

1RP-4298

Cabot Q SWD

Spill date – 5/28/2016.

Spill & Volume: 110 bbl produced water, 100 bbl recovered

Spill notes: Injection line failed near the well head, check valve allowed fluid to backflow to surface.. Spill mostly contained confined to well pad, but approx. 5,000 square feet of pasture affected by the release

Delineation or remediation: Affected areas of pasture excavated to surface of caliche—only 0.5 to 1 foot. Spill area vertically delineated on September 8, 2106. Delineation samples collected and laboratory report submitted to Tomas Oberding on 1/6/2017.

Photos: Attached

Additional notes: Deferred by Tomas Oberding on 1/31/2017.

Documents Attached:

- New Mexico Form C-141
- Vertical Delineation Locations
- Vertical Delineation Laboratory Report
- Vertical Delineation Email Communication to Tomas Oberding
- Horizontal Delineation Locations
- Horizontal Delineation Laboratory Report
- Horizontal Delineation / Deferral Email Communication with Tomas Oberding

FASKEN STATUS: DEFERRED



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

February 28, 2019

Mr. Bradford Billings
New Mexico Energy, Mineral, and Natural Resources Department
Oil Conservation Division
1220 South St. Francis Street
Santa Fe, NM 87505

RE: 1RP-4298

Mr. Billings,

Thank you for meeting with me on February 21st to discuss spills that have been reported to the OCD and remain in an "open" status.

As we discussed this spill which was originally reported to the OCD by Fasken on May 28, 2016. The spill was deferred by Tomas Oberding on January 31, 2017.

Fasken Oil and Ranch, Ltd. respectfully requests to **DEFER** this spill until the SWD battery is decommissioned.

Thank you very much,

Aaron Pachlhofer
Environmental Coordinator
Fasken Oil and Ranch, Ltd.





PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

September 14, 2016

ROBBIE RUNNELS

Basin Environmental Service

P.O. Box 301

Lovington, NM 88260

RE: CABOT Q SWD

Enclosed are the results of analyses for samples received by the laboratory on 09/08/16 15:35.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-16-8. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

| | |
|------------------|------------------------------|
| Method EPA 552.2 | Haloacetic Acids (HAA-5) |
| Method EPA 524.2 | Total Trihalomethanes (TTHM) |
| Method EPA 524.4 | Regulated VOCs (V1, V2, V3) |

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene".

Celey D. Keene

Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

Basin Environmental Service
 ROBBIE RUNNELS
 P.O. Box 301
 Lovington NM, 88260
 Fax To: (575) 396-1429

| | | | |
|-------------------|-------------|---------------------|----------------|
| Received: | 09/08/2016 | Sampling Date: | 09/08/2016 |
| Reported: | 09/14/2016 | Sampling Type: | Soil |
| Project Name: | CABOT Q SWD | Sampling Condition: | ** (See Notes) |
| Project Number: | NONE GIVEN | Sample Received By: | Jodi Henson |
| Project Location: | NOT GIVEN | | |

Sample ID: SP 1 @ 4' (H602024-01)

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: AC | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 704 | 16.0 | 09/12/2016 | ND | 432 | 108 | 400 | 0.00 | |

Sample ID: SP 1 @ 8' (H602024-02)

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: AC | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 48.0 | 16.0 | 09/12/2016 | ND | 416 | 104 | 400 | 3.77 | |

Sample ID: SP 1 @ 10' (H602024-03)

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: AC | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 64.0 | 16.0 | 09/12/2016 | ND | 432 | 108 | 400 | 0.00 | |

Sample ID: SP 2 @ 2' (H602024-04)

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: AC | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 336 | 16.0 | 09/12/2016 | ND | 432 | 108 | 400 | 0.00 | |

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

Basin Environmental Service
 ROBBIE RUNNELS
 P.O. Box 301
 Lovington NM, 88260
 Fax To: (575) 396-1429

| | | | |
|-------------------|-------------|---------------------|----------------|
| Received: | 09/08/2016 | Sampling Date: | 09/08/2016 |
| Reported: | 09/14/2016 | Sampling Type: | Soil |
| Project Name: | CABOT Q SWD | Sampling Condition: | ** (See Notes) |
| Project Number: | NONE GIVEN | Sample Received By: | Jodi Henson |
| Project Location: | NOT GIVEN | | |

Sample ID: SP 2 @ 8' (H602024-06)

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: AC | | | | | |
|----------------------|------------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 416 | 16.0 | 09/12/2016 | ND | 432 | 108 | 400 | 0.00 | |

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*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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Notes and Definitions

- ND Analyte NOT DETECTED at or above the reporting limit
- RPD Relative Percent Difference
- ** Samples not received at proper temperature of 6°C or below.
- *** Insufficient time to reach temperature.
- Chloride by SM4500Cl-B does not require samples be received at or below 6°C
Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

From: [Aaron Pachlhofer](#)
To: [Oberding, Tomas, EMNRD](#); kristen.lynch@state.nm.us
Subject: Fasken Cabot Q SWD
Date: Wednesday, October 12, 2016 4:34:00 PM
Attachments: [image001.png](#)
[H602024 BASIN.pdf](#)
[cabot screen capture with delineation points.JPG](#)

Tomas and Kristen,

Coordinates of the battery are 33.029897°, -103.454002°

Attached is an aerial the shows the affected areas of the pasture and the entire spill area. Our delineation areas are noted on the image as SP1 and SP2. Also attached are our laboratory results from delineated.

In this area, we have no receptors to worry about. There are no water wells or surface water in the general area of this spill...it appears that the nearest water mile is roughly one mile to the west at or near 33.029508°, -103.467570°. As best as I can tell, groundwater is at least 75 feet BGS, if not deeper.

No oil was spilled, just produced water. The road and pad were not cleaned up...we will still have to do that later when we decommission.

At SP1, we achieved excellent delineation at this location, with slightly elevated at the surface and low chlorides at this location at 8' BGS.

At SP2, we achieved less than 500 mg/kg delineation at 8 feet BGS (just not 250 mg/kg!). I will admit that this is not ideal, but I think with the trench location between two well heads and very near to the location both reserve pits for these wells, we might expect to see some elevated chlorides. We would have sampled deeper, but we were having trouble gaining depth....the ground is very, very hard. Furthermore, I think this is a good concentration that will protect groundwater that is much deeper, and also allow vegetation to recover at the surface. I don't think we really have much more to do here.

Let me know your thoughts.



Aaron Pachlhofer, P.G.
Environmental Coordinator
Fasken Oil and Ranch, Ltd.
6101 Holiday Hill Road
Midland, TX 79707
432-687-1777 Office
830-377-9190 Cell



**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: Cabot Q SWD
Project Number: None Given
Location: Lovington NM
Lab Order Number: 6L19010



NELAP/TCEQ # T104704156-16-6

Report Date: 12/22/16

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

Project: Cabot Q SWD
Project Number: None Given
Project Manager: Aaron Pachlhofer

Fax: 43-687-1570

ANALYTICAL REPORT FOR SAMPLES

| Sample ID | Laboratory ID | Matrix | Date Sampled | Date Received |
|-----------|---------------|--------|----------------|------------------|
| Pad 1 | 6L19010-01 | Soil | 12/15/16 00:00 | 12-19-2016 13:01 |
| Pad 1a | 6L19010-02 | Soil | 12/15/16 00:00 | 12-19-2016 13:01 |
| Pad 2 | 6L19010-03 | Soil | 12/15/16 00:00 | 12-19-2016 13:01 |
| Pad 2a | 6L19010-04 | Soil | 12/15/16 00:00 | 12-19-2016 13:01 |
| Pad 3 | 6L19010-05 | Soil | 12/15/16 00:00 | 12-19-2016 13:01 |
| Pad 3a | 6L19010-06 | Soil | 12/15/16 00:00 | 12-19-2016 13:01 |
| Pad 4 | 6L19010-07 | Soil | 12/15/16 00:00 | 12-19-2016 13:01 |
| Pad 4a | 6L19010-08 | Soil | 12/15/16 00:00 | 12-19-2016 13:01 |
| Pad 5 | 6L19010-09 | Soil | 12/15/16 00:00 | 12-19-2016 13:01 |
| Pad 5a | 6L19010-10 | Soil | 12/15/16 00:00 | 12-19-2016 13:01 |

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

Project: Cabot Q SWD
 Project Number: None Given
 Project Manager: Aaron Pachlhofer

Fax: 43-687-1570

Pad 1
6L19010-01 (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

| | | | | | | | | | |
|-------------------|-------------|------|-----------|---|---------|----------|----------|---------------|--|
| Chloride | 1200 | 5.26 | mg/kg dry | 5 | P6L1904 | 12/19/16 | 12/20/16 | EPA 300.0 | |
| % Moisture | 5.0 | 0.1 | % | 1 | P6L2001 | 12/20/16 | 12/20/16 | % calculation | |

Permian Basin Environmental Lab, L.P.

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1400 Rankin HWY Midland, TX 79701 432-686-7235

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

Project: Cabot Q SWD
 Project Number: None Given
 Project Manager: Aaron Pachlhofer

Fax: 43-687-1570

Pad 1a
6L19010-02 (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

| | | | | | | | | | |
|-------------------|-------------|------|-----------|---|---------|----------|----------|---------------|--|
| Chloride | 56.7 | 1.06 | mg/kg dry | 1 | P6L1904 | 12/19/16 | 12/20/16 | EPA 300.0 | |
| % Moisture | 6.0 | 0.1 | % | 1 | P6L2001 | 12/20/16 | 12/20/16 | % calculation | |

Permian Basin Environmental Lab, L.P.

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

Project: Cabot Q SWD
 Project Number: None Given
 Project Manager: Aaron Pachlhofer

Fax: 43-687-1570

Pad 2
6L19010-03 (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

| | | | | | | | | | |
|-------------------|------------|------|-----------|---|---------|----------|----------|---------------|--|
| Chloride | 527 | 1.05 | mg/kg dry | 1 | P6L1904 | 12/19/16 | 12/20/16 | EPA 300.0 | |
| % Moisture | 5.0 | 0.1 | % | 1 | P6L2001 | 12/20/16 | 12/20/16 | % calculation | |

Permian Basin Environmental Lab, L.P.

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1400 Rankin HWY Midland, TX 79701 432-686-7235

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

Project: Cabot Q SWD
 Project Number: None Given
 Project Manager: Aaron Pachlhofer

Fax: 43-687-1570

Pad 2a
6L19010-04 (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

| | | | | | | | | | |
|-------------------|------------|------|-----------|---|---------|----------|----------|---------------|--|
| Chloride | 334 | 1.06 | mg/kg dry | 1 | P6L1904 | 12/19/16 | 12/20/16 | EPA 300.0 | |
| % Moisture | 6.0 | 0.1 | % | 1 | P6L2001 | 12/20/16 | 12/20/16 | % calculation | |

Permian Basin Environmental Lab, L.P.

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1400 Rankin HWY Midland, TX 79701 432-686-7235

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

Project: Cabot Q SWD
 Project Number: None Given
 Project Manager: Aaron Pachlhofer

Fax: 43-687-1570

Pad 3
6L19010-05 (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

| | | | | | | | | | |
|-------------------|------------|------|-----------|----|---------|----------|----------|---------------|--|
| Chloride | 760 | 10.4 | mg/kg dry | 10 | P6L1904 | 12/19/16 | 12/20/16 | EPA 300.0 | |
| % Moisture | 4.0 | 0.1 | % | 1 | P6L2001 | 12/20/16 | 12/20/16 | % calculation | |

Permian Basin Environmental Lab, L.P.

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1400 Rankin HWY Midland, TX 79701 432-686-7235

| | | |
|---|---|------------------|
| Fasken Oil & Ranch, Ltd. 6101 Holiday Hill Road Midland TX, 79707 | Project: Cabot Q SWD Project Number: None Given Project Manager: Aaron Pachlhofer | Fax: 43-687-1570 |
|---|---|------------------|

Pad 3a
6L19010-06 (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

| | | | | | | | | | |
|-------------------|------------|------|-----------|---|---------|----------|----------|---------------|--|
| Chloride | 339 | 1.06 | mg/kg dry | 1 | P6L1904 | 12/19/16 | 12/20/16 | EPA 300.0 | |
| % Moisture | 6.0 | 0.1 | % | 1 | P6L2001 | 12/20/16 | 12/20/16 | % calculation | |

Permian Basin Environmental Lab, L.P.

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1400 Rankin HWY Midland, TX 79701 432-686-7235

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

Project: Cabot Q SWD
 Project Number: None Given
 Project Manager: Aaron Pachlhofer

Fax: 43-687-1570

Pad 4
6L19010-07 (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

| | | | | | | | | | |
|-------------------|-------------|------|-----------|---|---------|----------|----------|---------------|--|
| Chloride | 37.4 | 1.06 | mg/kg dry | 1 | P6L1904 | 12/19/16 | 12/20/16 | EPA 300.0 | |
| % Moisture | 6.0 | 0.1 | % | 1 | P6L2001 | 12/20/16 | 12/20/16 | % calculation | |

Permian Basin Environmental Lab, L.P.

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1400 Rankin HWY Midland, TX 79701 432-686-7235

| | | |
|---|---|------------------|
| Fasken Oil & Ranch, Ltd. 6101 Holiday Hill Road Midland TX, 79707 | Project: Cabot Q SWD Project Number: None Given Project Manager: Aaron Pachlhofer | Fax: 43-687-1570 |
|---|---|------------------|

Pad 4a
6L19010-08 (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

| | | | | | | | | | |
|-------------------|------------|------|-----------|---|---------|----------|----------|---------------|--|
| Chloride | 111 | 1.08 | mg/kg dry | 1 | P6L1904 | 12/19/16 | 12/20/16 | EPA 300.0 | |
| % Moisture | 7.0 | 0.1 | % | 1 | P6L2001 | 12/20/16 | 12/20/16 | % calculation | |

Permian Basin Environmental Lab, L.P.

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1400 Rankin HWY Midland, TX 79701 432-686-7235

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

Project: Cabot Q SWD
 Project Number: None Given
 Project Manager: Aaron Pachlhofer

Fax: 43-687-1570

Pad 5
6L19010-09 (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

| | | | | | | | | | |
|-------------------|-------------|------|-----------|----|---------|----------|----------|---------------|--|
| Chloride | 1510 | 10.4 | mg/kg dry | 10 | P6L1904 | 12/19/16 | 12/20/16 | EPA 300.0 | |
| % Moisture | 4.0 | 0.1 | % | 1 | P6L2001 | 12/20/16 | 12/20/16 | % calculation | |

Permian Basin Environmental Lab, L.P.

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1400 Rankin HWY Midland, TX 79701 432-686-7235

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

Project: Cabot Q SWD
 Project Number: None Given
 Project Manager: Aaron Pachlhofer

Fax: 43-687-1570

Pad 5a
6L19010-10 (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

| | | | | | | | | | |
|-------------------|------------|------|-----------|---|---------|----------|----------|---------------|--|
| Chloride | 269 | 5.32 | mg/kg dry | 1 | P6L1904 | 12/19/16 | 12/20/16 | EPA 300.0 | |
| % Moisture | 6.0 | 0.1 | % | 1 | P6L2001 | 12/20/16 | 12/20/16 | % calculation | |

Permian Basin Environmental Lab, L.P.

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1400 Rankin HWY Midland, TX 79701 432-686-7235

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

Project: Cabot Q SWD
 Project Number: None Given
 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 P6L1904 - *** DEFAULT PREP *** | | | | | | | | | | |
| Blank (P6L1904-BLK1) Prepared: 12/19/16 Analyzed: 12/20/16 | | | | | | | | | | |
| Chloride | ND | 1.00 | mg/kg wet | | | | | | | |
| LCS (P6L1904-BS1) Prepared: 12/19/16 Analyzed: 12/20/16 | | | | | | | | | | |
| Chloride | 384 | 1.00 | mg/kg wet | 400 | | 96.1 | 80-120 | | | |
| LCS Dup (P6L1904-BSD1) Prepared: 12/19/16 Analyzed: 12/20/16 | | | | | | | | | | |
| Chloride | 390 | 1.00 | mg/kg wet | 400 | | 97.5 | 80-120 | 1.45 | 20 | |
| Duplicate (P6L1904-DUP1) Source: 6L19002-08 Prepared: 12/19/16 Analyzed: 12/20/16 | | | | | | | | | | |
| Chloride | 280 | 1.06 | mg/kg dry | | 296 | | | 5.52 | 20 | |
| Duplicate (P6L1904-DUP2) Source: 6L19010-03 Prepared: 12/19/16 Analyzed: 12/20/16 | | | | | | | | | | |
| Chloride | 533 | 1.05 | mg/kg dry | | 527 | | | 1.15 | 20 | |
| Matrix Spike (P6L1904-MS1) Source: 6L19002-08 Prepared: 12/19/16 Analyzed: 12/20/16 | | | | | | | | | | |
| Chloride | 1250 | 1.06 | mg/kg dry | 1060 | 296 | 89.6 | 80-120 | | | |
| Batch P6L2001 - *** DEFAULT PREP *** | | | | | | | | | | |
| Blank (P6L2001-BLK1) Prepared & Analyzed: 12/20/16 | | | | | | | | | | |
| % Moisture | ND | 0.1 | % | | | | | | | |
| Duplicate (P6L2001-DUP1) Source: 6L19005-02 Prepared & Analyzed: 12/20/16 | | | | | | | | | | |
| % Moisture | 4.0 | 0.1 | % | | 4.0 | | | 0.00 | 20 | |

Permian Basin Environmental Lab, L.P.

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Permian Basin Environmental Lab.

1400 Rankin HWY Midland, TX 79701 432-686-7235

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

Project: Cabot Q SWD
Project Number: None Given
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: 12/22/2016

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.

From: [Oberding, Tomas, EMNRD](mailto:Tomas.Oberding@state.nm.us)
To: [Aaron Pachlhofer](mailto:Aaron.Pachlhofer@forl.com)
Subject: RE: Fasken Cabot SWD
Date: Tuesday, January 31, 2017 4:24:43 PM
Attachments: [jmae001.png](#)
[jmae002.png](#)

Aaron,

Thank you for the documentation. The OCD conditionally approves the delineation and proposal for deferment.

The OCD's condition is that the site be remediated at the time of a) abandonment or b) retrofit.

Please keep us informed.

Mahalo
 -Doc

Tomás 'Doc' Oberding PhD
 Hydrologist, Adv-District 1
 Oil Conservation Division, EMNRD
 (505) 476-3403
 E-Mail: tomas.oberding@state.nm.us
 一期一会

OCD approval does not relieve the operator of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment. In addition, OCD approval does not relieve the operator of responsibility for compliance with any other federal, state, local laws and/or regulations.

From: Aaron Pachlhofer [<mailto:aaronp@forl.com>]
Sent: Friday, January 6, 2017 1:00 PM
To: Oberding, Tomas, EMNRD <Tomas.Oberding@state.nm.us>
Subject: RE: Fasken Cabot SWD

Tomas,

Please see the attached lab report. The name 'Proposed' was changed to 'Pad' but all samples were collected at the locations indicated in the image below. Two samples were collected at each location: one at the surface, and the other at the deepest that could be achieved with a hand auger and shovel...generally 10 to 12 inches BGS max. Please call me at your convenience after you review the lab report. I think we can be done here.

Thanks,


 Aaron Pachlhofer, P.G.
 Environmental Coordinator
 Fasken Oil and Ranch, Ltd.
 6101 Holiday Hill Road
 Midland, TX 79707
 432-687-1777 Office
 830-377-9190 Cell

From: Oberding, Tomas, EMNRD [<mailto:Tomas.Oberding@state.nm.us>]
Sent: Thursday, November 17, 2016 1:54 PM
To: Aaron Pachlhofer <aaronp@forl.com>
Subject: RE: Fasken Cabot SWD

Aaron,

Based upon the discussion this morning 11-17-2016 the OCD agrees to an amendment of the approved delineation plan.
 To reiterate- complete delineation must be achieved within the berm and on the pad. As you noted spray over areas can be confirmed via field samples.
 A reference to the NM Regs that we discussed-

19.15.29.11 NMAC- state the following,

The responsible person shall complete division-approved corrective action for releases that endanger public health or the environment

Please keep us informed.
 Mahalo
 -Doc

Tomás 'Doc' Oberding PhD
 Hydrologist, Adv-District 1
 Oil Conservation Division, EMNRD
 (505) 476-3403
 E-Mail: tomas.oberding@state.nm.us
 一期一会

OCD approval does not relieve the operator of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment. In addition, OCD approval does not relieve the operator of responsibility for compliance with any other federal, state, local laws and/or regulations.

From: Aaron Pachlhofer [<mailto:aaronp@forl.com>]
Sent: Friday, October 28, 2016 1:03 PM
To: Oberding, Tomas, EMNRD <Tomas.Oberding@state.nm.us>
Subject: Fasken Cabot SWD

Tomas,

Apologies for the delay, I am catching up. Attached are the sampling locations that we discussed. I have to be honest with you, I do not see what useable data we will gain by cutting trenches at these locations. I would rather see surface grab samples collected to document what is present on the road and pad.



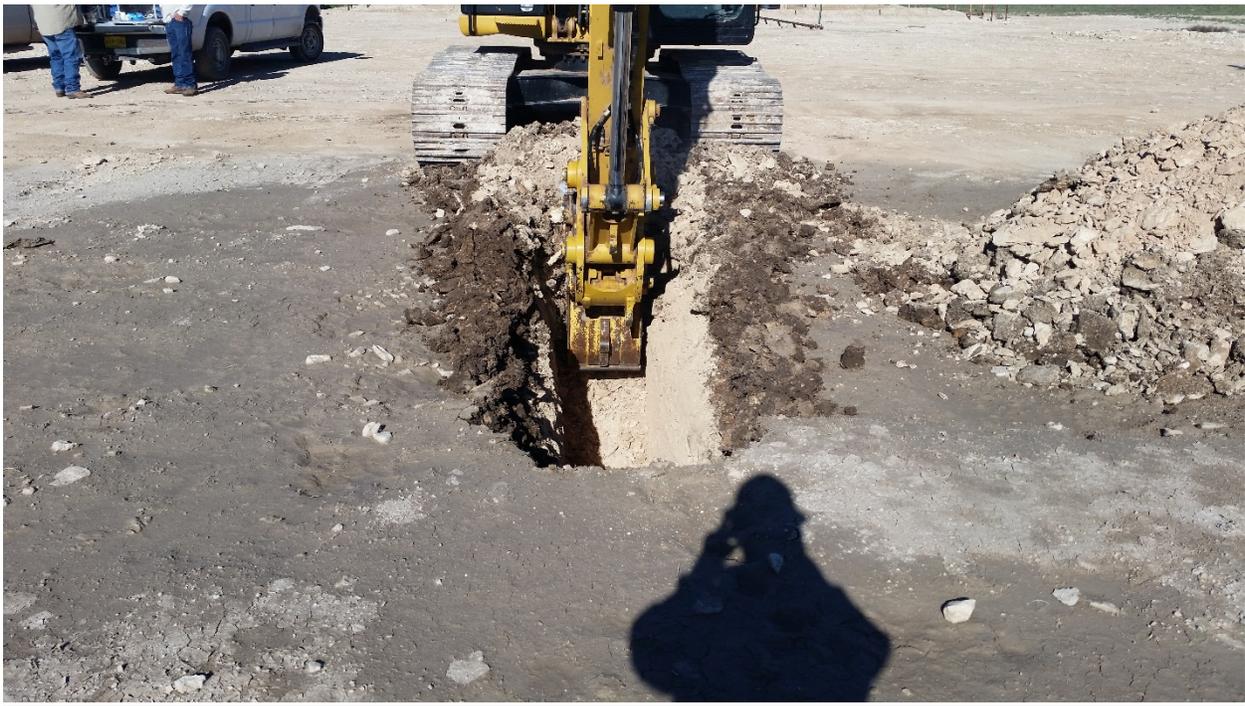

Aaron Pachlhofer, P.G.
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 Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
 1220 S. St Francis Dr., Santa Fe, NM 87505
 Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS

Action 204149

CONDITIONS

| | |
|--|--|
| Operator: FASKEN OIL & RANCH LTD 6101 Holiday Hill Rd Midland, TX 79707 | OGRID: 151416 |
| | Action Number: 204149 |
| | Action Type: [IM-SD] Incident File Support Doc (ENV) (IM-BNF) |

CONDITIONS

| Created By | Condition | Condition Date |
|------------|--|----------------|
| amaxwell | Release was deferred on 1/13/2017 by Tomas Oberding. | 4/11/2023 |
| amaxwell | The release will remain open in OCD database files and reflect an open environmental issue. | 4/11/2023 |
| amaxwell | Final remediation and reclamation shall take place in accordance with 19.15.29.12 and 19.15.29.13 NMAC once the site is no longer being used for oil and gas operations. | 4/11/2023 |