District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-144
June 1, 2004

**For drilling and production facilities**, submit to appropriate NMOCD District Office.
**For downstream facilities**, submit to Santa Fe office

# Pit or Below-Grade Tank Registration or Closure

Is pit or below-grade tank covered by a "general plan"? Yes ☒ No ☐
Type of action: Registration of a pit or below-grade tank ☐ Closure of a pit or below-grade tank ☒

Operator: EOG Resources Incorporated Telephone: (432) 686-3714 e-mail address:
Address: PO Box 2267 Midland, TX 79702
Facility or well name: Vaca 25 Federal #01 API #: 3002536941 U/L or Qtr/Qtr A-25-25S-33E Sec NENE 25 T 25S R 33E
County: Lea Latitude Longitude NAD: 1927 ☐ 1983 ☐
Surface Owner: Federal ☒ State ☐ Private ☐ Indian ☐

| **Pit** | **Below-grade tank** |
|---|---|
| Type: Drilling ☒ Production ☐ Disposal ☐<br>Workover ☐ Emergency ☐<br>Lined ☒ Unlined ☐<br>Liner type: Synthetic ☒ Thickness 20 mil Clay ☐<br>Pit Volume 1336 bbl | Volume: bbl Type of fluid:<br>Construction material:<br>Double-walled, with leak detection? Yes ☐ If not, explain why not. |

| | | | |
|---|---|---|---|
| Depth to ground water (vertical distance from bottom of pit to seasonal high water elevation of ground water.) | Less than 50 feet<br>50 feet or more, but less than 100 feet<br>100 feet or more | (20 points)<br>(10 points)<br>( 0 points) | 0 |
| Wellhead protection area: (Less than 200 feet from a private domestic water source, or less than 1000 feet from all other water sources.) | Yes<br>(No) | (20 points)<br>( 0 points) | 0 |
| Distance to surface water: (horizontal distance to all wetlands, playas, irrigation canals, ditches, and perennial and ephemeral watercourses.) | Less than 200 feet<br>200 feet or more, but less than 1000 feet<br>1000 feet or more | (20 points)<br>(10 points)<br>( 0 points) | 0 |
| | **Ranking Score (Total Points)** | | 0 |

**If this is a pit closure:** (1) Attach a diagram of the facility showing the pit's relationship to other equipment and tanks. (2) Indicate disposal location: (check the onsite box if your are burying in place) onsite ☒ offsite ☐ If offsite, name of facility. (3) Attach a general description of remedial action taken including remediation start date and end date. (4) Groundwater encountered: No ☒ Yes ☐ If yes, show depth below ground surface ft. and attach sample results. (5) Attach soil sample results and a diagram of sample locations and excavations.

Additional Comments:

**Depth to Ground Water is 110'.**

**See attachment for more information.**

I hereby certify that the information above is true and complete to the best of my knowledge and belief. **I further certify that the above-described pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines ☒, a general permit ☐, or an (attached) alternative OCD-approved plan ☐.**

Date: 3/31/2005
Printed Name/Title Julio C Martinez/ Consultant Signature

Your certification and NMOCD approval of this application/closure does not relieve the operator of liability should the contents of the pit or tank contaminate ground water or otherwise endanger public health or the environment. Nor does it relieve the operator of its responsibility for compliance with any other federal, state, or local laws and/or regulations.

Approval:
Printed Name/Title ENVIRONMENTAL ENGINEER Signature Paul Sheeley Date: 4-6-05

# Attachment to Form C-144

Vaca 25 Federal #01
API# 3002536941

## 1. Diagram of facility showing the pit's relationship to other equipment and tanks.

- There is no equipment or tanks on-site. The location is an abandoned and plugged well.

## 2. Disposal location

- There are no drill cuttings inside the existing pit that require disposal.
- Caliche from the drill pad will be deep-buried in the existing pit.

## 3. Remedial Action

- As part of the abandonment of the Vaca 25 Federal No 01, we are under order by the BLM to deep bury the existing caliche drill pad on-site in order to bring the site back to natural conditions.
- The existing reserve pit is empty therefore we will utilize it by backfilling the pit with the caliche that is on the drill pad.
- Remediation start date will be 4/9/2005. We expect to complete the reclamation by 4/27/2005.
- We propose to deep bury the existing caliche drill pad per BLM and NMOCD regulations.
    1. We will place all caliche in the existing pit and place at least 3' of top-soil on top.
    2. We will then broadcast native seed to re-vegetate the area and bring back to natural conditions.

ENVIRONMENTAL LAB OF
12600 West I-20 East - Odessa, Texas 79765

# Analytical Report

**Prepared for:**
Julio Martinez
Equis Environmental
P.O. Box 2367
Odessa, TX 79760

Project: Vaca 25 Fed #1
Project Number: None Given
Location: Jal

Lab Order Number: 5D05001

Report Date: 04/06/05

| | | |
|---|---|---|
| Equis Environmental | Project: Vaca 25 Fed #1 | Fax: n/a |
| P.O. Box 2367 | Project Number: None Given | Reported: |
| Odessa TX, 79760 | Project Manager: Julio Martinez | 04/06/05 12:05 |

## ANALYTICAL REPORT FOR SAMPLES

| Sample ID | Laboratory ID | Matrix | Date Sampled | Date Received |
|---|---|---|---|---|
| Pit Bottoms | 5D05001-01 | Soil | 04/04/05 15:00 | 04/05/05 09:00 |
| Dirt Pile (Fill) | 5D05001-02 | Soil | 04/04/05 15:00 | 04/05/05 09:00 |
| Caliche Pile (Fill) | 5D05001-03 | Soil | 04/04/05 15:00 | 04/05/05 09:00 |



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| | | |
|---|---|---|
| Equis Environmental<br>P.O. Box 2367<br>Odessa TX, 79760 | Project: Vaca 25 Fed #1<br>Project Number: None Given<br>Project Manager: Julio Martinez | Fax: n/a<br>**Reported:**<br>04/06/05 12:05 |

## Organics by GC

## Environmental Lab of Texas

| Analyte | Result | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|---|---|---|---|---|---|---|---|---|---|
| **Pit Bottoms (5D05001-01) Soil** | | | | | | | | | |
| **Gasoline Range Organics C6-C12** | **113** | 10.0 | mg/kg dry | 1 | ED50408 | 04/05/05 | 04/05/05 | EPA 8015M | |
| **Diesel Range Organics >C12-C35** | **774** | 10.0 | " | " | " | " | " | " | |
| **Total Hydrocarbon C6-C35** | **887** | 10.0 | " | " | " | " | " | " | |
| *Surrogate: 1-Chlorooctane* | | *87.8 %* | *67.6-140* | | " | " | " | " | |
| *Surrogate: 1-Chlorooctadecane* | | *103 %* | *70-130* | | " | " | " | " | |
| **Dirt Pile (Fill) (5D05001-02) Soil** | | | | | | | | | |
| Gasoline Range Organics C6-C12 | ND | 10.0 | mg/kg dry | 1 | ED50408 | 04/05/05 | 04/05/05 | EPA 8015M | |
| Diesel Range Organics >C12-C35 | ND | 10.0 | " | " | " | " | " | " | |
| Total Hydrocarbon C6-C35 | ND | 10.0 | " | " | " | " | " | " | |
| *Surrogate: 1-Chlorooctane* | | *88.4 %* | *67.6-140* | | " | " | " | " | |
| *Surrogate: 1-Chlorooctadecane* | | *96.4 %* | *70-130* | | " | " | " | " | |
| **Caliche Pile (Fill) (5D05001-03) Soil** | | | | | | | | | |
| Gasoline Range Organics C6-C12 | ND | 10.0 | mg/kg dry | 1 | ED50408 | 04/05/05 | 04/05/05 | EPA 8015M | |
| Diesel Range Organics >C12-C35 | ND | 10.0 | " | " | " | " | " | " | |
| Total Hydrocarbon C6-C35 | ND | 10.0 | " | " | " | " | " | " | |
| *Surrogate: 1-Chlorooctane* | | *93.6 %* | *67.6-140* | | " | " | " | " | |
| *Surrogate: 1-Chlorooctadecane* | | *95.8 %* | *70-130* | | " | " | " | " | |







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Equis Environmental
P.O. Box 2367
Odessa TX, 79760

Project: Vaca 25 Fed #1
Project Number: None Given
Project Manager: Julio Martinez

Fax: n/a

**Reported:**
04/06/05 12:05

## General Chemistry Parameters by EPA / Standard Methods

## Environmental Lab of Texas

| Analyte | Result | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|---|---|---|---|---|---|---|---|---|---|
| **Pit Bottoms (5D05001-01) Soil** | | | | | | | | | |
| **Chloride** | 134 | 5.00 | mg/kg | 10 | ED50610 | 04/05/05 | 04/05/05 | EPA 300.0 | |
| **% Moisture** | 0.6 | 0.1 | % | 1 | ED50601 | 04/05/05 | 04/06/05 | % calculation | |
| **Dirt Pile (Fill) (5D05001-02) Soil** | | | | | | | | | |
| **Chloride** | 52.1 | 5.00 | mg/kg | 10 | ED50610 | 04/05/05 | 04/05/05 | EPA 300.0 | |
| **% Moisture** | 1.9 | 0.1 | % | 1 | ED50601 | 04/05/05 | 04/06/05 | % calculation | |
| **Caliche Pile (Fill) (5D05001-03) Soil** | | | | | | | | | |
| **Chloride** | 54.3 | 5.00 | mg/kg | 10 | ED50610 | 04/05/05 | 04/05/05 | EPA 300.0 | |
| **% Moisture** | 1.1 | 0.1 | % | 1 | ED50601 | 04/05/05 | 04/06/05 | % calculation | |

| | | |
|---|---|---|
| Equis Environmental<br>P.O. Box 2367<br>Odessa TX, 79760 | Project: Vaca 25 Fed #1<br>Project Number: None Given<br>Project Manager: Julio Martinez | Fax: n/a<br>**Reported:**<br>04/06/05 12:05 |

## Organics by GC - Quality Control

## Environmental Lab of Texas

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|
| **Batch ED50408 - Solvent Extraction (GC)** | | | | | | | | | | |
| **Blank (ED50408-BLK1)** | | | | Prepared & Analyzed: 04/04/05 | | | | | | |
| Gasoline Range Organics C6-C12 | ND | 10.0 | mg/kg wet | | | | | | | |
| Diesel Range Organics >C12-C35 | ND | 10.0 | " | | | | | | | |
| Total Hydrocarbon C6-C35 | ND | 10.0 | " | | | | | | | |
| *Surrogate: 1-Chlorooctane* | *39.7* | | *mg/kg* | *50.0* | | *79.4* | *67.6-140* | | | |
| *Surrogate: 1-Chlorooctadecane* | *35.6* | | *"* | *50.0* | | *71.2* | *70-130* | | | |
| **LCS (ED50408-BS1)** | | | | Prepared & Analyzed: 04/04/05 | | | | | | |
| Gasoline Range Organics C6-C12 | 435 | 10.0 | mg/kg wet | 500 | | 87.0 | 76.3-104 | | | |
| Diesel Range Organics >C12-C35 | 454 | 10.0 | " | 500 | | 90.8 | 76.1-118 | | | |
| Total Hydrocarbon C6-C35 | 889 | 10.0 | " | 1000 | | 88.9 | 81.8-105 | | | |
| *Surrogate: 1-Chlorooctane* | *36.0* | | *mg/kg* | *50.0* | | *72.0* | *67.6-140* | | | |
| *Surrogate: 1-Chlorooctadecane* | *35.5* | | *"* | *50.0* | | *71.0* | *70-130* | | | |
| **Calibration Check (ED50408-CCV1)** | | | | Prepared & Analyzed: 04/04/05 | | | | | | |
| Gasoline Range Organics C6-C12 | 499 | | mg/kg | 500 | | 99.8 | 80-120 | | | |
| Diesel Range Organics >C12-C35 | 516 | | " | 500 | | 103 | 80-120 | | | |
| Total Hydrocarbon C6-C35 | 1010 | | " | 1000 | | 101 | 80-120 | | | |
| *Surrogate: 1-Chlorooctane* | *48.9* | | *"* | *50.0* | | *97.8* | *67.6-140* | | | |
| *Surrogate: 1-Chlorooctadecane* | *39.4* | | *"* | *50.0* | | *78.8* | *70-130* | | | |
| **Matrix Spike (ED50408-MS1)** | Source: 5D04006-02 | | | Prepared: 04/04/05 Analyzed: 04/05/05 | | | | | | |
| Gasoline Range Organics C6-C12 | 531 | 10.0 | mg/kg dry | 591 | 6.79 | 88.7 | 75.9-114 | | | |
| Diesel Range Organics >C12-C35 | 728 | 10.0 | " | 591 | 121 | 103 | 85.3-122 | | | |
| Total Hydrocarbon C6-C35 | 1260 | 10.0 | " | 1180 | ND | 107 | 84.4-115 | | | |
| *Surrogate: 1-Chlorooctane* | *45.6* | | *mg/kg* | *50.0* | | *91.2* | *67.6-140* | | | |
| *Surrogate: 1-Chlorooctadecane* | *38.6* | | *"* | *50.0* | | *77.2* | *70-130* | | | |
| **Matrix Spike Dup (ED50408-MSD1)** | Source: 5D04006-02 | | | Prepared: 04/04/05 Analyzed: 04/05/05 | | | | | | |
| Gasoline Range Organics C6-C12 | 550 | 10.0 | mg/kg dry | 591 | 6.79 | 91.9 | 75.9-114 | 3.52 | 10.4 | |
| Diesel Range Organics >C12-C35 | 705 | 10.0 | " | 591 | 121 | 98.8 | 85.3-122 | 3.21 | 10.4 | |
| Total Hydrocarbon C6-C35 | 1250 | 10.0 | " | 1180 | ND | 106 | 84.4-115 | 0.797 | 7.6 | |
| *Surrogate: 1-Chlorooctane* | *46.5* | | *mg/kg* | *50.0* | | *93.0* | *67.6-140* | | | |
| *Surrogate: 1-Chlorooctadecane* | *38.4* | | *"* | *50.0* | | *76.8* | *70-130* | | | |







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| | | |
|---|---|---|
| Equis Environmental<br>P.O. Box 2367<br>Odessa TX, 79760 | Project: Vaca 25 Fed #1<br>Project Number: None Given<br>Project Manager: Julio Martinez | Fax: n/a<br>Reported:<br>04/06/05 12:05 |

## General Chemistry Parameters by EPA / Standard Methods - Quality Control

### Environmental Lab of Texas

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|
| **Batch ED50601 - General Preparation (Prep)** | | | | Prepared: 04/05/05 Analyzed: 04/06/05 | | | | | | |
| **Blank (ED50601-BLK1)** | | | | | | | | | | |
| % Moisture | ND | 0.1 | % | | | | | | | |
| **Duplicate (ED50601-DUP1)** | Source: 5D05001-01 | | | Prepared: 04/05/05 Analyzed: 04/06/05 | | | | | | |
| % Moisture | 0.4 | 0.1 | % | | 0.6 | | | 40.0 | 20 | |
| **Batch ED50610 - Water Extraction** | | | | Prepared & Analyzed: 04/05/05 | | | | | | |
| **Blank (ED50610-BLK1)** | | | | | | | | | | |
| Chloride | ND | 0.500 | mg/kg | | | | | | | |
| **LCS (ED50610-BS1)** | | | | Prepared & Analyzed: 04/05/05 | | | | | | |
| Chloride | 10.7 | | mg/L | 10.0 | | 107 | 80-120 | | | |
| **Calibration Check (ED50610-CCV1)** | | | | Prepared & Analyzed: 04/05/05 | | | | | | |
| Chloride | 10.7 | | mg/L | 10.0 | | 107 | 80-120 | | | |
| **Duplicate (ED50610-DUP1)** | Source: 5D05001-01 | | | Prepared & Analyzed: 04/05/05 | | | | | | |
| Chloride | 151 | 5.00 | mg/kg | | 134 | | | 11.9 | 20 | |







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| | | |
|---|---|---|
| Equis Environmental<br>P.O. Box 2367<br>Odessa TX, 79760 | Project: Vaca 25 Fed #1<br>Project Number: None Given<br>Project Manager: Julio Martinez | Fax: n/a<br>Reported:<br>04/06/05 12:05 |

**Notes and Definitions**

| | |
|---|---|
| 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: Raland K. Tuttle Date: 4/6/2005

Raland K. Tuttle, Lab Manager
Celey D. Keene, Lab Director, Org. Tech Director
Peggy Allen, QA Officer
Jeanne Mc Murrey, Inorg. Tech Director
James L. Hawkins, Chemist/Geologist
Sandra Sanchez, Lab Tech.