. See attached lab reports.

Conclusions

1. This spill was likely the result of a theft of crude oil. Fasken personnel concluded that the volume of oil missing did not correlate with area affected by the crude oil that was spilled. Fasken asserts that if the full 31 barrels of the amount of oil had been spilled into the firewall of the battery, a much larger volume of soil would have been removed in the initial response.
2. According to the sample analysis, the initial response was appropriate to address the spilled oil. Three separate samples show any remaining crude oil below 1,000 mg/kg. Some crude oil remains beneath two oil tanks at the battery, since they are in service and could not be moved during response activities.
3. The stockpile that remains at the battery contains a low concentration of TPH, and it is ready for re-use as needed by Fasken personnel.

Recommendations

1. Fasken recommends no further action for this spill be taken until the battery is decommissioned or the oil tanks are removed from service at which time any contaminated soil can be removed from beneath the tanks.
2. Fasken recommends that the stockpile be released for re-use for firewall or road repair.

If there are any questions or comments, please do not hesitate to contact Aaron Pachlhofer at the letterhead address or 432-687-1777 or aaronp@forl.com.

Thank You,

Aaron Pachlhofer

Attachments:
Photographs
Laboratory Reports



Spill upon arrival



Spill upon arrival



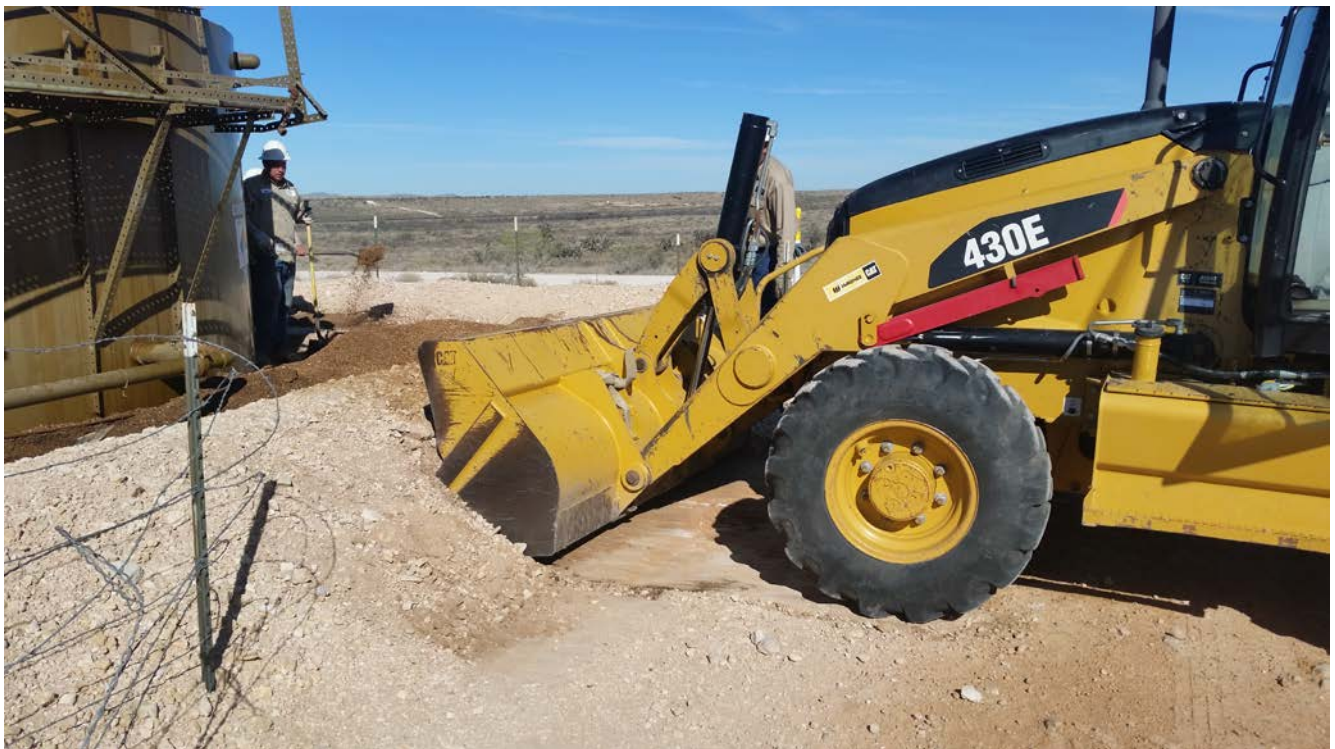
Spill upon arrival, backside of battery



Spill on arrival, between tanks from backside



Removing affected soils



Removing firewall



Firewall removed, affected soils mostly removed



Firewall removed, affected soils mostly removed



Firewall and fence replaced



Excavated area prior to backfilling with new pea gravel



Soil stockpile with El Paso Federal 12 battery in the background

**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 County, NM

Lab Order Number: 7C31012



NELAP/TCEQ # T104704156-16-6

Report Date: 04/07/17

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 |
|-----------|---------------|--------|----------------|------------------|
| S-1 | 7C31012-01 | Soil | 03/30/17 13:35 | 03-31-2017 11:52 |
| S-2 | 7C31012-02 | Soil | 03/30/17 13:40 | 03-31-2017 11:52 |
| S-3 (Pad) | 7C31012-03 | Soil | 03/30/17 13:45 | 03-31-2017 11:52 |

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

Fax: 43-687-1570

S-1
7C31012-01 (Soil)

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

Permian Basin Environmental Lab, L.P.

Organics by GC

| | | | | | | | | |
|-----------------------------------|---------------|--------|-----------|----|---------|----------|----------|-----------|
| Benzene | ND | 0.0220 | mg/kg dry | 20 | P7D0503 | 04/03/17 | 04/03/17 | EPA 8021B |
| Toluene | ND | 0.0440 | mg/kg dry | 20 | P7D0503 | 04/03/17 | 04/03/17 | EPA 8021B |
| Ethylbenzene | ND | 0.0220 | mg/kg dry | 20 | P7D0503 | 04/03/17 | 04/03/17 | EPA 8021B |
| Xylene (p/m) | ND | 0.0440 | mg/kg dry | 20 | P7D0503 | 04/03/17 | 04/03/17 | EPA 8021B |
| Xylene (o) | ND | 0.0220 | mg/kg dry | 20 | P7D0503 | 04/03/17 | 04/03/17 | EPA 8021B |
| Surrogate: 4-Bromofluorobenzene | | 82.8 % | 75-125 | | P7D0503 | 04/03/17 | 04/03/17 | EPA 8021B |
| Surrogate: 1,4-Difluorobenzene | | 91.6 % | 75-125 | | P7D0503 | 04/03/17 | 04/03/17 | EPA 8021B |
| C6-C12 | 30.879 | 27.473 | mg/kg dry | 1 | P7D0609 | 04/05/17 | 04/06/17 | TX 1005 |
| >C12-C28 | 138.98 | 27.473 | mg/kg dry | 1 | P7D0609 | 04/05/17 | 04/06/17 | TX 1005 |
| >C28-C35 | 53.099 | 27.473 | mg/kg dry | 1 | P7D0609 | 04/05/17 | 04/06/17 | TX 1005 |
| Surrogate: 1-Chlorooctane | | 105 % | 70-130 | | P7D0609 | 04/05/17 | 04/06/17 | TX 1005 |
| Surrogate: o-Terphenyl | | 103 % | 70-130 | | P7D0609 | 04/05/17 | 04/06/17 | TX 1005 |
| Total Hydrocarbon nC6-nC35 | 222.96 | 27.473 | mg/kg dry | 1 | [CALC] | 04/05/17 | 04/06/17 | [CALC] |

General Chemistry Parameters by EPA / Standard Methods

| | | | | | | | | |
|-------------------|------------|-----|---|---|---------|----------|----------|---------------|
| % Moisture | 9.0 | 0.1 | % | 1 | P7D0301 | 04/03/17 | 04/03/17 | % calculation |
|-------------------|------------|-----|---|---|---------|----------|----------|---------------|

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Project Number: [none]
Project Manager: Aaron Pachlhofer

Fax: 43-687-1570

S-2
7C31012-02 (Soil)

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

Permian Basin Environmental Lab, L.P.

Organics by GC

| | | | | | | | | |
|-----------------------------------|---------------|--------|-----------|----|---------|----------|----------|-----------|
| Benzene | ND | 0.0215 | mg/kg dry | 20 | P7D0503 | 04/03/17 | 04/04/17 | EPA 8021B |
| Toluene | ND | 0.0430 | mg/kg dry | 20 | P7D0503 | 04/03/17 | 04/04/17 | EPA 8021B |
| Ethylbenzene | ND | 0.0215 | mg/kg dry | 20 | P7D0503 | 04/03/17 | 04/04/17 | EPA 8021B |
| Xylene (p/m) | ND | 0.0430 | mg/kg dry | 20 | P7D0503 | 04/03/17 | 04/04/17 | EPA 8021B |
| Xylene (o) | ND | 0.0215 | mg/kg dry | 20 | P7D0503 | 04/03/17 | 04/04/17 | EPA 8021B |
| Surrogate: 1,4-Difluorobenzene | | 97.6 % | 75-125 | | P7D0503 | 04/03/17 | 04/04/17 | EPA 8021B |
| Surrogate: 4-Bromofluorobenzene | | 89.4 % | 75-125 | | P7D0503 | 04/03/17 | 04/04/17 | EPA 8021B |
| C6-C12 | 184.08 | 26.882 | mg/kg dry | 1 | P7D0609 | 04/05/17 | 04/06/17 | TX 1005 |
| >C12-C28 | 531.51 | 26.882 | mg/kg dry | 1 | P7D0609 | 04/05/17 | 04/06/17 | TX 1005 |
| >C28-C35 | 80.237 | 26.882 | mg/kg dry | 1 | P7D0609 | 04/05/17 | 04/06/17 | TX 1005 |
| Surrogate: 1-Chlorooctane | | 101 % | 70-130 | | P7D0609 | 04/05/17 | 04/06/17 | TX 1005 |
| Surrogate: o-Terphenyl | | 99.1 % | 70-130 | | P7D0609 | 04/05/17 | 04/06/17 | TX 1005 |
| Total Hydrocarbon nC6-nC35 | 795.82 | 26.882 | mg/kg dry | 1 | [CALC] | 04/05/17 | 04/06/17 | [CALC] |

General Chemistry Parameters by EPA / Standard Methods

| | | | | | | | | |
|-------------------|------------|-----|---|---|---------|----------|----------|---------------|
| % Moisture | 7.0 | 0.1 | % | 1 | P7D0301 | 04/03/17 | 04/03/17 | % calculation |
|-------------------|------------|-----|---|---|---------|----------|----------|---------------|

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

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S-3 (Pad)
7C31012-03 (Soil)

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

Permian Basin Environmental Lab, L.P.

Organics by GC

| | | | | | | | | | |
|---------------------------------|---------------|--------|-----------|----|---------|----------|----------|-----------|------|
| Benzene | ND | 0.0208 | mg/kg dry | 20 | P7D0503 | 04/03/17 | 04/04/17 | EPA 8021B | |
| Toluene | ND | 0.0417 | mg/kg dry | 20 | P7D0503 | 04/03/17 | 04/04/17 | EPA 8021B | |
| Ethylbenzene | 0.194 | 0.0208 | mg/kg dry | 20 | P7D0503 | 04/03/17 | 04/04/17 | EPA 8021B | |
| Xylene (p/m) | 0.846 | 0.0417 | mg/kg dry | 20 | P7D0503 | 04/03/17 | 04/04/17 | EPA 8021B | |
| Xylene (o) | 0.421 | 0.0208 | mg/kg dry | 20 | P7D0503 | 04/03/17 | 04/04/17 | EPA 8021B | |
| Surrogate: 4-Bromofluorobenzene | | 74.5 % | 75-125 | | P7D0503 | 04/03/17 | 04/04/17 | EPA 8021B | S-GC |
| Surrogate: 1,4-Difluorobenzene | | 90.4 % | 75-125 | | P7D0503 | 04/03/17 | 04/04/17 | EPA 8021B | |
| C6-C12 | 629.52 | 26.042 | mg/kg dry | 1 | P7D0609 | 04/05/17 | 04/06/17 | TX 1005 | |
| >C12-C28 | 3316.6 | 26.042 | mg/kg dry | 1 | P7D0609 | 04/05/17 | 04/06/17 | TX 1005 | |
| >C28-C35 | 438.93 | 26.042 | mg/kg dry | 1 | P7D0609 | 04/05/17 | 04/06/17 | TX 1005 | |
| Surrogate: 1-Chlorooctane | | 104 % | 70-130 | | P7D0609 | 04/05/17 | 04/06/17 | TX 1005 | |
| Surrogate: o-Terphenyl | | 98.4 % | 70-130 | | P7D0609 | 04/05/17 | 04/06/17 | TX 1005 | |
| Total Hydrocarbon nC6-nC35 | 4385 | 26.042 | mg/kg dry | 1 | [CALC] | 04/05/17 | 04/06/17 | [CALC] | |

General Chemistry Parameters by EPA / Standard Methods

| | | | | | | | | | |
|------------|------------|-----|---|---|---------|----------|----------|---------------|--|
| % Moisture | 4.0 | 0.1 | % | 1 | P7D0301 | 04/03/17 | 04/03/17 | % calculation | |
|------------|------------|-----|---|---|---------|----------|----------|---------------|--|

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Project Manager: Aaron Pachlhofer

Fax: 43-687-1570

Organics by GC - 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 P7D0503 - General Preparation (GC)

Blank (P7D0503-BLK1)

Prepared & Analyzed: 04/03/17

| | | | | | | | | | | |
|---------------------------------|--------|---------|-----------|--------|--|------|--------|--|--|--|
| Benzene | ND | 0.00100 | mg/kg wet | | | | | | | |
| Toluene | ND | 0.00200 | " | | | | | | | |
| Ethylbenzene | ND | 0.00100 | " | | | | | | | |
| Xylene (p/m) | ND | 0.00200 | " | | | | | | | |
| Xylene (o) | ND | 0.00100 | " | | | | | | | |
| Surrogate: 1,4-Difluorobenzene | 0.0583 | | " | 0.0600 | | 97.1 | 75-125 | | | |
| Surrogate: 4-Bromofluorobenzene | 0.0505 | | " | 0.0600 | | 84.1 | 75-125 | | | |

LCS (P7D0503-BS1)

Prepared & Analyzed: 04/03/17

| | | | | | | | | | | |
|---------------------------------|--------|---------|-----------|--------|--|------|--------|--|--|--|
| Benzene | 0.0924 | 0.00100 | mg/kg wet | 0.100 | | 92.4 | 70-130 | | | |
| Toluene | 0.0872 | 0.00200 | " | 0.100 | | 87.2 | 70-130 | | | |
| Ethylbenzene | 0.0855 | 0.00100 | " | 0.100 | | 85.5 | 70-130 | | | |
| Xylene (p/m) | 0.180 | 0.00200 | " | 0.200 | | 90.1 | 70-130 | | | |
| Xylene (o) | 0.0865 | 0.00100 | " | 0.100 | | 86.5 | 70-130 | | | |
| Surrogate: 4-Bromofluorobenzene | 0.0655 | | " | 0.0600 | | 109 | 75-125 | | | |
| Surrogate: 1,4-Difluorobenzene | 0.0629 | | " | 0.0600 | | 105 | 75-125 | | | |

LCS Dup (P7D0503-BSD1)

Prepared & Analyzed: 04/03/17

| | | | | | | | | | | |
|---------------------------------|--------|---------|-----------|--------|--|------|--------|------|----|--|
| Benzene | 0.0991 | 0.00100 | mg/kg wet | 0.100 | | 99.1 | 70-130 | 7.01 | 20 | |
| Toluene | 0.0826 | 0.00200 | " | 0.100 | | 82.6 | 70-130 | 5.49 | 20 | |
| Ethylbenzene | 0.0802 | 0.00100 | " | 0.100 | | 80.2 | 70-130 | 6.35 | 20 | |
| Xylene (p/m) | 0.168 | 0.00200 | " | 0.200 | | 83.9 | 70-130 | 7.10 | 20 | |
| Xylene (o) | 0.0761 | 0.00100 | " | 0.100 | | 76.1 | 70-130 | 12.8 | 20 | |
| Surrogate: 1,4-Difluorobenzene | 0.0607 | | " | 0.0600 | | 101 | 75-125 | | | |
| Surrogate: 4-Bromofluorobenzene | 0.0531 | | " | 0.0600 | | 88.5 | 75-125 | | | |

Matrix Spike (P7D0503-MS1)

Source: 7D03003-01

Prepared & Analyzed: 04/03/17

| | | | | | | | | | | |
|---------------------------------|--------|---------|-----------|--------|----|------|--------|--|--|-------|
| Benzene | 0.0924 | 0.00101 | mg/kg dry | 0.101 | ND | 91.5 | 80-120 | | | |
| Toluene | 0.0754 | 0.00202 | " | 0.101 | ND | 74.7 | 80-120 | | | QM-07 |
| Ethylbenzene | 0.0623 | 0.00101 | " | 0.101 | ND | 61.6 | 80-120 | | | QM-07 |
| Xylene (p/m) | 0.118 | 0.00202 | " | 0.202 | ND | 58.3 | 80-120 | | | QM-07 |
| Xylene (o) | 0.0585 | 0.00101 | " | 0.101 | ND | 57.9 | 80-120 | | | QM-07 |
| Surrogate: 4-Bromofluorobenzene | 0.0561 | | " | 0.0606 | | 92.6 | 75-125 | | | |
| Surrogate: 1,4-Difluorobenzene | 0.0613 | | " | 0.0606 | | 101 | 75-125 | | | |

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

Organics by GC - 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 P7D0503 - General Preparation (GC)

Matrix Spike Dup (P7D0503-MSD1)

Source: 7D03003-01

Prepared & Analyzed: 04/03/17

| | | | | | | | | | | |
|---------------------------------|--------|---------|-----------|--------|----|------|--------|------|----|-------|
| Benzene | 0.116 | 0.00101 | mg/kg dry | 0.101 | ND | 115 | 80-120 | 22.6 | 20 | R3 |
| Toluene | 0.0802 | 0.00202 | " | 0.101 | ND | 79.4 | 80-120 | 6.12 | 20 | QM-07 |
| Ethylbenzene | 0.0597 | 0.00101 | " | 0.101 | ND | 59.1 | 80-120 | 4.21 | 20 | QM-07 |
| Xylene (p/m) | 0.120 | 0.00202 | " | 0.202 | ND | 59.2 | 80-120 | 1.65 | 20 | QM-07 |
| Xylene (o) | 0.0597 | 0.00101 | " | 0.101 | ND | 59.2 | 80-120 | 2.07 | 20 | QM-07 |
| Surrogate: 4-Bromofluorobenzene | 0.0608 | | " | 0.0606 | | 100 | 75-125 | | | |
| Surrogate: 1,4-Difluorobenzene | 0.0681 | | " | 0.0606 | | 112 | 75-125 | | | |

Batch P7D0609 - TX 1005

Blank (P7D0609-BLK1)

Prepared: 04/05/16 Analyzed: 04/05/17

| | | | | | | | | | | |
|---------------------------|------|--------|-----------|------|--|-----|--------|--|--|--|
| C6-C12 | ND | 25.000 | mg/kg wet | | | | | | | |
| >C12-C28 | ND | 25.000 | " | | | | | | | |
| >C28-C35 | ND | 25.000 | " | | | | | | | |
| Surrogate: 1-Chlorooctane | 108 | | " | 100 | | 108 | 70-130 | | | |
| Surrogate: o-Terphenyl | 53.2 | | " | 50.0 | | 106 | 70-130 | | | |

LCS (P7D0609-BS1)

Prepared: 04/05/16 Analyzed: 04/05/17

| | | | | | | | | | | |
|---------------------------|------|--------|-----------|------|--|------|--------|--|--|--|
| C6-C12 | 1000 | 25.000 | mg/kg wet | 1000 | | 100 | 75-125 | | | |
| >C12-C28 | 942 | 25.000 | " | 1000 | | 94.2 | 75-125 | | | |
| Surrogate: 1-Chlorooctane | 110 | | " | 100 | | 110 | 70-130 | | | |
| Surrogate: o-Terphenyl | 50.3 | | " | 50.0 | | 101 | 70-130 | | | |

LCS Dup (P7D0609-BSD1)

Prepared: 04/05/16 Analyzed: 04/05/17

| | | | | | | | | | | |
|---------------------------|------|--------|-----------|------|--|------|--------|-------|----|--|
| C6-C12 | 1010 | 25.000 | mg/kg wet | 1000 | | 101 | 75-125 | 0.511 | 20 | |
| >C12-C28 | 938 | 25.000 | " | 1000 | | 93.8 | 75-125 | 0.401 | 20 | |
| Surrogate: 1-Chlorooctane | 106 | | " | 100 | | 106 | 70-130 | | | |
| Surrogate: o-Terphenyl | 48.7 | | " | 50.0 | | 97.4 | 70-130 | | | |

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

Fax: 43-687-1570

Organics by GC - 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 P7D0609 - TX 1005

Matrix Spike (P7D0609-MS1)

Source: 7D05001-01

Prepared: 04/05/16 Analyzed: 04/06/17

| | | | | | | | | | | |
|---------------------------|------|--------|-----------|------|------|------|--------|--|--|-------|
| C6-C12 | 761 | 25.510 | mg/kg dry | 1020 | 36.5 | 71.0 | 75-125 | | | QM-07 |
| >C12-C28 | 1070 | 25.510 | " | 1020 | 796 | 26.6 | 75-125 | | | QM-07 |
| Surrogate: 1-Chlorooctane | 100 | | " | 102 | | 98.0 | 70-130 | | | |
| Surrogate: o-Terphenyl | 46.2 | | " | 51.0 | | 90.5 | 70-130 | | | |

Matrix Spike Dup (P7D0609-MSD1)

Source: 7D05001-01

Prepared: 04/05/16 Analyzed: 04/06/17

| | | | | | | | | | | |
|---------------------------|------|--------|-----------|------|------|------|--------|------|----|-------|
| C6-C12 | 786 | 25.510 | mg/kg dry | 1020 | 36.5 | 73.5 | 75-125 | 3.43 | 20 | QM-07 |
| >C12-C28 | 1070 | 25.510 | " | 1020 | 796 | 27.2 | 75-125 | 2.01 | 20 | QM-07 |
| Surrogate: 1-Chlorooctane | 100 | | " | 102 | | 98.1 | 70-130 | | | |
| Surrogate: o-Terphenyl | 45.9 | | " | 51.0 | | 89.9 | 70-130 | | | |

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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 P7D0301 - * DEFAULT PREP *****

Blank (P7D0301-BLK1)

Prepared & Analyzed: 04/03/17

| | | | |
|------------|----|-----|---|
| % Moisture | ND | 0.1 | % |
|------------|----|-----|---|

Duplicate (P7D0301-DUP1)

Source: 7C31003-11

Prepared & Analyzed: 04/03/17

| | | | | | | |
|------------|-----|-----|---|-----|------|----|
| % Moisture | 7.0 | 0.1 | % | 7.0 | 0.00 | 20 |
|------------|-----|-----|---|-----|------|----|

Duplicate (P7D0301-DUP2)

Source: 7C31008-06

Prepared & Analyzed: 04/03/17

| | | | | | | |
|------------|-----|-----|---|-----|------|----|
| % Moisture | 5.0 | 0.1 | % | 5.0 | 0.00 | 20 |
|------------|-----|-----|---|-----|------|----|

Duplicate (P7D0301-DUP3)

Source: 7C31012-03

Prepared & Analyzed: 04/03/17

| | | | | | | |
|------------|-----|-----|---|-----|------|----|
| % Moisture | 4.0 | 0.1 | % | 4.0 | 0.00 | 20 |
|------------|-----|-----|---|-----|------|----|

Notes and Definitions

| | |
|-------|--|
| S-GC | Surrogate recovery outside of control limits. The data was accepted based on valid recovery of the remaining surrogate. |
| R3 | The RPD exceeded the acceptance limit due to sample matrix effects. |
| QM-07 | The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery. |
| 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:

4/7/2017

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.

**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: 7F01006



NELAP/TCEQ # T104704516-16-7

Report Date: 06/09/17

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 |
|------------------|---------------|--------|----------------|------------------|
| Pad Confirmation | 7F01006-01 | Soil | 05/31/17 12:24 | 06-01-2017 12:09 |
| Stockpile | 7F01006-02 | Soil | 05/31/17 12:30 | 06-01-2017 12:09 |

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

Pad Confirmation

7F01006-01 (Soil)

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

Permian Basin Environmental Lab, L.P.

Organics by GC

| | | | | | | | | | |
|---------------------------------|-------|--------|-----------|----|---------|----------|----------|-----------|------|
| Benzene | ND | 0.0202 | mg/kg dry | 20 | P7F0703 | 06/01/17 | 06/02/17 | EPA 8021B | |
| Toluene | ND | 0.0404 | mg/kg dry | 20 | P7F0703 | 06/01/17 | 06/02/17 | EPA 8021B | |
| Ethylbenzene | ND | 0.0202 | mg/kg dry | 20 | P7F0703 | 06/01/17 | 06/02/17 | EPA 8021B | |
| Xylene (p/m) | ND | 0.0404 | mg/kg dry | 20 | P7F0703 | 06/01/17 | 06/02/17 | EPA 8021B | |
| Xylene (o) | ND | 0.0202 | mg/kg dry | 20 | P7F0703 | 06/01/17 | 06/02/17 | EPA 8021B | |
| Surrogate: 4-Bromofluorobenzene | | 73.6 % | 75-125 | | P7F0703 | 06/01/17 | 06/02/17 | EPA 8021B | S-GC |
| Surrogate: 1,4-Difluorobenzene | | 86.7 % | 75-125 | | P7F0703 | 06/01/17 | 06/02/17 | EPA 8021B | |
| C6-C12 | ND | 126.26 | mg/kg dry | 5 | P7F0501 | 06/05/17 | 06/09/17 | TX 1005 | |
| >C12-C28 | 508.4 | 126.26 | mg/kg dry | 5 | P7F0501 | 06/05/17 | 06/09/17 | TX 1005 | |
| >C28-C35 | 161.4 | 126.26 | mg/kg dry | 5 | P7F0501 | 06/05/17 | 06/09/17 | TX 1005 | |
| Surrogate: 1-Chlorooctane | | 121 % | 70-130 | | P7F0501 | 06/05/17 | 06/09/17 | TX 1005 | |
| Surrogate: o-Terphenyl | | 115 % | 70-130 | | P7F0501 | 06/05/17 | 06/09/17 | TX 1005 | |
| Total Hydrocarbon nC6-nC35 | 669.8 | 126.26 | mg/kg dry | 5 | [CALC] | 06/05/17 | 06/09/17 | [CALC] | |

General Chemistry Parameters by EPA / Standard Methods

| | | | | | | | | | |
|------------|-----|-----|---|---|---------|----------|----------|------------|--|
| % Moisture | 1.0 | 0.1 | % | 1 | P7F0503 | 06/05/17 | 06/05/17 | ASTM D2216 | |
|------------|-----|-----|---|---|---------|----------|----------|------------|--|

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
7F01006-02 (Soil)

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

Permian Basin Environmental Lab, L.P.

Organics by GC

| | | | | | | | | | |
|--|----------------|---------|-----------|---|---------|----------|----------|-----------|------|
| Benzene | ND | 0.00106 | mg/kg dry | 1 | P7F0702 | 06/01/17 | 06/01/17 | EPA 8021B | |
| Toluene | ND | 0.00213 | mg/kg dry | 1 | P7F0702 | 06/01/17 | 06/01/17 | EPA 8021B | |
| Ethylbenzene | ND | 0.00106 | mg/kg dry | 1 | P7F0702 | 06/01/17 | 06/01/17 | EPA 8021B | |
| Xylene (p/m) | ND | 0.00213 | mg/kg dry | 1 | P7F0702 | 06/01/17 | 06/01/17 | EPA 8021B | |
| Xylene (o) | 0.00520 | 0.00106 | mg/kg dry | 1 | P7F0702 | 06/01/17 | 06/01/17 | EPA 8021B | |
| <i>Surrogate: 4-Bromofluorobenzene</i> | | 113 % | 75-125 | | P7F0702 | 06/01/17 | 06/01/17 | EPA 8021B | |
| <i>Surrogate: 1,4-Difluorobenzene</i> | | 90.5 % | 75-125 | | P7F0702 | 06/01/17 | 06/01/17 | EPA 8021B | |
| C6-C12 | 75.372 | 26.596 | mg/kg dry | 1 | P7F0501 | 06/05/17 | 06/08/17 | TX 1005 | |
| >C12-C28 | 1786.8 | 26.596 | mg/kg dry | 1 | P7F0501 | 06/05/17 | 06/08/17 | TX 1005 | |
| >C28-C35 | 323.12 | 26.596 | mg/kg dry | 1 | P7F0501 | 06/05/17 | 06/08/17 | TX 1005 | |
| <i>Surrogate: 1-Chlorooctane</i> | | 117 % | 70-130 | | P7F0501 | 06/05/17 | 06/08/17 | TX 1005 | |
| <i>Surrogate: o-Terphenyl</i> | | 136 % | 70-130 | | P7F0501 | 06/05/17 | 06/08/17 | TX 1005 | S-GC |
| Total Hydrocarbon nC6-nC35 | 2185.3 | 26.596 | mg/kg dry | 1 | [CALC] | 06/05/17 | 06/08/17 | [CALC] | |

General Chemistry Parameters by EPA / Standard Methods

| | | | | | | | | | |
|-------------------|------------|-----|---|---|---------|----------|----------|------------|--|
| % Moisture | 6.0 | 0.1 | % | 1 | P7F0503 | 06/05/17 | 06/05/17 | ASTM D2216 | |
|-------------------|------------|-----|---|---|---------|----------|----------|------------|--|

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

Organics by GC - 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 P7F0501 - TX 1005

Blank (P7F0501-BLK1)

Prepared: 06/05/17 Analyzed: 06/07/17

| | | | | | | | | | | |
|---------------------------|------|--------|-----------|------|--|------|--------|--|--|--|
| C6-C12 | ND | 25.000 | mg/kg wet | | | | | | | |
| >C12-C28 | ND | 25.000 | " | | | | | | | |
| >C28-C35 | ND | 25.000 | " | | | | | | | |
| Surrogate: 1-Chlorooctane | 92.1 | | " | 100 | | 92.1 | 70-130 | | | |
| Surrogate: o-Terphenyl | 47.2 | | " | 50.0 | | 94.4 | 70-130 | | | |

LCS (P7F0501-BS1)

Prepared: 06/05/17 Analyzed: 06/07/17

| | | | | | | | | | | |
|---------------------------|------|--------|-----------|------|--|------|--------|--|--|--|
| C6-C12 | 813 | 25.000 | mg/kg wet | 1000 | | 81.3 | 75-125 | | | |
| >C12-C28 | 872 | 25.000 | " | 1000 | | 87.2 | 75-125 | | | |
| Surrogate: 1-Chlorooctane | 99.9 | | " | 100 | | 99.9 | 70-130 | | | |
| Surrogate: o-Terphenyl | 42.7 | | " | 50.0 | | 85.5 | 70-130 | | | |

LCS Dup (P7F0501-BSD1)

Prepared: 06/05/17 Analyzed: 06/07/17

| | | | | | | | | | | |
|---------------------------|------|--------|-----------|------|--|------|--------|-------|----|--|
| C6-C12 | 817 | 25.000 | mg/kg wet | 1000 | | 81.7 | 75-125 | 0.553 | 20 | |
| >C12-C28 | 961 | 25.000 | " | 1000 | | 96.1 | 75-125 | 9.75 | 20 | |
| Surrogate: 1-Chlorooctane | 110 | | " | 100 | | 110 | 70-130 | | | |
| Surrogate: o-Terphenyl | 46.5 | | " | 50.0 | | 92.9 | 70-130 | | | |

Matrix Spike (P7F0501-MS1)

Source: 7F01004-06

Prepared: 06/05/17 Analyzed: 06/08/17

| | | | | | | | | | | |
|---------------------------|------|--------|-----------|------|----|------|--------|--|--|--|
| C6-C12 | 850 | 25.510 | mg/kg dry | 1020 | ND | 83.3 | 75-125 | | | |
| >C12-C28 | 1080 | 25.510 | " | 1020 | ND | 106 | 75-125 | | | |
| Surrogate: 1-Chlorooctane | 133 | | " | 102 | | 130 | 70-130 | | | |
| Surrogate: o-Terphenyl | 55.1 | | " | 51.0 | | 108 | 70-130 | | | |

Matrix Spike Dup (P7F0501-MSD1)

Source: 7F01004-06

Prepared: 06/05/17 Analyzed: 06/08/17

| | | | | | | | | | | |
|---------------------------|------|--------|-----------|------|----|------|--------|-------|----|--|
| C6-C12 | 865 | 25.510 | mg/kg dry | 1020 | ND | 84.7 | 75-125 | 1.68 | 20 | |
| >C12-C28 | 1090 | 25.510 | " | 1020 | ND | 107 | 75-125 | 0.917 | 20 | |
| Surrogate: 1-Chlorooctane | 129 | | " | 102 | | 126 | 70-130 | | | |
| Surrogate: o-Terphenyl | 49.0 | | " | 51.0 | | 96.0 | 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

Organics by GC - 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 P7F0702 - General Preparation (GC)

Blank (P7F0702-BLK1)

Prepared & Analyzed: 06/01/17

| | | | | | | | | | | |
|---------------------------------|--------|---------|-----------|--------|--|------|--------|--|--|--|
| Benzene | ND | 0.00100 | mg/kg wet | | | | | | | |
| Toluene | ND | 0.00200 | " | | | | | | | |
| Ethylbenzene | ND | 0.00100 | " | | | | | | | |
| Xylene (p/m) | ND | 0.00200 | " | | | | | | | |
| Xylene (o) | ND | 0.00100 | " | | | | | | | |
| Surrogate: 4-Bromofluorobenzene | 0.0589 | | " | 0.0600 | | 98.1 | 75-125 | | | |
| Surrogate: 1,4-Difluorobenzene | 0.0534 | | " | 0.0600 | | 89.0 | 75-125 | | | |

LCS (P7F0702-BS1)

Prepared & Analyzed: 06/01/17

| | | | | | | | | | | |
|---------------------------------|--------|---------|-----------|--------|--|------|--------|--|--|--|
| Benzene | 0.121 | 0.00100 | mg/kg wet | 0.100 | | 121 | 70-130 | | | |
| Toluene | 0.111 | 0.00200 | " | 0.100 | | 111 | 70-130 | | | |
| Ethylbenzene | 0.111 | 0.00100 | " | 0.100 | | 111 | 70-130 | | | |
| Xylene (p/m) | 0.204 | 0.00200 | " | | | | 70-130 | | | |
| Xylene (o) | 0.111 | 0.00100 | " | | | | 70-130 | | | |
| Surrogate: 1,4-Difluorobenzene | 0.0583 | | " | 0.0600 | | 97.2 | 75-125 | | | |
| Surrogate: 4-Bromofluorobenzene | 0.0597 | | " | 0.0600 | | 99.6 | 75-125 | | | |

LCS Dup (P7F0702-BSD1)

Prepared & Analyzed: 06/01/17

| | | | | | | | | | | |
|---------------------------------|--------|---------|-----------|--------|--|------|--------|------|----|--|
| Benzene | 0.119 | 0.00100 | mg/kg wet | 0.100 | | 119 | 70-130 | 1.25 | 20 | |
| Toluene | 0.107 | 0.00200 | " | 0.100 | | 107 | 70-130 | 4.14 | 20 | |
| Ethylbenzene | 0.115 | 0.00100 | " | 0.100 | | 115 | 70-130 | 3.60 | 20 | |
| Xylene (p/m) | 0.201 | 0.00200 | " | | | | 70-130 | | 20 | |
| Xylene (o) | 0.104 | 0.00100 | " | | | | 70-130 | | 20 | |
| Surrogate: 4-Bromofluorobenzene | 0.0562 | | " | 0.0600 | | 93.7 | 75-125 | | | |
| Surrogate: 1,4-Difluorobenzene | 0.0557 | | " | 0.0600 | | 92.9 | 75-125 | | | |

Matrix Spike (P7F0702-MS1)

Source: 7E31004-01

Prepared & Analyzed: 06/01/17

| | | | | | | | | | | |
|---------------------------------|--------|---------|-----------|--------|----|------|--------|--|--|-------|
| Benzene | 0.0608 | 0.00103 | mg/kg dry | 0.103 | ND | 59.0 | 80-120 | | | QM-05 |
| Toluene | 0.0531 | 0.00206 | " | 0.103 | ND | 51.5 | 80-120 | | | QM-05 |
| Ethylbenzene | 0.0573 | 0.00103 | " | 0.103 | ND | 55.6 | 80-120 | | | QM-05 |
| Xylene (p/m) | 0.119 | 0.00206 | " | | ND | | 80-120 | | | |
| Xylene (o) | 0.0625 | 0.00103 | " | | ND | | 80-120 | | | |
| Surrogate: 4-Bromofluorobenzene | 0.0619 | | " | 0.0619 | | 100 | 75-125 | | | |
| Surrogate: 1,4-Difluorobenzene | 0.0570 | | " | 0.0619 | | 92.1 | 75-125 | | | |

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

Organics by GC - 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 P7F0702 - General Preparation (GC)

Matrix Spike Dup (P7F0702-MSD1)

Source: 7E31004-01

Prepared & Analyzed: 06/01/17

| | | | | | | | | | | |
|---------------------------------|--------|---------|-----------|--------|----|------|--------|-------|----|-------|
| Benzene | 0.0580 | 0.00103 | mg/kg dry | 0.103 | ND | 56.3 | 80-120 | 4.72 | 20 | QM-05 |
| Toluene | 0.0539 | 0.00206 | " | 0.103 | ND | 52.3 | 80-120 | 1.50 | 20 | QM-05 |
| Ethylbenzene | 0.0571 | 0.00103 | " | 0.103 | ND | 55.4 | 80-120 | 0.252 | 20 | QM-05 |
| Xylene (p/m) | 0.112 | 0.00206 | " | | ND | | 80-120 | | 20 | |
| Xylene (o) | 0.0556 | 0.00103 | " | | ND | | 80-120 | | 20 | |
| Surrogate: 1,4-Difluorobenzene | 0.0591 | | " | 0.0619 | | 95.6 | 75-125 | | | |
| Surrogate: 4-Bromofluorobenzene | 0.0607 | | " | 0.0619 | | 98.1 | 75-125 | | | |

Batch P7F0703 - General Preparation (GC)

Blank (P7F0703-BLK1)

Prepared: 06/01/17 Analyzed: 06/02/17

| | | | | | | | | | | |
|---------------------------------|--------|---------|-----------|--------|--|------|--------|--|--|--|
| Benzene | ND | 0.00100 | mg/kg wet | | | | | | | |
| Toluene | ND | 0.00200 | " | | | | | | | |
| Ethylbenzene | ND | 0.00100 | " | | | | | | | |
| Xylene (p/m) | ND | 0.00200 | " | | | | | | | |
| Xylene (o) | ND | 0.00100 | " | | | | | | | |
| Surrogate: 1,4-Difluorobenzene | 0.0516 | | " | 0.0600 | | 86.0 | 75-125 | | | |
| Surrogate: 4-Bromofluorobenzene | 0.0547 | | " | 0.0600 | | 91.2 | 75-125 | | | |

LCS (P7F0703-BS1)

Prepared & Analyzed: 06/01/17

| | | | | | | | | | | |
|---------------------------------|--------|---------|-----------|--------|--|------|--------|--|--|--|
| Benzene | 0.120 | 0.00100 | mg/kg wet | 0.100 | | 120 | 70-130 | | | |
| Toluene | 0.107 | 0.00200 | " | 0.100 | | 107 | 70-130 | | | |
| Ethylbenzene | 0.116 | 0.00100 | " | 0.100 | | 116 | 70-130 | | | |
| Xylene (p/m) | 0.199 | 0.00200 | " | | | | 70-130 | | | |
| Xylene (o) | 0.108 | 0.00100 | " | | | | 70-130 | | | |
| Surrogate: 4-Bromofluorobenzene | 0.0592 | | " | 0.0600 | | 98.6 | 75-125 | | | |
| Surrogate: 1,4-Difluorobenzene | 0.0604 | | " | 0.0600 | | 101 | 75-125 | | | |

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

Organics by GC - 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 P7F0703 - General Preparation (GC)

LCS Dup (P7F0703-BSD1)

Prepared: 06/01/17 Analyzed: 06/02/17

| | | | | | | | | | | |
|---------------------------------|--------|---------|-----------|--------|--|-----|--------|-------|----|--|
| Benzene | 0.119 | 0.00100 | mg/kg wet | 0.100 | | 119 | 70-130 | 0.343 | 20 | |
| Toluene | 0.107 | 0.00200 | " | 0.100 | | 107 | 70-130 | 0.149 | 20 | |
| Ethylbenzene | 0.116 | 0.00100 | " | 0.100 | | 116 | 70-130 | 0.423 | 20 | |
| Xylene (p/m) | 0.199 | 0.00200 | " | | | | 70-130 | | 20 | |
| Xylene (o) | 0.105 | 0.00100 | " | | | | 70-130 | | 20 | |
| Surrogate: 1,4-Difluorobenzene | 0.0613 | | " | 0.0600 | | 102 | 75-125 | | | |
| Surrogate: 4-Bromofluorobenzene | 0.0604 | | " | 0.0600 | | 101 | 75-125 | | | |

Duplicate (P7F0703-DUP1)

Source: 7F01009-02

Prepared: 06/01/17 Analyzed: 06/02/17

| | | | | | | | | | | |
|---------------------------------|--------|--------|-----------|--------|----|------|--------|--|----|--|
| Benzene | ND | 0.0208 | mg/kg dry | | ND | | | | 20 | |
| Toluene | ND | 0.0417 | " | | ND | | | | 20 | |
| Ethylbenzene | ND | 0.0208 | " | | ND | | | | 20 | |
| Xylene (p/m) | ND | 0.0417 | " | | ND | | | | 20 | |
| Xylene (o) | ND | 0.0208 | " | | ND | | | | 20 | |
| Surrogate: 1,4-Difluorobenzene | 0.0550 | | " | 0.0625 | | 88.0 | 75-125 | | | |
| Surrogate: 4-Bromofluorobenzene | 0.0516 | | " | 0.0625 | | 82.5 | 75-125 | | | |

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 P7F0503 - * DEFAULT PREP *****

Blank (P7F0503-BLK1)

Prepared & Analyzed: 06/05/17

| | | | |
|------------|----|-----|---|
| % Moisture | ND | 0.1 | % |
|------------|----|-----|---|

Blank (P7F0503-BLK2)

Prepared & Analyzed: 06/05/17

| | | | |
|------------|----|-----|---|
| % Moisture | ND | 0.1 | % |
|------------|----|-----|---|

Blank (P7F0503-BLK3)

Prepared & Analyzed: 06/05/17

| | | | |
|------------|----|-----|---|
| % Moisture | ND | 0.1 | % |
|------------|----|-----|---|

Duplicate (P7F0503-DUP1)

Source: 7E31012-30

Prepared & Analyzed: 06/05/17

| | | | | | | |
|------------|-----|-----|---|------|------|----|
| % Moisture | 9.0 | 0.1 | % | 10.0 | 10.5 | 20 |
|------------|-----|-----|---|------|------|----|

Duplicate (P7F0503-DUP2)

Source: 7E31013-17

Prepared & Analyzed: 06/05/17

| | | | | | | |
|------------|-----|-----|---|-----|------|----|
| % Moisture | 8.0 | 0.1 | % | 9.0 | 11.8 | 20 |
|------------|-----|-----|---|-----|------|----|

Duplicate (P7F0503-DUP3)

Source: 7F01007-20

Prepared & Analyzed: 06/05/17

| | | | | | | |
|------------|------|-----|---|------|------|----|
| % Moisture | 11.0 | 0.1 | % | 11.0 | 0.00 | 20 |
|------------|------|-----|---|------|------|----|

Duplicate (P7F0503-DUP4)

Source: 7F01007-47

Prepared & Analyzed: 06/05/17

| | | | | | | |
|------------|-----|-----|---|-----|------|----|
| % Moisture | 5.0 | 0.1 | % | 5.0 | 0.00 | 20 |
|------------|-----|-----|---|-----|------|----|

Notes and Definitions

| | |
|-------|--|
| S-GC | Surrogate recovery outside of control limits. The data was accepted based on valid recovery of the remaining surrogate. |
| QM-05 | The spike recovery was outside acceptance limits for the MS and/or MSD due to matrix interference. The LCS and/or LCSD were within acceptance limits showing that the laboratory is in control and the data is acceptable. |
| 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:

6/9/2017

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.

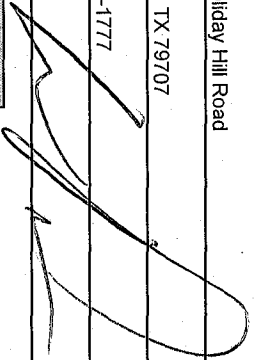
Project Manager: Aaron Pachhofer

Company Name: Fasken Oil and Ranch, Ltd

Company Address: 6101 Holiday Hill Road

City/State/Zip: Midland, TX 79707

Telephone No: 432-687-1777

Sampler Signature: 

Fax No: 432-687-1570

e-mail: aaronp@forl.com

Report Format: ☒ Standard ☐ TRRP ☐ NPDES

Project Name: El Paso Federal No. 12
Project #:
Project Loc: Eddy County, NM

PO #:

(lab use only)

ORDER #: 1761006

LAB # (lab use only)

FIELD CODE

Pad Confirmation

Stockpile

Beginning Depth

Ending Depth

Date Sampled

Time Sampled

Field Filtered

Total #. of Containers

Ice

HNO₃

HCl

H₂SO₄

NaOH

Na₂S₂O₃

None

Other (Specify)

DW=Drinking Water SL=Sludge

GW = Groundwater S=Soil/Solid

NP=Non-Potable Specify Other

TPH: 418.1 8015M 8015B

TPH: TX 1005 TX 1006

Cations (Ca, Mg, Na, K)

Anions (Cl, SO₄, Alkalinity)

SAR / ESP / CEC

Metals: As Ag Ba Cd Cr Pb Hg Se

Volatiles

Semivolatiles

BTEX 8021B/5030 or BTEX 8260

RCI

N.O.R.M.

Glycol

RUSH TAT (Pre-Schedule) 24, 48, 72 hrs

Standard TAT

Special Instructions:

Relinquished by: Aaron Pachhofer

Date: 6/6/17

Time: 12:00

Received by:

Date:

Time:

Relinquished by:

Date:

Time:

Received by:

Date:

Time:

Relinquished by:

Date:

Time:

Received by: PBE

Date: 6/7/17

Time: 12:09

Laboratory Comments:

Sample Containers Intact?

VOCs Free of Headspace?

Labels on container(s)?

Custody seals on container(s)?

Custody seals on cooler(s)?

Sample Hand Delivered by Sampler/Client Rep.?

by Courier? UPS DHL FedEx-Lone Star

Temperature Upon Receipt

Adjusted: 60 °C Factor

Adjusted: 60 °C Factor

Adjusted: 60 °C Factor

Adjusted: 60 °C Factor

Adjusted: 60 °C Factor