



Kegan W. Boyer, P.G.
Project Manager

Upstream Business Unit
Environmental Management
Company
1400 Smith Street
Room 07076
Houston, Texas 77002
Tel 713-372-7705
kegan.boyer@chevron.com

December 18, 2013

Mr. Geoffrey Leking
New Mexico Oil Conservation Division
District 1
1625 N. French Drive
Hobbs, New Mexico 88240

HOBBS OCD

DEC 23 2013

RECEIVED

Re: Pit Closure Plan and Backfill Request
Central Vacuum Unit No. 47H (API No. 30-025-08532)

Dear Mr. Leking,

With respect to the Central Vacuum Unit Well No. 47H project site (API No. 30-025-08532) located in Lea County, New Mexico, Chevron Environmental Management Company (CEMC) is submitting the enclosed document detailing the proposed pit closure plan and is requesting New Mexico Oil Conservation Division (NMOCD) concurrence with the proposed plan to backfill the open excavation currently present at the Site.

On behalf of Chevron Environmental Management Company (CEMC), Conestoga-Rovers & Associates (CRA) has prepared the enclosed Workplan entitled '*Pit Closure Plan and Backfill Request, Central Vacuum Unit #47H, Unit A, Section 31, T17S, R35E, Lea County, New Mexico*' describing the proposed path forward for this Site. Also included with the above-referenced report is an updated 'closure plan' Form C-144.

Contingent on contractor availability, CEMC would like to move forward with the implementation of the proposed activities in mid to late-February. In advance of our proposed timeline, should you have any questions or concerns regarding the proposed activities, I am available to discuss at your convenience. Please do not hesitate to contact me by phone at 713-372-7705 or via e-mail at kegan.boyer@chevron.com.

We appreciate your continued support of this project.

Sincerely,

Kegan W. Boyer, P.G.
Environmental Project Manager

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., 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
Department
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-144
Revised June 6, 2013

For temporary pits, below-grade tanks, and multi-well fluid management pits, submit to the appropriate NMOCD District Office.
For permanent pits submit to the Santa Fe Environmental Bureau office and provide a copy to the appropriate NMOCD District Office.

Pit, Below-Grade Tank, or
Proposed Alternative Method Permit or Closure Plan Application

Type of action: ☐ Below grade tank registration
☐ Permit of a pit or proposed alternative method
☐ Closure of a pit, below-grade tank, or proposed alternative method
☐ Modification to an existing permit/or registration
☒ Closure plan only submitted for an existing permitted or non-permitted pit, below-grade tank, or proposed alternative method

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Instructions: Please submit one application (Form C-144) per individual pit, below-grade tank or alternative request

Please be advised that approval of this request does not relieve the operator of liability should operations result in pollution of surface water, ground water or the environment. Nor does approval relieve the operator of its responsibility to comply with any other applicable governmental authority's rules, regulations or ordinances.

1.
Operator: Chevron, USA OGRID #: _____
Address: 56 Texas Camp Road, Lovington, New Mexico 88260
Facility or well name: Central Vacuum Unit #47H
API Number: 30-025-08532 OCD Permit Number: _____
U/L or Qtr/Qtr A Section 31 Township 17S Range 34E County: Lea
Center of Proposed Design: Latitude N 32.7969° Longitude W 103.4907° NAD: ☐ 1927 ☒ 1983
Surface Owner: ☐ Federal ☒ State ☐ Private ☐ Tribal Trust or Indian Allotment

2.
☐ **Pit:** Subsection F, G or J of 19.15.17.11 NMAC
Temporary: ☐ Drilling ☐ Workover
☐ Permanent ☐ Emergency ☐ Cavitation ☐ P&A ☐ Multi-Well Fluid Management Low Chloride Drilling Fluid ☐ yes ☐ no
☐ Lined ☐ Unlined Liner type: Thickness _____ mil ☐ LLDPE ☐ HDPE ☐ PVC ☐ Other _____
☐ String-Reinforced
Liner Seams: ☐ Welded ☐ Factory ☐ Other _____ Volume: _____ bbl Dimensions: L _____ x W _____ x D _____

3.
☐ **Below-grade tank:** Subsection I of 19.15.17.11 NMAC
Volume: _____ bbl Type of fluid: _____
Tank Construction material: _____
☐ Secondary containment with leak detection ☐ Visible sidewalls, liner, 6-inch lift and automatic overflow shut-off
☐ Visible sidewalls and liner ☐ Visible sidewalls only ☐ Other _____
Liner type: Thickness _____ mil ☐ HDPE ☐ PVC ☐ Other _____

4.
☐ **Alternative Method:**
Submittal of an exception request is required. Exceptions must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.

5.
Fencing: Subsection D of 19.15.17.11 NMAC (Applies to permanent pits, temporary pits, and below-grade tanks)
☐ Chain link, six feet in height, two strands of barbed wire at top (Required if located within 1000 feet of a permanent residence, school, hospital, institution or church)
☐ Four foot height, four strands of barbed wire evenly spaced between one and four feet
☐ Alternate. Please specify _____

6.

Netting: Subsection E of 19.15.17.11 NMAC (*Applies to permanent pits and permanent open top tanks*)

☐ Screen ☐ Netting ☐ Other _____

☐ Monthly inspections (If netting or screening is not physically feasible)

7.

Signs: Subsection C of 19.15.17.11 NMAC

☐ 12"x 24", 2" lettering, providing Operator's name, site location, and emergency telephone numbers

☐ Signed in compliance with 19.15.16.8 NMAC

8.

Variances and Exceptions:

Justifications and/or demonstrations of equivalency are required. Please refer to 19.15.17 NMAC for guidance.

Please check a box if one or more of the following is requested, if not leave blank:

☐ Variance(s): Requests must be submitted to the appropriate division district for consideration of approval.

☐ Exception(s): Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.

9.

Siting Criteria (regarding permitting): 19.15.17.10 NMAC

Instructions: The applicant must demonstrate compliance for each siting criteria below in the application. Recommendations of acceptable source material are provided below. Siting criteria does not apply to drying pads or above-grade tanks.

General siting

Ground water is less than 25 feet below the bottom of a low chloride temporary pit or below-grade tank.

- ☐ NM Office of the State Engineer - iWATERS database search; ☐ USGS; ☐ Data obtained from nearby wells

☐ Yes ☐ No
☐ NA

Ground water is less than 50 feet below the bottom of a Temporary pit, permanent pit, or Multi-Well Fluid Management pit.

NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells

☐ Yes ☐ No
☐ NA

Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended. **(Does not apply to below grade tanks)**

- Written confirmation or verification from the municipality; Written approval obtained from the municipality

☐ Yes ☐ No

Within the area overlying a subsurface mine. **(Does not apply to below grade tanks)**

- Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division

☐ Yes ☐ No

Within an unstable area. **(Does not apply to below grade tanks)**

- Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map

☐ Yes ☐ No

Within a 100-year floodplain. **(Does not apply to below grade tanks)**

- FEMA map

☐ Yes ☐ No

Below Grade Tanks

Within 100 feet of a continuously flowing watercourse, significant watercourse, lake bed, sinkhole, wetland or playa lake (measured from the ordinary high-water mark).

- Topographic map; Visual inspection (certification) of the proposed site

☐ Yes ☐ No

Within 200 horizontal feet of a spring or a fresh water well used for public or livestock consumption;.

- NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site

☐ Yes ☐ No

Temporary Pit using Low Chloride Drilling Fluid (maximum chloride content 15,000 mg/liter)

Within 100 feet of a continuously flowing watercourse, or any other significant watercourse or within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). (Applies to low chloride temporary pits.)

- Topographic map; Visual inspection (certification) of the proposed site

☐ Yes ☐ No

Within 300 feet from a occupied permanent residence, school, hospital, institution, or church in existence at the time of initial application.

- Visual inspection (certification) of the proposed site; Aerial photo; Satellite image

☐ Yes ☐ No

Within 200 horizontal feet of a spring or a private, domestic fresh water well used by less than five households for domestic or stock watering purposes, or 300feet of any other fresh water well or spring, in existence at the time of the initial application.

NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site

☐ Yes ☐ No

Within 100 feet of a wetland.

- US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site

☐ Yes ☐ No

Temporary Pit Non-low chloride drilling fluid

Within 300 feet of a continuously flowing watercourse, or any other significant watercourse, or within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark).

- Topographic map; Visual inspection (certification) of the proposed site

☐ Yes ☐ No

Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.

- Visual inspection (certification) of the proposed site; Aerial photo; Satellite image

☐ Yes ☐ No

Within 500 horizontal feet of a spring or a private, domestic fresh water well used by less than five households for domestic or stock watering purposes, or 1000 feet of any other fresh water well or spring, in the existence at the time of the initial application;

- NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site

☐ Yes ☐ No

Within 300 feet of a wetland.

- US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site

☐ Yes ☐ No

Permanent Pit or Multi-Well Fluid Management Pit

Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse, or lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark).

- Topographic map; Visual inspection (certification) of the proposed site

☐ Yes ☐ No

Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.

- Visual inspection (certification) of the proposed site; Aerial photo; Satellite image

☐ Yes ☐ No

Within 500 horizontal feet of a spring or a fresh water well used for domestic or stock watering purposes, in existence at the time of initial application.

- NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site

☐ Yes ☐ No

Within 500 feet of a wetland.

- US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site

☐ Yes ☐ No

10.

Temporary Pits, Emergency Pits, and Below-grade Tanks Permit Application Attachment Checklist: Subsection B of 19.15.17.9 NMAC

Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.

- ☐ Hydrogeologic Report (Below-grade Tanks) - based upon the requirements of Paragraph (4) of Subsection B of 19.15.17.9 NMAC
- ☐ Hydrogeologic Data (Temporary and Emergency Pits) - based upon the requirements of Paragraph (2) of Subsection B of 19.15.17.9 NMAC
- ☐ Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC
- ☐ Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC
- ☐ Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC

☐ Previously Approved Design (attach copy of design) API Number: _____ or Permit Number: _____

11.

Multi-Well Fluid Management Pit Checklist: Subsection B of 19.15.17.9 NMAC

Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.

- ☐ Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC
- ☐ A List of wells with approved application for permit to drill associated with the pit.
- ☐ Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC

- ☐ Hydrogeologic Data - based upon the requirements of Paragraph (4) of Subsection B of 19.15.17.9 NMAC
- ☐ Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC

☐ Previously Approved Design (attach copy of design) API Number: _____ or Permit Number: _____

12.
Permanent Pits Permit Application Checklist: Subsection B of 19.15.17.9 NMAC

Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.

- ☐ Hydrogeologic Report - based upon the requirements of Paragraph (1) of Subsection B of 19.15.17.9 NMAC
- ☐ Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC
- ☐ Climatological Factors Assessment
- ☐ Certified Engineering Design Plans - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Dike Protection and Structural Integrity Design - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Leak Detection Design - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Liner Specifications and Compatibility Assessment - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Quality Control/Quality Assurance Construction and Installation Plan
- ☐ Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC
- ☐ Freeboard and Overtopping Prevention Plan - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Nuisance or Hazardous Odors, including H₂S, Prevention Plan
- ☐ Emergency Response Plan
- ☐ Oil Field Waste Stream Characterization
- ☐ Monitoring and Inspection Plan
- ☐ Erosion Control Plan
- ☐ Closure Plan - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC

13.
Proposed Closure: 19.15.17.13 NMAC

Instructions: Please complete the applicable boxes, Boxes 14 through 18, in regards to the proposed closure plan.

- Type: ☒ Drilling ☐ Workover ☐ Emergency ☐ Cavitation ☐ P&A ☐ Permanent Pit ☐ Below-grade Tank ☐ Multi-well Fluid Management Pit
☐ Alternative
- Proposed Closure Method: ☒ Waste Excavation and Removal
☐ Waste Removal (Closed-loop systems only)
☐ On-site Closure Method (Only for temporary pits and closed-loop systems)
☐ In-place Burial ☐ On-site Trench Burial
☐ Alternative Closure Method

14.
Waste Excavation and Removal Closure Plan Checklist: (19.15.17.13 NMAC) **Instructions:** Each of the following items must be attached to the closure plan. Please indicate, by a check mark in the box, that the documents are attached.

- ☒ Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC
- ☒ Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.13 NMAC
- ☒ Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings)
- ☒ Soil Backfill and Cover Design Specifications - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC
- ☒ Re-vegetation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC
- ☒ Site Reclamation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC

15.
Siting Criteria (regarding on-site closure methods only): 19.15.17.10 NMAC

Instructions: Each siting criteria requires a demonstration of compliance in the closure plan. Recommendations of acceptable source material are provided below. Requests regarding changes to certain siting criteria require justifications and/or demonstrations of equivalency. Please refer to 19.15.17.10 NMAC for guidance.

- | | |
|---|---|
| Ground water is less than 25 feet below the bottom of the buried waste.
- NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells | <input type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/> NA |
| Ground water is between 25-50 feet below the bottom of the buried waste
- NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells | <input type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/> NA |
| Ground water is more than 100 feet below the bottom of the buried waste.
- NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells | <input type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/> NA |
| Within 100 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse, lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark).
- Topographic map; Visual inspection (certification) of the proposed site | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.
- Visual inspection (certification) of the proposed site; Aerial photo; Satellite image | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Within 300 horizontal feet of a private, domestic fresh water well or spring used for domestic or stock watering purposes, in existence at the time of initial application.
- NM Office of the State Engineer - iWATERS database; Visual inspection (certification) of the proposed site | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Written confirmation or verification from the municipality; Written approval obtained from the municipality | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Within 300 feet of a wetland.
US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance | |

adopted pursuant to NMSA 1978, Section 3-27-3, as amended.

- Written confirmation or verification from the municipality; Written approval obtained from the municipality

☐ Yes ☐ No

Within the area overlying a subsurface mine.

- Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division

☐ Yes ☐ No

Within an unstable area.

- Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map

☐ Yes ☐ No

Within a 100-year floodplain.

- FEMA map

☐ Yes ☐ No

16.

On-Site Closure Plan Checklist: (19.15.17.13 NMAC) *Instructions: Each of the following items must be attached to the closure plan. Please indicate, by a check mark in the box, that the documents are attached.*

- ☐ Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC
☐ Proof of Surface Owner Notice - based upon the appropriate requirements of Subsection E of 19.15.17.13 NMAC
☐ Construction/Design Plan of Burial Trench (if applicable) based upon the appropriate requirements of Subsection K of 19.15.17.11 NMAC
☐ Construction/Design Plan of Temporary Pit (for in-place burial of a drying pad) - based upon the appropriate requirements of 19.15.17.11 NMAC
☐ Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC
☐ Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of 19.15.17.13 NMAC
☐ Waste Material Sampling Plan - based upon the appropriate requirements of 19.15.17.13 NMAC
☐ Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings or in case on-site closure standards cannot be achieved)
☐ Soil Cover Design - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC
☐ Re-vegetation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC
☐ Site Reclamation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC

17.

Operator Application Certification:

I hereby certify that the information submitted with this application is true, accurate and complete to the best of my knowledge and belief.

Name (Print): Kegan Boyer Title: CEMC - Project Manger

Signature:  Date: 12/18/13

e-mail address: kegan.boyer@chevron.com Telephone: (713) 372-7705

18.

OCD Approval: ☐ Permit Application (including closure plan) ☒ Closure Plan (only) ☐ OCD Conditions (see attachment)

OCD Representative Signature: _____ **Approval Date:** _____

Title: _____ **OCD Permit Number:** _____

19.

Closure Report (required within 60 days of closure completion): 19.15.17.13 NMAC

Instructions: Operators are required to obtain an approved closure plan prior to implementing any closure activities and submitting the closure report. The closure report is required to be submitted to the division within 60 days of the completion of the closure activities. Please do not complete this section of the form until an approved closure plan has been obtained and the closure activities have been completed.

☐ Closure Completion Date: _____

20.

Closure Method:

- ☒ Waste Excavation and Removal ☐ On-Site Closure Method ☐ Alternative Closure Method ☐ Waste Removal (Closed-loop systems only)
☐ If different from approved plan, please explain.

21.

Closure Report Attachment Checklist: *Instructions: Each of the following items must be attached to the closure report. Please indicate, by a check mark in the box, that the documents are attached.*

- ☐ Proof of Closure Notice (surface owner and division)
☐ Proof of Deed Notice (required for on-site closure for private land only)
☐ Plot Plan (for on-site closures and temporary pits)
☐ Confirmation Sampling Analytical Results (if applicable)
☐ Waste Material Sampling Analytical Results (required for on-site closure)
☐ Disposal Facility Name and Permit Number
☐ Soil Backfilling and Cover Installation
☐ Re-vegetation Application Rates and Seeding Technique
☐ Site Reclamation (Photo Documentation)

On-site Closure Location: Latitude _____ Longitude _____ NAD: ☐ 1927 ☐ 1983

Operator Closure Certification:

I hereby certify that the information and attachments submitted with this closure report is true, accurate and complete to the best of my knowledge and belief. I also certify that the closure complies with all applicable closure requirements and conditions specified in the approved closure plan.

Name (Print): _____ Title: _____

Signature: _____ Date: _____

e-mail address: _____ Telephone: _____



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Pit Closure Plan and Backfill Request

**Central Vacuum Unit #47H
Unit A, Section 31, T17S, R35E
Lea County, New Mexico**

**Prepared for:
Chevron Environmental Management Company**

**Prepared by:
Conestoga-Rovers
& Associates**

2135 South Loop, 250 West
Midland, Texas
U.S.A. 79703

Office: (432) 686-0086
Fax: (432) 686-0186

web: <http://www.CRAworld.com>

**NOVEMBER 2013
REF. NO. 073821**



**CONESTOGA-ROVERS
& ASSOCIATES**

2135 South Loop, 250 West, Midland, Texas 79703
Telephone: (432) 686-0086 Fax: (432) 686-0186
www.CRAworld.com

November 26, 2013

Reference No. 073821

Mr. Geoffrey R. Leking
Environmental Engineer
New Mexico Oil Conservation Division
1625 N French Drive
Hobbs, New Mexico 88240

Dear Mr. Leking:

Re: Pit Closure Plan and Backfill Request
Central Vacuum Unit #47H
Unit A, Section 31, T17S, R35E
Lea County, New Mexico

Introduction

Conestoga-Rovers & Associates, Inc. (CRA), on behalf of Chevron Environmental Management Company (CEMC), is pleased to submit this Pit Closure Plan and Backfill Request for the Central Vacuum Unit #47H (hereafter referred to as the "Site"). A ten-foot deep excavation remains at the former reserve pit location that is a hazard to Site workers in this active area. Chevron is requesting backfilling of this excavation as a corrective action to prevent an incident from occurring at this Site. This correspondence also addresses several issues associated with the pit closure.

1.0 Project History

The Site is located in Unit Letter A, Section 31, Township 17 South, Range 35 East, Lea County, New Mexico and contains a former pit location with an open excavation resulting from waste removal actions (to the Sundance facility) associated with the closure of the former pit. The approximate excavation dimensions are 65'x 65'x 70'x 105' with an average depth of approximately 10' below ground surface (bgs). The Site coordinates are N 32.796954°, W 103.490719°. The Site location is shown on Figures 1 and 2.

In a correspondence dated July 9, 2007, an environmental site consultant (Environmental Plus, Inc.- EPI), on behalf of Chevron USA (Chevron), submitted to the New Mexico Oil Conservation Division (NMOCD) Hobbs office a request for pit closure work plan along with an initial C-144 form (Appendix A). The work plan summarized assessment activities that included soil boring/soil analytical data from January-February 2006, and proposed remedial activities to achieve the pit closure. An area around the former pit location was excavated to approximately 10 feet bgs, and an estimated 2,622 cubic yards of drilling mud/soil material was transported to a disposal facility. Subsequent to excavation, soil samples from two soil borings (SB-1 and SB-2) at the base of the excavation and eight sidewall samples (NSWW-3, WSWN-3, WSW-3, SSWW-3, SSWE-3, ESWS-3, ESWN-3 and NSWE-3) of the excavation were collected. Soil boring data demonstrated

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**CONESTOGA-ROVERS
& ASSOCIATES**

November 26, 2013

Reference No. 073821

- 2 -

decreasing chloride concentrations to below 250 mg/kg in each of the pit floor borings. Sidewall samples indicated elevated chloride impacts at the south/southeastern portions of the excavation at a depth of three feet. On July 11, 2007, the work plan was denied approval by the NMOCD Hobbs office because of elevated chloride concentrations still present on the south/southeastern portion of the existing excavation. The NMOCD recommended these "hot spots" be removed and a closure proposal be resubmitted upon lateral delineation. Figure 3 illustrates the approximate location and analytical results of the soil borings, sidewall sample collection points and existing pump jack/oil well.

In December 2010, CEMC assumed the responsibilities of the pit closure activities at the Site from Chevron. CEMC subcontracted CRA to manage pit closure activities. On January 11, 2011, CRA, CEMC and AECOM met at the NMOCD District I Hobbs office to discuss the path forward at the Site. Topics of discussions included 2007 work plan submittal and objectives to close the pit as directed by the NMOCD Hobbs district office.

On April 17, 2012, X-Ray Locating Services from Houston, Texas performed an x-ray utility clearance assessment of the affected area. The purpose of this assessment was to locate all active existing utilities where access points were observed. Electrical and multiple unknown underground lines were identified within the assessment area (Figure 3).

On June 27, 2012, CRA and CEMC met at the NMOCD District I Hobbs office to discuss the path forward at the Site. Topics of discussion included, information from CRA's Closure Request Workplan, prepared March 18, 2011, additional delineation, proper closure documentation (form-C-141/C-144) and reporting. The NMOCD requested additional assessments to be completed to further evaluate the vertical extent of chloride impacts for areas outside of the excavated pit boundaries.

In December 2012, soil borings (SB-3 and SB-4) were drilled to 50 feet bgs to assess areas outside of the excavated pit boundaries. The soil borings were properly plugged with bentonite. Boring location and chloride results map are presented on Figure 3.

The open pit excavation, at a depth of ten feet, remains at the Site. Based on information presented in this correspondence and safety concerns, CEMC is requesting the excavation to be backfilled to match the surface grade. This corrective action will greatly reduce the probability of experiencing an incident at this active well location that could result in significant property damage and/or personal injury. Additional activities are proposed to address delineation closure issues at CVU #47H.



**CONESTOGA-ROVERS
& ASSOCIATES**

November 26, 2013

Reference No. 073821

- 3 -

2.0 Site Setting and Regulatory Framework

According to the Petroleum Recovery Research Center (PRRC) database, the New Mexico Office of the State Engineer (NMOSE) and local knowledge, the average depth to groundwater in the immediate area of CVU Well #47H is approximately 80-100 feet bgs. A Figure depicting the average depths to groundwater, distance to surface water bodies and any wellheads is provided in Appendix B.

On June 23, 2013 the New Mexico Administrative Code (NMAC) Title 19 (Natural Resources and Wildlife) Chapter 15 (Oil and Gas) Part 17 "Pits, Closed-Loop Systems, Below-Grade Tanks and Sumps" order was made effective by the Energy, Minerals, and Natural Resources Department, Oil Conservation Division (OCD). This order, identified as R-13506-D is also known as the 'pit rule'. The objective of 19.15.17 NMAC is to regulate pits, closed-loop systems, below-grade tanks and sumps used in connection with oil and gas operations for the protection of fresh water, public health and the environment.

The pit rule requires drilling, or reserve (temporary) pits to be permitted by the OCD using form C-144. Operation and maintenance procedures, a closure plan and hydrogeologic data information shall be provided and the pit permit shall comply with siting requirements and other permitting required as outlined in 19.15.17 NMAC where wastes are destined for disposal at division approved facilities.

Closure and site reclamation of temporary pit requirements are provided in 19.15.17.13 NMAC. A closure plan should be submitted and approved by the OCD District using form C-144 providing the requested information prior to commencing closure activities. The surface owner shall also be notified in advance. The rule states that at a minimum a five point composite soil sample shall be collected beneath the pit liner and analyzed for the constituents provided in Table I of the pit rule that include - total petroleum hydrocarbons (TPH), chlorides, benzene, toluene, ethylbenzene, and xylenes (BTEX) and concentrations compared to closure criteria concentration limits shown on Table I.



November 26, 2013

Reference No. 073821

- 4 -

Table I Closure Criteria for Soils Beneath Below-Grade Tanks, Drying Pads Associated with Closed-Loop Systems and Pits where Contents are Removed			
Depth below bottom of pit to groundwater less than 10,000 mg/l TDS	Constituent	Method *	Limit**
≤50 feet	Chloride	EPA 300.0	600 mg/kg
	TPH	EPA SW-846 Method 418.1	100 mg/kg
	BTEX	EPA SW-846 Method 8021B or 8260B	50 mg/kg
	Benzene	EPA SW-846 Method 8021B or 8015M	10 mg/kg
51 feet-100 feet	Chloride	EPA 300.0	10,000 mg/kg
	TPH	EPA SW-846 Method 418.1	2,500 mg/kg
	GRO+DRO	EPA SW-846 Method 8015M	1,000 mg/kg
	BTEX	EPA SW-846 Method 8021B or 8260B	50 mg/kg
	Benzene	EPA SW-846 Method 8021B or 8015M	10 mg/kg
> 100 feet	Chloride	EPA 300.0	20,000 mg/kg
	TPH	EPA SW-846 Method 418.1	2,500 mg/kg
	GRO+DRO	EPA SW-846 Method 8015M	1,000 mg/kg
	BTEX	EPA SW-846 Method 8021B or 8260B	50 mg/kg
	Benzene	EPA SW-846 Method 8021B or 8015M	10 mg/kg

*Or other test methods approved by the division

**Numerical limits or natural background level, whichever is greater

Provided the constituent concentrations are below the listed limits, an operator may proceed with backfilling and restoration of the pit in accordance to the closure plan and pit rule required. If constituent concentrations are above the limits in Table I, the OCD may require additional delineation sampling and closure activities.



November 26, 2013

Reference No. 073821

- 5 -

3.0 CVU #47H Pit Closure Plan

Recognizing the history of the Site and the remedial and delineation efforts associated with chloride impacts at the Site to date, CRA proposes to follow directives outlined in NMOCD Form C-144 and NMAC's, June 23, 2013, "Pits, Closed-Loop Systems, Below-Grade Tanks and Sumps" order 19.15.17 NMAC solely for closure of the existing pit and remedial excavation. The actions are designed to address regulatory compliance requirements and to alleviate safety concerns regarding the deep excavation that has remained open for several years.

A separate closure workplan and appropriate form C-141 will be compiled and submitted to the NMOCD to address delineation and remedial actions/issues in the areas outside of the excavated pit boundaries.

Upon NMOCD concurrence of this Pit Closure Plan and confirmation of delineation limits outlined in Table I (19.15.17), CRA proposes the following activities:

- Over-excavation of the east/southeast sidewall of the excavation to the extent practical, recognizing that the extent of the excavation will be limited by the proximity of numerous underground flowlines.
- Transfer and disposal of over-excavated materials to a division approved facility (Controlled Recovery, Inc. #R9166).
- Collection and analysis of a five point composite sample from the over-excavated east/southeast sidewall area for analysis of TPH, chlorides and BTEX for comparison to applicable limits established in the June 2013 Pit Rule order.
- Collection and analysis of a five point composite sample from the excavation floor area for analysis of TPH, chlorides and BTEX for comparison to applicable limits established in the June 2013 Pit Rule order.
- Excavation shall be backfilled with imported clean materials (caliche and sandy soils) from approximately 10 feet bgs to 2 foot below grade to ensure a uniform/level surface.
- Placement of a 20 mil poly liner in excavated area and backfill remaining excavation with clean top soil (1-2 ft.) and use of heavy machinery for grading purposes.



**CONESTOGA-ROVERS
& ASSOCIATES**

November 26, 2013

Reference No. 073821

- 6 -

- Construction affected areas (approximately) of pit floor/release site will be graded and seeded using mixtures utilized by local agencies such as the BLM, County Ag Agency and/or as directed by property owner to restore the impacted surface areas ensuring stability and preservation of surface water flow patterns ultimately returning construction affected areas (approximately) to the condition that existed prior to oil and gas operations.

Upon completion of closure activities outlined in this Pit Closure Plan, a closure report on form C-144 with necessary attachments to document all closure activities will be submitted to the NMOCD summarizing closure activities.

If you have any questions or comments with regard to this Remediation and Closure Work Plan, please do not hesitate to contact our Midland office at (432) 686-0086.

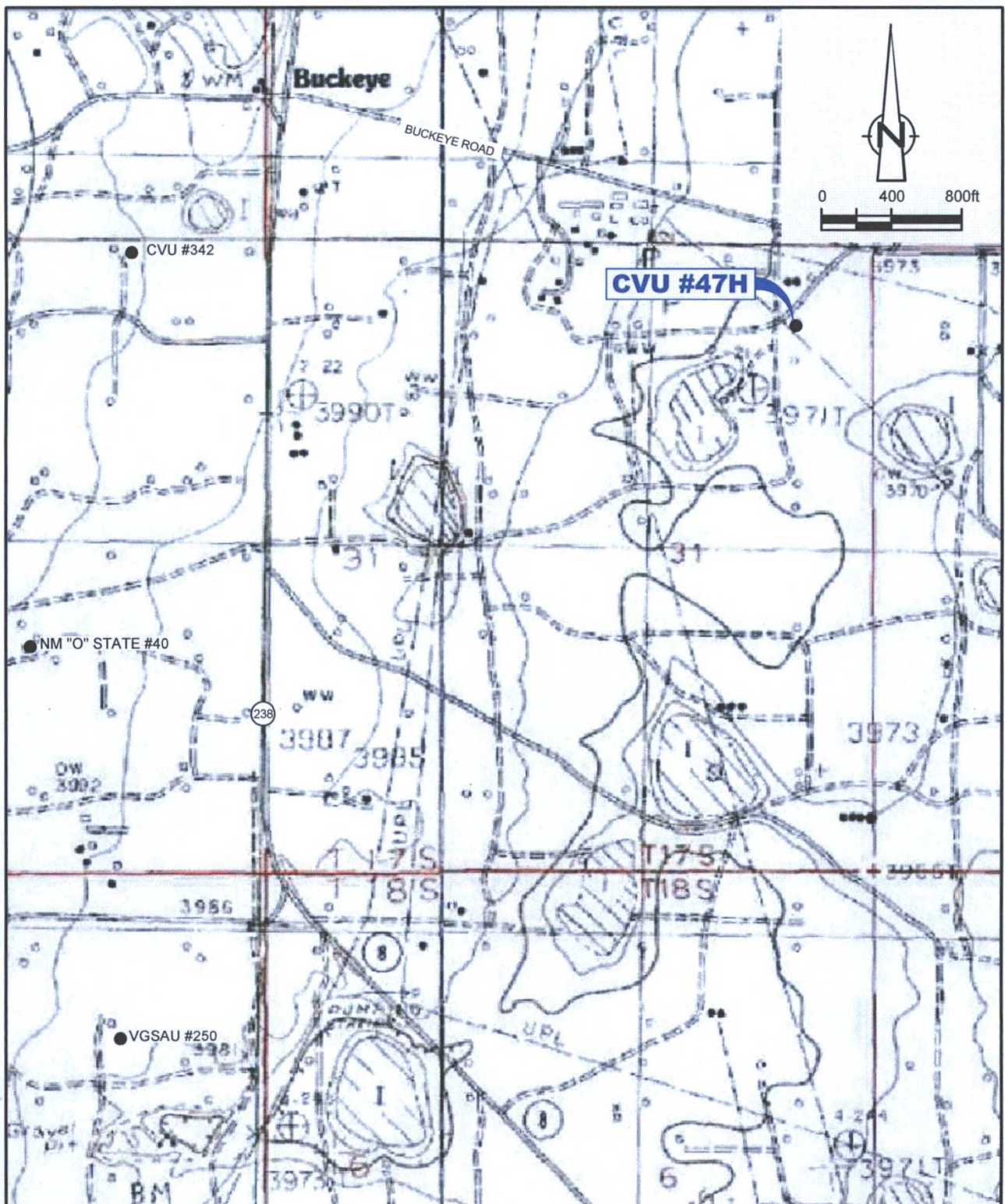
Yours Truly,

CONESTOGA-ROVERS & ASSOCIATES

Jake Ferenz
Project Manager

JF/pd/gb/1
Encl: as stated

Thomas C. Larson
Midland Operations Manager



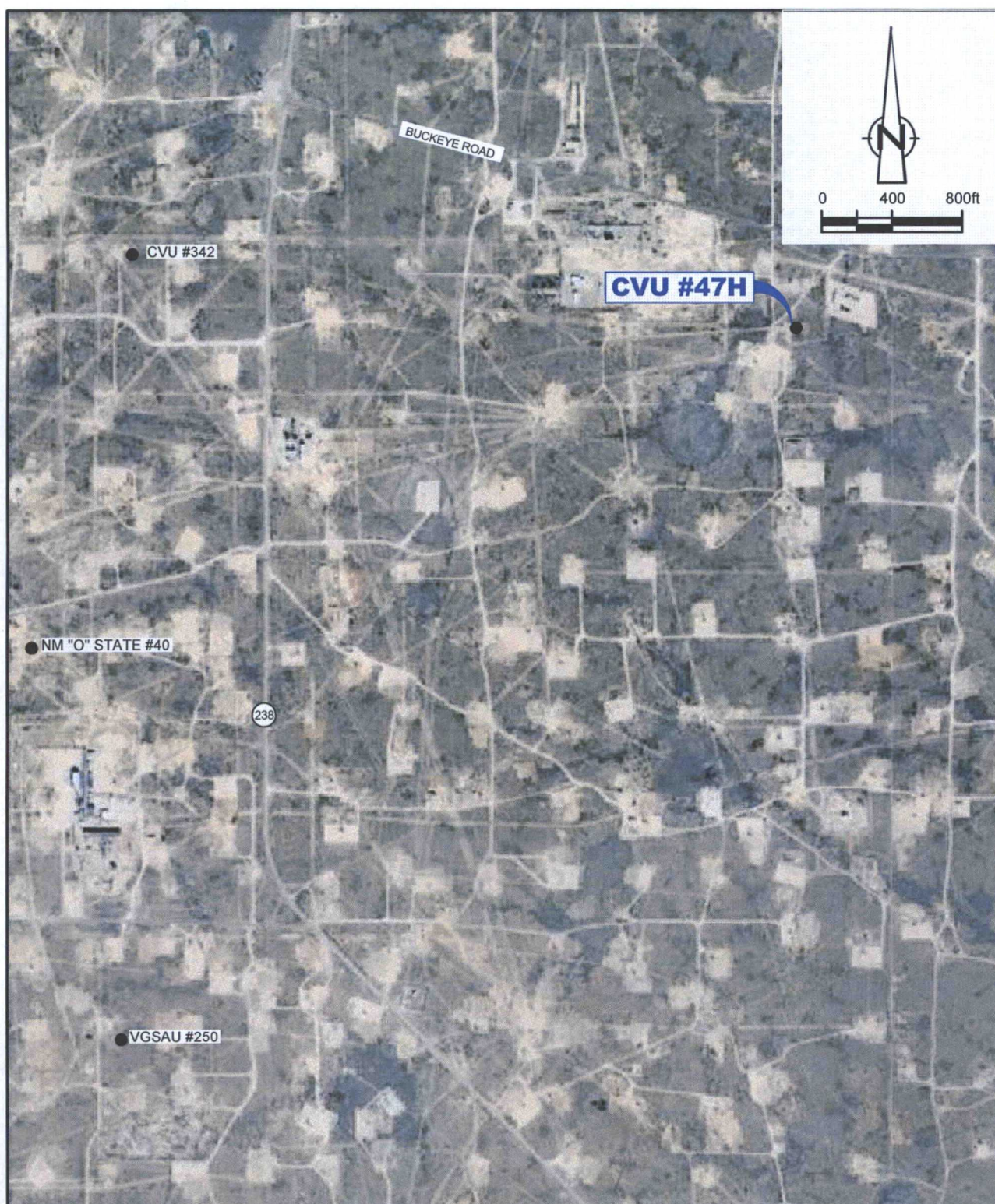
SOURCE: USGS TOPOGRAPHIC MAP
 BUCKEYE 7.5 MINUTE QUADRANGLE
 NM "O" STATE #40 32° 47' 22" N, 103° 30' 43" W
 CVU #342 32° 47' 55" N, 103° 30' 33" W
 CVU #47H 32° 47' 49" N, 103° 29' 26" W
 VGSAV #250 32° 46' 49" N, 103° 30' 34" W

figure 1

**SITE VICINITY MAP
 BUCKEYE AREA RESERVE PITS
 LEA COUNTY, NEW MEXICO**

Chevron Environmental Management Company





SOURCE: USGS TOPOGRAPHIC MAP
 BUCKEYE 7.5 MINUTE QUADRANGLE
 NM "O" STATE #40 32° 47' 22" N, 103° 30' 43" W
 CVU #342 32° 47' 55" N, 103° 30' 33" W
 CVU #47H 32° 47' 49" N, 103° 29' 26" W
 VGSAU #250 32° 46' 49" N, 103° 30' 34" W



figure 2
SITE LOCATION MAP
BUCKEYE AREA RESERVE PITS
LEA COUNTY, NEW MEXICO
Chevron Environmental Management Company

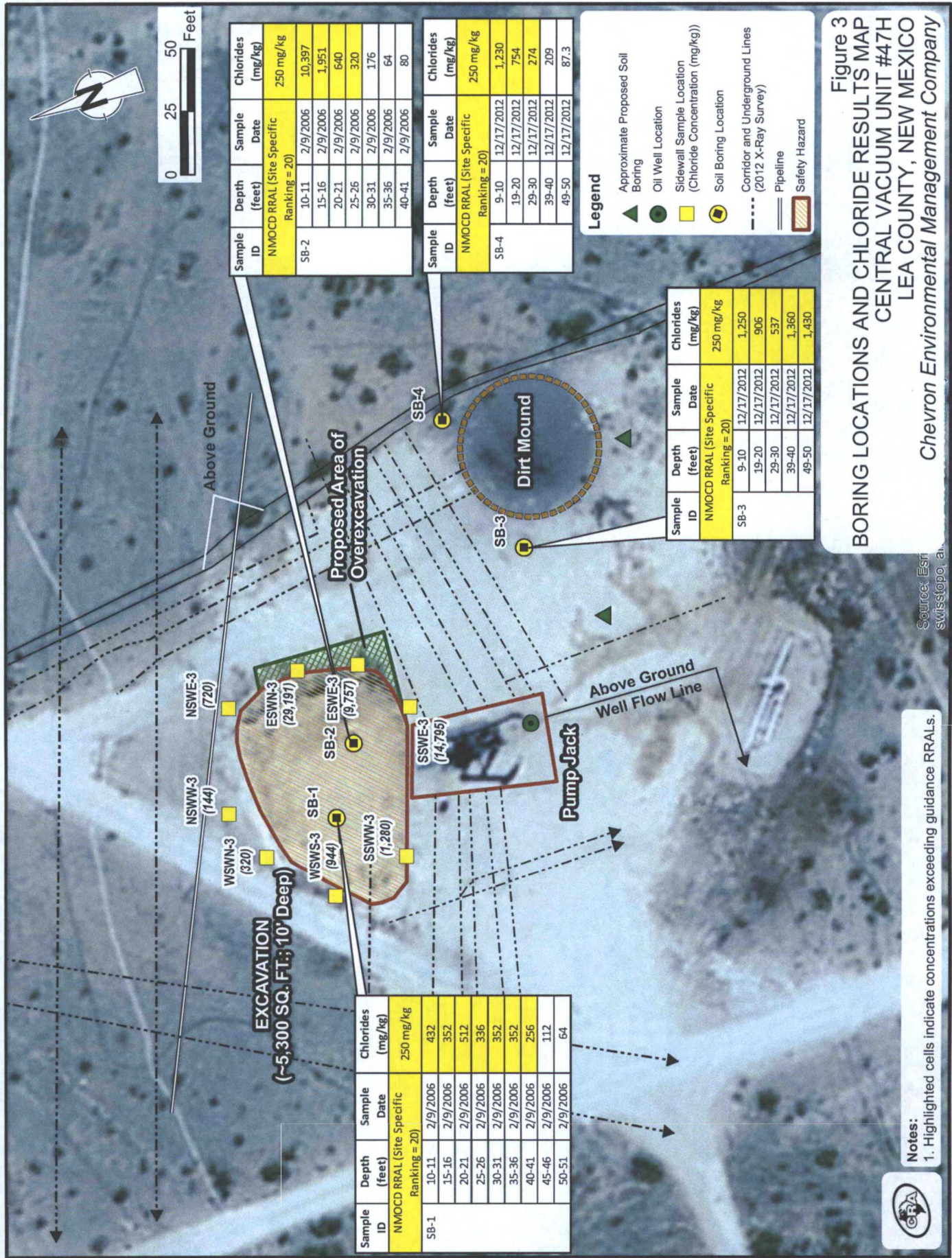


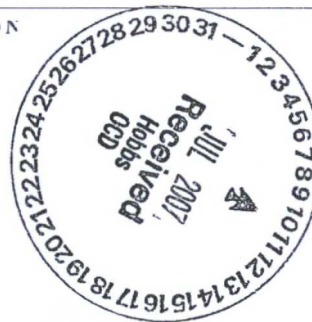
Figure 3
BORING LOCATIONS AND CHLORIDE RESULTS MAP
CENTRAL VACUUM UNIT #47H
LEA COUNTY, NEW MEXICO
Chevron Environmental Management Company

Notes:
1. Highlighted cells indicate concentrations exceeding guidance RRALs.





ENVIRONMENTAL PLUS, INC.
CONSULTING AND REMEDIAL CONSTRUCTION



9 July 2007

Mr. Larry Johnson
Environmental Engineer
New Mexico Oil Conservation Division
1625 North French Drive
Hobbs, New Mexico 88240

RE: Remediation Proposal
Chevron USA - Central Vacuum Unit (CVU) #47
UL-A NE ¼ of the NE ¼ Section 31, T 17 S, R 35 E
Latitude: 32° 47' 49.11"; Longitude: 103° 29' 26.32"
EPI Ref. #200060

ADL# 30025 08532 0000

Dear Mr. Johnson:

On behalf of Chevron USA, Environmental Plus, Inc., (EPI) submits the following Remediation Proposal to supplement the Method of Closure as noted on the Initial NMOCD Form C-144 submitted circa 28 November 2005.

Site Background

The Site is located in UL-A NE ¼ of the NE ¼ of Section 31, T17S, R35E at an approximate elevation of 3,973 feet above mean sea level (amsl). The property is owned by the State of New Mexico and managed by the New Mexico State Land Office (NMSLO). A search for water wells was completed utilizing the New Mexico Office of the State Engineers website and a database maintained by the United States Geological Survey (USGS). One playa (surface water) exists within a 1,000 foot radius of the release site (reference Figure 2). Groundwater data taken from domestic and USGS water wells within a one (1) mile radius indicates an average water depth of approximately 87 feet below ground surface (bgs). Based on available information, it was determined the distance between impacted soil and groundwater is approximately 46 vertical feet. Utilizing this information, New Mexico Oil Conservation Division (NMOCD) Remedial Goals for this Site were determined as follows:

Parameter	Remedial Goal
Benzene	10 parts per million
BTEX	50 parts per million
TPH	100 parts per million

*Chloride and sulfate residuals may not be capable of impacting local Groundwater above NMWQCC Standard of 250 mg/L and 600 mg/L, respectively

P O. BOX 1558

2100 AVENUE O

EDUNICE, NEW MEXICO 88231

TELEPHONE 505-394-3481

FAX 505-394-2601

RP#1483

ENVIRONMENTAL PLUS, INC.



Field Work

EPI mobilized at the site on 31 January 2006 and commenced stiffening drilling mud in the drill pit. After the drilling mud was sufficiently stiffened, the material was loaded and transported to Sundance Services, Inc., for disposal. After disposal of the drilling mud was complete, excavation of the drill pit sidewalls and bottom was undertaken in areas where chloride concentrations exceeded remedial threshold goals. From 31 January through 24 February 2006, approximately 2,622 cubic yards of drilling mud and impacted soil were transported to the disposal facility. On 9 and 10 of February 2006, Straub Corporation advanced two (2) soil borings in the bottom of the drill pit to determine vertical extent of impacted soil. Soil Boring SB-1 was advanced to a depth of 51-feet below ground surface (bgs) and SB-2 a depth of 41-feet bgs. Impacted soil above remedial threshold goals existed to 41-feet bgs in SB-1 and 26-feet bgs in SB-2 (reference *Figure 4* for location and *Figure 5* for analytical data). On 15 February 2006 eight (8) soil samples were collected from identical depths, but at various locales from sidewalls of the drill pit excavation. Laboratory analytical results confirmed existence of chloride impacted soil above remedial threshold goals in sidewalls (reference *Figure 6*). Despite knowledge this condition existed, excavation activities were terminated on 15 February 2006.

Analytical Data

Laboratory analytical tests were conducted for BTEX and TPH on three (3) of the eight (8) sidewall and five (5) of the sixteen (16) soil boring soil samples. Analytical data confirmed BTEX and TPH concentrations were either below remedial threshold goals or non detectable at or above laboratory analytical method detection limits (MDL) for eight (8) soil samples. Chloride concentrations on soil samples collected from the sidewalls ranged from 144 mg/Kg (NSWW-3) to 29,191 mg/Kg (ESWN-3). Chloride concentrations above remedial threshold goal of 250 mg/Kg existed in seven (7) soil samples at equal depths (reference *Figure 6*). Chloride concentrations in SB-1 ranged from 512 mg/Kg (20-21 feet bgs) to 64 mg/Kg (50-51 feet bgs). Chloride concentrations in SB-2 ranged from 10,397 mg/Kg (10-11 feet bgs) to 64 mg/Kg (35-36 feet bgs) (reference *Figure 5*).

Site Remedial Proposal

Based on field analyses and laboratory analytical results, soils within the drill pit bottom and sidewalls are chloride impacted. However, residual chloride concentrations diminish with vertical depth limiting the potential for contaminating groundwater above New Mexico Water Quality Control Commission Ground Water Standards (NMWQCC) of 250 mg/L (reference *Table 5*). This theory is further enhanced by noting distance between groundwater (~87-feet bgs) and the lowest point of chloride impacted soil (41-feet bgs) is approximately 46 vertical feet. With the chloride impacts confined to a small area, natural attenuation will deplete concentrations significantly during vertical migration. In view of this, it is recommended impacted soil remaining in situ in the drill pit bottom be removed to a minimum depth of 11-feet bgs in the vicinity of SB-2. While not eliminating all chloride impacts in the soil, it removes the most elevated concentration of 10,397 mg/Kg. Primary goal is excavation of sidewalls until chloride concentrations are below 250 mg/Kg, if possible. However, certain limitations must be imposed as to sidewall width excavations as excessive excavation may prove to be neither performance nor cost effective. EPI proposes a maximum width of two (2) horizontal feet be initiated with field analyses of soil samples for chloride concentrations. Should chloride impacts indicate a rapid decrease in concentration,



excavation will continue until remedial threshold goals are met. If the sidewalls indicate protracted excavation is needed to achieve remedial threshold goals, the drill pit may become a "risk based closure" candidate. EPI believes sidewall excavation starting counter clockwise at some point between SSWE-3 and SSWW-3 and ending at some point between NSWE-3 and ESWN-3 can be accomplished within the two (2) horizontal feet criteria. However, continuing in the counter clockwise mode, the remaining section between the two (2) cited terminal points may not achieve the same results. This sector may require additional excavation beyond the proposed two (2) horizontal feet width. Once the proposed width has been excavated, chloride concentrations will dictate if additional excavation is warranted to remove impacted soil or should the other course of action be considered.

In order to provide additional safety measures, EPI recommends installation of a 20-mil thick polyethylene liner in the bottom of the excavation. The polyethylene barrier will be sandwiched between two (2) foot layers of cushion sand or clean topsoil for protection. After installation of the polyethylene liner and protective cushions, the excavation is to be backfilled with caliche to original pad elevation. Disturbed areas will be contoured to allow natural drainage and road traffic.

Should you have any technical questions or concerns, please contact me at (505) 394-3481 or via email at dduncan@envplus.net. Upon approval, EPI will initiate remedial work of the release area. Official correspondence should be submitted to Mr. James Duke, Chevron USA, at (505) 394-1201 (office), (505) 390-7225 (cellular) or via email at lduk@chevron.com.

Sincerely,

ENVIRONMENTAL PLUS, INC.

David P. Duncan
Civil Engineer

Cc: Jim Duke, New Mexico Construction Representative, Chevron USA
Tejay Simpson, Operations Superintendent, Chevron USA
Larry Ridenour, Operations Representative, Chevron USA
Thaddeus Kostrubala, Environmental Engineer, NMSLO-Santa Fe, NM
Myra Meyers, District Resources Manager, NMSLO – Hobbs, NM

Encl: Figure 1 – Area Map
Figure 2 – Site Location Map
Figure 3 – Site Map
Figure 4 – Groundwater Gradient Map
Figure 5 – Soil Boring/Chloride Analytical Map
Figure 6 – Soil Sample/Chloride Analytical Map
Table 1 – Well Data
Table 2- Summary of Excavation Soil Sample Laboratory Analytical Results



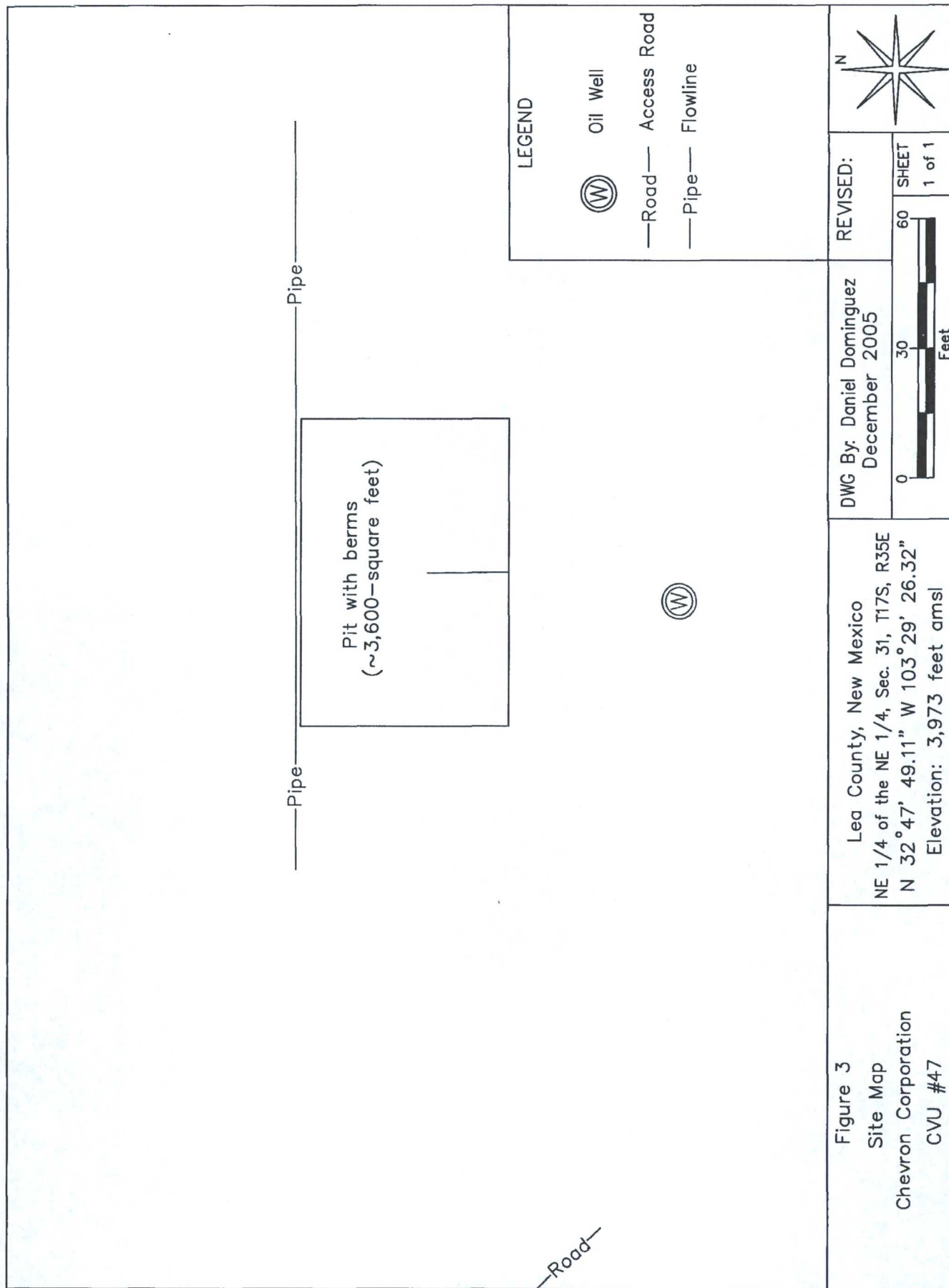
Table 3 – Summary of Soil Boring Field Analyses and Laboratory Analytical Results

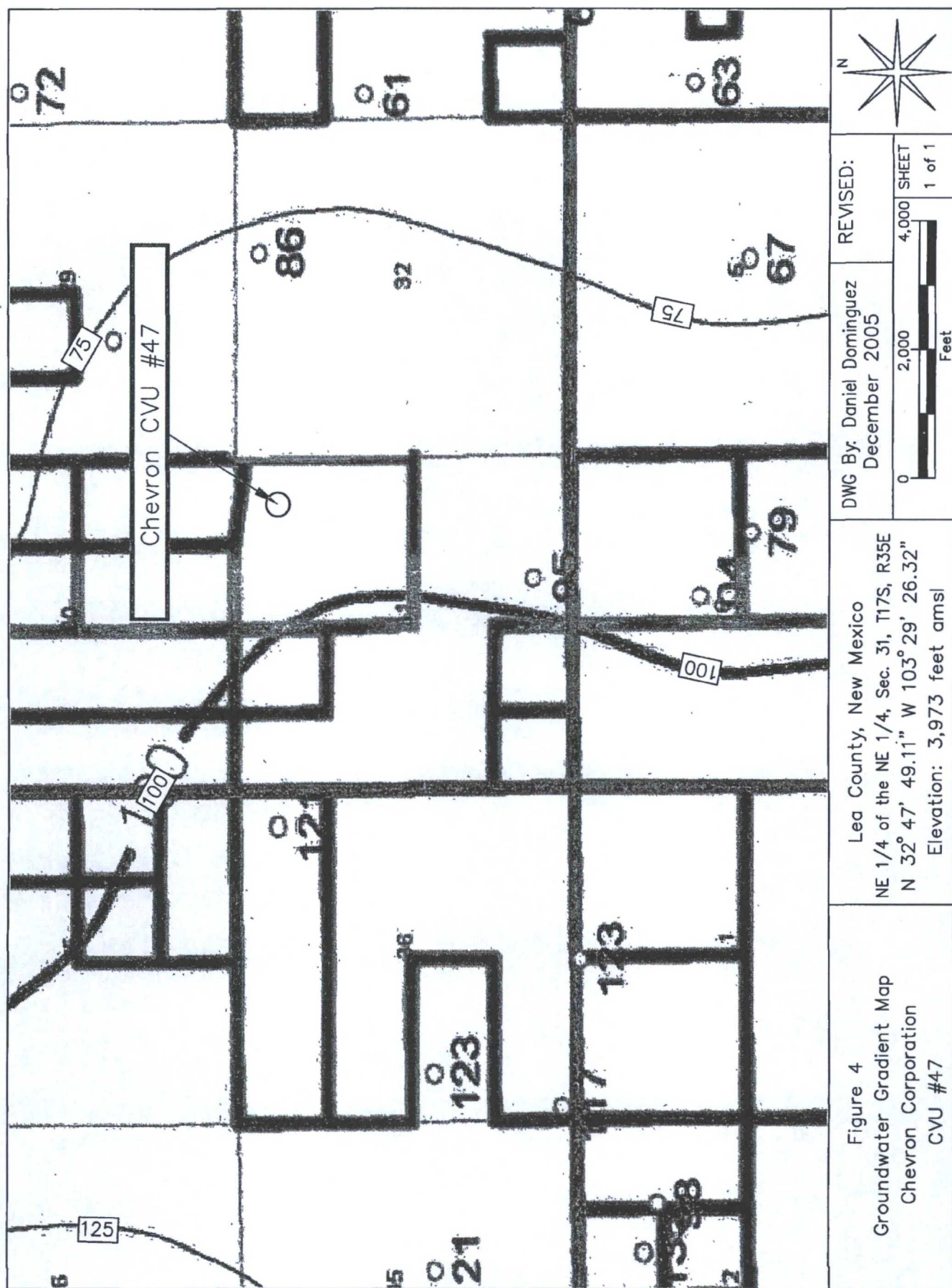
Attachment I – Site Photographs

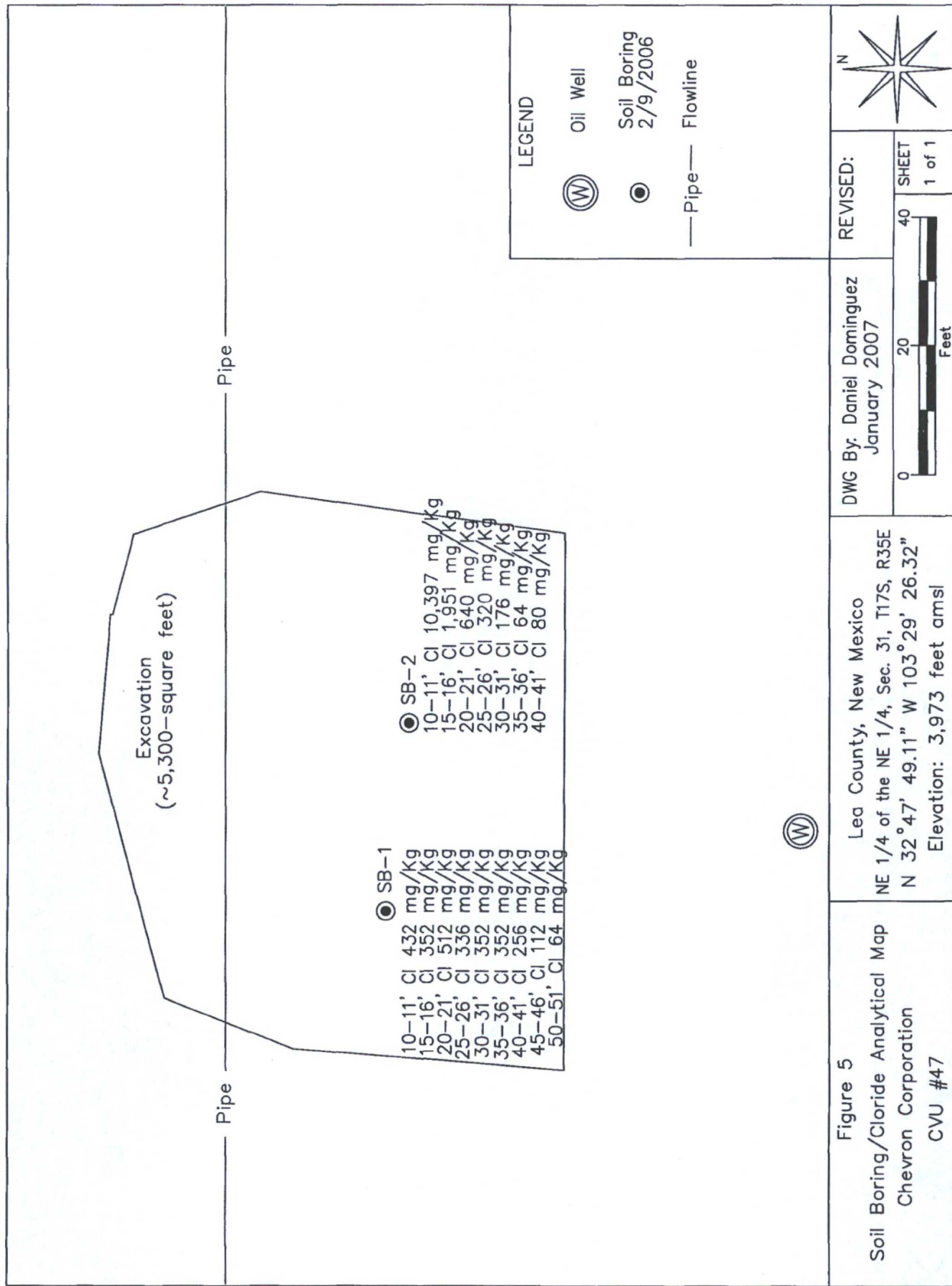
Attachment II – Laboratory Analytical Results and Chain-of-Custody Form

Attachment III – Soil Boring Logs

Attachment IV – Copy of Initial C-144







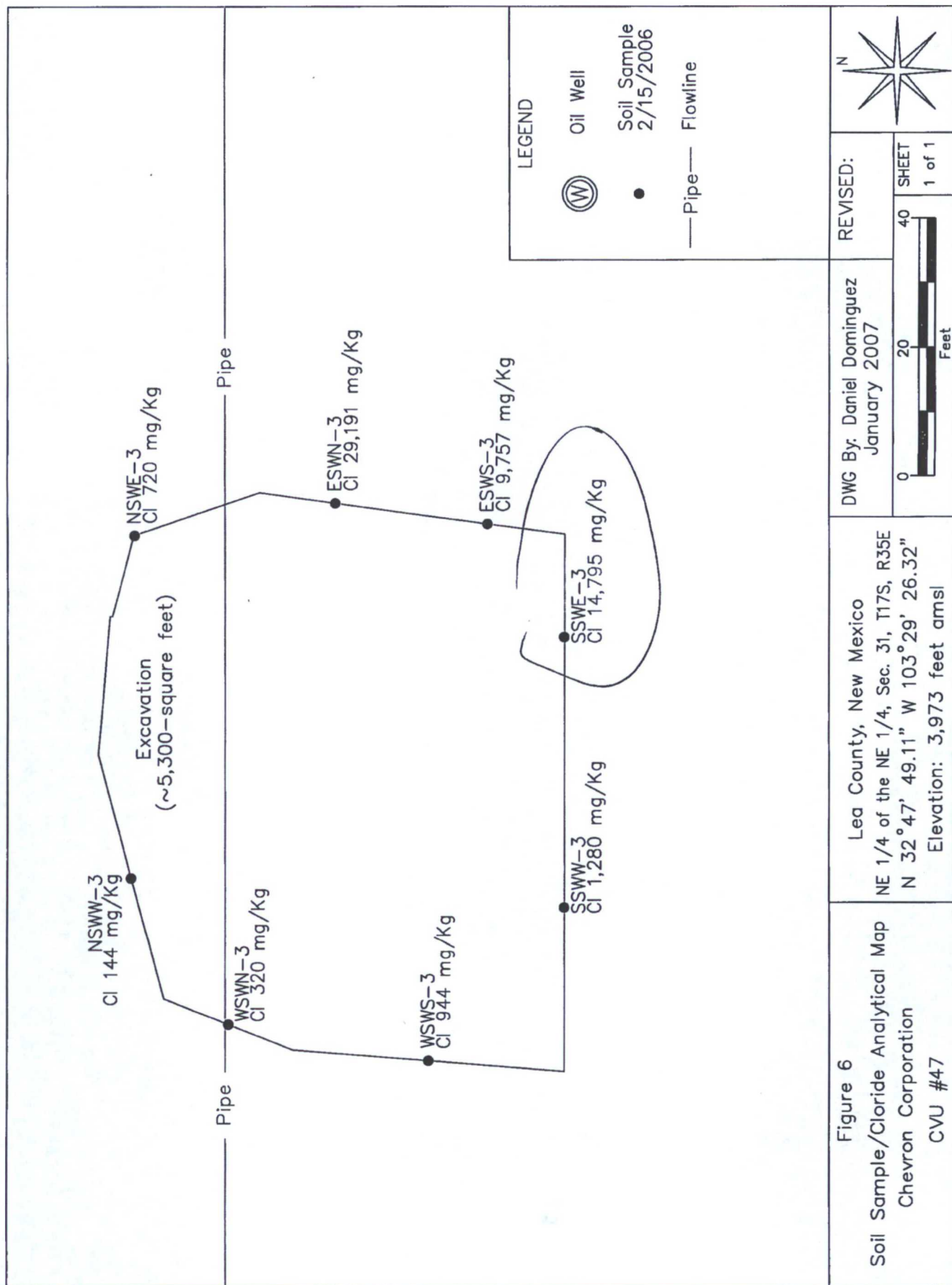


Figure 6

Soil Sample/Chloride Analytical Map
Chevron Corporation
CVU #47

Lea County, New Mexico
NE 1/4 of the NE 1/4, Sec. 31, T17S, R35E
N 32°47' 49.11" W 103°29' 26.32"
Elevation: 3,973 feet amsl

DWG By: Daniel Dominguez
January 2007

REVISED:

SHEET
1 of 1

TABLE 1

WELL INFORMATION REPORT*

Chevron CVU #47 - (Ref #200060)

Well Number	Diversion ^A	Owner	Use	Twsp	Rng	Sec q q q	Latitude	Longitude	Date Measured	Surface Elevation ^B	Depth to Water (ft bgs)
L 03873	31 68	PHILLIPS PETROLEUM CO	IND	17S	35E	31 1 2 3	N32° 47' 42.18"	W103° 30' 3.44"		3,986	
L 03874	23.67	PHILLIPS PETROLEUM CORP.	IND	17S	35E	31 1 1 3	N32° 47' 42.18"	W103° 29' 47.86"		3,983	
L 04247 A	1400	INTREPID MINING NM LLC	IND	17S	35E	31 1 1 3	N32° 47' 16.01"	W103° 30' 18.04"	25-Jan-74	3,993	95
L 04247 AS				17S	35E	31 1 1 2	N32° 47' 16.01"	W103° 30' 18.04"	09-Jul-90	3,993	117
L 05010 EXP	0	NOBLE DRILLING CO.	PRO	17S	35E	31 2 2	N32° 47' 42.15"	W103° 29' 32.29"		3,976	
L 04028	3	ZAPATA PETROLEUM CORPORATION	PRO	17S	35E	29 2 1	N32° 48' 34.50"	W103° 28' 45.96"		3,973	
L 04028 APPRO EXP				17S	35E	29 2 1	N32° 48' 34.50"	W103° 28' 45.96"		3,973	
L 04829 X4		PHILLIPS PETROLEUM COMPANY	OIL	17S	35E	29 3 2	N32° 48' 8.33"	W103° 29' 1.36"		3,976	
L 10445	317	GILES LEE	STK	17S	35E	29 4 2 4	N32° 48' 8.14"	W103° 28' 30.39"		3,967	
L 03875 S	0	DUKE ENERGY FIELD SERVICES, LP	POL	17S	35E	30 4 3 3	N32° 47' 55.30"	W103° 29' 47.88"		3,986	
L 03875 S2	0	DUKE ENERGY FIELD SERVICES, LP	POL	17S	35E	30 4 3 3	N32° 47' 55.30"	W103° 29' 47.88"		3,986	
L 03875 S3	0	DUKE ENERGY FIELD SERVICES, LP	POL	17S	35E	30 4 3 4	N32° 47' 55.30"	W103° 29' 47.88"		3,986	
L 03875 S4	0	DUKE ENERGY FIELD SERVICES, LP	POL	17S	35E	30 4 3 3	N32° 47' 55.30"	W103° 29' 47.88"		3,986	
L 04066	3	GACKLE DRILLING COMPANY	PRO	17S	35E	30 2 4	N32° 48' 21.55"	W103° 29' 32.41"	03-Feb-59	3,987	70
L 04066 APPRO				17S	35E	30 2 4	N32° 48' 21.55"	W103° 29' 32.41"	03-Feb-59	3,987	70
L 04490 APPRO	0	MORAN OIL PRODUCING & DRILLING	PRO	17S	35E	30 2 4	N32° 48' 21.55"	W103° 29' 32.41"	25-Jul-60	3,986	70
L 05392	0	INC. A. W. THOMPSON	PRO	17S	35E	30 3 1	N32° 48' 8.38"	W103° 30' 18.09"	16-May-64	3,996	80
L 05744	0	TRI-SERVICE DRILLING COMPANY	PRO	17S	35E	30 2 3 3	N32° 48' 21.53"	W103° 29' 47.94"		3,993	75
L 06357 S	207 8	REPUBLIC FACTORS INC. OF MIDLA	COM	17S	35E	30 1 1 3	N32° 48' 34.57"	W103° 30' 18.13"		3,996	
L 06357 S2				17S	35E	30 1 1 3	N32° 48' 34.57"	W103° 30' 18.13"	20-Jun-89	3,996	130
L 07695	480	PHILLIPS PETROLEUM COMPANY	OIL	17S	35E	32 4 3	N32° 47' 2.60"	W103° 28' 45.63"		3,963	
L 01649	0	CROSS LABORATORIES, INC.	DOM	17S	34E	25	N32° 47' 55.05"	W103° 31' 19.88"		4,012	
L 02217	3	FIRST BAPTIST CHURCH	DOM	17S	34E	25 4 2	N32° 48' 8.32"	W103° 30' 33.54"	10-Jun-53	3,999	75
L 02308	3	CHURCH OF CHRIST	DOM	17S	34E	25 4 2	N32° 48' 8.32"	W103° 30' 33.54"	10-Jun-53	3,999	75
L 02308 APPRO				17S	34E	25 4 4	N32° 47' 55.22"	W103° 30' 33.52"	12-Aug-53	3,999	76
L 04520 APPRO EXP	0	SOCONY MOBIL OIL COMPANY INC.	IND	17S	34E	25 4 4	N32° 47' 55.22"	W103° 30' 33.52"	12-Aug-53	3,999	76
L 04520 DCL				17S	34E	25 2 1 3	N32° 48' 34.45"	W103° 30' 49.00"		4,006	
L 05025	0	TRI-SERVICE DRILLING COMPANY	PRO	17S	34E	25 2 1 3	N32° 48' 34.45"	W103° 30' 49.00"		4,006	
L 05025 (1)	0	TRI-SERVICE DRILLING COMPANY	PRO	17S	34E	25 3 3	N32° 47' 55.05"	W103° 31' 19.88"	21-Dec-62	4,012	95
L 05106	0	NOBLE DRILLING COMPANY	PRO	17S	34E	25 3 1	N32° 48' 8.14"	W103° 31' 19.88"	15-Apr-63	4,011	95
L 01652	0	CROSS LABORATORIES, INC.	DOM	17S	34E	36	N32° 47' 2.72"	W103° 31' 19.90"		4,009	
L 02724 S-4	2410	INTREPID MINING NM LLC	IND	17S	34E	36 3 3 3	N32° 47' 2.72"	W103° 31' 19.90"		4,009	
L 05003	0	BRAHANEY DRILLING CO	PRO	17S	34E	36 1	N32° 47' 28.89"	W103° 31' 19.89"	28-Nov-62	4,008	105
L 05003 (1)	0	BRAHANEY DRILLING COMPANY	PRO	17S	34E	36 1 4	N32° 47' 28.94"	W103° 31' 4.43"		4,006	
L 05003 (2) EXP	0	BRAHANEY DRILLING COMPANY	PRO	17S	34E	36 1 4	N32° 47' 28.94"	W103° 31' 4.43"		4,006	
L 05003 (3) EXP	0	BRAHANEY DRILLING COMPANY	PRO	17S	34E	36 1 4	N32° 47' 28.94"	W103° 31' 4.43"		4,006	
L 05003 (4) EXP	0	BRAHANEY DRILLING COMPANY	PRO	17S	34E	36 1 4	N32° 47' 28.94"	W103° 31' 4.43"		4,006	
L 05843 EXPL	0	KERMAC POTASH COMPANY	EXP	17S	34E	36 3	N32° 47' 2.72"	W103° 31' 19.90"	26-Jan-66	4,009	
L 06030	3	INC. TEXACO	PRO	17S	34E	36 3 3	N32° 47' 2.72"	W103° 31' 19.90"	05-Oct-66	4,009	102
L 05851 EXPL	0	KERMAC POTASH COMPANY	EXP	18S	34E	01 1	N32° 46' 36.30"	W103° 31' 19.69"	28-Jan-66	4,002	
L 06115	3	TEXACO INC	EXP	18S	34E	01 1 1 1	N32° 46' 49.35"	W103° 31' 19.80"	10-Mar-67	4,006	110
L 06115 EXPL				18S	34E	01 1 1 1	N32° 46' 49.35"	W103° 31' 19.80"	10-Mar-67	4,006	110

TABLE 1
WELL INFORMATION REPORT*
Chevron CVU #47 - (Ref #200060)

Well Number	Diversion ^A	Owner	Use	Twsp	Rng	Sec q q q	Latitude	Longitude	Date Measured	Surface Elevation ^B	Depth to Water (ft bgs)
L 10467	3	TEXACO E & P	SAN	18S	34E	01 1 2 2	N32° 46' 49.47"	W103° 31' 4.35"	01-Feb-95	3,999	115
L 04591	3	SHARP DRILLING COMPANY	PRO	18S	35E	05 2 4	N32° 46' 36.43"	W103° 28' 30.11"	01-Feb-61	3,954	75
L 04591 APPRO				18S	35E	05 2 4	N32° 46' 36.43"	W103° 28' 30.11"	01-Feb-61	3,954	75
L 04931	0	MOBIL OIL CORPORATION	SRO	18S	35E	05 2 1	N32° 46' 49.55"	W103° 28' 45.61"	07-Mar-81	3,963	70
L 05759	0	PHILLIPS PET CO.	PRO	18S	35E	05 1 3	N32° 46' 36.60"	W103° 29' 16.56"		3,970	
L 05523	0	MARCUM DRILLING COMPANY	PRO	18S	35E	06 2 3	N32° 46' 36.67"	W103° 29' 47.72"	07-Jan-65	3,983	85
L 10337	0	MARATHON OIL COMPANY	PRO	18S	35E	06 1 1 4	N32° 46' 49.83"	W103° 30' 17.99"	07-Jul-93	3,986	110
L 01644	0	CROSS LABORATORIES INC.	DOM	18S	34E	01 1 3 3	N32° 46' 10.18"	W103° 31' 19.51"		4,003	
L 04160		GACKLE DRILLING CO.	PRO	18S	34E	01 1 3 3	N32° 46' 10.18"	W103° 31' 19.51"	26-May-59	4,003	100
L 04160 APPRO				18S	34E	01 1 3 3	N32° 46' 10.18"	W103° 31' 19.51"	26-May-59	4,003	100
L 04250		CACTUS DRILLING CORP OF TEXAS	PRO	18S	35E	05 2 2	N32° 46' 10.38"	W103° 29' 16.56"	27-Aug-59	3,966	60
L 04250 APPRO				18S	35E	05 2 2	N32° 46' 10.38"	W103° 29' 16.56"	27-Aug-59	3,966	60
L 04664		HONDO DRILLING COMPANY	PRO	18S	35E	05 3 2	N32° 46' 23.45"	W103° 29' 1.06"	16-Jun-61	3,967	70
L 04664 APPRO				18S	35E	05 3 2	N32° 46' 23.45"	W103° 29' 1.06"	16-Jun-61	3,967	70
L 04796		INGHAM THOMPSON	PRO	18S	35E	06 3 4 4	N32° 46' 10.52"	W103° 30' 3.22"	25-Jan-62	3,984	95
L 04796 APPRO				18S	35E	06 3 4 4	N32° 46' 10.52"	W103° 30' 3.22"	25-Jan-62	3,984	95
L 05411	0	CAMAY DRILLING COMPANY	PRO	18S	35E	06 4 3	N32° 46' 10.47"	W103° 29' 47.66"	28-May-64	3,980	60

* = Data obtained from the New Mexico Office of the State Engineer Website (<http://waters.osc.state.nm.us> 7001/AVATERS/wr_RegisServlet) and USGS Database.

Shaded well information indicates well location shown on Figure 2

^A = in acre feet per annum

^B = Interpolated from USGS Topographical Map

IND = Industrial

STK = Livestock Watering

EXP = Exploration

PUB = Construction of Public Works

SRO = Secondary recovery of oil

SAN = Sanitary in conjunction with commercial use

POL = Pollution control well

OIL = Oil production

COM = Commercial

PRO = Prospecting or development of a natural resource

DOM = Domestic one household

(quarters are 1=NW, 2=NE, 3=SW, 4=SE)

(quarters are biggest to smallest - X Y are in Feet - UTM are in Meters)

Shaded area indicates wells not shown on Figure 2

TABLE 2
Summary of Excavation Soil Sample Laboratory Analytical Results
Chevron CVU #47 (Ref. #200060)

Soil Sample I.D.	Depth (feet)	Soil Status	Sample Date	PID Reading (ppm)	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethylbenzene (mg/Kg)	Total Xylenes (mg/Kg)	Total BTEX (mg/Kg)	TPH (as gasoline) (mg/Kg)	TPH (as diesel) (mg/Kg)	Total TPH (mg/Kg)	Chloride (mg/Kg)
WSWN-5	3	In Situ	15-Feb-06	--	--	--	--	--	--	<10.0	<10.0	<20.0	320
NSWW-3	3	In Situ	15-Feb-06	--	--	--	--	--	--	--	--	--	144
NSWE-3	3	In Situ	15-Feb-06	--	--	--	--	--	--	--	--	--	720
WSWS-3	3	In Situ	15-Feb-06	--	--	--	--	--	--	--	--	--	944
ESWN-3	3	In Situ	15-Feb-06	--	--	--	--	--	--	<10.0	<10.0	<20.0	29,191
ESWS-3	3	In Situ	15-Feb-06	--	--	--	--	--	--	--	--	--	9,757
SSWW-3	3	In Situ	15-Feb-06	--	--	--	--	--	--	--	--	--	1,280
SSWE-3	3	In Situ	15-Feb-06	--	--	--	--	--	--	<10.0	<10.0	<20.0	14,795
NMOCD Remedial Thresholds				100	10				50			1,000	250¹

¹ *Bolded values are in excess of NMOCD Remediation Thresholds*

² -- = Not Analyzed

³ Chloride residuals may not be capable of impacting local groundwater above the NMWQCC standards of 250 mg/L

TABLE 3
Summary of Soil Boring Laboratory Analytical Results

Chevron - CVU #47 (Ref. #200060)															
Soil Sample I.D.	Depth (feet)	Soil Status	Sample Date	PID Reading (ppm)	Field Chloride (mg/Kg)	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethylbenzene (mg/Kg)	Total Xylenes (mg/Kg)	Total BTEX (mg/Kg)	TPH (as gasoline) (mg/Kg)	TPH (as diesel) (mg/Kg)	Total TPH (mg/Kg)	Chloride (mg/Kg)	Sulfate (mg/Kg)
SB-1	10 to 11	In Situ	09-Feb-06	--	560	0.006	0.007	0.007	0.021	0.041	<10.0	<10.0	<20.0	432	---
	15 to 16	In Situ	09-Feb-06	---	480	---	---	---	---	---	---	---	---	352	---
	20 to 21	In Situ	09-Feb-06	---	560	---	---	---	---	---	---	---	---	512	---
	25 to 26	In Situ	09-Feb-06	---	400	---	---	---	---	---	---	---	---	336	---
	30 to 31	In Situ	09-Feb-06	---	480	<0.005	<0.005	<0.005	<0.015	<0.03	<10.0	<10.0	<20.0	352	---
	35 to 36	In Situ	09-Feb-06	---	400	---	---	---	---	---	---	---	---	352	---
	40 to 41	In Situ	09-Feb-06	---	320	---	---	---	---	---	---	---	---	256	---
	45 to 46	In Situ	09-Feb-06	---	200	---	---	---	---	---	---	---	---	112	---
	50 to 51	In Situ	09-Feb-06	---	160	<0.005	<0.005	<0.005	<0.015	<0.03	<10.0	<10.0	<20.0	64	---
	10 to 11	In Situ	10-Feb-06	---	4,000+	<0.005	<0.005	<0.005	<0.015	<0.03	<10.0	<10.0	<20.0	10,397	---
SB-2	15 to 16	In Situ	10-Feb-06	---	2,000	---	---	---	---	---	---	---	---	1,951	---
	20 to 21	In Situ	10-Feb-06	---	800	---	---	---	---	---	---	---	---	640	---
	25 to 26	In Situ	10-Feb-06	---	480	---	---	---	---	---	---	---	---	320	---
	30 to 31	In Situ	10-Feb-06	---	320	---	---	---	---	---	---	---	---	176	---
	35 to 36	In Situ	10-Feb-06	---	200	---	---	---	---	---	---	---	---	64	---
	40 to 41	In Situ	10-Feb-06	---	200	<0.005	<0.005	<0.005	<0.015	<0.03	<10.0	<10.0	<20.0	80	---
NMOCD Remedial Thresholds				100		10			50			1,000	250 ³	650 ³	

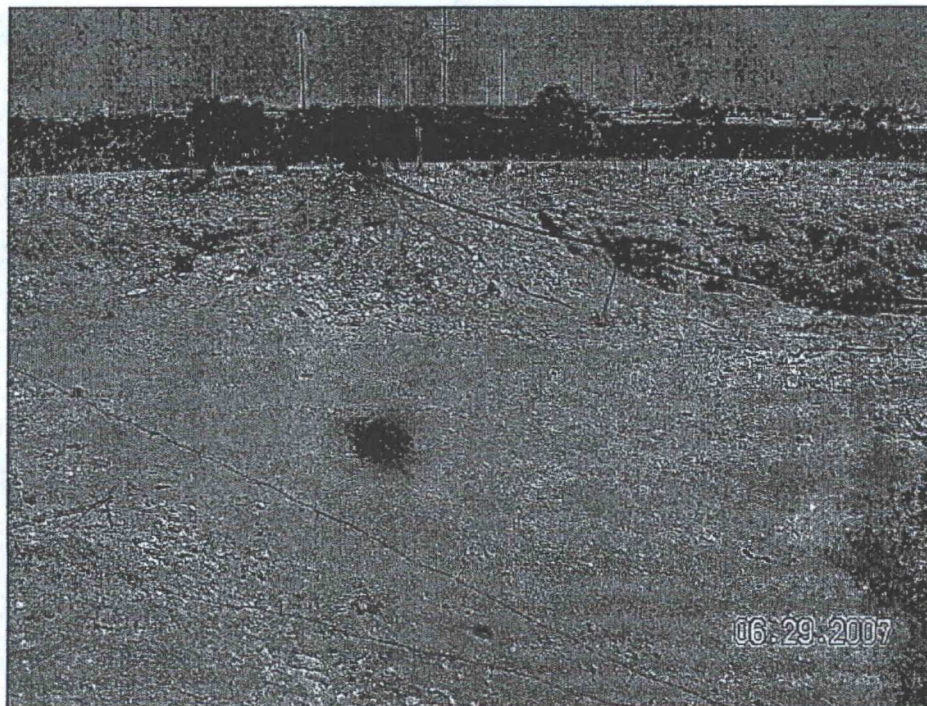
¹ Bolded values are in excess of NMOCD Remediation Thresholds and/or NMWQCC groundwater standards

² -- = Not Analyzed

³ Chloride and sulfate residuals may not be capable of impacting local groundwater above the NMWQCC standards of 250 mg/L and 650 mg/L, respectively



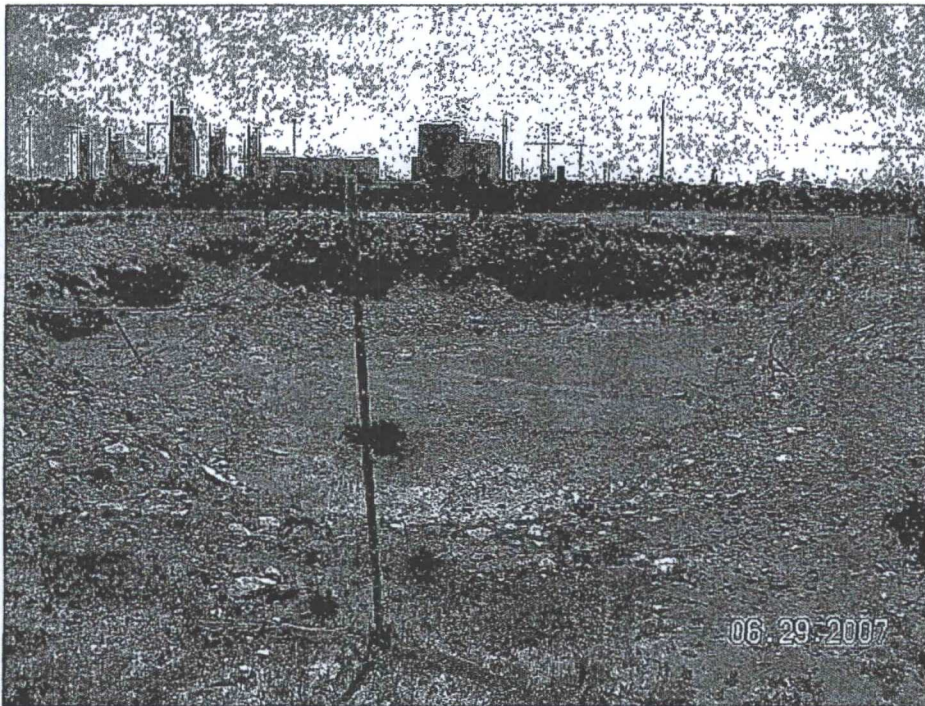
Photograph No. 1 – Lease Sign



Photograph No. 2 – Looking northwesterly at excavation, pipeline and lease road



Photograph No. 3 – Looking northerly at excavation



Photograph No. 4 – Looking northeasterly at excavation and tank battery



ARDINAL LABORATORIES

PHONE (325) 673-7001 • 2111 BEECHWOOD • ABILENE, TX 79603

PHONE (505) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

ANALYTICAL RESULTS FOR
ENVIRONMENTAL PLUS, INC.
ATTN: PAT McCASLAND
P.O. BOX 1558
EUNICE, NM 88231
FAX TO: (505) 394-2601

Receiving Date: 02/16/06
Reporting Date: 02/21/06
Project Owner: CHEVRON USA (#200060)
Project Name: CVU #47 PIT
Project Location: NOT GIVEN

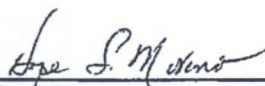
Analysis Date: 02/20/06
Sampling Date: 02/15/06
Sample Type: SOIL
Sample Condition: COOL & INTACT
Sample Received By: BC
Analyzed By: HM

LAB NUMBER	SAMPLE ID	Cl ⁻ (mg/Kg)
H10755-1	WSWN-5	320
H10755-2	NSWW-3	144
H10755-3	NSWE-3	720
H10755-4	WSWS-3	944
H10755-5	ESWN-3	29191
H10755-6	ESWS-3	9757
H10755-7	SSWW-3	1280
H10755-8	SSWE-3	14795
Quality Control		500
True Value QC		500
% Recovery		100
Relative Percent Difference		2.0

METHOD: Standard Methods

4500-Cl⁻B

NOTE: Analyses performed on 1:4 w:v aqueous extracts.


Chemist

02-21-06
Date

H10755



ARDINAL LABORATORIES

PHONE (325) 673-7001 • 2111 BEECHWOOD • ABILENE, TX 79603

PHONE (505) 393-2326 • 101 E MARLAND • HOBBS, NM 88240

ANALYTICAL RESULTS FOR
ENVIRONMENTAL PLUS, INC.
ATTN: PAT McCASLAND
P.O. BOX 1558
EUNICE, NM 88231
FAX TO: (505) 394-2601

Receiving Date: 02/16/05
Reporting Date: 02/22/06
Project Number: CHEVRON USA (#200060)
Project Name: CVU #47 PIT
Project Location: NOT GIVEN

Sampling Date: 02/15/06
Sample Type: SOIL
Sample Condition: COOL & INTACT
Sample Received By: BC
Analyzed By: BC

LAB NUMBER	SAMPLE ID	GRO	DRO
		(C ₆ -C ₁₀) (mg/Kg)	(>C ₁₀ -C ₂₈) (mg/Kg)
ANALYSIS DATE:		02/21/06	02/21/06
H10755-1	WSWN-5	<10.0	<10.0
H10755-5	ESWN-3	<10.0	<10.0
H10755-8	SSWE-3	<10.0	<10.0
Quality Control		778	787
True Value QC		800	800
% Recovery		97.2	98.4
Relative Percent Difference		3.0	1.5

METHOD: SW-846 8015 M


Chemist

2/22/06
Date

H10755A.XLS

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Cardinal Laboratories Inc.

101 East Marland, Hobbs, NM 88240
505-393-2326 Fax 505-393-2476

2111 Beechwood, Abilene, TX 79603
915-673-7001 Fax 915-673-7020

1 of 1

Company Name Environmental Plus, Inc.		Bill To		ANALYSIS REQUEST	
EPI Project Manager Pat McCasland		Chevron USA			
Mailing Address P.O. BOX 1558		HCR 60 Box 423			
City, State, Zip Eunice New Mexico 88231		Lovington, NM 88260			
EPI Phone#/Fax# 505-394-3481 / 505-394-2601		Attention: Mr. Larry Ridenour			
Client Company Chevron USA					
Facility Name CVU #47 Pit					
Project Reference #200060					
EPI Sampler Name David Robinson					

LAB I.D.	SAMPLE I.D.	MATRIX				PRESERV.			SAMPLING		TIME	BTEX 8021B	TPH 8015M	CHLORIDES (Cl)	SULFATES (SO ₄)	pH	TCLP	OTHER >>>	
		GROUND WATER	WASTEWATER	SOIL	CRUDE OIL	SLUDGE	OTHER:	ACID/BASE	ICE/COOL	OTHER									DATE
110755-1	WSWN-5			X							2/15/06	9:15 AM	X	X					
-22	NSWW-3			X							2/15/06	10:15 AM		X					
-33	NSWE-3			X							2/15/06	10:20 AM		X					
-44	WSWS-3			X							2/15/06	10:25 AM		X					
-55	ESWN-3			X							2/15/06	10:30 AM	X	X					
-66	ESWS-3			X							2/15/06	10:35 AM		X					
-77	SSWW-3			X							2/15/06	10:40 AM		X					
-88	SSWE-3			X							2/15/06	10:45 AM	X	X					
9																			
10																			

Sampler Relinquished:		Received By:	
Date: 2-16-06 Time: 9:53		Date: 2-15-06 Time: 12:50	
Relinquished by: <i>David Robinson</i>		Received By: (lab staff) <i>Jason Boone</i>	
Delivered by: <i>Jason Boone</i>		Checked By: <i>Jason Boone</i>	
Sample Cool & Intact		Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	

Fax Results To Pat McCasland - EPI @ 505-394-2601
REMARKS: CoC requested.
X - If TPH is detected above 100 mg/Kg, analyze the sample for BTEX.



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PHONE (505) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

ANALYTICAL RESULTS FOR ENVIRONMENTAL PLUS, INC.

ATTN: PAT McCASLAND

P.O. BOX 1558

EUNICE, NM 88231

FAX TO: (505) 394-2601

Receiving Date: 02/13/06

Reporting Date: 02/14/06

Project Owner: CHEVRON USA (#200060)

Project Name: CVU #47 PIT

Project Location: NOT GIVEN

Analysis Date: 02/13/06

Sampling Date: 02/09 & 02/10/06

Sample Type: SOIL

Sample Condition: COOL & INTACT

Sample Received By: HM

Analyzed By: HM

LAB NUMBER	SAMPLE ID	Cl ⁻
		(mg/Kg)
H10733-1	SB-1 10-11	432
H10733-2	SB-1 15-16	352
H10733-3	SB-1 20-21	512
H10733-4	SB-1 25-26	336
H10733-5	SB-1 30-31	352
H10733-6	SB-1 35-36	352
H10733-7	SB-1 40-41	256
H10733-8	SB-1 45-46	112
H10733-9	SB-1 50-51	64
H10733-10	SB-2 10-11	10397
H10733-11	SB-2 15-16	1951
H10733-12	SB-2 20-21	640
H10733-13	SB-2 25-26	320
H10733-14	SB-2 30-31	176
H10733-15	SB-2 35-36	64
H10733-16	SB-2 40-41	80
Quality Control		510
True Value QC		500
% Recovery		102
Relative Percent Difference		0.00

METHOD: Standard Methods

4500-Cl⁻B

NOTE: Analyses performed on 1:4 w:v aqueous extracts.

Hope S. Maden
Chemist

02-14-06
Date

H10733



ARDINAL LABORATORIES

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PHONE (505) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

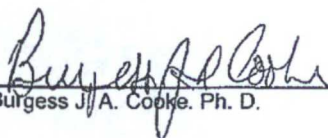
ANALYTICAL RESULTS FOR
ENVIRONMENTAL PLUS, INC.
ATTN: PAT McCASLAND
P.O. BOX 1558
EUNICE, NM 88231
FAX TO: (505) 394-2601

Receiving Date: 02/13/06
Reporting Date: 02/14/06
Project Owner: CHEVRON USA (#200060)
Project Name: CVU #47 PIT
Project Location: NOT GIVEN

Sampling Date: 02/09 & 02/10/06
Sample Type: SOIL
Sample Condition: COOL & INTACT
Sample Received By: HM
Analyzed By: BC

LAB NUMBER	SAMPLE ID	GRO (C ₆ -C ₁₀) (mg/Kg)	DRO (>C ₁₀ -C ₂₈) (mg/Kg)	BENZENE (mg/Kg)	TOLUENE (mg/Kg)	ETHYL BENZENE (mg/Kg)	TOTAL XYLENES (mg/Kg)
ANALYSIS DATE:		02/13/06	02/13/06	02/13/06	02/13/06	02/13/06	02/13/06
H10733-1	SP-1 10-11	<10.0	<10.0	0.006	0.007	0.007	0.021
H10733-5	SP-1 30-31	<10.0	<10.0	<0.005	<0.005	<0.005	<0.015
H10733-9	SP-1 50-51	<10.0	<10.0	<0.005	<0.005	<0.005	<0.015
H10733-10	SP-2 10-11	<10.0	<10.0	<0.005	<0.005	<0.005	<0.015
H10733-16	SP-2 40-41	<10.0	<10.0	<0.005	<0.005	<0.005	<0.015
Quality Control		730	780	0.101	0.098	0.097	0.265
True Value QC		800	800	0.100	0.100	0.100	0.300
% Recovery		91.2	97.5	101	98.1	96.8	95.3
Relative Percent Difference		7.3	4.0	5.9	2.8	5.0	3.0

METHODS: TPH GRO & DRO - EPA SW-846 8015 M; BTEX - SW-846 8260.


Burgess J. A. Cooke, Ph. D.

2/14/06
Date

H10733A.XLS

PLEASE NOTE Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above-stated reasons or otherwise.

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2111 Beechwood, Abilene, TX 79603
915-673-7001 Fax 915-673-7020

1 of 2

Company Name		Environmental Plus, Inc.		Bill To		ANALYSIS REQUEST															
EPI Project Manager		Pat McCasland		Chevron USA		HCR															
Mailing Address		P.O. BOX 1558		60 Box 423																	
City, State, Zip		Eunice New Mexico 88231		Lovington, NM 88260																	
EPI Phone#/Fax#		505-394-3481 / 505-394-2601		Attention: Mr. Larry Ridenour																	
Client Company		Chevron USA																			
Facility Name		CVU #47 Pit																			
Project Reference		#200060																			
EPI Sampler Name		George Blackburn																			

LAB I.D.	SAMPLE I.D.	# CONTAINERS	MATRIX				PRESERV.			SAMPLING		TIME	BTX 8021B	TPH 8016M	CHLORIDES (Cl ⁻)	SULFATES (SO ₄ ²⁻)	PH	TCLP	OTHER >>>	
			GROUND WATER	WASTEWATER	SOIL	CRUDE OIL	SLUDGE	OTHER:	ACID/BASE	ICE/COOL	OTHER									DATE
10733 - 1	SB-1 10-11	G 1			X							2/9/06	4:40 PM	X	X					
- 2	SB-1 15-16	G 1			X							2/9/06	4:45 PM	X	X					
- 3	SB-1 20-21	G 1			X							2/9/06	4:50 PM		X					
- 4	SB-1 25-26	G 1			X							2/9/06	4:55 PM		X					
- 5	SB-1 30-31	G 1			X							2/9/06	5:00 PM	X	X					
- 6	SB-1 35-36	G 1			X							2/9/06	5:05 PM		X					
- 7	SB-1 40-41	G 1			X							2/9/06	5:10 PM		X					
- 8	SB-1 45-46	G 1			X							2/9/06	5:15 PM		X					
- 9	SB-1 50-51	G 1			X							2/9/06	5:20 PM	X	X					
10																				

Sampler Relinquished by: <i>Pat McCasland</i>		Date: 2-13-06	Received By: <i>Pat McCasland</i>
Relinquished by: <i>Pat McCasland</i>		Time: 2:47	Received By: (lab staff)
Delivered by: <i>Pat McCasland</i>		Date: 2-13-06	Received By: <i>Pat McCasland</i>
		Time: 11:25	Received By: <i>Pat McCasland</i>
Sample Cool & Intact		Checked By:	
Res No			

Fax Results To Pat McCasland - EPI @ 505-394-2601
REMARKS: Chain of custody requested. Send original reports to Pat McCasland - EPI.

Cardinal Laboratories Inc.

101 East Marland, Hobbs, NM 88240
505-393-2326 Fax 505-393-2476

2111 Beechwood, Abilene, TX 79603
915-673-7001 Fax 915-673-7020

2 of 2

Company Name		Environmental Plus, Inc.	
EPI Project Manager		Pat McCasland	
Mailing Address		P.O. BOX 1558	
City, State, Zip		Eunice New Mexico 88231	
EPI Phone#/Fax#		505-394-3481 / 505-394-2601	
Client Company		Chevron USA	
Facility Name		CVU #47 Pit	
Project Reference		#200060	
EPI Sampler Name		George Blackburn	

Chevron USA HCR 60 Box 423 Lovington, NM 88260 Attention: Mr. Larry Ridenour	
---	--

LAB I.D.	SAMPLE I.D.	MATRIX				PRESERV.			SAMPLING		ANALYSIS REQUEST									
		GROUND WATER	WASTEWATER	SOIL	CRUDE OIL	SLUDGE	OTHER:	ACID/BASE	ICE/COOL	OTHER	DATE	TIME	BTEX 8021B	TPH 8015M	CHLORIDES (Cl)	SULFATES (SO ₄)	pH	TCLP	OTHER >>>	
10733	SB-2 10-11	G	1	X							2/10/06	8:05 AM	X	X	X					
114	SB-2 15-16	G	1	X							2/10/06	8:18 AM	X	X	X					
123	SB-2 20-21	G	1	X							2/10/06	8:22 AM	X	X	X					
134	SB-2 25-26	G	1	X							2/10/06	8:31 AM	X	X	X					
145	SB-2 30-31	G	1	X							2/10/06	8:40 AM	X	X	X					
156	SB-2 35-36	G	1	X							2/10/06	8:47 AM	X	X	X					
167	SB-2 40-41	G	1	X							2/10/06	8:53 AM	X	X	X					
8																				
9																				
10																				

Sampler Relinquished:	Date	Received By:
<i>Pat McCasland</i>	2/13/06	<i>Arnon Boone</i>
Relinquished by:	Time	Received By: (lab staff)
<i>Arnon Boone</i>	2:47	<i>Hope S. Manno</i>
Delivered by:	Date	Sample Cool & Intact
	2/13/06	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
	Time	Checked By:
	1:25	

Fax Results To Pat McCasland - EPI @ 505-394-2601

REMARKS: Chain of custody requested. Send original reports to Pat McCasland - EPI.

Log Of Test Borings

(NOTE - Page 1 of 2)



ENVIRONMENTAL PLUS, INC.
CONSULTING AND
REMEDIAL CONSTRUCTION
EUNICE, NEW MEXICO
505-394-3481

Project Number: 200060

Project Name: Chevron - CVU #47H

Location: UL-A, Section 31, Township 17 South, Range 35 East

Boring Number: SB-1

Surface Elevation: 3,973-feet amsl

Time	Sample Type	Recovery (inches)	Moisture	PID Readings (ppm)	Chloride Analysis (mg/Kg)	U.S.C.S. Symbol	Depth (feet)	Start Date: 2-9-06 Time: hrs	Completion Date: 2-9-06 Time: hrs	Description
							5			
					432		10			10' SAND - fine, tan/Sandstone/Caliche
							15			15' SAND - fine, tan/Sandstone
					352					
							20			20' SAND - fine, tan/Sandstone
					512					
							25			25' SAND - fine, tan/Sandstone
					336					
							30			30' SAND - fine, tan/Sandstone
					352					
							35			35' SAND - fine, tan
					352					

(NOTE - Page 2 of 2)



Surface Elevation: 3,973-feet amsl

Time	Sample Type	Recovery (Inches)	Moisture	PID Readings (ppm)	Chloride Analysis (mg/Kg)	U.S.C.S. Symbol	Depth (feet)	Description
					256		40	40' SAND - fine, tan
					112		45	45' SAND - fine, tan
					64		50	50' SAND - fine, tan End of Soil Boring at 51' bgs
							55	
							60	
							65	

Water Level Measurements (feet)

Date	Time	Sample Depth	Casing Depth	Cave-In Depth	Water Level	Drilling Method:	Backfill Method:	Field Representative:
-	-	-	-	-	-	Straub	Bentonite	GB

Log Of Test Borings

(NOTE - Page 1 of 2)



ENVIRONMENTAL PLUS, INC.
CONSULTING AND
REMEDIAL CONSTRUCTION
EUNICE, NEW MEXICO
505-394-3481

Project Number: 200060

Project Name: Chevron - CVU #47H

Location: UL-A, Section 31, Township 17 South, Range 35 East

Boring Number: SB-2

Surface Elevation: 3,973-feet amsl

Time	Sample Type	Recovery (inches)	Moisture	PID Readings (ppm)	Chloride Analysis (mg/Kg)	U.S.C.S. Symbol	Depth (feet)	Start Date: 2-10-06 Time: hrs	Completion Date: 2-10-06 Time: hrs	Description
							5			
					10,397		10			10' SAND - fine, tan/Sandstone/Caliche
					1,951		15			15' SAND - fine, tan/Sandstone
					640		20			20' SAND - fine, tan/Sandstone
					320		25			25' SAND - fine, tan/Sandstone
					176		30			30' SAND - fine, tan/Sandstone
					64		35			35' SAND - fine, tan/Sandstone

Log Of Test Borings

(NOTE - Page 2 of 2)



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EUNICE, NEW MEXICO
505-394-3481

Project Number: 200060

Project Name: Chevron - CVU #47H

Location: UL-A, Section 31, Township 17 South, Range 35 East

Boring Number: SB-2

Surface Elevation: 3,973-feet amsl

Time	Sample Type	Recovery (inches)	Moisture	PID Readings (ppm)	Chloride Analysis (mg/Kg)	U.S.C.S. Symbol	Depth (feet)	Start Date: 2-10-06 Time: hrs	Completion Date: 2-10-06 Time: hrs	Description
					80		40			40' SAND - fine, tan/Sandstone
							45			End of Soil Boring at 41' bgs
							50			
							55			
							60			
							65			

Water Level Measurements (feet)						Drilling Method: Straub
Date	Time	Sample Depth	Casing Depth	Cave-In Depth	Water Level	Backfill Method: Bentonite
-	-	-	-	-	-	Field Representative: GB
-	-	-	-	-	-	
-	-	-	-	-	-	

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 ☒

INITIAL
PROPOSAL

Operator Chevron USA		Telephone 505.396.4414		e-mail address lridenour@chevrontexaco.com	
Address. PO Box 1949 2401 Avenue O Eunice, New Mexico 88231					
Facility or well name. CVU #47		API #		Unit Letter (UL) A Qtr/Qtr. NE¼ NE¼ Section. 31, T17S, R35E	
County. Lea		Latitude 32°47'49.11"N Longitude. 103°29'26.32"W		NAD: 1927 <input type="checkbox"/> 1983 <input type="checkbox"/> WGS 84 <input checked="" type="checkbox"/>	
Surface Owner Federal <input type="checkbox"/> State <input checked="" type="checkbox"/> Private <input type="checkbox"/> Indian <input type="checkbox"/>					
Pit			Below-grade tank		
Type. Drilling <input checked="" type="checkbox"/> Production <input type="checkbox"/> Disposal <input type="checkbox"/> Workover <input type="checkbox"/> Emergency <input type="checkbox"/>			Volume. bbl Type of fluid		
Lined <input checked="" type="checkbox"/> Unlined <input type="checkbox"/>			Construction material		
Liner type. Synthetic <input checked="" type="checkbox"/> Thickness 12 mil Clay <input type="checkbox"/>			Double-walled, with leak detection? Yes <input type="checkbox"/> If not, explain why not.		
Pit Volume ~3,000 bbl					
Depth to ground water (vertical distance from bottom of pit to seasonal high water elevation of ground water) ~87bgs			Less than 50 feet		(20 points) <input type="checkbox"/>
			50 feet or more, but less than 100 feet		(10 points) <input checked="" type="checkbox"/>
			100 feet or more		(0 points) <input type="checkbox"/>
Wellhead protection area. (Less than 200 feet from a private domestic water source, or less than 1000 feet from all other water sources.)			Yes		(20 points) <input checked="" type="checkbox"/>
			No		(0 points) <input type="checkbox"/>
Distance to surface water: (horizontal distance to all wetlands, playas, irrigation canals, ditches, and perennial and ephemeral watercourses)			Less than 200 feet		(20 points) <input type="checkbox"/>
			200 feet or more, but less than 1,000 feet		(10 points) <input type="checkbox"/>
			1,000 feet or more		(0 points) <input checked="" type="checkbox"/>
Ranking Score (Total Points)			30		

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 you are burying in place) onsite ☐ offsite ☒ If offsite, name of facility CRI. (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. It is proposed to close this pit consistent with the "ChevronTexaco Drilling and Reserve Pit Closure General Plan, December 2004" and the NMOCD Pit and Below-Grade Tank Guidelines, November 1, 2004 as promulgated under NMOCD Rule 50 (19 15 2.50 NMAC)

Pit Status. Liner intact ☒ Liner punctured or torn ☐

Method of Closure Contents will be stiffen and hauled to disposal facility Excavation will be tested to confirm acceptable concentrations of TPH, BTEX, and Chloride, then backfilled with soil, contured and reseeded.

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 will be closed according to NMOCD guidelines ☒, a general permit ☒, or an (attached) alternative OCD-approved plan ☐.

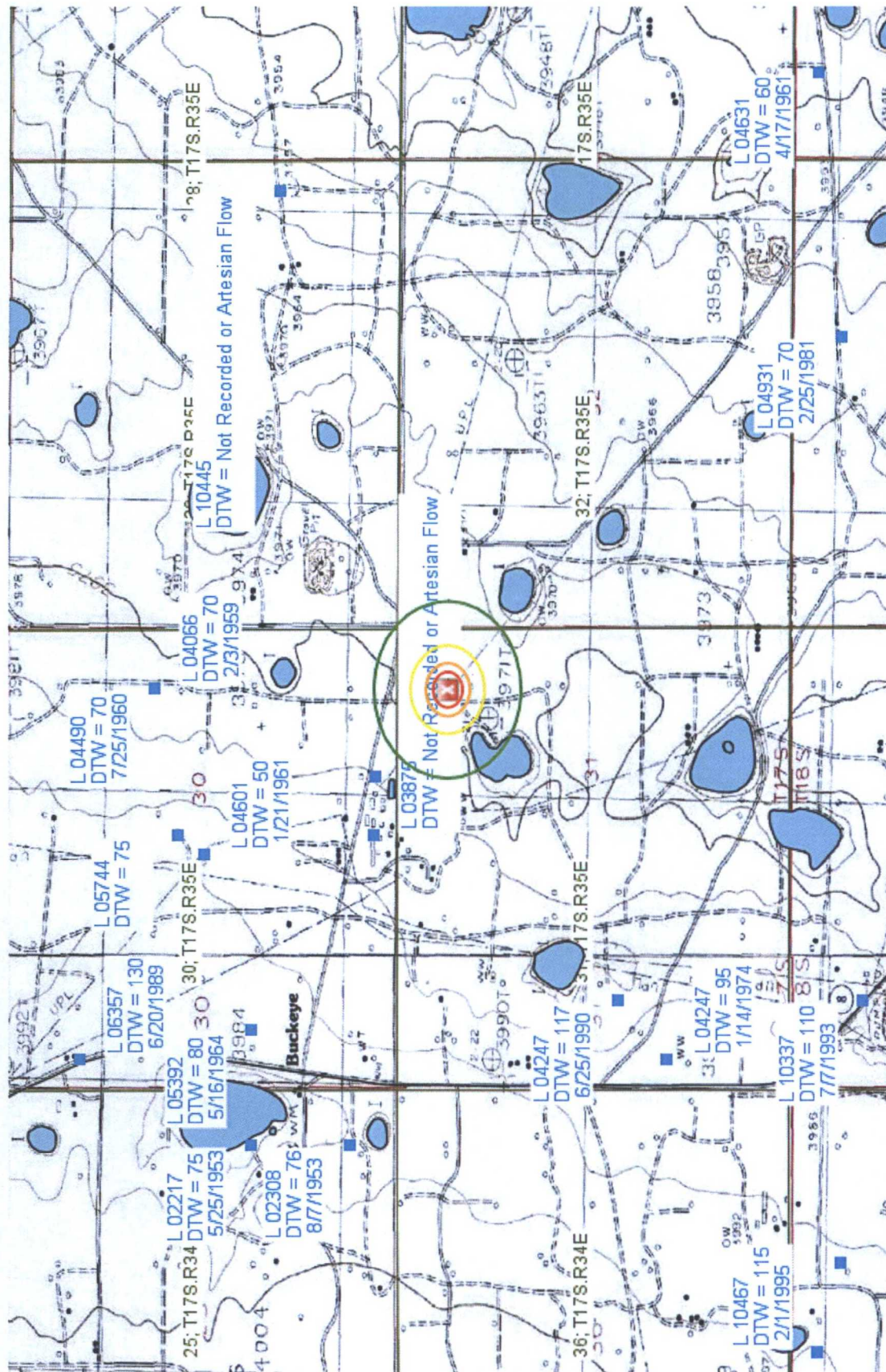
Date. Printed Name/Title Larry Ridenour, Facilities Representative Signature

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 L. Johnson - Enviro Engr Signature Date 7-11-07

* REMOVE 'HOT SPOT' IN SB-2, REMOVE 'HOT WATER' AREAS
* RE-SUBMIT CLOSURE PROPOSAL BY 9.17.07



Distance (ft): 0 200 300 500 1000



0 1000 2000ft

Petroleum Recovery Research Center

Vacuum #47H

Figure:

Client name/project name

Dec 03, 2010