



# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

GARY E. JOHNSON

Governor  
Betty Rivera  
Cabinet Secretary

Lori Wrotenbery  
Director  
Oil Conservation Division

*EMAIL  
7/19/02*

July 19, 2002

Mr. Frank Hernandez  
EOTT Energy Pipeline, LP  
PO Box 1660  
Midland, TX 79703

[Frank.Hernandez@eott.com](mailto:Frank.Hernandez@eott.com)

Re: Closure Approval, 8" Loop McKee Pump Site  
Site Reference UL-H, Sec-17 T-22S R-37E  
C-141 Final Report Date: July 9, 2002  
Closure Request Dated: July 10, 2002

Dear Mr. Hernandez,

The **Final Closure Document** is **hereby approved**. According to the information provided, no further action is required at this time.

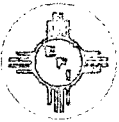
Please be advised that OCD approval of this plan does not relieve EOTT Energy Pipeline, LP liability should their operations fail to adequately investigate and remediate contaminants that threaten ground water, surface water, human health or the environment. Additionally, OCD approval does not relieve EOTT Energy Pipeline, LP of responsibility for compliance with any other federal, state, or local laws and/or regulations.

If you have any questions or need assistance please feel free to call or e-mail me at  
(505) 393-6161, x111 or email [lwjohnson@state.nm.us](mailto:lwjohnson@state.nm.us)

Sincerely,

Larry Johnson - Environmental Engineer

Cc: Roger Anderson - Environmental Bureau Chief  
Chris Williams - District I Supervisor  
Bill Olson - Hydrologist  
Paul Sheeley-Environmental Engineer



ENVIRONMENTAL PLUS, INC. *Micro-Blaze Micro-Blaze Out™*  
STATE APPROVED LAND FARM AND ENVIRONMENTAL SERVICES

July 10, 2002

Mr. Larry Johnson  
Energy, Minerals, and Natural Resources Department  
New Mexico Oil Conservation Division  
1625 North French Dr.  
Hobbs, New Mexico 88240

Subject: EOTT "8-Inch Loop Line Off McKee Pump" Final C-141 and Closure Documentation  
EOTT Site Reference: 2002-10052

Dear Mr. Johnson:

Environmental Plus, Inc. (EPI), on behalf of EOTT Energy Pipeline, LP (EOTT) submits for your consideration and approval the Final C-141 and Closure Documentation for the "8-Inch Loop Line Off McKee Pump" remediation site (EOTT Reference: 2002-10052). This report documents the vertical and horizontal extents of hydrocarbon contamination at the site, removal of contaminated soils above acceptable CoC levels, and the disposal of said contaminated soils at EPI's approved land farm consistent with the NMOCD approved "EOTT General Work Plan for Remediation of EOTT Pipeline Spills, Leaks and Releases in New Mexico, July 2000." EPI, on behalf of EOTT, therefore requests that the NMOCD consider the information provided within this documentation and require "no further action" at this site.

If there are any questions please call Mr. Ben Miller or myself at EPI's offices, or at 505.390.0288 or 505.390.7864 respectively. Mr. Frank Hernandez of EOTT Energy Pipeline, LP can be contacted at 915.638.3799.

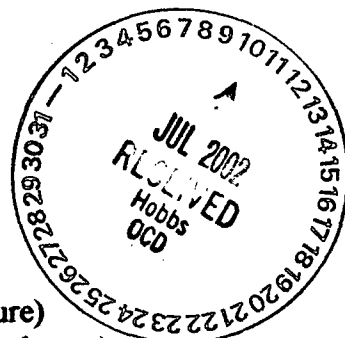
All official correspondence should be addressed to:

Mr. Frank Hernandez  
EOTT Energy Pipeline, LP  
P.O. Box 1660  
Midland, Texas 79703

Sincerely,

Pat McCasland  
EPI Technical Services Manager

cc: Frank Hernandez, EOTT Energy Pipeline, LP (w/enclosure)  
Cutty Cunningham, Enron Transportation Services (w/enclosure)  
Sherry Miller, EPI President  
Ben Miller, EPI Vice President and General Manager  
File



ENVIRONMENTAL PLUS, INC.

# EOTT ENERGY PIPELINE, LP

1 RP-78  
10/7/05

## SITE INVESTIGATION, REMEDIATION, AND FINAL C-141 CLOSURE DOCUMENTATION

8" LOOP LINE OFF MCKEE PUMP  
EOTT REF: #2002-10052

UL-H SE¼ OF THE NE¼ OF SECTION 17 T22S R37E

~3.15 MILES SOUTH OF EUNICE @ BEARING 201°

LEA COUNTY, NEW MEXICO

LATITUDE: 32°23'42"N

LONGITUDE: 103°10'44"W

JULY 10, 2002

PREPARED BY:

***Environmental Plus, Inc.***

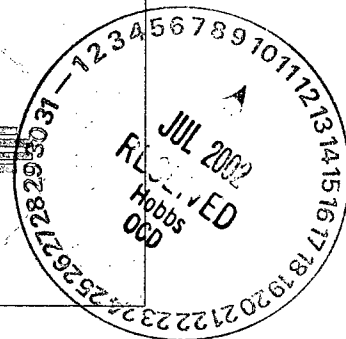
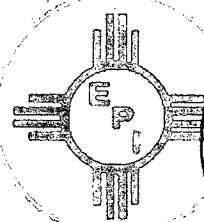
2100 Avenue O

P.O. Box 1558

Eunice, NM 88231

Phone: (505)394-3481

FAX: (505)394-2601



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## **Executive Summary**

Environmental Plus, Inc. (EPI) was notified by EOTT Energy Corporation (EOTT) on February 20, 2002 regarding the crude oil spill at EOTT's "8-Inch Loop Line Off McKee Pump". EOTT's Initial C-141 Report indicates that the spill was discovered on 02-20-02 with the release of ~30 bbl of crude oil. Approximately 5 bbl was recovered. The leak was due to internal/external pipeline corrosion. Repairs were made on the 8-inch pipeline by clamping.

EOTT's "8-Inch Loop Line Off McKee Pump" site is located 3.15 miles SSW of Eunice, NM (SE¼ of NE¼ of Section 17 T22S R37E). Geographically the site is located at Latitude 32°23'42"N and Longitude 103°10'44"W. The spill-affected area encompassed an area of approximately 1327-ft<sup>2</sup> (70' X 40'). The water table beneath the site is estimated to be ~75-ft bgs (based on proximal well comparisons). The property is owned by the State of New Mexico and is leased to the Millard Deck Estate.

EPI assumed the project on 2-20-02 and commenced with spill containment and excavation of the site. EPI excavated 746-yd<sup>3</sup> of contaminated soil from the spill affected area (maximum excavation depth was 17-ft near the Point of Release). The contaminated soil was disposed of in EPI's approved land farm. Bottom-hole and bottom sidewall composite soil samples were collected in the excavation on 2-22-02 and submitted to Environmental Lab of Texas for analysis. TPH and BTEX analysis results indicated that contaminated soil had been adequately removed from the site to allow closure. The excavation was backfilled with clean soil obtained on-site. Contouring of the site was completed in late March-02. The site was re-seeded in May-2002.

## **1.0 Introduction**

This report addresses the site investigation and remediation of the EOTT Energy Pipeline "8-Inch Loop Line Off McKee Pump" (EOTT Reference #2002-10052) crude oil spill site. Environmental Plus, Inc. (EPI), Eunice, New Mexico was notified immediately after EOTT became aware of the release on 2-20-02 and commenced spill control, site investigation and remediation of the site. The net 25-barrel release affected an approximate 70' X 40" (1327-ft<sup>2</sup>, irregular) area. 746-yd<sup>3</sup> of contaminated soil (maximum depth 17-ft bgs) was excavated from the site to achieve contamination levels below NMOCD remedial goals. The contaminated soil was analyzed for hazardous characteristics and was approved for disposal in EPI's permitted land farm. The excavation was backfilled with clean material obtained on-site and contoured in late March-2002. The affected area was reseeded with natural grasses in May-2002.

## **2.0 Background**

The site is associated with the EOTT Energy Pipeline - 8" crude oil pipeline coming off EOTT's McKee pump facility. This site is located in UL-H, the SE¼ of the NE¼ of Section 17 T22S R37E. The site is approximately 3.15 miles south-southwest (bearing 201°) of Eunice, Lea County, New Mexico at ~Latitude 32°23'42"N and ~Longitude 103°10'44"W. The property is owned by the State of New Mexico and leased to the Millard Deck Estate. A site location map and a detailed topographical map of the site are included in Attachment I as Plate 1 and Plate 2.

The crude oil release occurred on February 20, 2002. The release was estimated to be 30 barrels of crude oil with an estimated 5 barrels recovered. The leak was the result of pipe corrosion. The pipe was initially clamped and eventually replaced by EOTT.

## **3.0 Site Descriptions**

### **3.1 Geohydrology**

*The United States Geological Survey (USGS) Ground-Water Report 6, "Geology and Ground-Water Conditions in Southern Lea County, New Mexico," A. Nicholson and A. Clebsch, 1961, describes the near surface geology of southern Lea County as an intergrade of the Quaternary Alluvium (QA) sediments, i.e., fine to medium sand, with the mostly eroded Cenozoic Ogallala (CO) formation. Typically, the QA and CO formations in the area are capped by a thick interbed of caliche and generally*

overlain by sandy soil. The release site is located east of the Mescalero Ridge within the Eunice Plain physiographic subdivision. Nicholson & Clebsch describe the Eunice Plain as being "underlain by a hard caliche surface and is almost entirely covered by reddish-brown dune sand. In some places the underlying surface consists of alluvial sediments – most commonly calcareous silt in buried valleys or Quaternary lake basins."

The subsurface at the site is composed of approximately 75-feet of sand, sandstone and caliche that overlie a horizon of red clay that corresponds to the Triassic Dockum Formation locally called the "red bed" formation. The Triassic "red bed" formation serves as the lower confining strata for the locally present Ogallala Aquifer present in the alluvial sands above the "red bed" clay formation.

The unconfined ground water aquifer at this site (Tertiary Ogallala Formation) is estimated to be 75-feet bgs based on proximal water well data obtained from the NM State Engineer's Office and the New Mexico Tech Database. Ground water gradient in this area is to the southeast.

### 3.2 Ecology

The area is typical of the Upper Chihuahuan Desert Biome consisting primarily of hummocky sand hills covered with Harvard Shin Oak (*Quercus harvardi*) interspersed with Honey Mesquite (*Prosopis glandulosa*) along with typical desert grasses, flowering annuals and flowering perennials. Mammals represented, include Orrd's and Merriam's Kangaroo Rat, Deer Mouse, White Throated Wood Rat, Cottontail Rabbit, Black Tailed Jackrabbit, Mule Deer, Bobcat, Red Fox and Coyote. Reptiles, Amphibians, and Birds are numerous and typical of area. A survey of Listed, Threatened, or Endangered species was not conducted.

### 3.3 Area Water Wells and/or Surface Water Features

There are no recorded water wells or surface water bodies within 1000 horizontal feet of the site.

*Note: Water Well #4256 (NM Tech Database Records) is located approximately 1000-feet east-northeast of the release site (see Plate 2). EPI was unable to physically locate this water well to obtain an accurate GPS location. Based on its recorded location, the well is located up-gradient from the release site and cannot be impacted by the release. For purposes of site ranking, this well is considered >1000-ft from the spill site.*

## 4.0 NMOCD Site Ranking

Chemical parameters of the soil and ground water were characterized consistent with the characterization and remediation/abatement goals and objectives set forth in the New Mexico Oil Conservation Division (NMOCD) approved "General Work Plan for Remediation of E.O.T.T. Pipeline Spills, Leaks and Releases in New Mexico, July 2000" and the NMOCD guidelines published in the following documents:

- ◆ Guidelines for Remediation of Leaks, Spills and Releases (August 13, 1993)
- ◆ Unlined Surface Impoundment Closure Guidelines (February 1993)

Acceptable thresholds for contaminants/constituents of concern (CoCs), i.e., TPH<sup>8015m</sup>, Benzene, and the mass sum of Benzene, Toluene, Ethyl Benzene, and total Xylene (BTEX), were determined based on the NMOCD Ranking Criteria as follows:

- ◆ Depth to Ground water, i.e., distance from the lower most acceptable concentration to the ground water.
- ◆ Wellhead Protection Area, i.e., distance from fresh water supply wells.
- ◆ Distance to Surface Water Body, i.e., horizontal distance to all down gradient surface water bodies.

Based on the proximity of the site to area fresh-water wells, surface water bodies, and depth to ground water from the lower most contamination, the NMOCD ranking score for the site is 10 points with the soil remedial goals highlighted in the Site Ranking Matrix presented below.

1. Ground Water	2. Wellhead Protection Area	3. Distance to Surface Water	
Depth to GW <50 feet: 20 points	If <1000' from water source, or, <200' from private domestic water source: 20 points	<200 horizontal feet: 20 points	
Depth to GW 50 to 99 feet: 10 points		200-1000 horizontal feet: 10 points	
Depth to GW >100 feet: 0 points	If >1000' from water source, or, >200' from private domestic water source: 0 points	>1000 horizontal feet: 0 points	
Ground Water Score=10	Wellhead Protection Area Score= 0	Surface Water Score= 0	
Site Rank (1+2+3) = 10 + 0 + 0 = 10 points (for soil 0-8'bgs)			
Total Site Ranking Score and Acceptable Remedial Goal Concentrations			
Parameter	20+ (soil 26 – 75' bgs)	10 (soil 0 – 25'bgs)	0
Benzene <sup>1</sup>	10 ppm	10 ppm	10 ppm
BTEX <sup>1</sup>	50 ppm	50 ppm	50 ppm
TPH	100 ppm	1000 ppm	5000 ppm
<sup>1</sup> 100 ppm field VOC headspace measurement may be substituted for laboratory analysis			

## 5.0 Subsurface Soil Investigation

Due to EPI's timely response to this spill incident, it was deemed expedient to forego a borehole and soil analysis investigation to determine horizontal and vertical extents of hydrocarbon contamination at this site. The horizontal extents of the spill were clearly visible from the surface and vertical extent was determined while the excavation was in progress utilizing portable Photo Ionization Detection (PID) technology. VOC levels of <100 ppm were achieved at the 17-ft level, and 5-point composite bottom-hole and sidewall samples were collected for laboratory analysis of TPH and BTEX.

The BTEX levels for the bottom-hole and sidewall composite samples were all below the 0.025 mg/Kg detection limit of the lab's (Environmental Lab of Texas, Odessa, TX) analytical equipment. The average TPH level of the composite samples was <30 mg/Kg, with a high reading on the east sidewall of 53 mg/Kg.

A tabular summary of all analytical results for this project (bottom-hole/sidewall composites and contaminated soil hazardous characterization) is included in Attachment II. A graphical representation of the in-situ soil TPH levels (composite samples) is included in Attachment II as Plate 4.

## 6.0 Ground Water Investigation

Ground water depth is estimated to be ~75-feet bgs at the site. This estimate is based on proximal well data obtained from the NM Office of the State Engineer and New Mexico Tech University databases (see Attachment I). The site was excavated to a maximum depth of 17-ft (~58-ft above water level), and was backfilled with clean material obtained on-site. Composite bottom-hole and sidewall soil analysis of the excavation confirms less than detectable BTEX levels and a maximum TPH level of 53 mg/Kg (remedial goal = 1000 mg/Kg). Effectively, all hydrocarbon soil was removed from the site and properly disposed of. There should be no need for a ground water investigation at this site.

## 7.0 Remediation

Remediation of the site was completed in late March-02 by EPI. A total of 746-yd<sup>3</sup> of hydrocarbon contaminated soil was excavated (maximum depth 17-ft) and disposed of at EPI's permitted land farm. Bottom-hole and bottom sidewall soil analyses indicate that all contaminated soil was effectively from the site. The excavation was backfilled with clean material and contoured in late March-02. Reseeding of the site took place in May-02.

## 8.0 Closure Justification

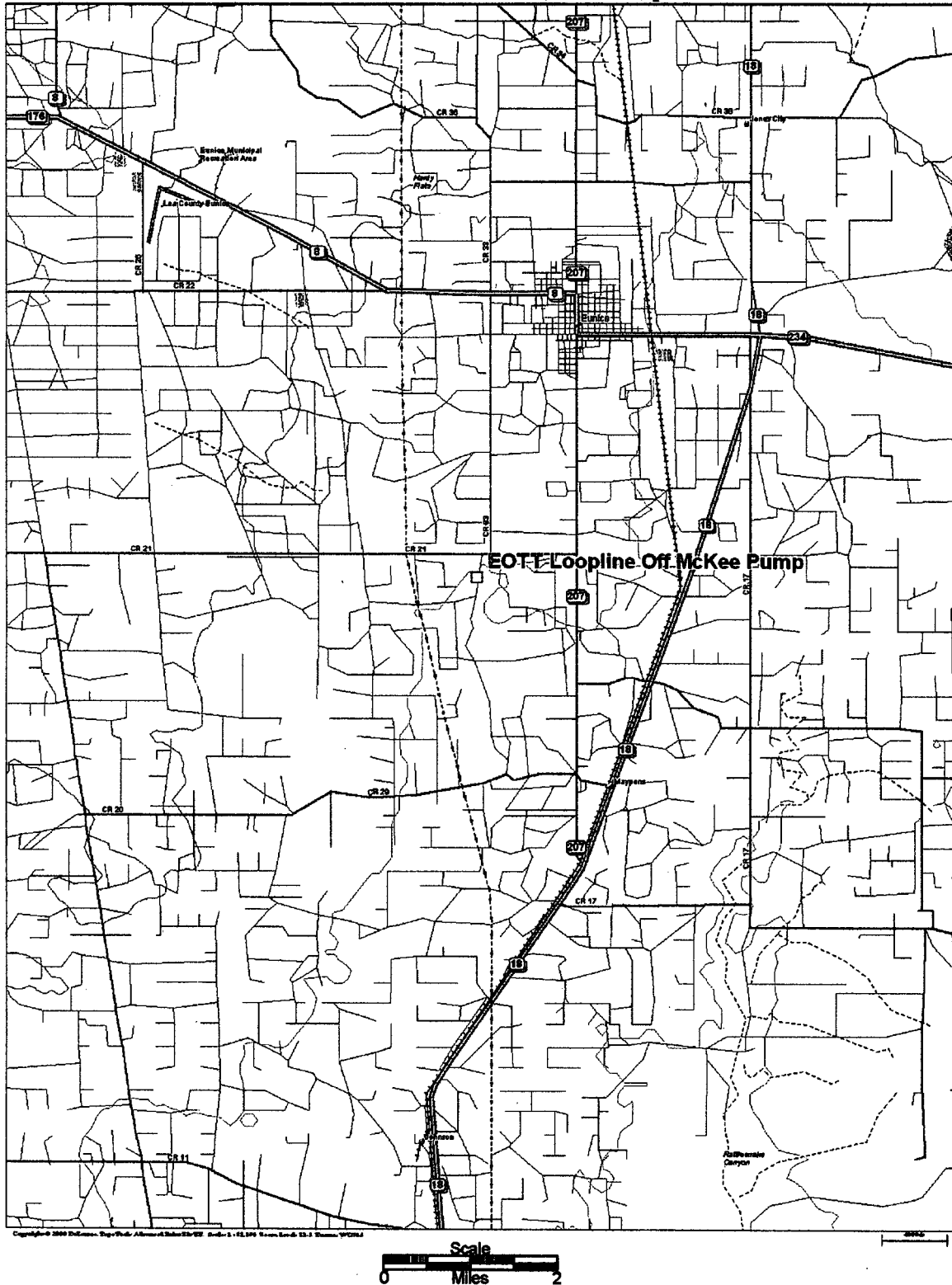
This report documents successful implementation of the Remediation Plan approved by NMOCD and is consistent with the NMOCD approved "E.O.T.T. General Work Plan for Remediation of E.O.T.T. Pipeline

**Spills, Leaks and Releases in New Mexico, July – 2000**. Soil contaminated above acceptable CoC remedial concentrations was excavated and disposed of off-site at EPI's land farm. The excavation was backfilled with clean material, properly contoured and reseeded with natural grasses. Based on the data presented in this report, Environmental Plus, Inc., on behalf of E.O.T.T. Energy Pipeline LP, requests that the NMOCD require "no further action" at this site.



**Attachment I: Site and Topographic Maps**

# Plate 1: Site Location Map

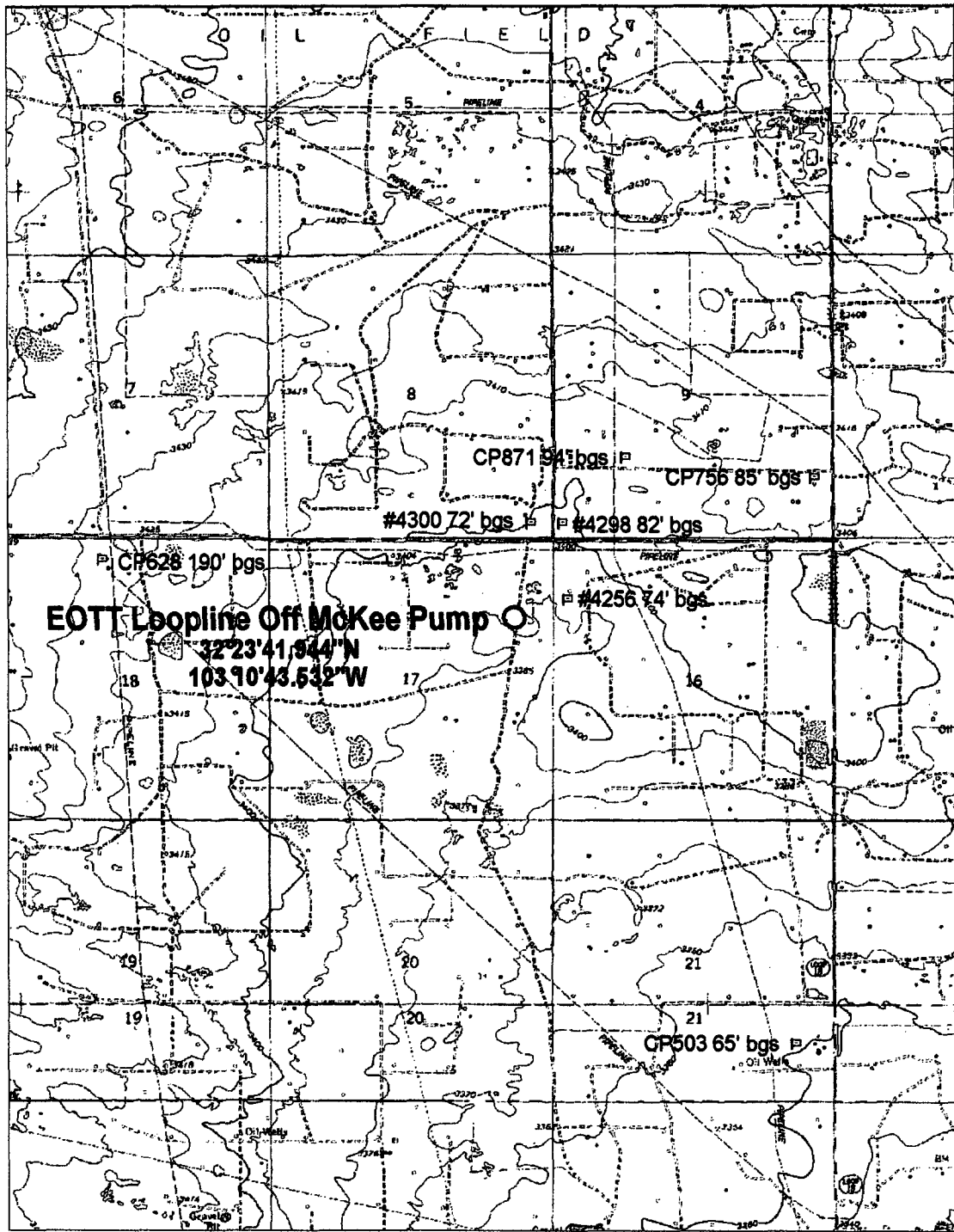


**Plate 1: Site Location Map**  
**EOTT Energy Pipeline - 8" Loopline Off McKee Pump (2002-10052)**  
**Lea County, NM; UL-H Section 17 T22S R37E**

Created By: JCG

Date: July-02

Revised:

**Plate 2: Topographic Site Map**

Legend: ○ Spill Location □ Water Well of Record

Scale  
0 Feet 4000



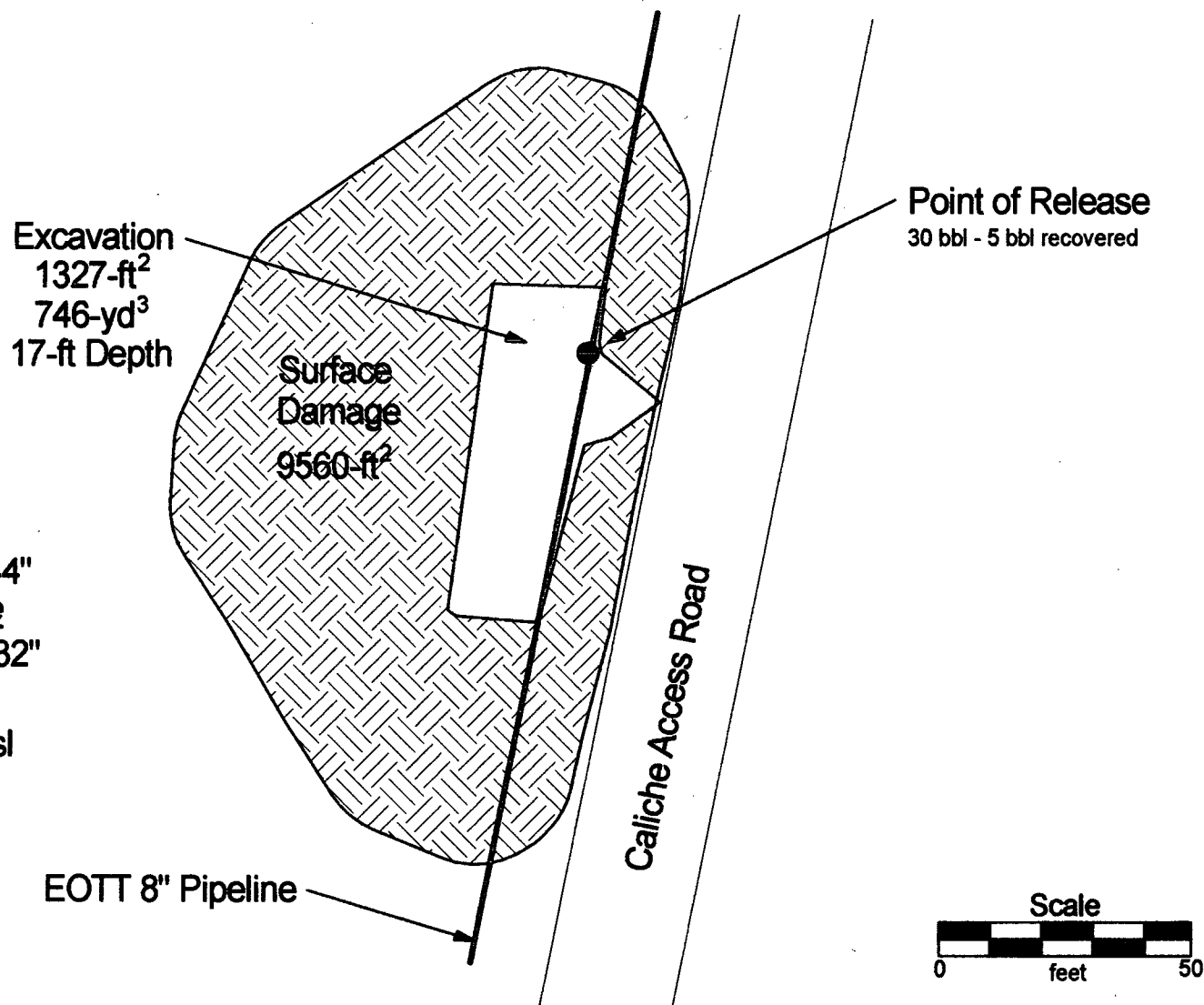
**Plate 2: Site Topography w/Water Wells**  
**EOTT Energy Pipeline - 8" Loopline Off McKee Pump (2002-10052)**  
**Lea County, NM; UL-H Section 17 T22S R37E**

Created By: JCG

Date: July-02

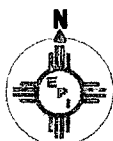
Revised:

**Plate 3: GPS Site Demarcation**



**Figure 3: Site Topography Map**  
EOTT Energy Pipeline - 8" Loopline Off McKee Pump (2002-10052)  
Lea County, NM; UL-A Section 17 T22S R37E

Created By: JCG  
Date: July-02  
Revised:



# **Water Well Database Reports** **T22S R37E - All Sections**

<b>State Engineer Wells of Record</b>									
<b>Well ID</b>	<b>Tws</b>	<b>Rng</b>	<b>Sec</b>	<b>Q</b>	<b>Q</b>	<b>Q</b>	<b>Well Depth</b>	<b>Water Depth</b>	<b>Water Column</b>
<b>CP871</b>	<b>22S</b>	<b>37E</b>	<b>09</b>	<b>3</b>			<b>167</b>	<b>94</b>	<b>73</b>
<b>CP756</b>	<b>22S</b>	<b>37E</b>	<b>09</b>	<b>4</b>	<b>4</b>	<b>2</b>	<b>125</b>	<b>85</b>	<b>40</b>
<b>CP628</b>	<b>22S</b>	<b>37E</b>	<b>18</b>	<b>1</b>	<b>2</b>		<b>525</b>	<b>190</b>	<b>335</b>
<b>CP503</b>	<b>22S</b>	<b>37E</b>	<b>21</b>	<b>4</b>	<b>4</b>		<b>115</b>	<b>65</b>	<b>50</b>
<b>New Mexico Tech Database Listed Wells</b>									
<b>#4300</b>	<b>22S</b>	<b>37E</b>	<b>08</b>	<b>4</b>	<b>4</b>	<b>4</b>		<b>72</b>	
<b>#4298</b>	<b>22S</b>	<b>37E</b>	<b>09</b>	<b>3</b>	<b>3</b>	<b>3</b>		<b>82</b>	
<b>#4256</b>	<b>22S</b>	<b>37E</b>	<b>16</b>	<b>1</b>	<b>1</b>	<b>3</b>		<b>74</b>	
<b>Quarters are 1=NW 2=NE 3=SW 4=SE (biggest to smallest)</b>									

**Attachment II: Laboratory Analytical Reports and Summaries**

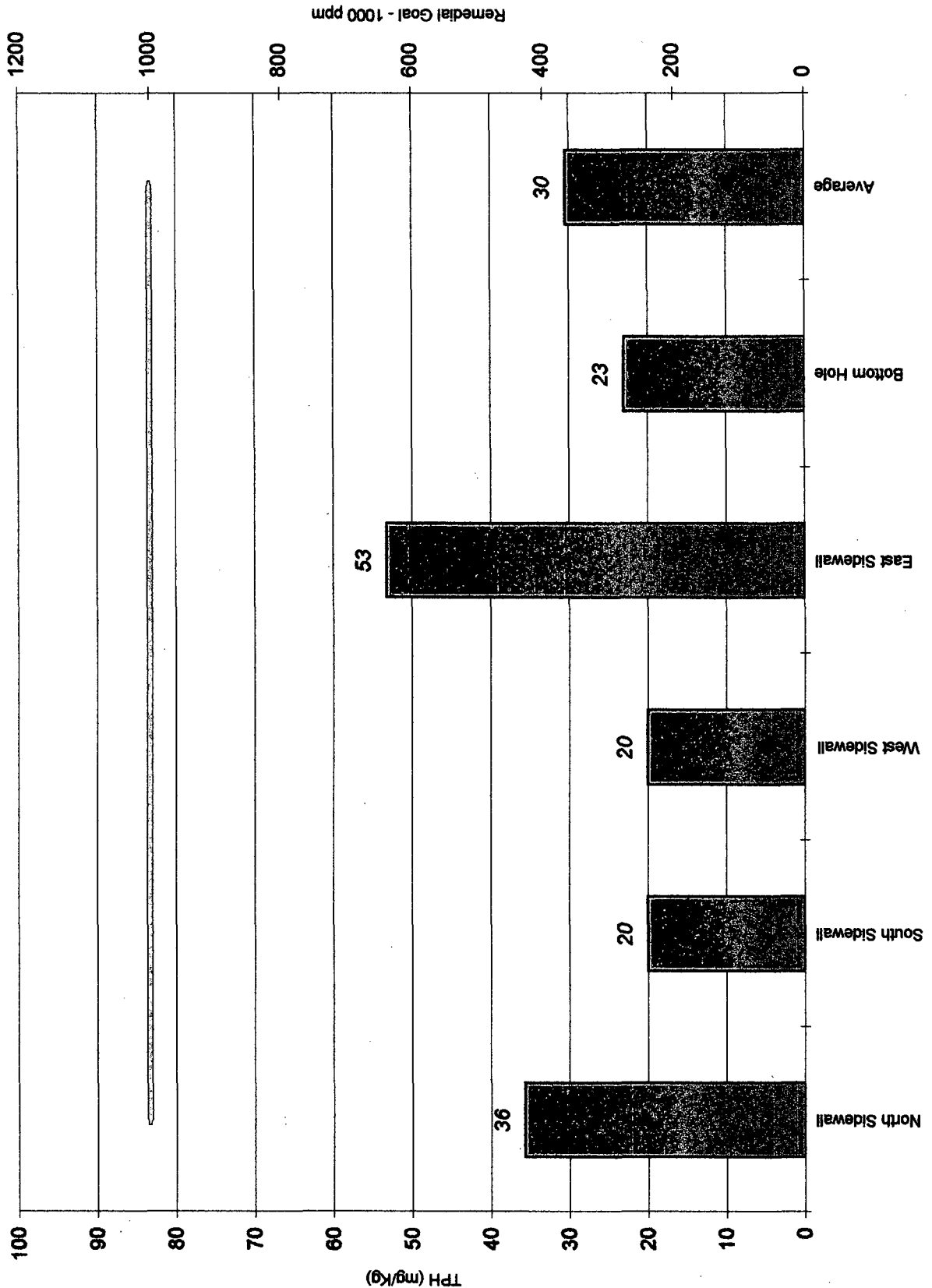
**EOTT Energy Pipeline - 8" Loopline Off McKee Pump****Excavation (Bottom Hole) Sampling Results****Bold** highlighted cells indicate values in excess of the NMOCD remedial action guideline thresholds: TPH = 1000 mg/Kg; Benzene = 10 mg/Kg; BTEX = 50 mg/Kg

Sample Date	Sample Location	Depth (ft - bgs)	SAMPLE ID#	Sample Type <sup>1</sup>	GRO <sup>2</sup> mg/Kg	DRO <sup>3</sup> mg/Kg	TPH <sup>4</sup> mg/Kg	BTEX <sup>5</sup> mg/Kg	Benzene mg/Kg	Toluene mg/Kg	Ethyl Benzene mg/Kg	m,p-Xylene mg/Kg	o-Xylene mg/Kg
2/22/2002	North Sidewall (5-pt)	17-ft	SE8LL22202NSW	Comp	10	25.7	36	0.125	0.025	0.025	0.025	0.025	0.025
2/22/2002	South Sidewall (5-pt)	17-ft	SE8LL22202SSW	Comp	10	10	20	0.125	0.025	0.025	0.025	0.025	0.025
2/22/2002	West Sidewall (5-pt)	17-ft	SE8LL22202WSW	Comp	10	10	20	0.125	0.025	0.025	0.025	0.025	0.025
2/22/2002	East Sidewall (5-pt)	17-ft	SE8LL22202ESW	Comp	10	43.2	53	0.125	0.025	0.025	0.025	0.025	0.025
2/22/2002	Bottom Hole (5-pt)	17-ft	SE8LL22202BH-17'	Comp	10	13.0	23	0.125	0.025	0.025	0.025	0.025	0.025
2/22/2002	Average	17-ft	Combined Averages	Calc	10	20.4	30	0.125	0.025	0.025	0.025	0.025	0.025

<sup>1</sup> Composite, Grab or Calculated Value    <sup>2</sup> GRO - Gasoline Range Organics (Detection Limit = 10 mg/Kg)    <sup>3</sup> DRO - Diesel Range Organics (Detection Limit = 10 mg/Kg)<sup>4</sup> TPH = (GRO+DRO)    <sup>5</sup> BTEX = Sum of CoC's (Detection Limit = 0.025 mg/Kg) Note: < detection limit is considered "de minimus" value and is included in TPH or BTEX summation.**EOTT Energy Pipeline - 8" Loopline Off McKee Pump****Contaminated Soil Analysis (BTEX, TCLP, RCI)**

Sample Date	SAMPLE ID#	Test Method	Parameter	Units	Result	RL
2/21/2002	SE8LL22102SP	8021B/5030	Benzene	µg/l	<1.0	1.0
2/21/2002	SE8LL22102SP	8021B/5030	Ethylbenzene	µg/l	33.3	1.0
2/21/2002	SE8LL22102SP	8021B/5030	Toluene	µg/l	9.21	1.0
2/21/2002	SE8LL22102SP	8021B/5030	m/p-Xylene	µg/l	29.7	1.0
2/21/2002	SE8LL22102SP	8021B/5030	o-Xylene	µg/l	17.0	1.0
2/21/2002	SE8LL22102SP	6010B	Arsenic	mg/l	0.059	0.008
2/21/2002	SE8LL22102SP	6010B	Barium	mg/l	0.663	0.001
2/21/2002	SE8LL22102SP	6010B	Cadmium	mg/l	0.001	0.001
2/21/2002	SE8LL22102SP	6010B	Chromium	mg/l	0.018	0.002
2/21/2002	SE8LL22102SP	6010B	Lead	mg/l	0.017	0.011
2/21/2002	SE8LL22102SP	245.1, 7470	Mercury	mg/l	<.002	0.002
2/21/2002	SE8LL22102SP	6010B	Selenium	mg/l	0.024	0.004
2/21/2002	SE8LL22102SP	6010B	Silver	mg/l	0.002	0.002
2/21/2002	SE8LL22102SP	1010	Ignitability	C	>100	N/A
2/21/2002	SE8LL22102SP	9045C	pH	pH Units	8.59	N/A
2/21/2002	SE8LL22102SP	SW846 CH 7	Reactive Cyanide	mg/kg	<.090	0.090
2/21/2002	SE8LL22102SP	SW846 CH 7	Reactive Sulfide	mg/kg	12.0	5.0

# Plate 4: Bottom-Hole and Sidewall TPH Composite Analyses



Detection Limit = 20 mg/Kg



**Lab Analyses and Chain-of-Custody Forms**  
**Bottom-Hole Excavation Composite Samples and**  
**Hazardous Analysis of Contaminated Soil for Disposal Approval**

# **ANALYTICAL REPORT**

## **Prepared for:**

**Frank Hernandez  
EOTT ENERGY  
BOX 5050  
HOBBS, NM 88240**

**Project: 8" Loop Line  
Order#: G0202660  
Report Date: 02/27/2002**

## **Certificates**

**US EPA Laboratory Code TX00158**

# ENVIRONMENTAL LAB OF TEXAS

## SAMPLE WORK LIST

EOTT ENERGY  
BOX 5050  
HOBBS, NM 88240  
505-392-2946

Order#: G0202660  
Project: 2002-10052  
Project Name: 8" Loop Line  
Location: None Given

The samples listed below were submitted to Environmental Lab of Texas and were received under chain of custody. Environmental Lab of Texas makes no representation or certification as to the method of sample collection, sample identification, or transportation/handling procedures used prior to the receipt of samples by Environmental Lab of Texas.

<u>Lab ID:</u>	<u>Sample :</u>	<u>Matrix:</u>	<u>Date / Time</u> <u>Collected</u>	<u>Date / Time</u> <u>Received</u>	<u>Container</u>	<u>Preservative</u>
0202660-01	SE8LL22202BH-17	SOIL	02/22/2002 12:00	02/22/2002 15:50	4 oz Glass	Ice
<u>Lab Testing:</u> Rejected: No Temp: -0.5C 8015M TPH GRO/DRO 8021B/5030 BTEX						
0202660-02	SE8LL22202NSW	SOIL	02/22/2002 12:15	02/22/2002 15:50	4 oz Glass	Ice
<u>Lab Testing:</u> Rejected: No Temp: -0.5C 8015M TPH GRO/DRO 8021B/5030 BTEX						
0202660-03	SE8LL22202WSW	SOIL	02/22/2002 12:30	02/22/2002 15:50	4 oz Glass	Ice
<u>Lab Testing:</u> Rejected: No Temp: -0.5C 8015M TPH GRO/DRO 8021B/5030 BTEX						
0202660-04	SE8LL22202ESW	SOIL	02/22/2002 12:45	02/22/2002 15:50	4 oz Glass	Ice
<u>Lab Testing:</u> Rejected: No Temp: -0.5C 8015M TPH GRO/DRO 8021B/5030 BTEX						
0202660-05	SE8LL22202SSW	SOIL	02/22/2002 1:00	02/22/2002 15:50	4 oz Glass	Ice
<u>Lab Testing:</u> Rejected: No Temp: -0.5C 8015M TPH GRO/DRO 8021B/5030 BTEX						

# ENVIRONMENTAL LAB OF TEXAS

## ANALYTICAL REPORT

Frank Hernandez  
EOTT ENERGY  
BOX 5050  
HOBBS, NM 88240

Order#: G0202660  
Project: 2002-10052  
Project Name: 8" Loop Line  
Location: None Given

Lab ID: 0202660-01  
Sample ID: SE8LL22202BH-17'

### 8015M TPH GRO/DRO

Method	Date	Date	Sample	Dilution	Analyst	Method
<u>Blank</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Amount</u>	<u>Factor</u>		
0000701-02		2/24/02 16:30	1	1	CK	8015

Parameter	Result mg/kg	RL
GRO, C6-C12	< 10.0	10.0
DRO, >C12-C28	13.0	10.0

### 8021B/5030 BTEX

Method	Date	Date	Sample	Dilution	Analyst	Method
<u>Blank</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Amount</u>	<u>Factor</u>		
0000700-02		2/23/02 12:17	1	1	CK	8021B

Parameter	Result ug/kg	RL
Benzene	< 25.0	25.0
Ethylbenzene	< 25.0	25.0
Toluene	< 25.0	25.0
p/m-Xylene	<25.0	25.0
o-Xylene	< 25.0	25.0

Lab ID: 0202660-02  
Sample ID: SE8LL22202NSW

### 8015M TPH GRO/DRO

Method	Date	Date	Sample	Dilution	Analyst	Method
<u>Blank</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Amount</u>	<u>Factor</u>		
0000701-02		2/24/02 16:40	1	1	CK	8015

Parameter	Result mg/kg	RL
GRO, C6-C12	< 10.0	10.0
DRO, >C12-C28	25.7	10.0

# ENVIRONMENTAL LAB OF TEXAS

## ANALYTICAL REPORT

Frank Hernandez  
EOTT ENERGY  
BOX 5050  
HOBBS, NM 88240

Order#: G0202660  
Project: 2002-10052  
Project Name: 8" Loop Line  
Location: None Given

Lab ID: 0202660-02  
Sample ID: SE8LL22202NSW

### 8021B/5030 BTEX

Method	Date	Date	Sample	Dilution	Analyst	Method
<u>Blank</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Amount</u>	<u>Factor</u>		
0000700-02		2/23/02 13:01	1	1	CK	8021B

Parameter	Result ug/kg	RL
Benzene	< 25.0	25.0
Ethylbenzene	< 25.0	25.0
Toluene	< 25.0	25.0
p/m-Xylene	< 25.0	25.0
o-Xylene	< 25.0	25.0

Lab ID: 0202660-03  
Sample ID: SE8LL22202WSW

### 8015M TPH GRO/DRO

Method	Date	Date	Sample	Dilution	Analyst	Method
<u>Blank</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Amount</u>	<u>Factor</u>		
0000701-02		2/24/02 16:51	1	1	CK	8015

Parameter	Result mg/kg	RL
GRO, C6-C12	< 10.0	10.0
DRO, >C12-C28	< 10.0	10.0

# ENVIRONMENTAL LAB OF TEXAS

## ANALYTICAL REPORT

Frank Hernandez  
EOTT ENERGY  
BOX 5050  
HOBBS, NM 88240

Order#: G0202660  
Project: 2002-10052  
Project Name: 8" Loop Line  
Location: None Given

Lab ID: 0202660-03  
Sample ID: SE8LL22202WSW

### 8021B/5030 BTEX

Method <u>Blank</u>	Date <u>Prepared</u>	Date <u>Analyzed</u>	Sample <u>Amount</u>	Dilution <u>Factor</u>	Analyst	Method
0000700-02		2/23/02 13:23	1	1	CK	8021B

Parameter	Result ug/kg	RL
Benzene	< 25.0	25.0
Ethylbenzene	< 25.0	25.0
Toluene	< 25.0	25.0
p/m-Xylene	<25.0	25.0
o-Xylene	< 25.0	25.0

Lab ID: 0202660-04  
Sample ID: SE8LL22202ESW

### 8015M TPH GRO/DRO

Method <u>Blank</u>	Date <u>Prepared</u>	Date <u>Analyzed</u>	Sample <u>Amount</u>	Dilution <u>Factor</u>	Analyst	Method
0000701-02		2/24/02 17:02	1	1	CK	8015

Parameter	Result mg/kg	RL
GRO, C6-C12	< 10.0	10.0
DRO, >C12-C28	43.2	10.0

# ENVIRONMENTAL LAB OF TEXAS

## ANALYTICAL REPORT

Frank Hernandez  
EOTT ENERGY  
BOX 5050  
HOBBS, NM 88240

Order#: G0202660  
Project: 2002-10052  
Project Name: 8" Loop Line  
Location: None Given

Lab ID: 0202660-04  
Sample ID: SE8LL22202ESW

### 8021B/5030 BTEX

Method <u>Blank</u>	Date <u>Prepared</u>	Date <u>Analyzed</u>	Sample <u>Amount</u>	Dilution <u>Factor</u>	Analyst	Method
0000700-02		2/23/02 14:06	1	1	CK	8021B

Parameter	Result ug/kg	RL
Benzene	< 25.0	25.0
Ethylbenzene	< 25.0	25.0
Toluene	< 25.0	25.0
p/m-Xylene	< 25.0	25.0
o-Xylene	< 25.0	25.0

Lab ID: 0202660-05  
Sample ID: SE8LL22202SSW

### 8015M TPH GRO/DRO

Method <u>Blank</u>	Date <u>Prepared</u>	Date <u>Analyzed</u>	Sample <u>Amount</u>	Dilution <u>Factor</u>	Analyst	Method
0000701-02		2/24/02 17:12	1	1	CK	8015

Parameter	Result mg/kg	RL
GRO, C6-C12	< 10.0	10.0
DRO, >C12-C28	< 10.0	10.0

# ENVIRONMENTAL LAB OF TEXAS

## ANALYTICAL REPORT

Frank Hernandez  
EOTT ENERGY  
BOX 5050  
HOBBS, NM 88240

Order#: G0202660  
Project: 2002-10052  
Project Name: 8" Loop Line  
Location: None Given

Lab ID: 0202660-05  
Sample ID: SE8LL22202SSW

### 8021B/5030 BTEX

Method	Date	Date	Sample	Dilution	Analyst	Method
<u>Blank</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Amount</u>	<u>Factor</u>		
0000700-02		2/23/102 14:28	1	1	CK	8021B

Parameter	Result ug/kg	RL
Benzene	< 25.0	25.0
Ethylbenzene	< 25.0	25.0
Toluene	< 25.0	25.0
p/m-Xylene	< 25.0	25.0
o-Xylene	< 25.0	25.0

Approval:

*Raland K Tuttle*  
Raland K. Tuttle, Lab Director, QA Officer  
Celey D. Keene, Org. Tech. Director  
Jeanne McMurrey, Inorg. Tech. Director  
Irene Perry, QA Assistant  
Sandra Biezugbe, Lab Tech.  
Curt Cowdrey, Lab Tech.  
Sara Molina, Lab Tech.

2-27-02  
Date



# ENVIRONMENTAL LAB OF TEXAS

## QUALITY CONTROL REPORT

8015M TPH GRO/DRO

Order#: G0202660

<b>BLANK</b>	<b>LAB-ID #</b>	<b>Sample Concentr.</b>	<b>Spike Concentr.</b>	<b>QC Test Result</b>	<b>Pct (%) Recovery</b>	<b>RPD</b>
GRO, C6-C12-mg/kg	0000701-02			<10		
GRO, >C12-C28-mg/kg	0000701-02			<10		
<b>MS</b>	<b>LAB-ID #</b>	<b>Sample Concentr.</b>	<b>Spike Concentr.</b>	<b>QC Test Result</b>	<b>Pct (%) Recovery</b>	<b>RPD</b>
GRO, C6-C12-mg/kg	0202645-01	0	480	530	111.1%	
GRO, >C12-C28-mg/kg	0202645-01	0	480	550	115.1%	
<b>MSD</b>	<b>LAB-ID #</b>	<b>Sample Concentr.</b>	<b>Spike Concentr.</b>	<b>QC Test Result</b>	<b>Pct (%) Recovery</b>	<b>RPD</b>
GRO, C6-C12-mg/kg	0202645-01	0	480	520	108.6%	2.3%
GRO, >C12-C28-mg/kg	0202645-01	0	480	560	116.6%	1.3%
<b>SRM</b>	<b>LAB-ID #</b>	<b>Sample Concentr.</b>	<b>Spike Concentr.</b>	<b>QC Test Result</b>	<b>Pct (%) Recovery</b>	<b>RPD</b>
GRO, C6-C12-mg/kg	0000701-05		500	480	97.9%	0.9%
GRO, >C12-C28-mg/kg	0000701-05		500	470	94.8%	0.9%

# ENVIRONMENTAL LAB OF TEXAS

## QUALITY CONTROL REPORT

8021B/5030 BTEX

Order#: G0202660

<b>BLANK</b>	<b>LAB-ID #</b>	<b>Sample Concentr.</b>	<b>Spike Concentr.</b>	<b>QC Test Result</b>	<b>Pct (%) Recovery</b>	<b>RPD</b>
Benzene-ug/kg	0000700-02			<25		
Ethylbenzene-ug/kg	0000700-02			<25		
Toluene-ug/kg	0000700-02			<25		
m-Xylene-ug/kg	0000700-02			<25		
p-Xylene-ug/kg	0000700-02			<25		
<b>MS</b>	<b>LAB-ID #</b>	<b>Sample Concentr.</b>	<b>Spike Concentr.</b>	<b>QC Test Result</b>	<b>Pct (%) Recovery</b>	<b>RPD</b>
Benzene-ug/kg	0202645-02	0	100	90	90.5%	
Ethylbenzene-ug/kg	0202645-02	0	100	110	107%	
Toluene-ug/kg	0202645-02	0	100	100	100%	
p/m-Xylene-ug/kg	0202645-02	0	200	220	110%	
o-Xylene-ug/kg	0202645-02	0	100	110	111%	
<b>MSD</b>	<b>LAB-ID #</b>	<b>Sample Concentr.</b>	<b>Spike Concentr.</b>	<b>QC Test Result</b>	<b>Pct (%) Recovery</b>	<b>RPD</b>
Benzene-ug/kg	0202645-02	0	100	94	94.4%	4.2%
Ethylbenzene-ug/kg	0202645-02	0	100	110	112%	4.6%
Toluene-ug/kg	0202645-02	0	100	100	105%	4.9%
p/m-Xylene-ug/kg	0202645-02	0	200	220	112.5%	2.2%
o-Xylene-ug/kg	0202645-02	0	100	110	114%	2.7%
<b>SRM</b>	<b>LAB-ID #</b>	<b>Sample Concentr.</b>	<b>Spike Concentr.</b>	<b>QC Test Result</b>	<b>Pct (%) Recovery</b>	<b>RPD</b>
Benzene-ug/kg	0000700-05		100	100	102%	0%
Ethylbenzene-ug/kg	0000700-05		100	110	114%	0%
Toluene-ug/kg	0000700-05		100	110	107%	0%
p/m-Xylene-ug/kg	0000700-05		200	230	114%	0%
o-Xylene-ug/kg	0000700-05		100	120	115%	0%

**Phone: 815-563-1800**  
**Fax: 815-563-1713**

Ch. Miller

**PO#:**

Special Instructions						Sample Containers Info Y N	
FAX RESULTS TO PAT MCCASLAND ASAP						Temperature Upon Request	
Relinquished:	Date	Time	Received by:	Date	Time	Laboratory Comments:	
<i>Bob Mill</i>	<i>2/22/02</i>	<i>1:20</i>	<i>MD G</i>	<i>2/22/02</i>	<i>1:20</i>	<i>-05°C</i>	
Relinquished:	Date	Time	Received by:	Date	Time		
<i>MD G</i>	<i>2/22/02</i>	<i>15:50</i>	<i>Sandra Bingle</i>	<i>2/22/02</i>	<i>1550</i>		

# **ANALYTICAL REPORT**

## **Prepared for:**

**FRANK HERNANDEZ  
ENRON TRANSPORTATION SYSTEMS  
5805 E. HWY. 80  
MIDLAND, TX 79706**

**Project: 8" Line Loop**

**Order#: G0202649**

**Report Date: 03/10/2002**

## **Certificates**

**US EPA Laboratory Code TX00158**

# ENVIRONMENTAL LAB OF TEXAS

## SAMPLE WORK LIST

ENRON TRANSPORTATION SYSTEMS  
5805 E. HWY. 80  
MIDLAND, TX 79706  
915-684-3456

Order#: G0202649  
Project: 2002-10052  
Project Name: 8" Line Loop  
Location: None Given

The samples listed below were submitted to Environmental Lab of Texas and were received under chain of custody. Environmental Lab of Texas makes no representation or certification as to the method of sample collection, sample identification, or transportation/handling procedures used prior to the receipt of samples by Environmental Lab of Texas.

<u>Lab ID:</u>	<u>Sample :</u>	<u>Matrix:</u>	<u>Date / Time</u> <u>Collected</u>	<u>Date / Time</u> <u>Received</u>	<u>Container</u>	<u>Preservative</u>
02649-01	SE8LL22102SP	SOIL	02/21/2002 12:00	02/21/2002 15:45	4 oz glass	Ice

Lab Testing:

Rejected: No

Temp: -2.5 C

8021B/5030 BTEX  
8260B TCLP  
8270C Semivolatile Organics - TCLP  
METALS RCRA 8 TCLP  
RCI  
TCLP Metals Extraction  
TCLP Organic Extraction

# ENVIRONMENTAL LAB OF TEXAS

## ANALYTICAL REPORT

FRANK HERNANDEZ  
ENRON TRANSPORTATION SYSTEMS  
5805 E. HWY. 80  
MIDLAND, TX 79706

Order#: G0202649  
Project: 2002-10052  
Project Name: 8" Line Loop  
Location: None Given

Lab ID: 0202649-01  
Sample ID: SE8LL22102SP

### 8021B/5030 BTEX

Method	Date	Date	Sample	Dilution	Analyst	Method
<u>Blank</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Amount</u>	<u>Factor</u>		
0000742-02		03/01/2002 17:12	1	1	CK	8021B

Parameter	Result ug/l	RL
Benzene	<1.00	1.0
Ethylbenzene	33.3	1.0
Toluene	9.21	1.0
p/m-Xylene	29.7	1.0
o-Xylene	17.0	1.0

Approval:

*R. K. Tuttle* 3-10-02  
Raland K. Tuttle, Lab Director, QA Officer  
Celey D. Keene, Org. Tech. Director  
Jeanne McMurrey, Inorg. Tech. Director  
Irene Perry, QA Assistant  
Sandra Biezugbe, Lab Tech.  
Curt Cowdrey, Lab Tech.  
Sara Molina, Lab Tech.

# ENVIRONMENTAL LAB OF TEXAS

## ANALYTICAL REPORT

FRANK HERNANDEZ  
ENRON TRANSPORTATION SYSTEMS  
5805 E. HWY. 80  
MIDLAND, TX 79706

Order#: G0202649  
Project: 2002-10052  
Project Name: 8" Line Loop  
Location: None Given

Lab ID: 0202649-01  
Sample ID: SE8LL22102SP

### METALS RCRA 8 TCLP

Parameter	Result	Units	Dilution Factor	RL	Method	Date Analyzed	Analyst
Arsenic	0.059	mg/L	1	0.008	6010B	2/28/02	SM
Barium	0.663	mg/L	1	0.001	6010b	2/28/02	SM
Cadmium	0.001	mg/L	1	0.001	6010B	2/28/02	SM
Chromium	0.018	mg/L	1	0.002	6010B	2/28/02	SM
Lead	0.017	mg/L	1	0.011	6010B	2/28/02	SM
Mercury	<0.002	mg/L	1	0.002	245.1, 7470	3/1/02	SM
Selenium	0.024	mg/L	1	0.004	6010B	2/28/02	SM
Silver	0.004	mg/L	1	0.002	6010B	2/28/02	SM

### RCI

Parameter	Result	Units	Dilution Factor	RL	Method	Date Analyzed	Analyst
Ignitability	>100	C	1	NA	1010	2/21/02	SB
pH	8.59	pH Units	1	N/A	9045C	2/21/02	CK
Reactive Cyanide	< 0.090	mg/kg	1	0.090	SW846 CH.7	2/26/02	CC
Reactive Sulfide	12.0	mg/kg	1	5.0	SW846 CH.7	2/26/02	CC

### Test Parameters

Parameter	Result	Units	Dilution Factor	RL	Method	Date Analyzed	Analyst
TCLP Metals Extraction	2/24/02	None	1	na	1311	3/8/02	CK
TCLP Organic Extraction	2/27/02	None	1	na	1311	3/1/02	CC

### Approval:

Raland K. Tuttle, Lab Director, QA Officer  
Celey D. Keene, Org. Tech. Director  
Jeanne McMurrey, Inorg. Tech. Director  
Irene Perry, QA Assistant  
Sandra Biezugbe, Lab Tech.  
Curt Cowdrey, Lab Tech.  
Sara Molina, Lab Tech.

Date

# ENVIRONMENTAL LAB OF TEXAS

## QUALITY CONTROL REPORT

8021B/5030 BTEX

Order#: G0202649

<b>BLANK</b>	<b>LAB-ID #</b>	<b>Sample Concentr.</b>	<b>Spike Concentr.</b>	<b>QC Test Result</b>	<b>Pct (%) Recovery</b>	<b>RPD</b>
Benzene-ug/l	0000742-02			<1.00		
Ethylbenzene-ug/l	0000742-02			<1.00		
Toluene-ug/l	0000742-02			<1.00		
p/m-Xylene-ug/l	0000742-02			<1.00		
o-Xylene-ug/l	0000742-02			<1.00		
<b>CONTROL</b>	<b>LAB-ID #</b>	<b>Sample Concentr.</b>	<b>Spike Concentr.</b>	<b>QC Test Result</b>	<b>Pct (%) Recovery</b>	<b>RPD</b>
Benzene-ug/l	0000742-03		100	106	106.6%	
Ethylbenzene-ug/l	0000742-03		100	106	106.6%	
Toluene-ug/l	0000742-03		100	106	106.6%	
p/m-Xylene-ug/l	0000742-03		200	219	109.5%	
o-Xylene-ug/l	0000742-03		100	110	110.0%	
<b>CONTROL DUP</b>	<b>LAB-ID #</b>	<b>Sample Concentr.</b>	<b>Spike Concentr.</b>	<b>QC Test Result</b>	<b>Pct (%) Recovery</b>	<b>RPD</b>
Benzene-ug/l	0000742-04		100	114	114.4%	7.3%
Ethylbenzene-ug/l	0000742-04		100	112	112.2%	5.5%
Toluene-ug/l	0000742-04		100	114	114.4%	7.3%
p/m-Xylene-ug/l	0000742-04		200	229	114.5%	4.5%
o-Xylene-ug/l	0000742-04		100	114	114.4%	3.6%
<b>SRM</b>	<b>LAB-ID #</b>	<b>Sample Concentr.</b>	<b>Spike Concentr.</b>	<b>QC Test Result</b>	<b>Pct (%) Recovery</b>	<b>RPD</b>
Benzene-ug/l	0000742-05		100	113	113.3%	0.6%
Ethylbenzene-ug/l	0000742-05		100	109	109.3%	0.6%
Toluene-ug/l	0000742-05		100	113	113.3%	0.6%
p/m-Xylene-ug/l	0000742-05		200	224	112.2%	0.6%
o-Xylene-ug/l	0000742-05		100	114	114.4%	0.6%



# ENVIRONMENTAL LAB OF TEXAS

## QUALITY CONTROL REPORT

### METALS RCRA 8 TCLP

Order#: G0202649

<b>BLANK</b>	<b>LAB-ID #</b>	<b>Sample Concentr.</b>	<b>Spike Concentr.</b>	<b>QC Test Result</b>	<b>Pct (%) Recovery</b>	<b>RPD</b>
Arsenic-mg/L	0000728-02			<0.0080		
Barium-mg/L	0000728-02			<0.0010		
Cadmium-mg/L	0000728-02			<0.0010		
Chromium-mg/L	0000728-02			<0.0020		
Lead-mg/L	0000728-02			<0.011		
Mercury-mg/L	0000728-02			<0.0020		
Selenium-mg/L	0000728-02			<0.0040		
Silver-mg/L	0000728-02			<0.0020		
<b>MS</b>	<b>LAB-ID #</b>	<b>Sample Concentr.</b>	<b>Spike Concentr.</b>	<b>QC Test Result</b>	<b>Pct (%) Recovery</b>	<b>RPD</b>
Arsenic-mg/L	0202659-01	0.043	0.20	0.24	99.5%	
Barium-mg/L	0202659-01	0.059	1.0	0.95	89.3%	
Cadmium-mg/L	0202659-01	0.021	0.20	0.20	91.%	
Chromium-mg/L	0202659-01	0.075	1.0	0.94	86.7%	
Lead-mg/L	0202659-01	0.030	1.0	0.99	96.4%	
Mercury-mg/L	0202659-01	0	0.015	0.015	98.7%	
Selenium-mg/L	0202659-01	0.054	0.20	0.26	100.5%	
Silver-mg/L	0202659-01	0	1.0	0.87	86.8%	
<b>MSD</b>	<b>LAB-ID #</b>	<b>Sample Concentr.</b>	<b>Spike Concentr.</b>	<b>QC Test Result</b>	<b>Pct (%) Recovery</b>	<b>RPD</b>
Arsenic-mg/L	0202659-01	0.043	0.20	0.25	103.5%	3.3%
Barium-mg/L	0202659-01	0.059	1.0	0.96	89.6%	0.3%
Cadmium-mg/L	0202659-01	0.021	0.20	0.20	91.%	0.9%
Chromium-mg/L	0202659-01	0.075	1.0	0.94	86.8%	0.1%
Lead-mg/L	0202659-01	0.030	1.0	1.0	97.%	0.6%
Mercury-mg/L	0202659-01	0.015	0.015	0.014	91.3%	7.7%
Selenium-mg/L	0202659-01	0.054	0.20	0.26	103.5%	2.3%
Silver-mg/L	0202659-01	0.87	1.0	0.87	87.3%	0.6%
<b>SRM</b>	<b>LAB-ID #</b>	<b>Sample Concentr.</b>	<b>Spike Concentr.</b>	<b>QC Test Result</b>	<b>Pct (%) Recovery</b>	<b>RPD</b>
Arsenic-mg/L	0000728-05		1.0	1.0	105.%	0.9%
Barium-mg/L	0000728-05		1.0	1.0	103.%	0.9%
Cadmium-mg/L	0000728-05		1.0	1.0	104.%	0.9%
Chromium-mg/L	0000728-05		1.0	1.1	107.%	0.9%
Lead-mg/L	0000728-05		1.0	1.0	103.%	0.9%
Mercury-mg/L	0000728-05		0.015	0.014	93.3%	0.9%
Selenium-mg/L	0000728-05		1.0	1.0	104.%	0.9%
Silver-mg/L	0000728-05		1.0	0.95	94.9%	0.9%

# ENVIRONMENTAL LAB OF TEXAS

## QUALITY CONTROL REPORT

RCI

Order#: G0202649

<b>BLANK</b>	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
pH-pH Units	0000803-01			7.2		
Reactive Cyanide-mg/kg	0000748-01			<0.090		
Reactive Sulfide-mg/kg	0000748-01			<5.0		
<b>CONTROL</b>	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
pH-pH Units	0000803-02		0	7.9	0.0%	
Reactive Cyanide-mg/kg	0000748-02		0.10	0.11	114.0%	
Reactive Sulfide-mg/kg	0000748-02		14	14	100.7%	
<b>CONTROL DUP</b>	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
pH-pH Units	0000803-03		0	8.0	0.0%	1.0%
Reactive Cyanide-mg/kg	0000748-03		0.10	0.099	99.0%	14.1%
Reactive Sulfide-mg/kg	0000748-03		14	12	89.7%	11.6%
<b>DUPLICATE</b>	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Reactive Cyanide-mg/kg	0202648-01	0		<0.090		0.0%
Reactive Sulfide-mg/kg	0202648-01	16		14		8.0%
<b>SRM</b>	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
pH-pH Units	0000803-04		10	10	99.9%	0.0%
Reactive Sulfide-mg/kg	0000748-04		680	470	68.7%	0.0%

# ENVIRONMENTAL

## LAB OF I, LTD.

"Don't Treat Your Soil Like Dirt" ENERGY PIPELINE  
ATTN: MR. FRANK HERNANDEZ  
5805 E. HWY 80  
MIDLAND, TEXAS 79701  
FAX: 915-556-0190

Sample Type: Soil  
Sample Condition: Intact/ Iced/ -2.5 deg C  
Project Name: 8" LINE LOOP  
Project #: 2002-10052  
Project Location: NONE GIVEN

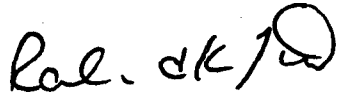
Sampling Date: 02/21/02  
Receiving Date: 02/21/02  
TCLP Extr: 02/27/02  
Analysis Date: 03/07/02  
Field Code: SE8LL22102SP

TCLP	REPORT	ELT#			
EPA SW846 8260B Compounds	LIMIT	0202649-01			
		mg/L	%EA	%DEV	RPD
Benzene	0.002	ND	124	-0.9	3
Carbon tetrachloride	0.002	ND		-5.9	
Chlorobenzene	0.002	ND	140	-1.6	4
Chloroform	0.002	ND		-1.5	
1,4-Dichlorobenzene	0.002	ND		1.5	
1,2-Dichloroethane	0.002	ND		-0.9	
1,1-Dichloroethylene	0.002	ND	76	-3.1	6
Methyl ethyl ketone	0.020	ND		2.4	
Tetrachloroethylene	0.002	ND		5.7	
Trichloroethylene	0.002	ND	92	-0.6	4
Vinyl chloride	0.002	ND		-10.2	

System Monitoring Compounds	% RECOVERY
Dibromofluoromethane	117
1,2-dichloroethane-d4	108
Toluene-d8	106
4-Bromofluorobenzene	90

ND= Not Detected at report limit

Method: EPA SW 846 8260B, 1311

  
Celey D. Keene  
Raland K. Tuttle

3-10-02  
Date

# ENVIRONMENTAL LAB OF I, LTD.

"Don't Treat Your Soil Like Dirt!"

EOTT ENERGY PIPELINE  
ATTN: MR. FRANK HERNANDEZ  
5805 E. HWY 80  
MIDLAND, TEXAS 79701  
FAX: 915-556-0190

Sample Type: Soil  
Sample Condition: Intact/ Iced/ -2.5 deg C  
Project Name: 8" LINE LOOP  
Project #: 2002-10052  
Project Location: NONE GIVEN

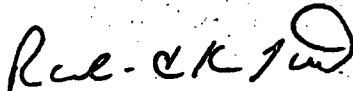
Sampling Date: 02/21/02  
Receiving Date: 02/21/02  
TCLP EXTR: 02/24/02  
Extracted: 02/26/02  
Analysis Date: 02/27/02  
Field Code: SE8LL22102SP

TCLP SEMIVOLATILE ORGANICS (mg/L)	REG. LIMIT	REPORT LIMIT	ELT# 0202649-01	%DEV	%EA	RPD
2-Methylphenol	200	0.005	ND	8.0		
4-Methylphenol	200	0.005	ND	5.2		
1,4-Dichlorobenzene	7.5	0.005	ND	-5.1	30	19
2, 4-Dinitrotoluene	0.13	0.005	ND	-10.6	42	19
Hexachlorobenzene	0.13	0.005	ND	-35.5		
Hexachlor-1, 3-butadien	0.5	0.005	ND	-28.2		
Hexachloroethane	3	0.005	ND	0.3		
Nitrobenzene	2	0.005	ND	15.8		
Pentachlorophenol	100	0.005	ND	-37.7	68	8
Pyridine	5	0.005	ND	16.5		
2,4,5-Trichlorophenol	400	0.005	ND	-18.2		
2,4,6-Trichlorophenol	2	0.005	ND	-16.2		

ND= NOT DETECTED, < REPORTING LIMIT  
SYSTEM MONITORING COMPOUNDS

	% Recovery
2-Fluorophenol	71.4
Phenol-d5	60.8
Nitrobenzene-d5	80.9
2-Fluorobiphenyl	89.8
2,4,6-Tribromophenol	146
p-Terphenyl-d14	97.3

Method: SW 846-8270C,1311



Celey D. Keene  
Raland K. Tuttle

3-10-02

Date

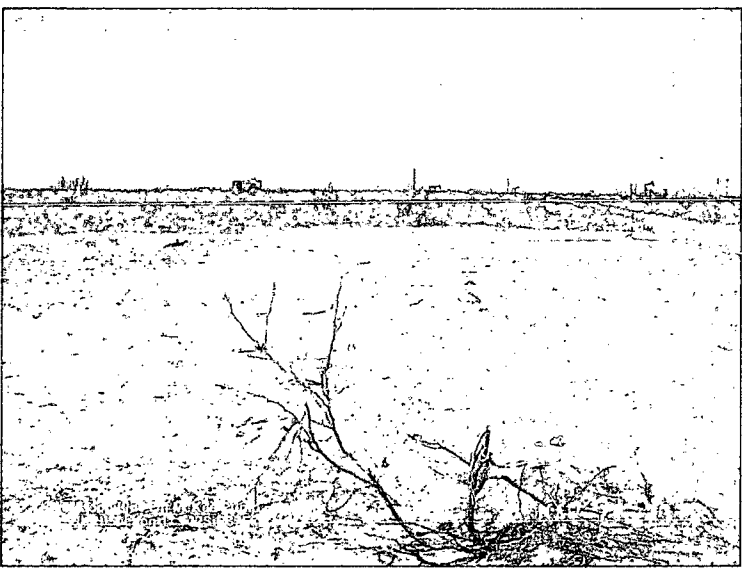
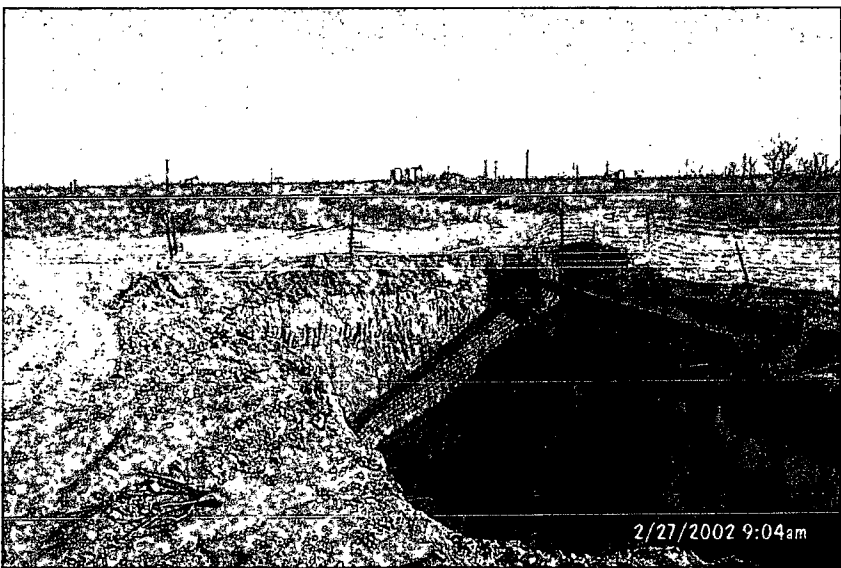
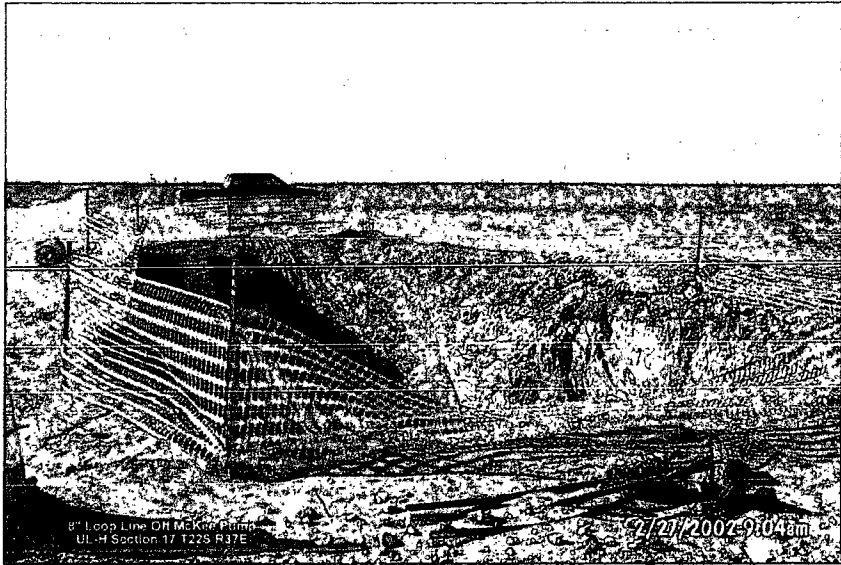
**Phone: 915-583-1800**  
**Fax: 915-583-1713**

Cady Miller

**PO#:**

[illegible]

**Attachment III: Photographs**



**Attachment IV: Regulatory and Summary Forms**

Site Information and Metrics			
SITE: 8" Loop Line Off McKee Pump		Assigned Site Reference #: 2002-10052	
Company: EOTT Energy Pipeline, LP			
Company Street Address: 5805 E. Highway 80, Midland, Texas 79701			
Company Mailing Address: P.O. Box 1660			
Company City, State, Zip: Midland, Texas 79702			
Company Representative: Frank Hernandez			
Company Representative Telephone: 915.638.3799			
Company Telephone: 915.684.3451 Fax: 915.687.2713			
Fluid volume released (bbls) = 30 (5 recovered)			
>25 bbls : Notify NMOCD verbally within 24 hrs and submit form C-141 within 15 days. (Also applies to unauthorized releases >500 mcf Natural Gas)			
5-25 bbls: Submit form C-141 within 15 days (Also applies to unauthorized releases of 50-500 mcf Natural Gas)			
Leak, Spill, or Pit (LSP) Name: 8" Loop Line Off McKee Pump			
Source of contamination: Pipe Corrosion			
Land Owner, i.e., BLM, ST, Fee, Other: New Mexico State Land Office (Leased to Millard Deck Estate)			
LSP Dimensions: affected area = ~70' NS x 40' EW			
LSP Area = ~1327 ft <sup>2</sup>			
Location of Reference Point (RP):			
Location distance and direction from RP:			
Latitude: 32° 23' 41.944"N			
Longitude: 103° 10' 43.532"W			
Elevation above mean sea level: ~ 3400' amsl			
Feet from South Section Line: ~3800			
Feet from West Section Line: ~4570			
Location- Unit or ¼ = UL-H (or) SE¼ of NE¼			
Location- Section = 17			
Location- Township = T22S			
Location- Range = R37E			
Surface water body within 1000' radius of site: None			
Surface water body within 1000' radius of site			
Domestic water wells within 1000' radius of site: None			
Domestic water wells within 1000' radius of site			
Agricultural water wells within 1000' radius of site: None			
Agricultural water wells within 1000' radius of site			
Public water supply wells within 1000' radius of site: None			
Public water supply wells within 1000' radius of site			
Depth from land surface to ground water (DG): 75-feet			
Depth of contamination (DC): 17-feet			
Depth to ground water (DG - DC = DiGW) 58-feet			
1. Ground Water		2. Wellhead Protection Area	
If Depth to GW <50 feet: 20 points		If <1000' from water source, or, <200' from private domestic water source: 20 points	
If Depth to GW 50 to 99 feet: 10 points			
If Depth to GW >100 feet: 0 points		If >1000' from water source, or, >200' from private domestic water source: 0 points	
Ground water Score = 10		Wellhead Protection Area Score = 0	
Site Rank (1+2+3) = 10+0+0 = 10 points		3. Distance to Surface Water Body	
		<200 horizontal feet: 20 points	
		200-100 horizontal feet: 10 points	
		>1000 horizontal feet: 0 points	
		Surface Water Score = 0	
Total Site Ranking Score and Acceptable Concentrations			
Parameter	20 or >	10-19	0-9
Benzene <sup>1</sup>	10 ppm	10 ppm	10 ppm
BTEX <sup>1</sup>	50 ppm	50 ppm	50 ppm
TPH	100 ppm	1000 ppm	5000 ppm
<sup>1</sup> 100 ppm field VOC headspace measurement may be substituted for lab analysis			



District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
811 South First, Artesia, NM 88210  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
District IV  
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico  
Energy Minerals and Natural Resources

E.O.T.T. Energy Pipeline Form C-138  
Revised March 17, 1999

Oil Conservation Division  
2040 South Pacheco  
Santa Fe, NM 87505

Submit Original  
Plus 1 Copy  
to Appropriate  
District Office

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. RCRA Exempt: <input type="checkbox"/> Non-Exempt: <input checked="" type="checkbox"/> Verbal Approval Received: Yes <input type="checkbox"/> No <input type="checkbox"/>	4. Generator <i>EOTT Energy Pipeline</i>
2. Management Facility Destination <i>Environmental Plus, Inc. (EPI)</i>	5. Originating Site <i>8" Loop Line off McKee Pump</i>
3. Address of Facility Operator <i>2100 Ave O Box 1558 Esanice, NM 88231</i>	6. Transporter <i>EPI</i>
7. Location of Material (Street Address or ULSTR) <i>UL-A Sec 17 T22S R37E</i>	8. State <i>NM</i>
9. Circle One: A. All requests for approval to accept oilfield exempt wastes will be accompanied by a certification of waste from the Generator; one certificate per job. B. All requests for approval to accept non-exempt wastes must be accompanied by necessary chemical analysis to PROVE the material is not-hazardous and the Generator's certification of origin. No waste classified hazardous by listing or testing will be approved. All transporters must certify the wastes delivered are only those consigned for transport.	

BRIEF DESCRIPTION OF MATERIAL:

*CRUDE OIL CONTAMINATED SOIL*

Estimated Volume 200 cy Known Volume (to be entered by the operator at the end of the haul) \_\_\_\_\_ cy

SIGNATURE *Rob McLean* TITLE: *Tech. Mgr.* DATE: *2.20.02*  
Waste Management Facility Authorized Agent

TYPE OR PRINT NAME: *Rob McLean* TELEPHONE NO. *505.394.3481*

(This space for State Use)

APPROVED BY: \_\_\_\_\_ TITLE: \_\_\_\_\_ DATE: \_\_\_\_\_  
APPROVED BY: \_\_\_\_\_ TITLE: \_\_\_\_\_ DATE: \_\_\_\_\_

**ENVIRONMENTAL PLUS, INC.****LAND FARM**

PERMIT # NM-01-0013

**CERTIFICATE OF WASTE STATUS****"NON - EXEMPT WASTE"**COMPANY E.O.T.T. ENERGY PIPELINEORIGIN UL OR ¼¼: A SECTION: 17 TOWNSHIP: 22S RANGE: 37ESOURCE DESCRIPTION (PIPELINE, LEASE, BATTERY, FLOWLINE, ETC.)  
8" Loopline off McKee Pump (pipeline)

"AS A CONDITION OF ACCEPTANCE FOR DISPOSAL,  
I HEREBY CERTIFY THAT THIS WASTE IS A NON-EXEMPT WASTE  
AS DEFINED BY THE ENVIRONMENTAL PROTECTION AGENCY (EPA)  
JULY 1988 REGULATORY DETERMINATION AND TO MY KNOWLEDGE,  
THIS WASTE BEEN CHARACTERIZED AS "NON-HAZARDOUS" PURSUANT  
TO THE PROVISIONS OF EPA 40 CFR PART 261 SUBPART C AND HAS  
NOT BEEN COMINGLED WITH AN EPA 40 CFR PART 261 SUBPART D  
"LISTED WASTE."

I, FRANK HERNANDEZ, THE UNDERSIGNED AGENT  
FOR, EOTT ENERGY PIPELINE, HEREBY CERTIFY THAT,  
BASED ON PERSONAL KNOWLEDGE, THE ABOVE STATEMENT IS TRUE  
AND CORRECT.

NAME FRANK HERNANDEZ  
TITLE DES  
ADDRESS 5805 E Highway 80  
Midland, Texas 79702  
SIGNATURE [Signature]  
DATE 2-20-02

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-141  
Revised March 17, 1999

Submit 2 Copies to appropriate  
District Office in accordance  
with Rule 116 on back  
side of form

**Release Notification and Corrective Action**

**OPERATOR**

☐ Initial Report ☒ Final Report

Name of Company: EOTT Energy Pipeline, LP	Contact: Frank Hernandez
Address: 5805 E. Hwy 80, Midland, TX 79702	Telephone No.: 915-638-3799
Facility Name: 8" Loop Line Off McKee Pump	Facility Type: 8" Pipeline

Surface Owner: State of New Mexico	Mineral Owner: Lessor - Millard Deck Estate	Lease No.
------------------------------------	---	-----------

**LOCATION OF RELEASE**

Unit Letter H	Section 17	Township 22S	Range 37E	Feet from the 3800	North/South Line South	Feet from the 4570	East/West Line West	County LEA
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**NATURE OF RELEASE**

Type of Release: Crude Oil	Volume of Release: 30 bbl	Volume Recovered: 5 bbl
Source of Release: 8" steel pipeline	Date and Hour of Occurrence: 0900 2/20/02	Date and Hour of Discovery: 1000 2/20/02
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Paul Sheeley (NMOCD) - left message	
By Whom? Frank Hernandez	Date and Hour: 10:30 AM 2/20/02	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	


If a Watercourse was Impacted, Describe Fully.\*

Describe Cause of Problem and Remedial Action Taken.\*

Internal/External Corrosion. Line clamp installed to repair pipeline. Pooled oil was recovered and re-introduced to the system. Environmental Plus, Inc., Eunice, NM contracted to remediate site.

Describe Area Affected and Cleanup Action Taken.\* Approximate 40' X 70' (1327-ft<sup>2</sup>) affected by spill. Spill affected area excavated down to 17-ft bgs to remove contaminated soils. Contaminated soils disposed of in EPI's approved land farm. Bottom-hole and bottom sidewall composite sampling of in-situ soil confirms that contaminated soils have been removed from the site. Excavation was backfilled by EPI with clean soil obtained on-site.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature: 	<b>OIL CONSERVATION DIVISION</b>		
Printed Name: Frank Hernandez	Approved by District Supervisor:		
Title: DES	Approval Date:	Expiration Date:	
Date: July 9, 2002 Phone: 915-638-3799	Conditions of Approval:	Attached <input type="checkbox"/>	

\* Attach Additional Sheets If Necessary