

**CORRESPONDENCE**

**MISC.**

**ENTRIX, Inc.**

5252 Westchester, Suite 250  
Houston TX 77005  
(713) 666-6223  
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*Since 1984 - Environmental Excellence*

May 17, 2000

Ms. Donna Williams  
Environmental Engineer Specialist  
State of New Mexico Oil Conservation Division  
1625 N. French Drive  
Hobbs, New Mexico 88240

Re: Site #LF37 Closure Investigation Report Summary  
ENTRIX Project No. 4665012

Dear Ms. Williams:

On behalf of EOTT Energy Corporation (EOTT), ENTRIX, Inc. (ENTRIX) is presenting a Closure Investigation Report Summary on the field activities that have taken place at Site #LF37.

### **Release Occurrence**

On May 4, 1999 at approximately 3:00 PM, a crude oil leak was reported at Site #LF37. Initial observations indicated that 5 barrels of crude oil leaked into the surrounding soil and groundwater due to corrosion of underground piping. The New Mexico Oil Conservation Division (NMOCD) was notified of the release by Lennah Frost of EOTT on May 4, 1999 at 4:30 PM.

### **Spill Response Actions**

Following the initial investigation into the release, it was determined that the EOTT 6" gathering line had developed a leak due to corrosion. EOTT contracted with Allstate Services of Midland, Texas to excavate all contaminated soil and backfill with clean soil. Allstate Services hauled approximately 2,000 cubic yards of crude oil contaminated soil from the referenced site and remaining contaminated soil was stockpiled on site and treated in-situ to reduce the levels of TPH to <100ppm, BTEX to <50 ppm, and benzene to <10ppm.

### **Verification of Closure Activities**

EOTT contracted with Environmental Plus of Eunice, New Mexico in March 2000 to verify the previous closure activities. Environmental Plus advanced nine borings to confirm the presence of clean soil and groundwater in the former excavation pit at Site #LF37. A summary of their field investigation is presented below:

LLLL  
LLLL  
LLLL  
LLLL

Ms. Donna Williams

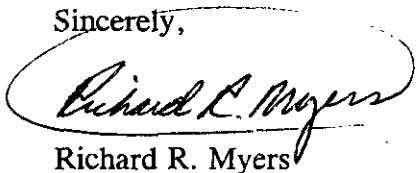
May 17, 2000

Page 2

- Groundwater was encountered in borings at a depth of 16 to 22 feet below ground surface.
- Three borings, BH1, BH4, and BH7 were abandoned as a siliceous sandstone layer was encountered at a depth of 10 to 15 feet below ground surface.
- Free phase hydrocarbon was observed in the groundwater from borings BH2, BH3, BH5, and BH6.
- Groundwater samples from BH2, BH3, and BH6 were below the New Mexico Water Quality Control Commission Ground Water Standards for benzene (<0.01 mg/L), toluene (0.75 mg/L), ethylbenzene (0.75 mg/L), and xylene (0.62 mg/L). Benzene was detected at the standard of 0.01 mg/L in the groundwater sample from boring BH5.
- Boring BH3 is located near the leak origin in the center of the previously backfilled excavation. Elevated concentrations of TPH-Diesel Range Organics (DRO) were detected in the soil from this boring. Concentrations ranged from 17 ppm to 618 ppm, which was located in soil above the soil groundwater interface.
- Backfill material from borings BH2, BH3, BH5, and BH6 had concentrations of TPH above 100 ppm and were within 50 feet of groundwater. The NMOCD closure requirements for soil are <100 ppm for soil in this proximity to groundwater.
- No clay cap was observed in any of the borings advanced.

We are assessing the data and will present you with an amended Stage 2 Abatement Plan following our review. If you have any questions on the information presented in this letter, please contact me or Glenn Waldrop.

Sincerely,



Richard R. Myers  
Project Manager

cc: William Olson-NMOCD

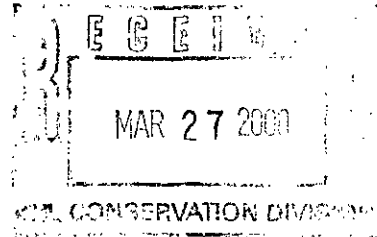
# **EOTT ENERGY Pipeline Limited Partnership**

P.O. BOX 1660  
5805 E. BUSINESS 20  
MIDLAND, TEXAS 79702  
(915) 682-3761

**Via Certified Mail**

**Return Receipt Requested - Z 471 136 379**

March 22, 2000



State of New Mexico  
Oil Conservation Division - Hobbs District Office  
1625 N. French Dr.  
Hobbs, NM 88240  
Attn: Donna Williams

**RE: UL L - Sec. 32, T-19-S, R-37-E  
EOTT Leak # TNM-LF-37  
Lea Co., NM**

Dear Ms. Williams:

As per your letters dated February 11 and 17, 2000, enclosed please find EOTT Energy's Remediation Status Report and Additional Subsurface Investigation Results on the above captioned leaksite(s). EOTT is treating the two leaks as one leaksite for remediation purposes. The attached report addresses all concerns of the NMOCD as outlined in your letter.

EOTT believes that additional subsurface investigation may be required to define possible old contamination from a previous Texas New Mexico pipeline leak at this site. It is possible that we are dealing with two separate incidents at this site, one prior to our acquisition of the site and the one we are cleaning up now.

Additional information will be forthcoming upon completion of further investigation. I hope all meets with your approval but if you have any questions, please don't hesitate to call me at

Sincerely,

Lennah Frost  
Sr. Environmental Engineer

cc: Environmental File  
William Olson - NMOCD - Santa Fe w/attachments ✓



State of New Mexico  
ENERGY MINERALS and NATURAL RESOURCES DEPARTMENT  
Santa Fe, New Mexico 87505

STATE OF  
NEW MEXICO  
OIL  
CONSERVATION  
DIVISION

MEMORANDUM OF MEETING OR CONVERSATION

☒ Telephone

☐ Personal

Time 0715

Date 3/21/00

Originating Party

Wayne Brunette - EOTT

Other Parties

Bill Olson - Envir. Bureau  
(voice mail)

Subject

Monument 6" line - LF-37 site

Discussion

Found product on water in borings

Conclusions or Agreements

Will followup with written notification

Distribution

File  
OCD Hobbs Office

Signed

Bill Olson

**Olson, William**

**From:** Olson, William  
**Sent:** Friday, March 17, 2000 3:26 PM  
**To:** 'Glenn\_Waldrop@eott.com'  
**Subject:** RE: PROPOSED WORK PLAN FOR EOTT SITE LF-37

Attached is a copy of the OCD's approval of the proposed work plan. The official hard copy has been sent to you in the mail. I will be in Hobbs on other business on Monday and Tuesday next week. If I get time I'll stop by the site. If you have any questions, let me know by email or at (505) 827-7154.



INV1.DOC

**From:** Glenn\_Waldrop@eott.com [SMTP:Glenn\_Waldrop@eott.com]

**Sent:** Friday, March 17, 2000 8:54 AM

**To:** Olson, William

**Cc:** Williams, Donna

**Subject:** PROPOSED WORK PLAN FOR EOTT SITE LF-37

**Importance:** High

Bill, I am sending you a copy of our proposal to conduct additional investigation on the site on state land known as LF-37, Monument 6". We are scheduled to begin this investigation on Monday, March 20. We have also contacted Donna Williams in Hobbs. Wayne Brunette will be the EOTT representative on site to conduct the activities. Should you have any questions please feel free to contact me at (915) 684-3453 or Wayne at (915) 556-0190. We appreciate your cooperation on this matter.

Respectfully,

Glenn E. Waldrop  
EOTT Energy

(See attached file: LF37PjP2.doc)<<File: LF37PjP2.doc>>



STATE OF NEW MEXICO  
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION  
2040 S. PACHECO  
SANTA FE, NEW MEXICO 87505  
(505) 827-7131

March 17, 2000

**CERTIFIED MAIL**  
**RETURN RECEIPT NO: Z-559-572-909**

Mr. Glenn Waldrop  
EOTT Energy Pipeline Limited Partnership  
P.O. Box 1660  
Midland, Texas 79702

**RE: SPILL SITE LF-37  
MONUMENT 6" LINE  
MONUMENT, NEW MEXICO**

Dear Mr. Waldrop:

The New Mexico Oil Conservation Division (OCD) has reviewed EOTT Energy Pipeline Limited Partnership's (EOTT) March 17, 2000 email and March 13, 2000 "E.O.T.T. ENERGY PIPELINE PROJECT PLAN (PJP), TO VERIFY CLOSURE DOCUMENTATION AT SITE #LF37, MONUMENT 6 INCH GATHERING LINE". This document contains EOTT's proposed work plan for additional investigation of the extent of soil and ground water contamination related to a crude oil pipeline spill at the LF-37 Monument 6" Line site located in Section 19, Township 19 South, Range 37 East, Lea County, New Mexico.

The above referenced work plan is approved with the following conditions:

1. Due to the prior discovery of oil on ground water at the site, EOTT shall install the proposed monitor well in the center of the excavation as a permanent monitor well.
2. EOTT shall install an additional permanent monitor well outside of and directly downgradient of the excavated area to demonstrate that contaminated ground water has not migrated from the spill site.
3. EOTT shall complete all monitor wells as follows:
  - a. At least 15 feet of well screen shall be placed across the water table interface with 5 feet of the well screen above the water table and 10 feet of the well screen below the water table.

- b. An appropriately sized gravel pack shall be set in the annulus around the well screen from the bottom of the hole to 2-3 feet above the top of the well screen.
  - c. A 2-3 foot bentonite plug shall be placed above the gravel pack.
  - d. The remainder of the hole shall be grouted to the surface with cement containing 3-5% bentonite.
  - e. A concrete pad and locking well cover shall be placed around the well at the surface.
  - f. The well shall be developed after construction using EPA approved procedures.
4. No less than 24 hours after the wells are developed, ground water from all monitor wells and the adjacent windmill shall be purged, sampled and analyzed for concentrations of benzene, toluene, ethylbenzene, xylene and polycyclic aromatic hydrocarbons (PAH) using EPA approved methods and quality assurance/quality control (QA/QC) procedures.

**NOTE: The OCD does not require that EOTT analyze ground water samples for concentrations of total petroleum hydrocarbons (TPH) since there are no state standards for TPH in ground water**

5. All wastes generated shall be disposed of at an OCD approved facility.
6. EOTT shall submit the results of the investigation to the OCD in a comprehensive report. The report shall be submitted to the OCD Santa Fe Office by May 17, 2000 with a copy provided to the OCD Hobbs District Office and shall include:
- a. A description of all investigation, remediation and monitoring activities which have occurred including conclusions and recommendations.
  - b. A geologic/lithologic log and well completion diagram for each monitor well.
  - c. Maps showing the location of the spills, excavated areas, monitor wells, windmill and any other pertinent site features as well as the direction and magnitude of the hydraulic gradient.
  - d. Isopleth maps for contaminants of concern which were observed during the investigations.
  - e. Summary tables of all soil ground water quality sampling results and copies of all laboratory analytical data sheets and associated QA/QC.
  - f. The disposition of all wastes generated.



Please be advised that OCD approval does not limit EOTT to the proposed work plan should the investigation actions fail to adequately define the extent of contamination related to EOTT's activities, or if contamination exists which is outside the scope of the work plan. In addition, OCD approval does not relieve EOTT of responsibility for compliance with any other federal, state or local laws and regulations.

If you have any questions or comments, please contact me at (505) 827-7154.

Sincerely,

A handwritten signature in cursive script, appearing to read "Will Olson".

William C. Olson

Hydrologist

Environmental Bureau

xc: Chris Williams, OCD Hobbs District Office

**Olson, William**

**From:** Glenn\_Waldrop@eott.com [SMTP:Glenn\_Waldrop@eott.com]  
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Respectfully,

Glenn E. Waldrop  
EOTT Energy



Microsoft Word 4

(See attached file: LF37PJ2.doc)

# E.O.T.T. ENERGY PIPELINE

## PROJECT PLAN (PJP),

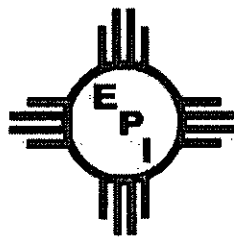
TO  
VERIFY CLOSURE DOCUMENTATION  
AT SITE #LF37  
"MONUMENT 6 INCH GATHERING LINE"

Sec19, T19S, R37E,  
Monument  
Lea County, New Mexico

March 13, 2000

Prepared by

Environmental Plus, Inc.  
1324 North Main Street  
P.O. Box 1558  
Eunice, New Mexico 88231  
Tele 505•394•3481 FAX 505•394•2601



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# 1 SITE #LF37 MONUMENT 6" GATHERING LINE PROJECT PLAN

This plan will provide information by which previous bottom hole and ground water analyses may be verified, as well as, establish prior excavation metrics and thickness of the installed clay cap.

## 1.1 Objectives

- Delineate subsurface bottom excavation intervals
- Log boreholes to delineate depth and thickness of installed clay cap
- Provide representative discrete subsurface soil samples at previously unexcavated intervals in the vadose zone
- Provide representative ground water samples from a location central to the site

## 1.2 Legal Description

The site is located ~5 miles NorthEastEast of Monument, Lea County, New Mexico in Sec19, T19S, R37E.

## 1.3 Delineation of the Subsurface Excavation

Site #LF37, referred to as the Monument 6" Gathering Line Site, was previously excavated and backfilled. Multiple borings will be advanced through the backfilled area using a 6" hollow stem continuous flight auger to the interval of the previously excavated bottom. The deepest portion of the excavation will be delineated with at least one boring. This interval will be identified by a change in drilling pressure required and drill cuttings color. The backfill will be much easier to drill and should not be as rocky.

## 1.4 Discrete Soil Sampling

A discrete sample will be obtained just below the interface of backfill and the unexcavated soil. The sample will be taken using a stainless steel vinyl sleeved sample probe through the open end of the hollow stem auger. Discrete samples will be taken at 4-foot intervals until ground water saturation is encountered. Intervals will be recorded at feet below surface grade.

## 1.5 Bore Hole Logs

A subsurface isoplethic log will be developed and illustrated for each borehole to identify thickness of the clay cap and positively identify the base of the previous excavation.

## 1.6 Ground Water Sampling

A borehole will be advanced at a location central to the excavation to a maximum depth of 75 feet or until ground water is encountered. According to USGS Ground Water Report #6, Nicholson and Clebsch, 1961, ground water occurs from 35-52 feet below the surface. Upon encountering ground water, the hollow stem auger will be drilled 2-3 feet into the saturated zone and pulled out to a point above saturation and set in the slips. This will allow free phase product, if present, to enter the bore. The borehole will be developed as a temporary monitor well, i.e., stabilized by purging 3 volumes of water from the bore, and sampled within 6 hours for BTEX and TPH analysis. After 24 hours the well will be sampled with a disposable 1.5 inch bailer. If free phase product is detected during development, a cup attachment will be used to ascertain amount of product on the surface of the ground water. Free phase product will be collected for finger print analysis. Consistent with NMOCD guidelines, all bore holes will be plugged/sealed with bentonite clay or portland cement.

## 1.7 Ground water & Soil - Analytical Parameters and Methods

Uniquely numbered ground water and soil samples will be prepared for laboratory analyses for the following parameters.

- BTEX, i.e., Benzene, Toluene, Ethyl Benzene, and m,o,&p Xylene (\*EPA-SW-846 Method 8260)
- Total Petroleum Hydrocarbon (TPH=DRO+GRO) (\*EPA-SW-846 Method 8015M)

\* New Mexico Oil Conservation Division approved method

## 1.8 Site Mapping

The site metrics will be collected using a measuring wheel and compass and a scale map developed. The map will include the reference point and the cardinal radians to locate bore holes and other site features.

## 1.9 Bore Hole Numbering and Site Reference Location

The water well next to the caliche road will be the reference point for the site. All bore holes will be given a number that identifies footage from the reference point along the cardinal radians. The primary reference line will be the North/South line with all locations perpendicular east or west of the line noted in feet.

Example: Bore Hole is 70 feet north of the reference point and 50 feet east = BHN70E50

## 1.10 Data Quality

To ensure quality and credibility of data used to support a successful site investigation, the following quality controls will be documented.

- Laboratory data must have > 85% recovery for TPH and BTEX and >75% recovery for general chemistry parameters.
- Laboratory data must have <15% Relative Percent Difference
- Field headspace analyses must be supported with instrument calibration data and calibration gas certification.

Duplicates or blanks may be submitted to the laboratory to establish reproducibility and possible laboratory contamination, respectively.

## 1.11 Representative Sampling Protocols

Prior to and after sampling iteration, all sampling equipment will be decontaminated with a solution ofalconox cleanser and distilled water and double rinsed. No rinsate samples will be taken.

## 1.12 Project Safety and Waste Management

Hazards that will be encountered at this site include the following;

- Moving equipment
- Highway ingress/egress
- Potential Hydrogen Sulfide Gas
- Buried pipelines
- Excavation

All waste from sampling activities will be placed in sealable containers and managed appropriately.

Employees and subcontractors will be required to confirm current training in these hazards. Standard personal protective equipment will include;

- Personal H<sub>2</sub>S Monitor
- Steel Toed Boots/Shoes
- Latex Gloves
- Hard-hat
- Safety Glasses
- Excavation Safety

## 1.13 Reporting

The information and data will be summarized in a report that will substantiate the information provided in earlier reports or cause it to be in question. The report will include the following outline information.

- Project Plan Implementation Activities and Events Journal
- Location Map
- Bore Hole Logs
- 3 dimensional illustration of the subsurface with data summaries by interval
- Statistical comparison of the previous and current data
- Conclusion as to the efficacy of the previous closure documentation



State of New Mexico  
ENERGY MINERALS and NATURAL RESOURCES DEPARTMENT  
Santa Fe, New Mexico 87505

STATE OF  
NEW MEXICO  
OIL  
CONSERVATION  
DIVISION

MEMORANDUM OF MEETING OR CONVERSATION

☒ Telephone ☐ Personal

Time 0940

Date 3/10/00

Originating Party

Other Parties

Lennah Frost - EOTT

Bill Olson - OCD

Subject

Monument 6" Gathering Line

Discussion

1/5/00 EOTT report has errors. Clay seal in bottom not installed, only a clean seal. Also EOTT plan to do some additional Geoprobe work at the site. She maintains that any remaining contamination is due to a Dynasty line at site. She asked to disregard 1/5/00 document. It will be replaced with new document containing additional data. Told her that OCD would not approve without down gradient monitor well.

Conclusions or Agreements

EOTT will submit new report containing additional data.

Distribution

Signed

Will Olson



State of New Mexico  
ENERGY MINERALS and NATURAL RESOURCES DEPARTMENT  
Santa Fe, New Mexico 87505

STATE OF  
NEW MEXICO  
OIL  
CONSERVATION  
DIVISION

MEMORANDUM OF MEETING OR CONVERSATION

☒ Telephone ☐ Personal

Time 0800

Date 3/10/00

Originating Party

Other Parties

Wayne Brunet - EOTT

Bill Olson

Subject

Monument 6" gathering line

Discussion

Requestal permission to do additional investigations  
at site.

Conclusions or Agreements

Gave verbal approval.

Distribution

Signed

Will Olson