

# E.O.T.T. ENERGY CORPORATION

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

DON JONES TURNER PUMP  
Ref.# 2001-10930

UL-I NE $\frac{1}{4}$  of the SE $\frac{1}{4}$  of Sec22, T21S, R37E,  
~2 miles northeast of Eunice  
Lea County, New Mexico  
Latitude 32°27'40"N Longitude 103°08'32"W

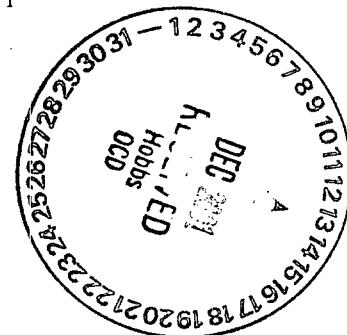
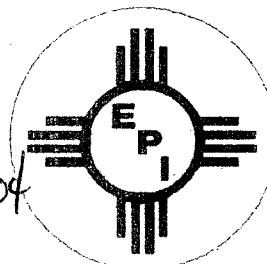
November 20, 2001

Contract #

Prepared by

Environmental Plus, Inc.  
2100 Avenue O  
P.O. Box 1558  
Eunice, New Mexico 88231  
Tele 505•394•3481 FAX 505•394•2601

EOTT-64617  
facility - pPAC0606853320  
incident - nPAC0606853481  
application - pPAC0606853604



## Table of Contents

Table of Contents .....	ii
Executive Summary.....	3
1.0      Introduction and Background.....	4
2.0      Initial Response and Mitigation .....	4
3.0      Site Ranking and Remedial Goals.....	4
4.0      Site Delineation .....	5
4.1      Soil .....	5
4.2      Ground Water.....	5
4.2.1      Precautions.....	5
4.2.2      West and South Water Wells .....	5
4.2.3      Borehole 3 Temporary Monitor Well .....	6
5.0      Remediation .....	6
5.1      Excavation and Disposal.....	6
5.2      Contaminated Pipeline Support Column.....	6
6.0      Compliance Sampling.....	6
7.0      Surface and Facility Restoration.....	7
8.0      Closure Justification.....	7
9.0      Follow Up Activities.....	7
Attachment I: Figures and Maps .....	8
Attachment II: Photographs .....	12
Attachment III: Results Summary and Original Analytical Reports .....	18
Attachment IV: Site Information and Metrics Form .....	26

## EXECUTIVE SUMMARY

On March 26, 2001, a subsurface crude oil leak was discovered in the 4" discharge line at the E.O.T.T. Energy Pipeline Turner Pump located approximately 2 miles northeast of Eunice, New Mexico and adjacent to a primary all-weather oil field access road and within 150' of the Don Jones family residence. Estimated volume was <25 barrels. The initial response was to isolate the pipeline, recover remaining fluid, and excavate and repair the leak, stockpiling the crude oil contaminated soil on a plastic barrier north of the excavation. Because ground water occurs at ~55' below ground surface ('bgs), of primary concern was contamination of the water wells near the site, i.e., ~ 75' north of the leak is the West Water well and ~200'southeast is the South Water well. The Jones' use these wells for domestic and agricultural purposes. On March 27, 2001, to monitor the constituents of concern, i.e. Benzene, Toluene, Ethyl Benzene, and Xylenes, co-located samples were collected from the wells and sent to separate laboratories for analysis. As a precautionary measure during the reporting interim, the Jones' were provided an alternative source of drinking water and fresh water for their livestock. The water analyses did not report any hydrocarbon or metals contamination but did detect Chloride levels above background. The source of the chloride is likely from historical releases of saline produced water associated with oil and gas production and drilling activities in the area. An unremediated abandoned tank battery site is located ~300' due west of the West Water Well and was used to store and handle crude oil and saline produced water for many years before being abandoned. Other sources could include buried drilling reserve pits associated with the production and injection wells located within 1,500 feet of the site. Soil borings were advanced and sampled to determine the vertical and horizontal extent of the crude oil. Borehole 3, located between the spill and the West Water Well, was advanced to ground water, developed as a temporary monitor well, and sampled. Nominal concentrations of Benzene, Toluene, Ethyl Benzene, and Xylenes were reported above the instrument detection limit but were 2 orders of magnitude below the New Mexico Water Quality Control Commission (WQCC) Ground Water Standards. The delineation identified soil contamination above the NMOCD remedial goals vertically to approximately 35'below ground surface ('bgs) in the immediate area of the spill and to ~20'bgs to the east up to the north/south EOTT mainline that is adjacent and parallel to the Jones' west front yard fence. The remediation strategy, given the proximity to the water wells, the public access road, and the Jones' dwelling, was to remove soil contaminated above the NMOCD remedial guidelines and backfill with clean soil. A total of 2,096-yd<sup>3</sup> of soil was disposed of in the NMOCD approved and permitted Environmental Plus, Inc. land farm located approximately 4 miles south of the site. Prior to backfilling with clean soil, composite samples of the excavation sidewalls and bottom were collected and analyzed to verify adequate remediation.

During the excavation, in the center of the east part of the excavation, a 10'w x 10'l x 20'h column of historically contaminated soil was left in place to support the valve setting at the mainline junction. The consensus was that removing the support column from this particular point on the pipeline would present untenable operational, occupational, and environmental risks, i.e., the added weight of the valves, the stress of the lateral piping and the fact that the line was active and loaded, would have caused the line to sag/shift and rupture. Analysis of a composite sample from the column showed the Total Petroleum Hydrocarbon EPA method 418.1 (TPH<sup>418.1</sup>) to be 17,843 mg/Kg, Benzene <0.100 mg/Kg, and BTEX (sum of Benzene, Toluene, Ethyl Benzene, and Xylenes) 46.410 mg/Kg. The TPH<sup>418.1</sup> value exceeds the NMOCD remedial goal of 100 mg/Kg, however the Benzene and BTEX values are below the respective remedial goals of 10 and 50 mg/Kg. This supports the environmental rationale for leaving the column in place, i.e., the Benzene and BTEX soil remedial goals will be protective of the ground water according to the NMOCD guidelines and in the absence of a WQCC ground water standard for TPH, it is reasonable to

conclude that the remaining TPH<sup>418,1</sup> source term likewise poses no risk to the local ground water. Based on the risks involved and the assessment of environmental consequences of leaving the soil column in place, the decision was made to backfill the excavation and contour to the original grade. Final restoration activities included replacing the Jones' front yard fence and re-landscaping the southwest corner that was affected by the remediation. Because the NMOCD soil TPH remedial goal is exceeded in the soil column supporting the valve setting, the NMOCD will be asked to allow leaving the soil in place until a time in the future when the pipeline is relocated or decommissioned and can be safely removed.

## 1.0 INTRODUCTION AND BACKGROUND

Mr. Don Jones is the land owner of record where the leak occurred and is ~2 miles northeast of Eunice, Lea County, New Mexico UL-I NE $\frac{1}{4}$  of the SE $\frac{1}{4}$  of Sec22, T21S, R37E, Latitude 32°27'40"N Longitude 103°08'32"W. The Jones family resides in the house and raise cattle and horses on the ranch. Adjacent and parallel to the west front yard fence is the buried EOTT north/south 8" mainline; the Turner Pump is located approximately 150' west of the dwelling. The leak site is located between the mainline and the Turner Pump and is 25' of north of a primary all weather oil field access road that connects NMSR 18 to the east and NMSR 207 to the west. Refer to Attachment I for an area map.

## 2.0 INITIAL RESPONSE AND MITIGATION

Environmental Plus, Inc. (EPI) responded to the emergency and excavated the leak with support from EOTT personnel who installed a 4-bolt repair clamp. EOTT recovered a small volume of oil (<1 bbl) from the estimated release volume of 25 barrels (bbls). It appeared the leak was due to internal corrosion. All crude oil contaminated soil was initially placed on a plastic barrier north of the excavation and was subsequently move to an area south of the road. Odorous/noxious vapor from the spoils was controlled with an application of MicroBlaze Spill Control. The site investigation and remediation were conducted consistent with the New Mexico Oil Conservation Division (NMOCD) approved "E.O.T.T. Energy Corp. (EOTT) General Work Plan for Remediation of EOTT Pipeline Spills, Leaks, and Releases in New Mexico." The regulatory basis for the General Work Plan is the August 1993 NMOCD Guidelines for Remediation of Leaks, Spills, and Releases.

## 3.0 SITE RANKING AND REMEDIAL GOALS

The NMOCD site ranking score is 40 points based on the criteria listed in the table below. The score is >19 and applies the most stringent remedial goals.

1. Ground Water	2. Wellhead Protection Area	3. Distance to Surface Water Body	
If Depth to GW <50 feet: 20 points		<200 horizontal feet: 20 points	
If Depth to GW 50 to 99 feet: 10 points	If <1000' from water source, or; <200' from private domestic water source: 20 points	200-100 horizontal 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	>1000 horizontal feet: 0 points	
Ground water Score = 20	Wellhead Protection Area Score= 20	Surface Water Score= 0	
Site Rank (1+2+3) = 20+20+0 = 40 points			
Parameter	Total Site Ranking Score and Acceptable Concentrations		
	>19	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

## 4.0 SITE DELINEATION

Strategically located soil borings were advanced and sampled at discrete subsurface intervals to delineate the areal distribution of the crude oil spill. Borehole 3 was advanced to the saturated zone to facilitate installation and development of a temporary monitoring well for representative ground water sampling.

### 4.1 SOIL

Boreholes 1, 2, 3, and 4 were strategically advanced just outside of the visible spill area to verify the horizontal extent. Borehole 5 was advanced to determine vertical extent of contamination in the area of the valve setting and Borehole 6 and 1A to bound the distribution of historical contamination present around the valve setting. The Turner Pump was previously located ~15' west of the valve setting but was moved 125' west, to its' current location after the construction of the Don Jones residence in 1999. Sample analyses for Boreholes 1, 3, and 4 located south, north, and west of the spill area, respectively, support the conclusion that contamination did not migrate beyond these lateral points. Borehole 2 results indicated contamination persisted to ~35' bgs but is being considered historical contamination from leaks that occurred at the old pump location. Borehole 6 and 1A data support the conclusion that the historical contamination had not migrated laterally to these points. Refer to Attachment I for the location borehole sample map and Attachment II for copies of the original analytical reports, summaries, and illustrations.

### 4.2 GROUND WATER

To ensure that the ground water had not been impacted by the EOTT crude oil leak, the Jones water wells were sampled and a borehole advanced to determine if an impact had occurred. Refer to Attachment I for site maps and Attachment II for copies of the original analytical reports and summaries.

#### 4.2.1 Precautions

Because of the close proximity of the West and South Don Jones water wells to the spill and the shallow ground water depth, the decision was made to immediately provide the Jones' with alternative supplies of clean drinking water and fresh water for the livestock. The Jones' were provided with bottled water and a dispenser. The existing waterings for the animals were barricaded and new drinking tubs set and filled with clean water from the City of Eunice public water supply system.

#### 4.2.2 West and South Water Wells

The West Water well is located ~ 75' north of the leak and the South Water well ~200' southeast. The Jones' use these wells for domestic and agricultural purposes. On March 27, 2001, to monitor the constituents of concern, i.e. Benzene, Toluene, Ethyl Benzene, and Xylenes, co-located samples were collected from the wells and sent to separate laboratories for analysis. The water analyses did not report any hydrocarbon or metals contamination but did detect Chloride levels above background. The source of the chloride is likely from historical releases of saline produced water associated with oil and gas production and drilling activities in the area. An unremediated abandoned tank battery site is located ~300' due west of the West Water Well and was used to store and handle crude oil and saline produced water for many years before being abandoned. Other sources could include buried drilling reserve pits associated with the production and injection wells located within 1,500 feet of the site.

#### 4.2.3 Borehole 3 Temporary Monitor Well

Borehole 3, located between the spill and the West Water Well, was advanced to ground water, developed as a temporary monitor well, and sampled. Nominal concentrations of Benzene, Toluene, Ethyl Benzene, and Xylenes were reported above the instrument detection limit but were 2 orders of magnitude below the New Mexico Water Quality Control Commission (WQCC) Ground Water Standards.

### 5.0 REMEDIATION

The selected remediation strategy was to excavate and dispose of soil contaminated above the NMOCD remedial goals based on site rank.

#### 5.1 EXCAVATION AND DISPOSAL

Soil volume disposed of in the NMOCD approved EPI landfarm was 2,096 yd<sup>3</sup>. Contaminated soil down to a maximum depth of 34' bgs was removed. As the project progressed, composite samples of the excavation bottom and sidewalls were collected and surveyed with a Photoionization Detector (PID) to monitor Volatile Organic Constituents Headspace concentration to determine acceptable remediation. When PID readings <50 ppm were obtained the final compliance composite samples of the bottom hole and sidewalls were collected and sent to the laboratory for analysis.

#### 5.2 CONTAMINATED PIPELINE SUPPORT COLUMN

Peculiar to this site is a valve setting adjacent to the county road and the Jones residence. During excavation, in the center of the east part of the excavation, a 10'w x 10'l x 20'h column of historically contaminated soil was left in place to support the valve setting at the mainline junction. The consensus was that removing the support column from this particular point on the pipeline would present untenable operational, occupational, and environmental risks, i.e., the added weight of the valves, the stress of the lateral piping and the fact that the line was active and loaded, would have caused the line to sag/shift and rupture. Borehole 5 was advanced proximate to the valve setting and delineated vertical contamination above the NMOCD remedial guidelines to be between the 20' and 25'bgs interval. BTEX concentrations from Borehole 5 exceeded 50 mg/Kg but were removed during the excavation. Analysis of a composite sample from the column, after excavation was completed, showed the Total Petroleum Hydrocarbon EPA method 418.1 (TPH<sup>418.1</sup>) to be 17,843 mg/Kg, Benzene <0.100 mg/Kg, and BTEX (sum of Benzene, Toluene, Ethyl Benzene, and Xylenes) 46.410 mg/Kg. The TPH<sup>418.1</sup> value exceeds the NMOCD remedial goal of 100 mg/Kg, however the Benzene and BTEX values are below the respective remedial goals of 10 and 50 mg/Kg. This supports the environmental rationale for leaving the column in place, i.e., the Benzene and BTEX soil remedial goals will be protective of the ground water according to the NMOCD guidelines and, in the absence of a WQCC ground water standard for TPH, it is reasonable to conclude that the remaining TPH<sup>418.1</sup> source term likewise poses no risk to the local ground water. Based on the risks involved and the assessment of environmental consequences posed by leaving the soil column in place, the decision was made to backfill the excavation and contour to the original grade. Because of the exceedances the NMOCD will be petitioned to allow leaving the contaminated soil column in place until a time in the future when the pipeline is relocated or decommissioned and can be safely removed.

### 6.0 COMPLIANCE SAMPLING

The final configuration of the excavation is illustrated on the site map included in Attachment I. Compliance sample locations were located on the North, East, South, West, and Northeast Sidewalls and the excavation Bottom. Due to the excavation, the five point composite samples were collected

remotely using the bucket of the excavator. The final compliance data is summarized and illustrated in Attachment III.

## **7.0 SURFACE AND FACILITY RESTORATION**

Final restoration activities included replacing the Jones' front yard fence and re-landscaping the southwest corner that was affected by the remediation (3,529 ft<sup>3</sup>), as well as, contouring the spoils pile area (6,335 ft<sup>3</sup>).

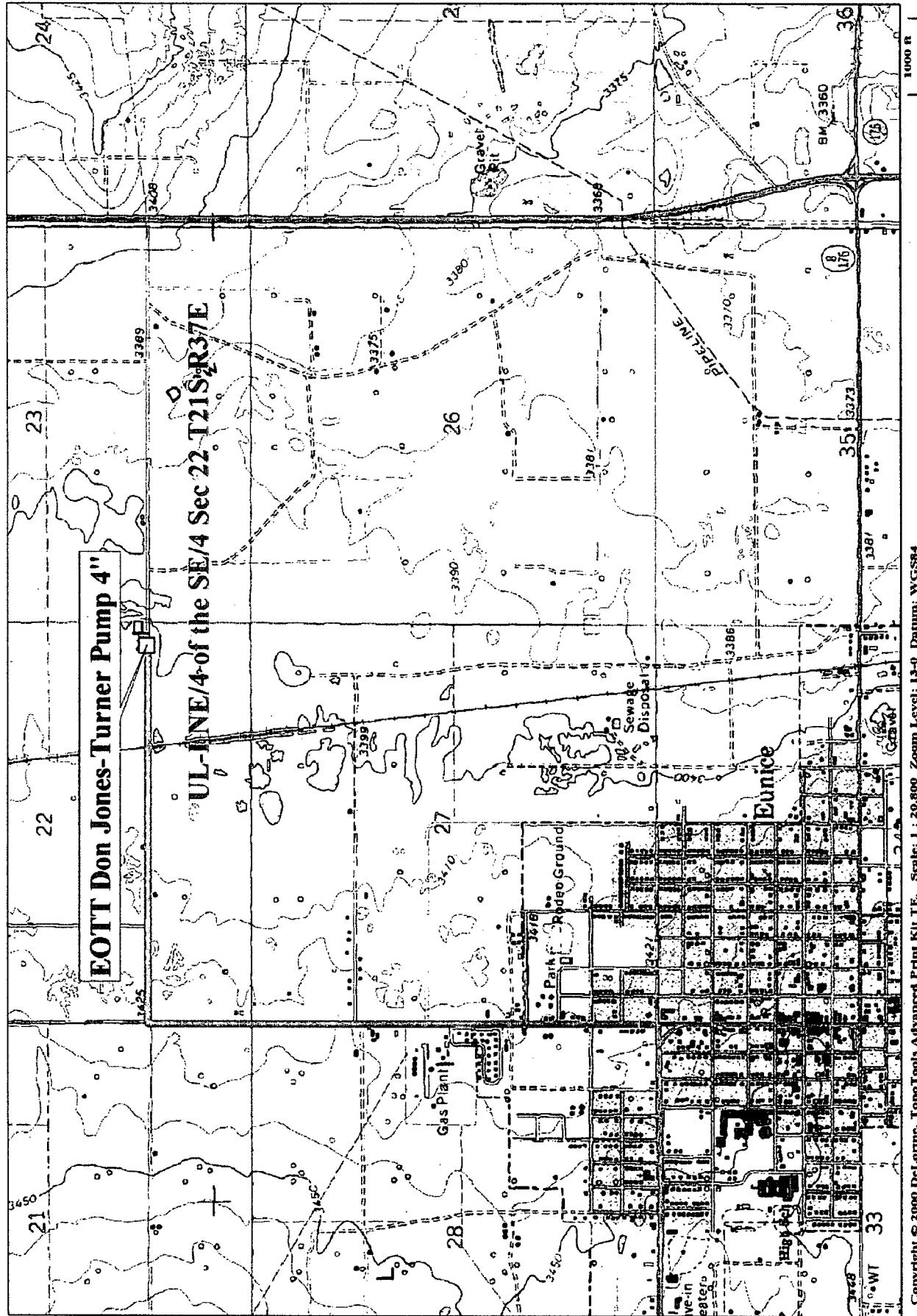
## **8.0 CLOSURE JUSTIFICATION**

The information provided in this report documents spill mitigation and site remediation in accordance with the NMOCD approved "E.O.T.T. Energy Corp. (EOTT) General Work Plan for Remediation of EOTT Pipeline Spills, Leaks, and Releases in New Mexico" and the NMOCD Guidelines for Remediation of Leaks, Spills, and Releases (August 1993). The contaminated soil column supporting the pipeline was left in place because of operational and occupation hazards inherent to the soil removal process and is environmentally acceptable, i.e., residual BTEX concentrations are below the NMOCD remedial goals and not considered a risk to the ground water. Likewise, the NMOCD Guidelines do not consider the elevated TPH source term residual to be a viable threat to the ground water. Additionally, the soil column is isolated from the surface by an 8-inch thick compacted caliche cap that will also severely inhibit the vertical migration mechanism. Based on the information provided in this report and the justifications supporting leaving the contaminated soil column in place, EPI, on behalf of E.O.T.T. Energy Pipeline, requests that the NMOCD require "no further action" at this site, with the conditional provision that EOTT remove the contaminated soil column (~74 yd<sup>3</sup>) remaining beneath the mainline junction valve setting at a time in the future when the line is relocated or decommissioned.

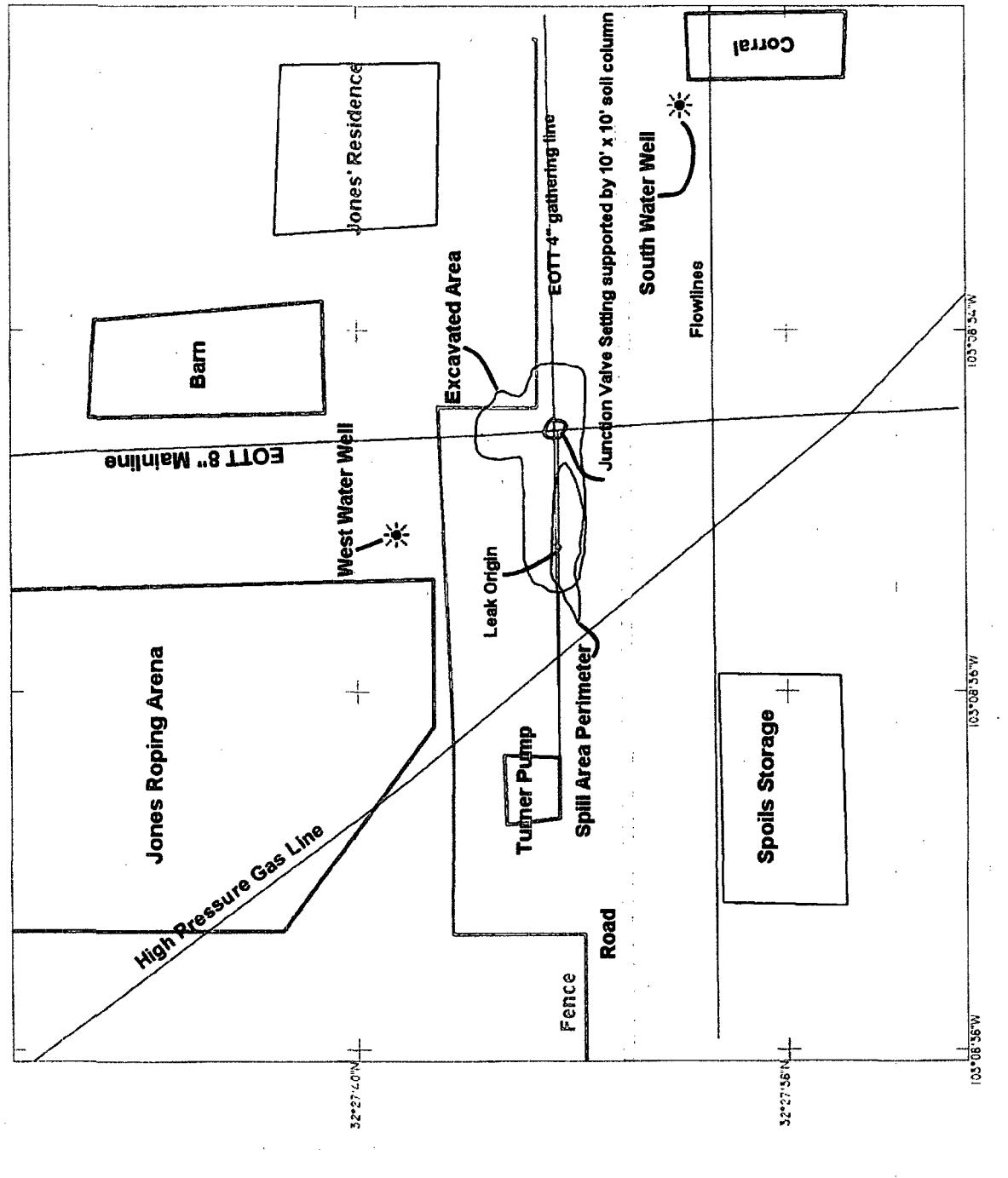
## **9.0 FOLLOW UP ACTIVITIES**

The contaminated soil column will be removed at a time in the future when the line is relocated or decommissioned. The spoils pile area will be reseeded in the Spring of 2002.

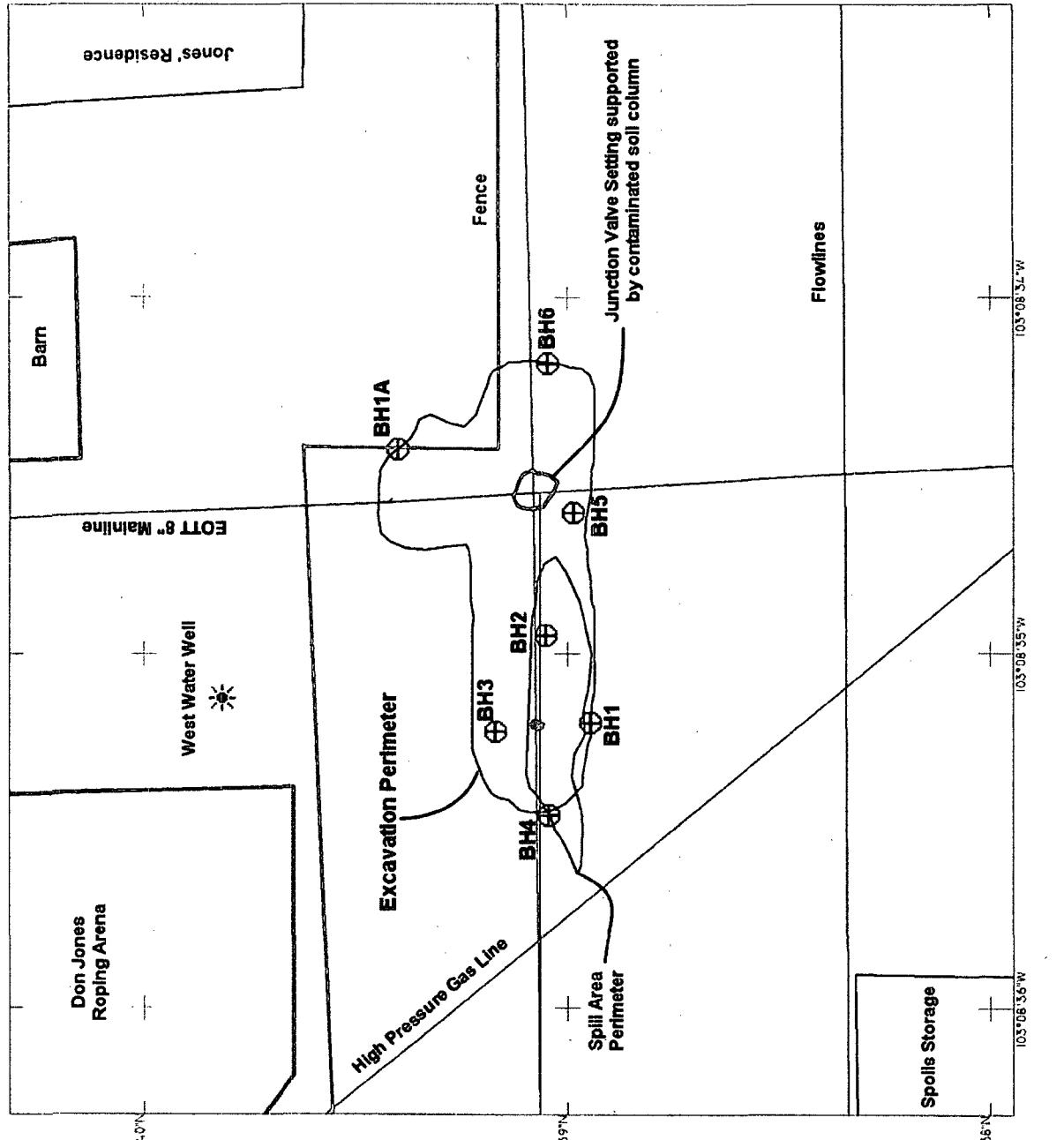
**Attachment I: Figures and Maps**



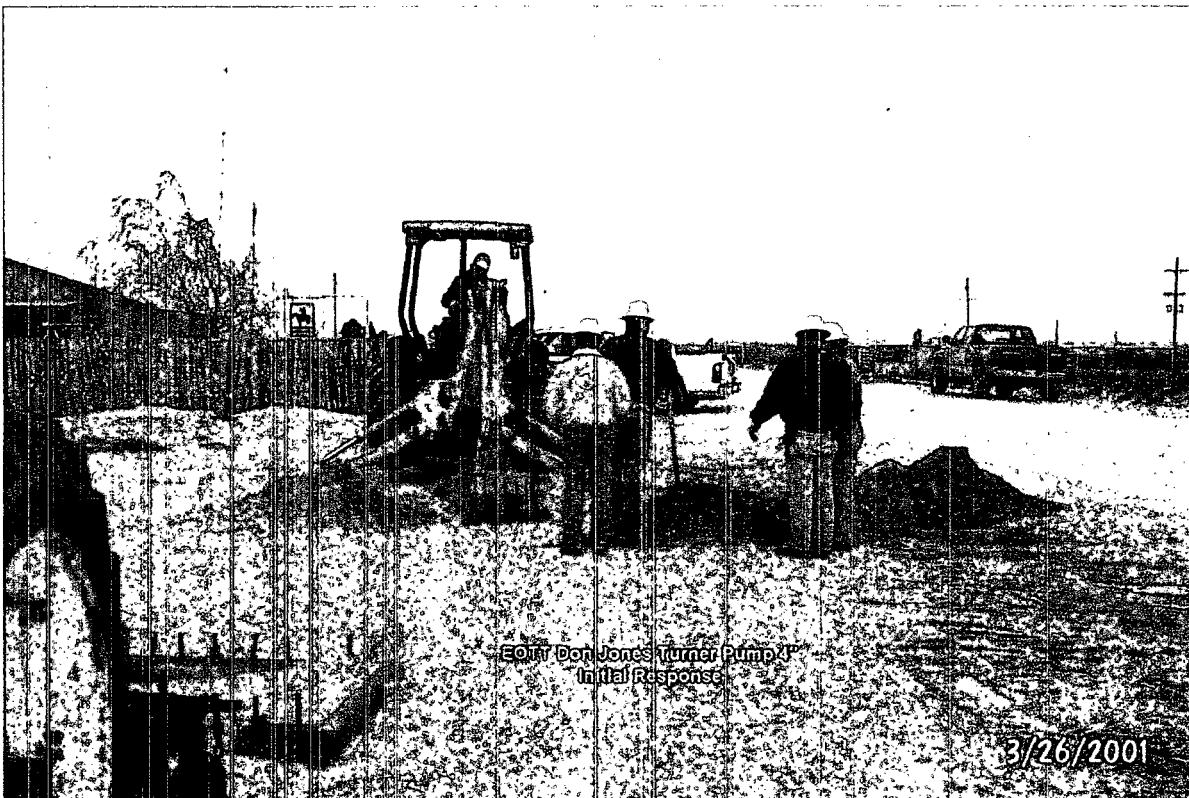
E.O.T.T.  
ENERGY PIPELINE  
DON JONES  
TURNER PUMP 4"  
UL-1 SEC 22  
T2S R37E  
LEA COUNTY  
NEW MEXICO

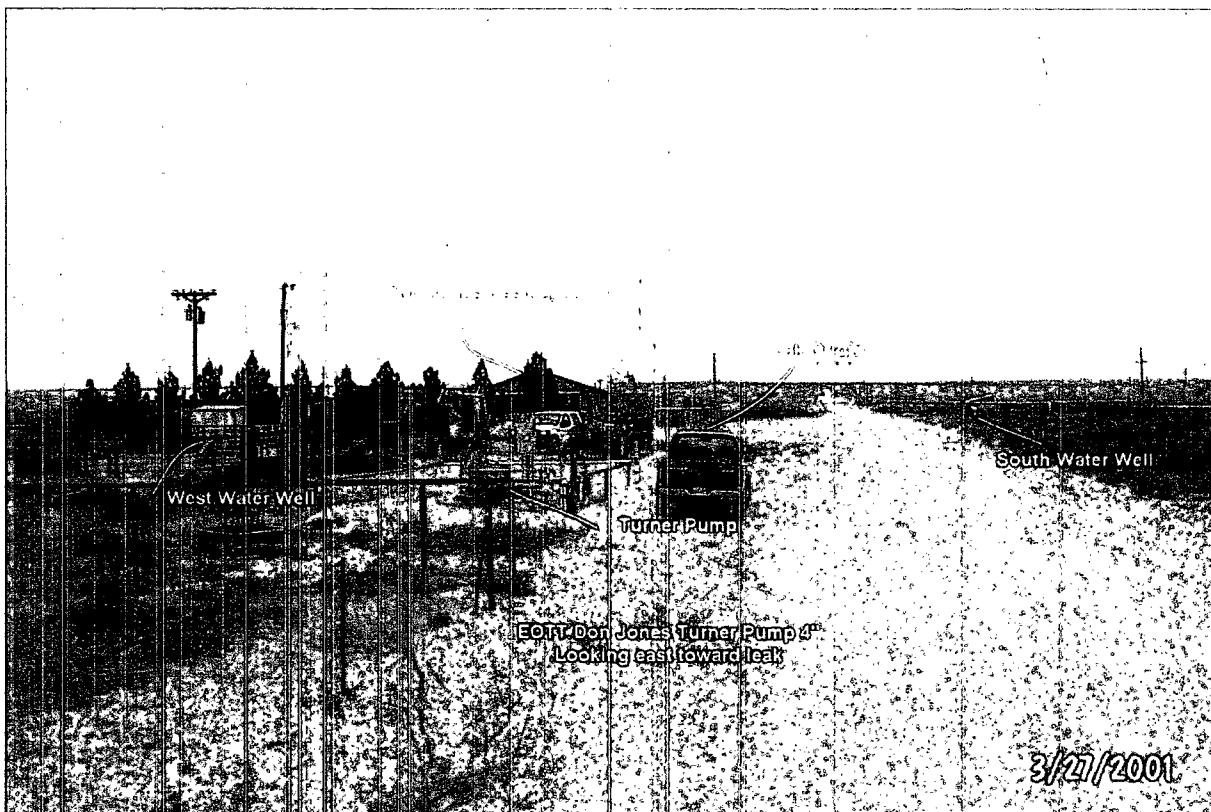


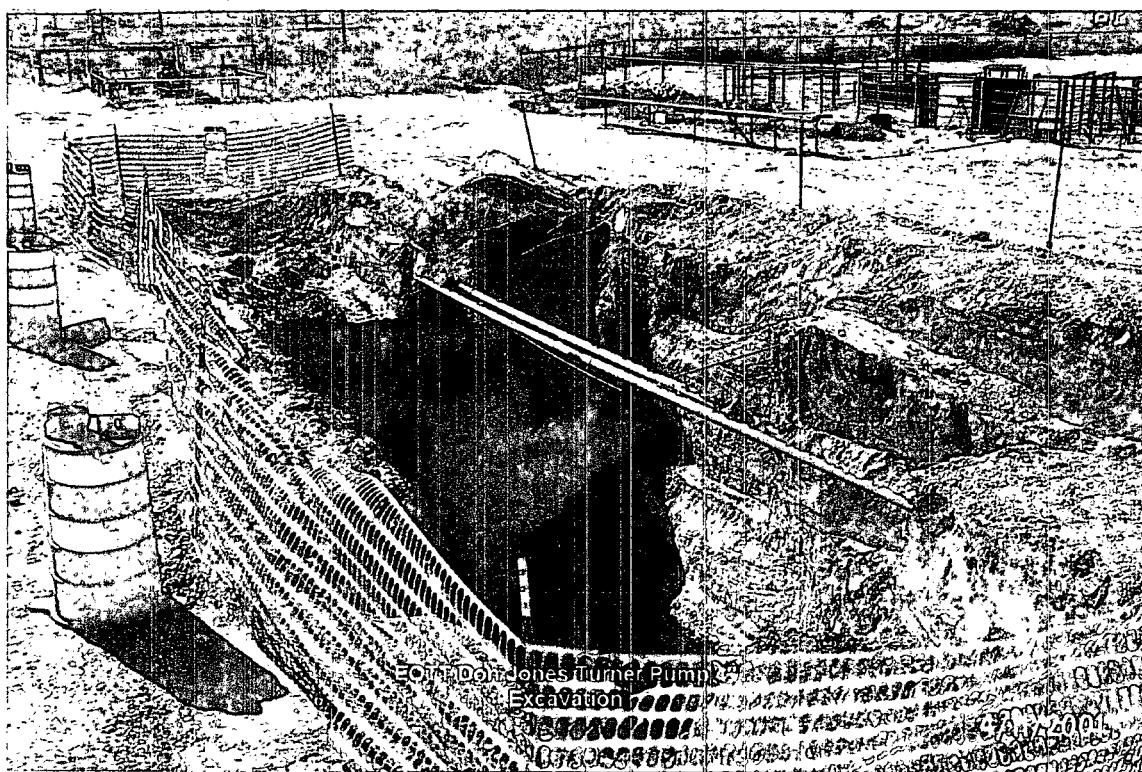
**E.O.T.T.**  
**ENERGY PIPELINE**  
**DON JONES**  
**TURNER PUMP**  
**UL-I SEC 22**  
**T2IS R37E**  
**LEA COUNTY**  
**NEW MEXICO**  
**SPILL AREA**  
**~771 SQFT**

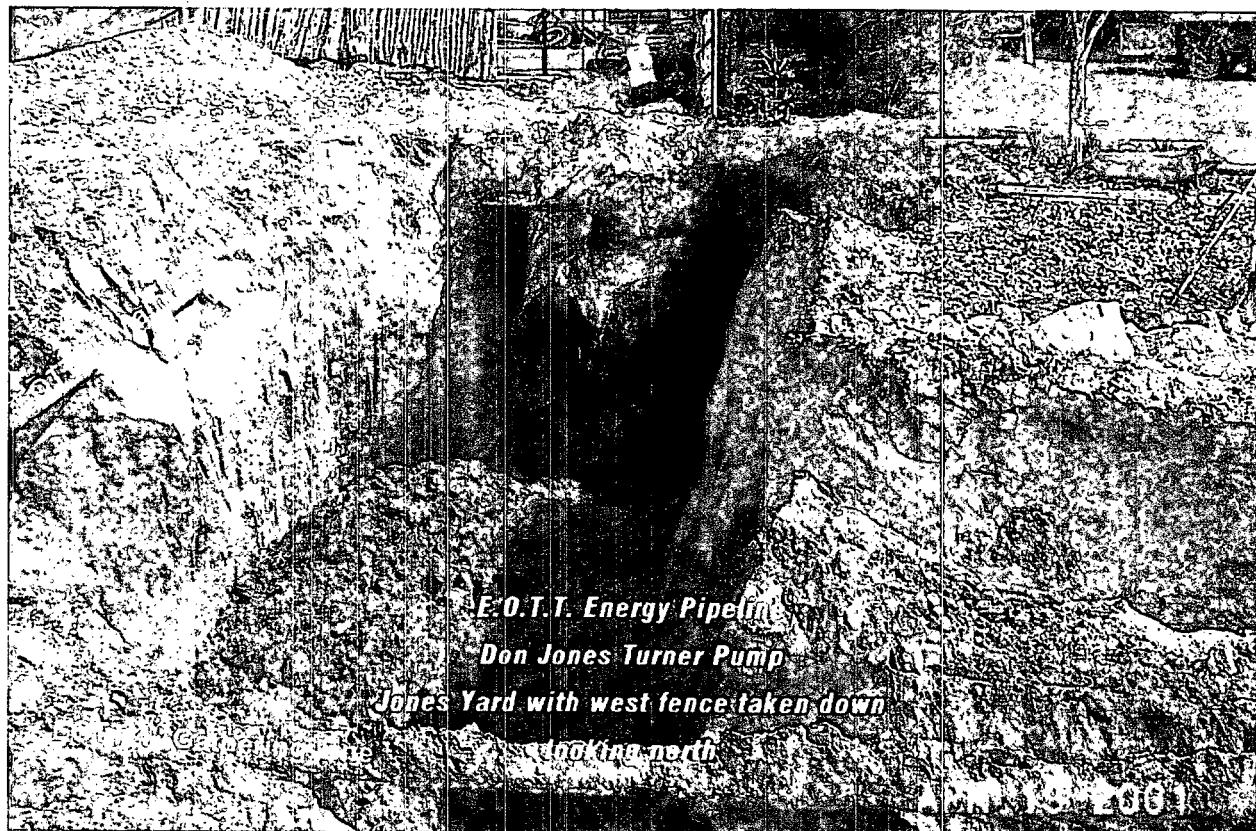
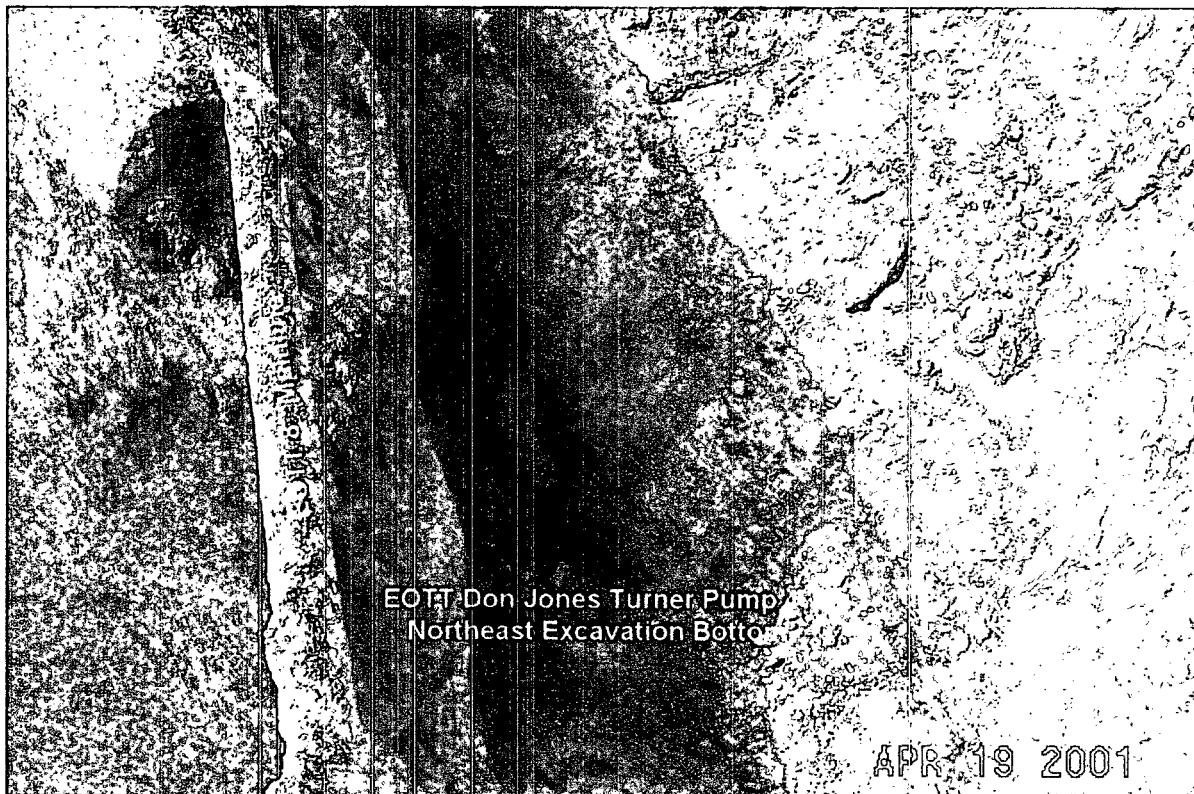


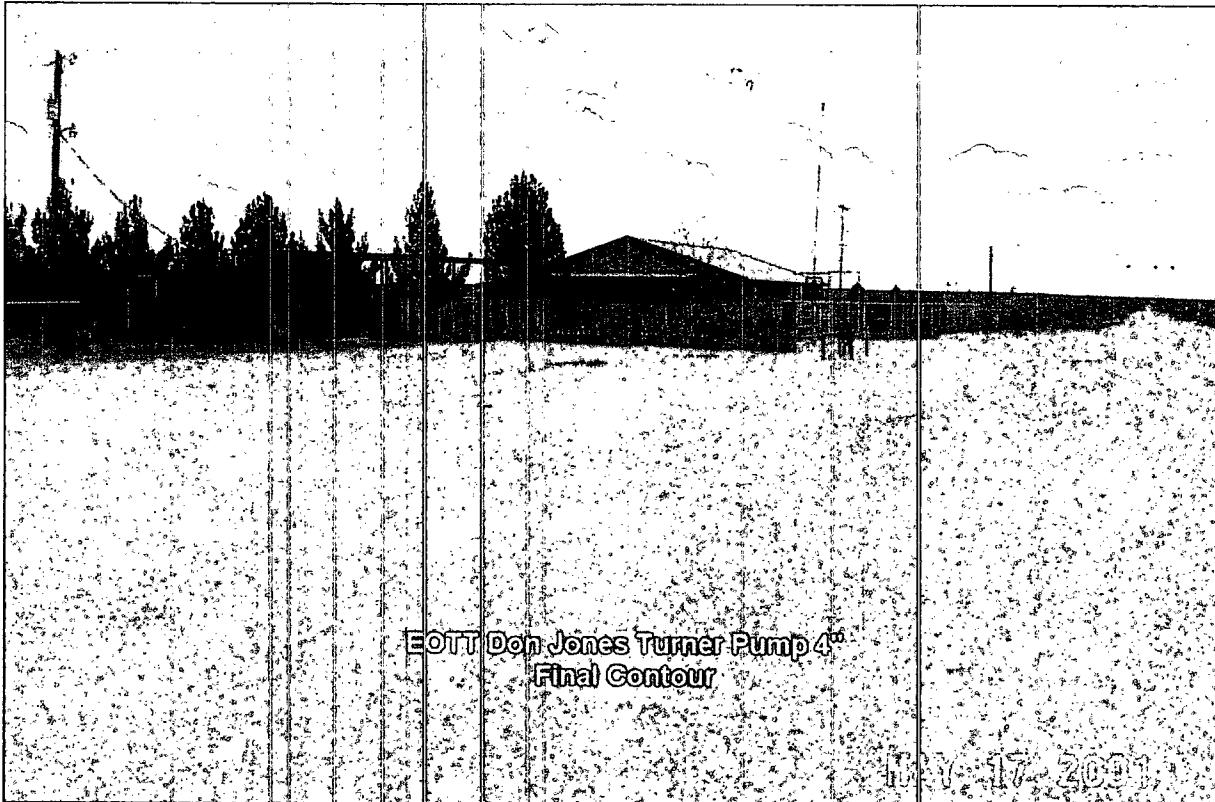
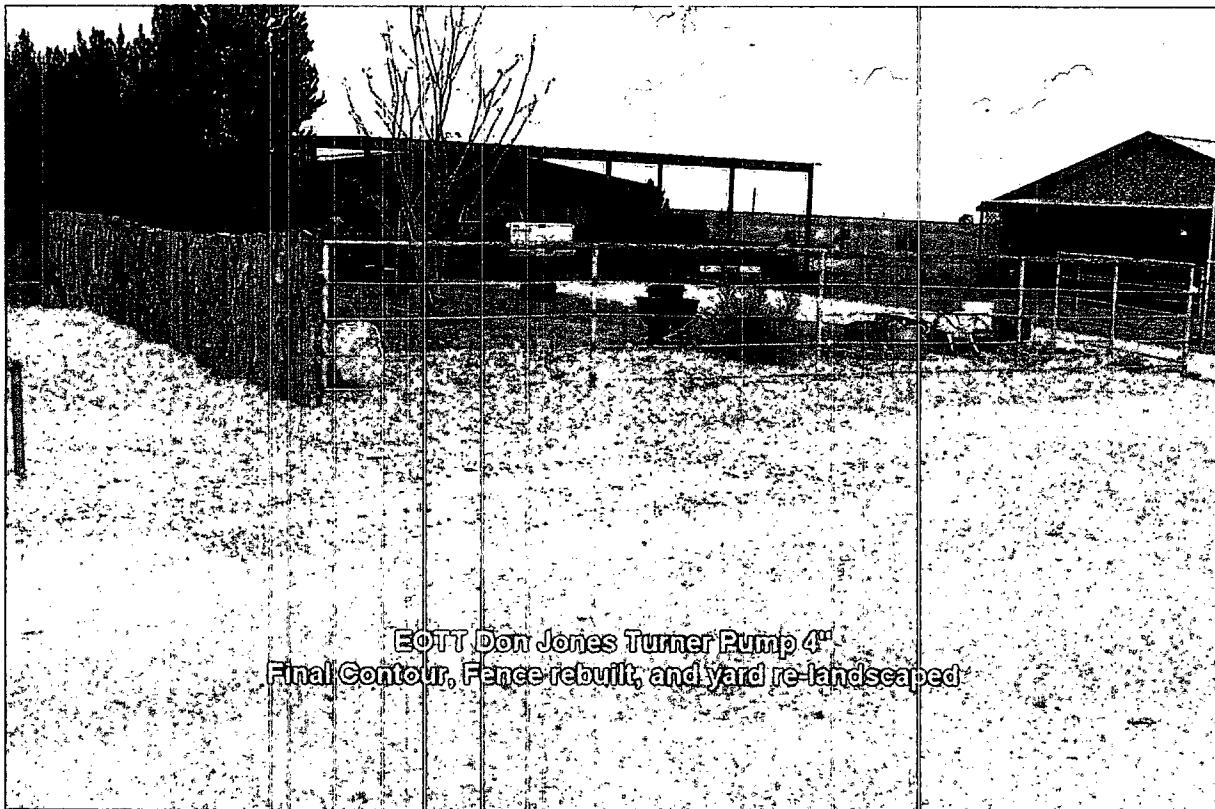
**Attachment II: Photographs**











**Attachment III: Results Summary and Original Analytical Reports**

**E.O.T. ENERGY PIPELINE**  
**TURNER PUMP DATA SUMMARY**

BOREHOLE/SAMPLE LOCATION	SAMPLE DESCRIPTION	DATE	SAMPLING INTERVAL (FT. BGS)	LITHOLOGY	SAMPLE ID#	HEADSPACE VOC (PPM)	GRO <sup>1</sup> MG/KG	DRO <sup>2</sup> MG/KG	BTEX <sup>3</sup> MG/KG	BENZENE MG/KG	TOLUENE MG/KG	ETHYL BENZENE MG/KG	M-P-XYLENE MG/KG	O-XYLENE MG/KG	CHLORIDE MG/KG	
BOREHOLE 1	DISCRETE	3/27/2001	2	TAN SAND	EDJS3270IBH1-2	2.1	10 <sup>4</sup>	44	0.125	0.025	0.025	0.025	0.025	0.025	NA <sup>4</sup>	
BOREHOLE 1	DISCRETE	3/27/2001	5	BROWN SAND	EDJS3270IBH1-5	52.1	10	128	138 <sup>5</sup>	0.153	0.025	0.025	0.025	0.025	0.025	NA
BOREHOLE 1	DISCRETE	3/27/2001	10	BROWN SAND	EDJS3270IBH1-10	6.8	10	119	129	0.125	0.025	0.025	0.025	0.025	0.025	277
BOREHOLE 1	DISCRETE	3/27/2001	15	BROWN SAND & ROCK	EDJS3270IBH1-15	5.5	10	79	89	0.125	0.025	0.025	0.025	0.025	0.025	NA
BOREHOLE 1	DISCRETE	3/27/2001	20	BROWN SAND	EDJS3270IBH1-20	6.3	10	238	248	0.125	0.025	0.025	0.025	0.025	0.025	10
BOREHOLE 2	DISCRETE	3/27/2001	2	BROWN SAND	EDJS3270IBH2-2	5.8	10	10	20	0.125	0.025	0.025	0.025	0.025	0.025	NA
BOREHOLE 2	DISCRETE	3/27/2001	5	BROWN SAND	EDJS3270IBH2-5	31.4	10	677	687	0.125	0.025	0.025	0.025	0.025	0.025	NA
BOREHOLE 2	DISCRETE	3/27/2001	10	BROWN SAND	EDJS3270IBH2-10	13.4	10	10	20	0.125	0.025	0.025	0.025	0.025	0.025	59
BOREHOLE 2	DISCRETE	3/27/2001	15	BROWN SAND	EDJS3270IBH2-15	5.1	10	10	20	0.125	0.025	0.025	0.025	0.025	0.025	NA
BOREHOLE 2	DISCRETE	3/27/2001	20	BROWN SAND	EDJS3270IBH2-20	3.7	10	97	107	0.125	0.025	0.025	0.025	0.025	0.025	NA
BOREHOLE 2	DISCRETE	3/27/2001	25	BROWN SAND	EDJS3270IBH2-25	2.2	10	610	620	0.125	0.025	0.025	0.025	0.025	0.025	NA
BOREHOLE 2	DISCRETE	3/27/2001	30	BROWN SAND	EDJS3270IBH2-30	3.4	10	152	162	0.125	0.025	0.025	0.025	0.025	0.025	10
BOREHOLE 2	DISCRETE	3/27/2001	35	BROWN SAND	EDJS3270IBH2-35	2.6	10	427	437	0.125	0.025	0.025	0.025	0.025	0.025	10
BOREHOLE 2	DISCRETE	3/27/2001	40	BROWN SAND	EDJS3270IBH2-40	2.1	10	10	20	0.125	0.025	0.025	0.025	0.025	0.025	NA
BOREHOLE 3	DISCRETE	3/28/2001	2	LIGHT BROWN SAND	EDJS3280IBH3-2	5.0	10	10	20	0.125	0.025	0.025	0.025	0.025	0.025	NA
BOREHOLE 3	DISCRETE	3/28/2001	5	BROWN SAND	EDJS3280IBH3-5	4.6	10	10	20	0.125	0.025	0.025	0.025	0.025	0.025	NA
BOREHOLE 3	DISCRETE	3/28/2001	10	BROWN SAND	EDJS3280IBH3-10	5.9	10	10	20	0.125	0.025	0.025	0.025	0.025	0.025	NA
BOREHOLE 3	DISCRETE	3/28/2001	15	BROWN SAND	EDJS3280IBH3-15	1.9	10	10	20	0.125	0.025	0.025	0.025	0.025	0.025	NA
BOREHOLE 3	DISCRETE	3/28/2001	20	BROWN SAND	EDJS3280IBH3-20	6.1	10	10	20	0.125	0.025	0.025	0.025	0.025	0.025	NA
BOREHOLE 3	DISCRETE	3/28/2001	25	BROWN SAND	EDJS3280IBH3-25	3.1	10	10	20	0.125	0.025	0.025	0.025	0.025	0.025	NA
BOREHOLE 3	DISCRETE	3/28/2001	30	BROWN SAND	EDJS3280IBH3-30	1.7	10	10	20	0.135	0.025	0.025	0.025	0.035	0.025	57
BOREHOLE 3	DISCRETE	3/28/2001	35	BROWN SAND	EDJS3280IBH3-35	2.5	10	10	20	0.125	0.025	0.025	0.025	0.025	0.025	NA
BOREHOLE 3	DISCRETE	3/28/2001	40	BROWN SAND	EDJS3280IBH3-40	1.7	10	161	191	0.150	0.025	0.025	0.025	0.050	0.025	71
BOREHOLE 3	DISCRETE	3/28/2001	45	BROWN SAND	EDJS3280IBH3-45	1.4	10	10	20	0.125	0.025	0.025	0.025	0.025	0.025	NA
BOREHOLE 3	DISCRETE	3/29/2001	50	BROWN SAND	EDJS3290IBH3-50	1.6	10	10	20	0.125	0.025	0.025	0.025	0.025	0.025	10
BOREHOLE 3	DISCRETE	3/29/2001	55	BROWN SAND	EDJS3290IBH3-55	1.3	10	10	20	0.125	0.025	0.025	0.025	0.025	0.025	NA

**E.O.T.T. ENERGY PIPELINE**  
**TURNER PUMP DATA SUMMARY**

BOREHOLE/SAMPLE LOCATION	SAMPLE DESCRIPTION	DATE	SAMPLING INTERVAL (FT. BGS)	LITHOLOGY	SAMPLE ID#	HE-AIRSPACE VOC (PPM)	GRO <sup>1</sup> MG/KG	DRO <sup>2</sup> MG/KG	GRO+DRO THP <sup>3</sup> MG/KG	BTEX <sup>4</sup> MG/KG	BENZENE MG/KG	TOLUENE MG/KG	ETHYL BENZENE MG/KG	M-P-XYLENE MG/KG	o-XYLENE MG/KG	CHLORIDE MG/KG	
BOREHOLE 4	DISCRETE	3/29/2001	2	LIGHT BROWN SAND	EDJS3290IBH4-2	3.7	10	10	20	0.125	0.025	0.025	0.025	0.025	0.025	0.025	0.025
BOREHOLE 4	DISCRETE	3/29/2001	5	BROWN SAND	EDJS3290IBH4-5	5.9	10	10	20	0.125	0.025	0.025	0.025	0.025	0.025	0.025	0.025
BOREHOLE 4	DISCRETE	3/29/2001	10	BROWN SAND	EDJS3290IBH4-10	5.7	10	10	20	0.125	0.025	0.025	0.025	0.025	0.025	0.025	0.025
BOREHOLE 4	DISCRETE	3/29/2001	15	BROWN SAND	EDJS3290IBH4-15	3.9	10	10	20	0.125	0.025	0.025	0.025	0.025	0.025	0.025	0.025
BOREHOLE 4	DISCRETE	3/29/2001	20	BROWN SAND	EDJS3290IBH4-20	3.2	10	10	20	0.125	0.025	0.025	0.025	0.025	0.025	0.025	0.025
BOREHOLE 5	DISCRETE	3/29/2001	2	LIGHT BROWN SAND	EDJS3290IBH5-2	9.9	119	558.6	570.5	0.125	0.025	0.025	0.025	0.025	0.025	0.025	0.025
BOREHOLE 5	DISCRETE	3/29/2001	5	BROWN SAND	EDJS3290IBH5-5	1150.0	134.8	2116	346.4	114.040	3.040	27,300	19,100	45,000	19,600	19,600	19,600
BOREHOLE 5	DISCRETE	3/29/2001	10	BROWN SAND	EDJS3290IBH5-10	950.0	1178	1428	2606	100.210	2.810	27,100	16,700	39,800	13,800	13,800	13,800
BOREHOLE 5	DISCRETE	3/29/2001	15	BROWN SAND	EDJS3290IBH5-15	857.0	1513	1894	34.07	99.090	1.590	21,400	14,800	44,900	16,300	16,300	16,300
BOREHOLE 5	DISCRETE	3/29/2001	20	BROWN SAND	EDJS3290IBH5-20	150.0	4.8	122	170	1.802	0.025	0.201	0.165	1,090	0.321	1,090	1,090
BOREHOLE 5	DISCRETE	3/29/2001	25	BROWN SAND	EDJS3290IBH5-25	78.6	20	122	14.2	0.239	0.025	0.054	0.059	0.096	0.025	0.025	0.025
BOREHOLE 5	DISCRETE	3/29/2001	30	BROWN SAND	EDJS3290IBH5-30	18.9	10	10	20	0.125	0.025	0.025	0.025	0.025	0.025	0.025	0.025
BOREHOLE 6	DISCRETE	3/29/2001	2	LIGHT BROWN SAND	EDJS3290IBH2-2	2.1	10	10	20	0.125	0.025	0.025	0.025	0.025	0.025	0.025	0.025
BOREHOLE 6	DISCRETE	3/29/2001	5	BROWN SAND	EDJS3290IBH2-5	1.0	10	10	20	0.125	0.025	0.025	0.025	0.025	0.025	0.025	0.025
BOREHOLE 6	DISCRETE	3/29/2001	10	BROWN SAND	EDJS3290IBH2-10	0.7	10	10	20	0.125	0.025	0.025	0.025	0.025	0.025	0.025	0.025
BOREHOLE 6	DISCRETE	3/29/2001	15	BROWN SAND	EDJS3290IBH2-15	0.4	10	10	20	0.125	0.025	0.025	0.025	0.025	0.025	0.025	0.025
BOREHOLE 6	DISCRETE	3/29/2001	20	BROWN SAND	EDJS3290IBH2-20	0.1	10	10	20	0.125	0.025	0.025	0.025	0.025	0.025	0.025	0.025
BORE HOLE 1A	DISCRETE	4/23/2001	2	LIGHT BROWN SAND	ETPS4230IBH1-2	NA	10	10	20	0.125	0.025	0.025	0.025	0.025	0.025	0.025	0.025
BORE HOLE 1A	DISCRETE	4/23/2001	5	BROWN SAND	ETPS4230IBH1-5	NA	10	10	20	0.125	0.025	0.025	0.025	0.025	0.025	0.025	0.025
BORE HOLE 1A	DISCRETE	4/23/2001	10	BROWN SAND	ETPS4230IBH1-10	NA	10	10	20	0.125	0.025	0.025	0.025	0.025	0.025	0.025	0.025
BORE HOLE 1A	DISCRETE	4/23/2001	15	BROWN SAND	ETPS4230IBH1-15	NA	10	10	20	0.125	0.025	0.025	0.025	0.025	0.025	0.025	0.025
BORE HOLE 1A	DISCRETE	4/23/2001	20	BROWN SAND	ETPS4230IBH1-20	NA	10	10	20	0.125	0.025	0.025	0.025	0.025	0.025	0.025	0.025
BORE HOLE 1A	DISCRETE	4/23/2001	25	BROWN SAND	ETPS4230IBH1-25	NA	10	10	20	0.125	0.025	0.025	0.025	0.025	0.025	0.025	0.025
BORE HOLE 1A	DISCRETE	4/23/2001	30	BROWN SAND	ETPS4230IBH1-30	NA	10	10	20	0.125	0.025	0.025	0.025	0.025	0.025	0.025	0.025
BORE HOLE 1A	DISCRETE	4/23/2001	35	BROWN SAND	ETPS4230IBH1-35	NA	10	133	14.3	0.125	0.025	0.025	0.025	0.025	0.025	0.025	0.025
BORE HOLE 1A	DISCRETE	4/23/2001	40	BROWN SAND	ETPS4230IBH1-40	NA	10	10	20	0.125	0.025	0.025	0.025	0.025	0.025	0.025	0.025

**E.O.T.T. ENERGY PIPELINE**  
**TURNER PUMP DATA SUMMARY**

BOREHOLE/SAMPLE LOCATION:	SAMPLE DESCRIPTION	DATE	SAMPLING INTERVAL (F.T. BGS)	LITHOLOGY	SAMPLE ID#	HEADSPACE VOC (PPM)	GRO <sup>a</sup> MG/KG	DRO <sup>b</sup> MG/KG	GRO+DRO TPH <sup>c</sup> MG/KG	BTEX <sup>d</sup> MG/KG	BENZENE MG/KG	TOLUENE MG/KG	ETHYL BENZENE MG/KG	M-P-XYLENE MG/KG	O-XYLENE MG/KG	CHLORIDE MG/KG	DETECTION LIMITS ARE: <0.025	
BORE HOLE 1A	DISCRETE	4/23/2001	.45	BROWN SAND	ETPS4230IBHI-45	NA	10	10	20	0.125	0.025	0.025	0.025	0.025	0.025	0.025	0.025	355
BOTTOM HOLE	COMPLIANCE COMPOSITE	4/5/2001	35-40	CALICHE/CLAY	S4501ETPBHCl	NA	10	10	20	0.137	0.025	0.025	0.025	0.037	0.037	0.025	0.025	14
EAST SIDE WALL	COMPLIANCE COMPOSITE	4/5/2001	SIDE WALL	CALICHE/SAND	S4501ETPESWCI	NA	10	10	20	0.380	0.025	0.156	0.140	0.404	0.404	0.175	0.175	31
NORTH SIDE WALL	COMPLIANCE COMPOSITE	4/5/2001	SIDE WALL	CALICHE/SAND	S4501ETPNSWCI	NA	10	10	20	0.125	0.025	0.025	0.025	0.025	0.025	0.025	0.025	10
SOUTH SIDE WALL	COMPLIANCE COMPOSITE	4/5/2001	SIDE WALL	CALICHE/SAND	S4501ETPSSWCI	NA	10	10	20	0.125	0.025	0.025	0.025	0.025	0.025	0.025	0.025	11
WEST SIDE WALL	COMPLIANCE COMPOSITE	4/5/2001	SIDE WALL	CALICHE/SAND	S4501ETPWSWCI	NA	10	10	20	0.125	0.025	0.025	0.025	0.025	0.025	0.025	0.025	39
SURFACE	COMPOSITE	4/18/2001	SURFACE	CALICHE/SAND	ETPS41801	NA	10	250	240	0.125	0.025	0.025	0.025	0.025	0.025	0.025	0.025	44
SURFACE	COMPOSITE	4/19/2001	SURFACE	CALICHE/SAND	ETPS41901GSJ	NA	10	20	0.125	0.025	0.025	0.025	0.025	0.025	0.025	0.025	379	
BOTTOM HOLE	COMPLIANCE COMPOSITE	4/19/2001	35-40	CALICHE/SAND	ETPS41901BHJ	NA	10	10	20	0.125	0.025	0.025	0.025	0.025	0.025	0.025	0.025	53
NORTH EAST SIDE WALL	COMPOSITE	4/19/2001	SIDE WALL	CALICHE/SAND	ETPS41901SWJ	NA	10	110	1120	0.125	0.025	0.025	0.025	0.025	0.025	0.025	0.025	367
BACHILL	COMPOSITE	4/23/2001	SURFACE	BROWN SAND	ETPS4230IBF	NA	10	20	0.125	0.025	0.025	0.025	0.025	0.025	0.025	0.025	18	
NORTH EAST SIDE WALL	COMPLIANCE COMPOSITE	5/1/2001	SIDE WALL	CALICHE/SAND	ETPS5010INESW	NA	10	20	0.125	0.025	0.025	0.025	0.025	0.025	0.025	0.025	239	
SOIL COLUMN (10' x 10' x 20')	BENEATH THE VALVE SETTING AT THE MANLINE JUNCTION	5/9/2001	COLUMN WALL	CALICHE/SAND	ETPS5090INSS	NA				1784.5 <sup>e</sup>	46.410	0.100	7.250	5.390	25.800	7.870	35	

GRO - GASOLINE RANGE ORGANICS C<sub>6</sub>-C<sub>10</sub>DRO - DIESEL RANGE ORGANICS C<sub>10</sub>-C<sub>28</sub>

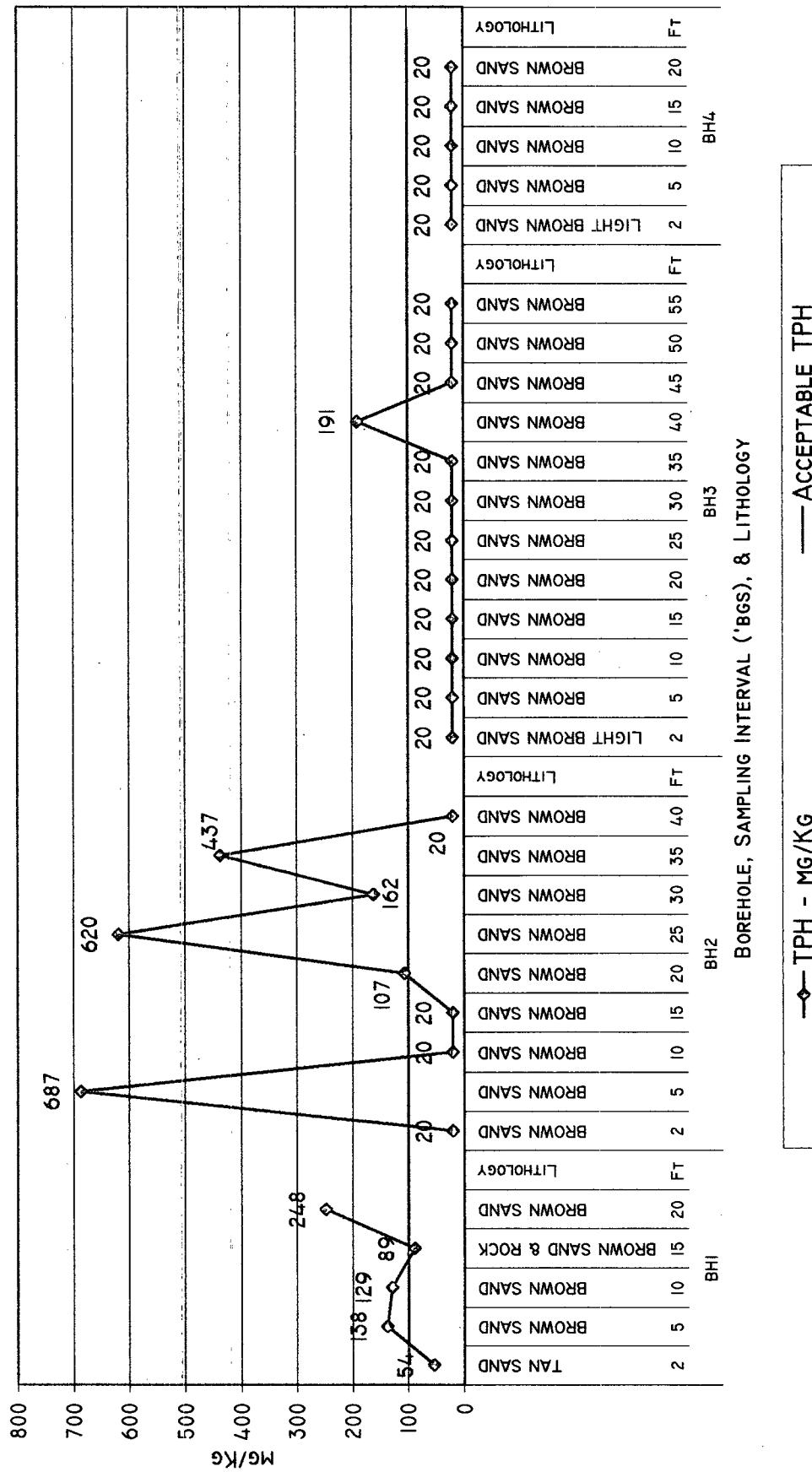
BTEX - THE SUM OF BENZENE, TOLUENE, ETHYL BENZENE, AND M-P, O-XYLENE

NA - NOT ANALYZED

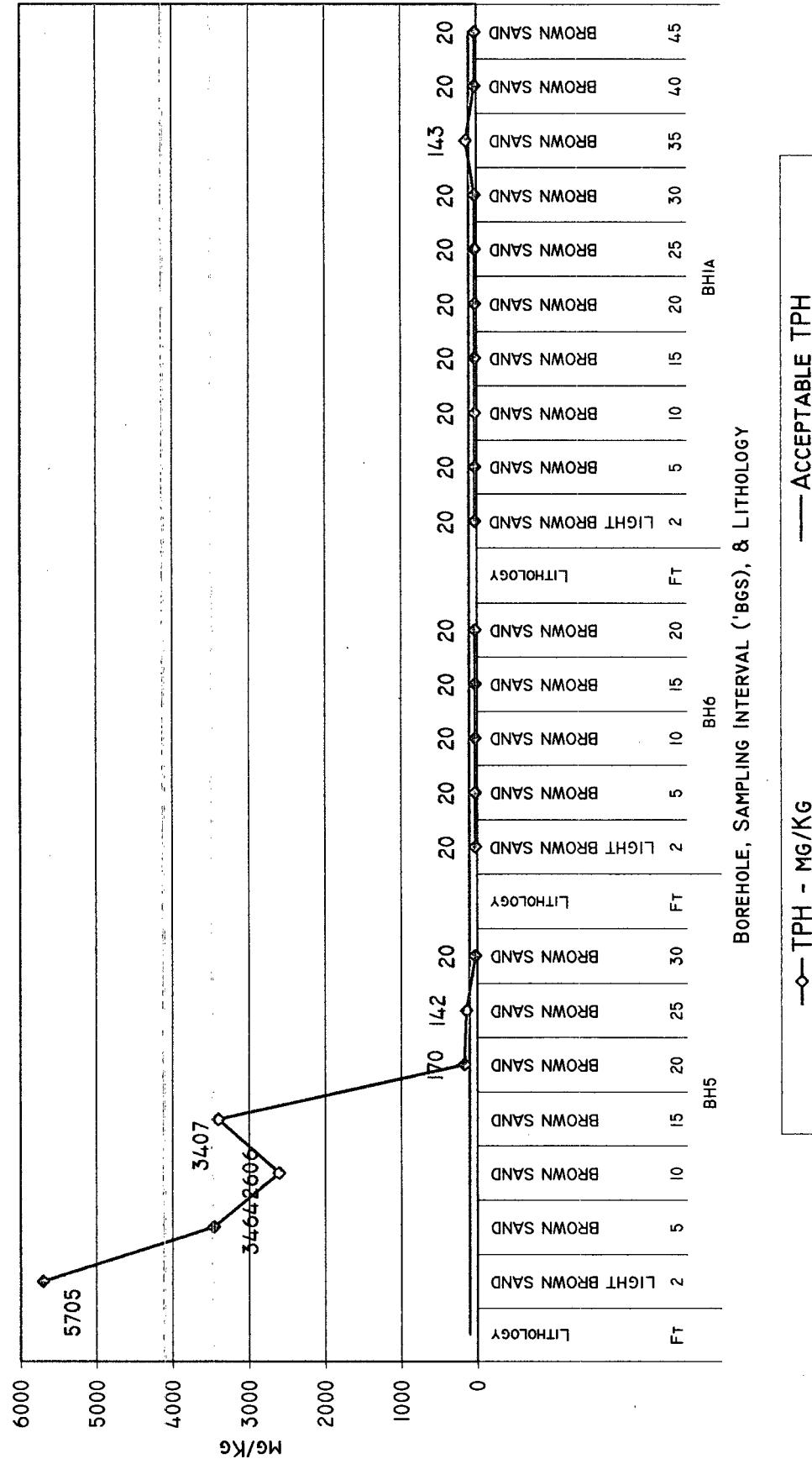
BOULDED VALUES ARE IN EXCESS OF THE NEW MEXICO OIL CONSERVATION DIVISION GUIDELINE THRESHOLD FOR THE PARAMETER

<sup>a</sup>UNLICIZED VALUES ARE < THE INSTRUMENT DETECTION LIMIT.<sup>b</sup>GRO+DRO (TPH) - TOTAL PETROLEUM HYDROCARBON EPA METHOD 8051M<sup>c</sup>VALUE DERIVED USING EPA METHOD 44B.1

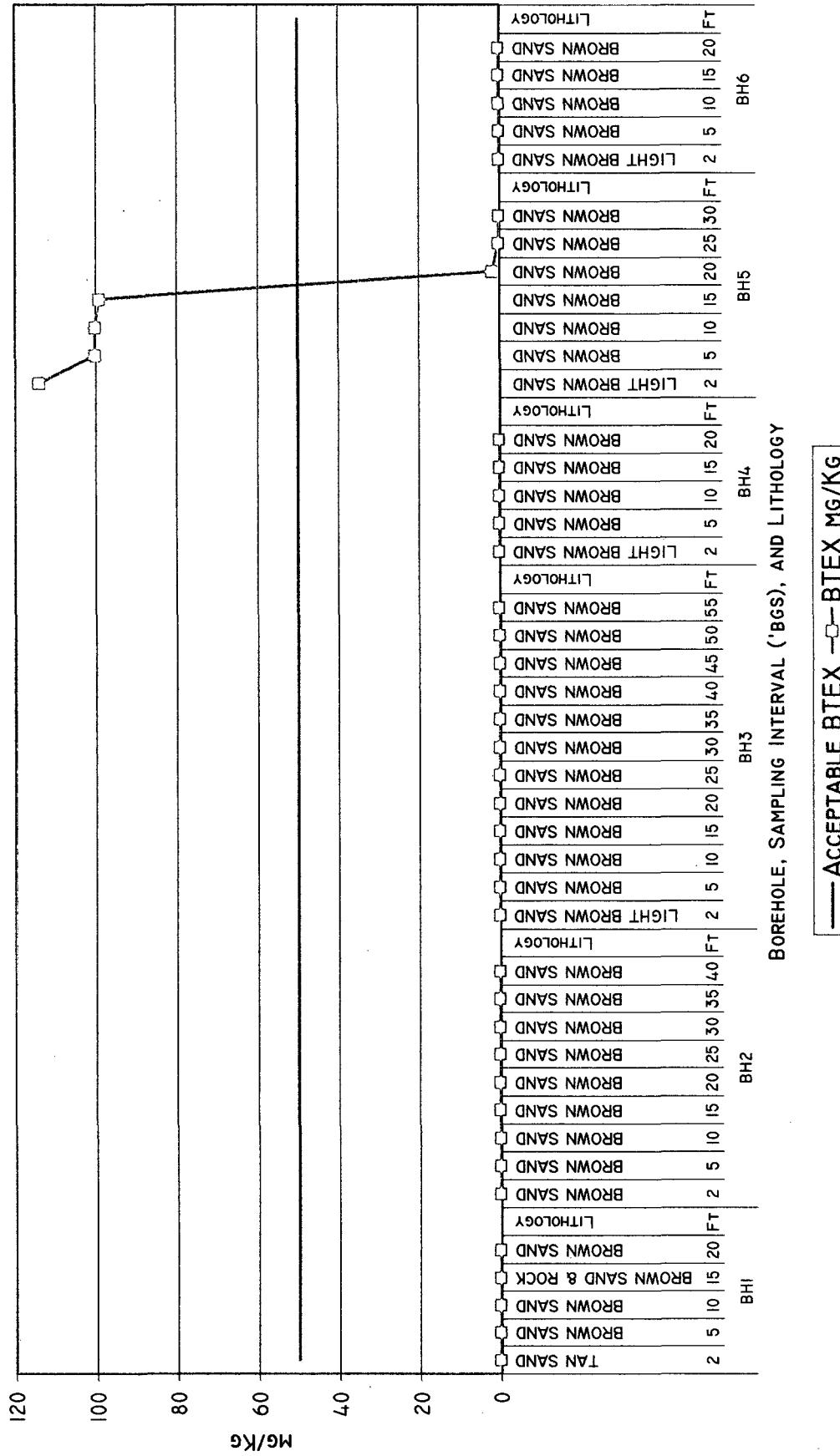
E.O.T.T. ENERGY PIPELINE  
 DON JONES TURNER PUMP  
 DELINEATION OF SUBSURFACE TOTAL PETROLEUM HYDROCARBON  
 BOREHOLES #1, 2, 3 & 4



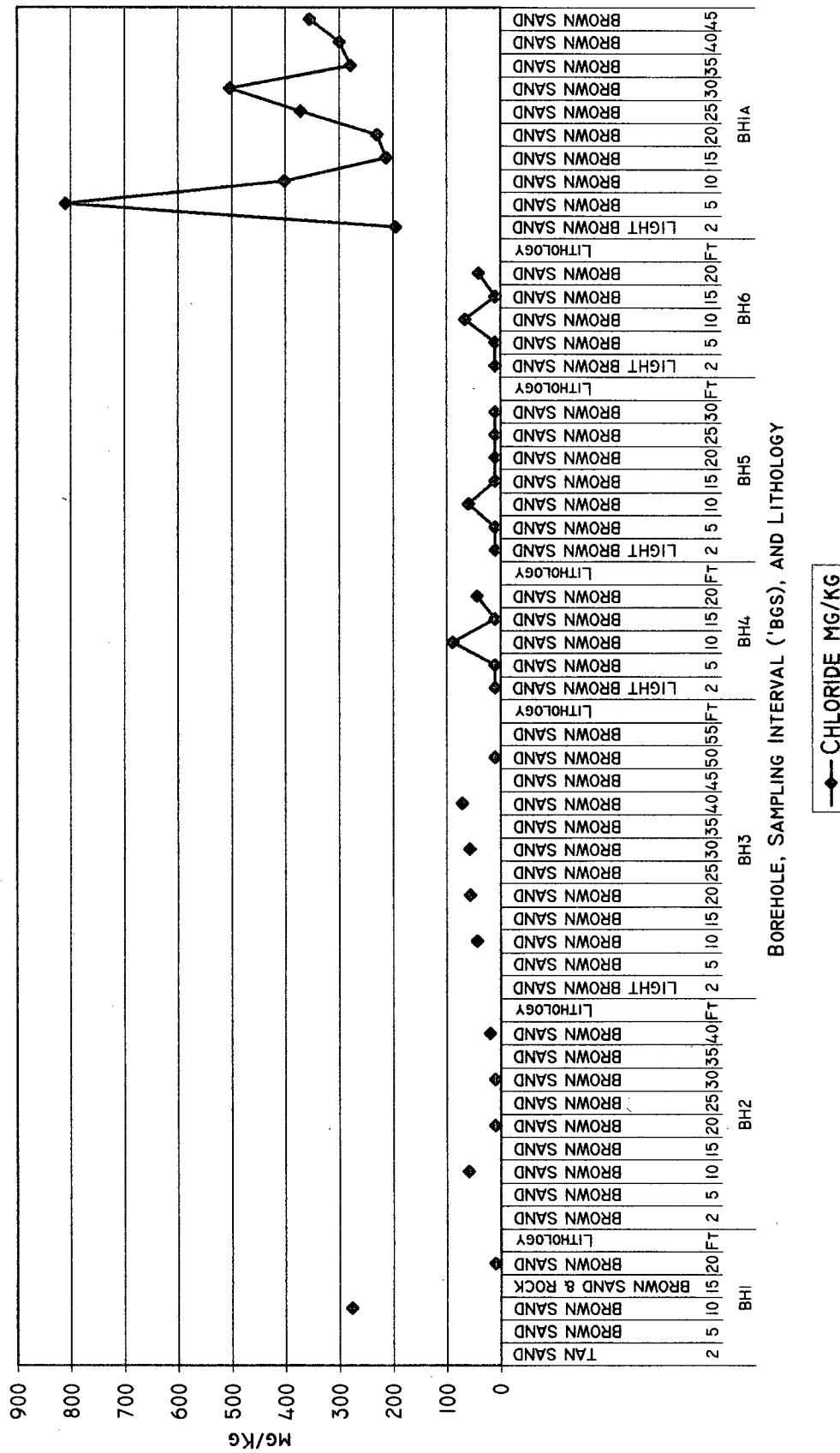
E.O.T.T. ENERGY PIPELINE  
 DON JONES TURNER PUMP  
 DELINEATION OF SUBSURFACE TOTAL PETROLEUM HYDROCARBON  
 BOREHOLES #5, 6, & 1A



**E.O.T.T. ENERGY PIPELINE  
DON JONES TURNER PUMP  
DELINEATION OF SUBSURFACE BTEX CONCENTRATIONS**



E.O.T.T. ENERGY PIPELINE  
DON JONES TURNER PUMP  
DELINEATION OF SUBSURFACE CHLORIDE CONCENTRATIONS



# E.O.T.T. ENERGY PIPELINE

## DON JONES TURNER PUMP GROUND WATER DATA

PARAMETER	UNITS	TRACE ANALYSIS, INC.			ENVIRONMENTAL LAB OF TEXAS			TRACE ANALYSIS, INC.			ENVIRONMENTAL LAB OF TEXAS		
		DON JONES WEST WELL			DON JONES SOUTH WELL			DON JONES WEST WELL			DON JONES SOUTH WELL		
		DONJ32701EWEST			DONJ32701ESOUTH			DONJ32701GSOUTH			DONJ3290IBH3		
TPH <sup>1</sup> (GRO) <sup>2</sup>	MG/L	0.5 <sup>5</sup>	5.0	0.5	0.5	0.5	0.5	0.1	0.1	0.1	0.5	0.5	0.5
TPH (DRO) <sup>3</sup>	MG/L	0.5	0.1	0.5	0.5	0.5	0.5	5.0	5.0	5.0	0.5	0.5	0.5
TPH (DRO+GRO)	MG/L	1.0	5.1	1.0	1.0	1.0	1.0	5.1	5.1	5.1	1.0	1.0	1.0
BENZENE	MG/L	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
TOLUENE	MG/L	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
ETHYL BENZENE	MG/L	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
M, P-XYLENE	MG/L	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
O-XYLENE	MG/L	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
BTEX <sup>4</sup>	MG/L	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
NAPHTHALENE	MG/L	ND <sup>6</sup>	ND <sup>6</sup>	0.005	0.005	ND	ND	ND	ND	ND	ND	ND	ND
ACENAPHTHYLENE	MG/L	ND	ND	0.005	0.005	ND	ND	ND	ND	ND	ND	ND	ND
ACENAPHTHENE	MG/L	ND	ND	0.005	0.005	ND	ND	ND	ND	ND	ND	ND	ND
FLUORENE	MG/L	ND	ND	0.005	0.005	ND	ND	ND	ND	ND	ND	ND	ND
PHENANTHRENE	MG/L	ND	ND	0.005	0.005	ND	ND	ND	ND	ND	ND	ND	ND
ANTHRACENE	MG/L	ND	ND	0.005	0.005	ND	ND	ND	ND	ND	ND	ND	ND
FLUORANTHENE	MG/L	ND	ND	0.005	0.005	ND	ND	ND	ND	ND	ND	ND	ND
PYRENE	MG/L	ND	ND	0.005	0.005	ND	ND	ND	ND	ND	ND	ND	ND
BENZO[A]ANTHRACENE	MG/L	ND	ND	0.005	0.005	ND	ND	ND	ND	ND	ND	ND	ND
CHRYSENE	MG/L	ND	ND	0.005	0.005	ND	ND	ND	ND	ND	ND	ND	ND
BENZO[B]FLUORANTHENE	MG/L	ND	ND	0.005	0.005	ND	ND	ND	ND	ND	ND	ND	ND
BENZO[K]FLUORANTHENE	MG/L	ND	ND	0.005	0.005	ND	ND	ND	ND	ND	ND	ND	ND
BENZO[A]PYRENE	MG/L	ND	ND	0.005	0.005	ND	ND	ND	ND	ND	ND	ND	ND
INDENOL[2,3,-CD]PYRENE	MG/L	ND	ND	0.005	0.005	ND	ND	ND	ND	ND	ND	ND	ND
DIBENZO[A,H]ANTHRACENE	MG/L	ND	ND	0.005	0.005	ND	ND	ND	ND	ND	ND	ND	ND
BENZO[G,H,I]PERYLENE	MG/L	ND	ND	0.005	0.005	ND	ND	ND	ND	ND	ND	ND	ND
POTASSIUM (K)	MG/L	17.77	16	12.82	12.82	13.1	13.1	13.1	13.1	13.1	13.1	13.1	13.1
MAGNESIUM (Mg)	MG/L	231.1	236	156.7	156.7	181.0	181.0	181.0	181.0	181.0	181.0	181.0	181.0
CALCIUM (Ca)	MG/L	574.2	611	394.4	394.4	475.0	475.0	475.0	475.0	475.0	475.0	475.0	475.0
SODIUM (Na)	MG/L	292.1	336.1	244.4	244.4	302.0	302.0	302.0	302.0	302.0	302.0	302.0	302.0
NITRATE - N (NO <sub>3</sub> )	MG/L	NA <sup>8</sup>	1.1	NA	NA	1.1	1.1	NA	NA	NA	NA	NA	NA
FLUORIDE (F)	MG/L	NA	2.7	NA	NA	206.0	206.0	NA	NA	NA	NA	NA	NA
CHLORIDE (Cl)	MG/L	2091	1900	1400	1400	1500.0	1500.0	532	532	532	532	532	532
SULFATE (SO <sub>4</sub> )	MG/L	24.0	17.0	26.1	26.1	200.0	200.0	708.0	708.0	708.0	708.0	708.0	708.0
BICARBONATE (HCO <sub>3</sub> )	MG/L	216	24.2	14.8	14.8	154.4	154.4	524	524	524	524	524	524
CARBONATE (CO <sub>3</sub> )	MG/L	2	1.0	2	2	1.0	1.0	2	2	2	2	2	2
HYDROXIDE (COH)	MG/L	NA	1.0	NA	NA	1.0	1.0	NA	NA	NA	NA	NA	NA
TOTAL ALKALINITY	MG/L		24.2			154.0	154.0						
TOTAL DISSOLVED SOLIDS (TDS)	MG/L	6774	3900	4584	4584	3000.0	3000.0	2657	2657	2657	2657	2657	2657
CONDUCTIVITY (MICROMHOS/CM)	UMHOS/CM	5850	6400	4340	4340	5100	5100	3160	3160	3160	3160	3160	3160
PH	SU	7.07	7.3	7.21	7.21	7.4	7.4	7.02	7.02	7.02	7.02	7.02	7.02

<sup>5</sup> italicized values are reported as "less than (<) the instrument detection limit."

<sup>6</sup> ND - not detected at report limit of 0.005 MG/LITER

<sup>7</sup> ND - not detected at report limit of 0.006 MG/LITER

<sup>8</sup> NA - not analyzed

<sup>1</sup>TPH - TOTAL PETROLEUM HYDROCARBON

<sup>2</sup>GRO - GASOLINE RANGE ORGANICS C<sub>6</sub>-C<sub>10</sub>

<sup>3</sup>DRO - DIESEL RANGE ORGANICS C<sub>10</sub>-C<sub>28</sub>

<sup>4</sup>BTEX - SUM OF BENZENE, TOLUENE, ETHYL BENZENE, AND TOTAL XYLENE.

# E.O.T.T. ENERGY PIPELINE

## DON JONES TURNER PUMP GROUND WATER DATA

PARAMETER	UNITS	7/13/2001	PARAMETER	UNITS	7/13/2001
		DON JONES SOUTHEAST			DON JONES SOUTHEAST
		BATHROOM			BATHROOM
		DJ7120ISEBATH			DJ7120ISEBATH
ANALYSYS, INC.			ANALYSYS, INC.		
TPH <sup>1</sup> (418.1)	MG/L	0.5230	METHYL METHACRYLATE	µG/L	<5
GRO <sup>2</sup>	MG/L	NA <sup>8</sup>	METHYLENE CHLORIDE	µG/L	<5
DRO <sup>3</sup>	MG/L	NA	O-XYLENE	µG/L	<5
DRO+GRO	MG/L	NA	PROPIONITRILE	µG/L	<100
I,I,I,2-TETRACHLOROETHANE	µG/L	<5 <sup>5</sup>	STYRENE	µG/L	<5
I,I,I-TRICHLOROETHANE	µG/L	<5	TETRACHLOROETHENE	µG/L	<5
I,I,2,2-TETRACHLOROETHANE	µG/L	<5	TOLUENE	µG/L	<5
I,I,2-TRICHLOROETHANE	µG/L	<5	TRANS-I,2-DICHLOROETHENE	µG/L	<5
I,I,DICHLOROETHANE	µG/L	<5	TRANS-I,3-DICHLOROPROPENE	µG/L	<5
I,I-DICHLOROETHENE	µG/L	<5	TRICHLOROETHENE	µG/L	<5
I,2,3-TRICHLOROPROPANE	µG/L	<5	TRICHLOROFLUOROMETHANE	µG/L	<10
I,2,4-TRICHLOROBENZENE	µG/L	<5	VINYL ACETATE	µG/L	<10
I,2-DIBROMO-3-CHLOROPROPANE	µG/L	<10	VINYL CHLORIDE	µG/L	<10
I,2-DIBROMOETHANE	µG/L	<5	BTEX <sup>4</sup>	MG/L	ND <sup>6</sup>
I,2-DICHLOROBENZENE	µG/L	<5	NAPHTHALENE	µG/L	<0.05
I,2-DICHLOROETHANE	µG/L	<5	I-METHYLNAPHTHALENE	µG/L	<0.05
I,2-DICHLOROPROPANE	µG/L	<5	2-METHYLNAPHTHALENE	µG/L	<0.05
I,3-DICHLOROBENZENE	µG/L	<5	BENZO[A]PYRENE	µG/L	<0.05
I,4-DICHLORO-2-BUTENE	µG/L	<100	ALUMINUM/ICP	MG/L	0.424
I,4-DICHLOROBENZENE	µG/L	<5	ARSENIC/ICP	MG/L	<0.05
I,4-DIOXANE	µG/L	<100	BARIUM/ICP	MG/L	0.0753
2-BUTANONE (MEK)	µG/L	<10	BORON/ICP	MG/L	0.2890
2-HEXANONE	µG/L	<20	CADMIUM/ICP	MG/L	<0.005
4-METHYL-2-PENTANONE (MIBK)	µG/L	<10	CHROMIUM/ICP	MG/L	<0.01
ACETONE	µG/L	<50	COBALT/ICP	MG/L	<0.02
ACETONITRILE	µG/L	<100	COPPER/ICP	MG/L	<0.02
ACROLEIN	µG/L	<50	IRON/ICP	MG/L	<0.05
ACRYLONITRILE	µG/L	<50	LEAD/ICP	MG/L	<0.02
ALLYL CHLORIDE	µG/L	<5	MANGANESE/ICP	MG/L	<0.01
BENZENE	µG/L	<5	MERCURY/CVAA	MG/L	<0.0002
BROMODICHLOROMETHANE	µG/L	<5	MOLYBDENUM/ICP	MG/L	<0.02
BROMOFORM	µG/L	<5	NICKEL/ICP	MG/L	<0.02
BROMOMETHANE	µG/L	<10	SELENIUM/ICP	MG/L	<0.05
CARBON DISULFIDE	µG/L	<10	SILVER/GFAA	MG/L	<0.002
CARBON TETRACHLORIDE	µG/L	<5	ZINC/ICP	MG/L	0.0175
CHLOROBENZENE	µG/L	<5	POTASSIUM (K)/AA	MG/L	11.9
CHLOROETHANE	µG/L	<10	MAGNESIUM (Mg)/ICP	MG/L	20.2
CHLOROFORM	µG/L	<5	CALCIUM (CA)	MG/L	44.8
CHLOROMETHANE	µG/L	<5	SODIUM (NA)/ICP	MG/L	201.0
DIBROMOMETHANE	µG/L	<5	NITRATE/NITRITE -N	MG/L	0.222
DICHLORODIFLUOROMETHANE	µG/L	<10	FLUORIDE (F)	MG/L	1.9
ETHYL METHACRYLATE	µG/L	<5	CHLORIDE (CL)	MG/L	1560.0
ETHYL BENZENE	µG/L	<5	SULFATE (SO4)	MG/L	191.0
IODOMETHANE	µG/L	<5	TOTAL ALKALINITY	MG/L	150.0
ISOBUTANOL	µG/L	<100	TOTAL DISSOLVED SOLIDS (TDS)	MG/L	5300.0
M, P-XYLENES	µG/L	<5	CONDUCTIVITY	µS/CM	3500
METHACRYLONITRILE	µG/L	<100	PH	SU	7

<sup>1</sup>TPH - TOTAL PETROLEUM HYDROCARBON

<sup>2</sup>GRO - GASOLINE RANGE ORGANICS C<sub>6</sub>-C<sub>10</sub>

<sup>3</sup>DRO - DIESEL RANGE ORGANICS C<sub>10</sub>-C<sub>28</sub>

<sup>4</sup>BTEX - SUM OF BENZENE, TOLUENE, ETHYL BENZENE, AND TOTAL XYLENE.

<sup>5</sup>ITALICIZED VALUES ARE REPORTED AS "LESS THAN (<) THE INSTRUMENT DETECTION LIMIT."

<sup>6</sup>ND - NOT DETECTED AT REPORT LIMIT OF 0.005 MG/LITER

<sup>7</sup><ND - NOT DETECTED AT REPORT LIMIT OF 0.006 MG/LITER

<sup>8</sup>NA - NOT ANALYZED

LESS THAN (<) VALUES ARE CONSIDERED "DE MINIMUS"



# ENVIRONMENTAL

# LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

EOTT ENERGY  
ATTN: MR. WAYNE BRUNETTE  
P.O. BOX 1660  
MIDLAND, TEXAS 79703  
FAX: 684-3456  
FAX: 505-394-2601 (Pat McCasland)

Sample Type: Water

Sample Condition: Intact/Iced/ HCl/ 2.0 deg C

Project #: None Given

Project Name: Don Jones Ranch

Project Location: SW/4 Sec23 T21S R37E

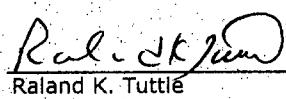
Sampling Date: 03/27/01

Receiving Date: 03/27/01

Analysis Date: 03/27/01

ELT#	FIELD CODE	GRO C6-C10 mg/L	DRO >C10-C28 mg/L
38550	DONJ32701EWEST	<0.5	<0.5
38551	DONJ32701ESOUTH	<0.5	<0.5
% IA		96	113
%EA		98	111
BLANK		<0.5	<0.5

Methods: EPA SW 846-8015M GRO/DRO

  
Raland K. Tuttle

3-28-01  
Date

# ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

EOTT ENERGY  
ATTN: MR. WAYNE BRUNETTE  
P.O. BOX 1660  
MIDLAND, TEXAS 79703  
FAX: 684-3456  
FAX: 505-394-2601 (Pat Mc Casland)

Sample Type: Water  
Sample Condition: Intact/ Iced/ HCl/ 2.0 deg. C  
Project #: None Given  
Project Name: Don Jones Ranch  
Project Location: SW/4, Sec 23, T21S, R37E

Sampling Date: 03/27/01  
Receiving Date: 03/27/01  
Analysis Date: 03/27/01

ELT#	FIELD CODE	BENZENE mg/L	TOLUENE mg/L	ETHYLBENZENE mg/L	m,p-XYLENE mg/L	o-XYLENE mg/L
38550	DONJ32701EWEST	<0.001	<0.001	<0.001	<0.001	<0.001
38551	DONJ32701ESOUTH	<0.001	<0.001	<0.001	<0.001	<0.001
%IA		99	104	108	106	107
%EA		98	104	108	107	109
BLANK		<0.001	<0.001	<0.001	<0.001	<0.001

METHODS: EPA.SW 846-8021B ,5030

Raland K. Tuttle

Raland K. Tuttle

3-28-01

Date

# ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

## ENRON TRANSPORTATION SERVICES

ATTN: MR. WAYNE BRUNETTE  
P.O. BOX 1660  
MIDLAND, TEXAS 79703  
FAX: 684-3456  
FAX: 505-394-2601 (Pat McCasland)

Sample Type: Water  
Sample Condition: Intact/ Iced/ 2.0 deg. C  
Project #: None Given  
Project Name: Don Jones Ranch  
Project Location: SW/4 Sec23 T21S R37E

Sampling Date: 03/27/01  
Receiving Date: 03/27/01  
Analysis Date: 03/28/01

ELT#	FIELD CODE	Na mg/L	Ca mg/L	Mg mg/L	K mg/L
38550	DONJ32701EWEST	292.1	574.2	231.1	17.77
38551	DONJ32701ESOUTH	244.4	394.4	156.7	12.82
% INSTRUMENT ACCURACY	96	100	101	97	
% EXTRACTION ACCURACY	83	99	104	90	
BLANK	<0.01	<0.01	<0.001	<0.05	

METHODS: SW846-6010B

Raland K. Tuttle  
Ralond K. Tuttle

3-28-01  
Date

# ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

Sample Type: Water  
 Sample Condition: Intact/ Iced/ 2.0 deg C  
 Project #: None Given  
 Project Name: Don Jones Ranch  
 Project Location: SW/4 Sec23 T21S R37E

ENRON TRANSPORTATION SERVICES  
 ATTN: MR. WAYNE BRUNETTE  
 P.O. BOX 1660  
 MIDLAND, TEXAS 79703  
 FAX: 684-3456  
 FAX: 505-394-2601 (Pat McCasland)

Sampling Date: 03/27/01  
 Receiving Date: 03/27/01  
 Analysis Date: 03/27/01

ELT#	FIELD CODE	pH s.u.	Conductivity uS/cm	Chloride mg/L	Sulfate mg/L	Carbonate mg/L	Bicarbonate mg/L
38550	DONJ32701EWEST	7.07	5850	2091	240	<2	216
38551	DONJ32701ESOUTH	7.21	4340	1400	261	<2	148
QUALITY CONTROL		7.01	1434	4963	51.6	*	*
TRUE VALUE		7.00	1413	5000	50.0	*	*
% IA		100	101	99	103	*	*
BLANK		*	*	<10	<0.5	<2	<2

METHODS: EPA 325.3, 375.4, 310.1, 150.1, 120.1

Raland K. Tuttle

3-28-01  
Date

# ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

Sample Type: Water  
Sample Condition: Intact/ Iced/ 2.0 deg. C  
Project #: None Given  
Project Name: Don Jones Ranch  
Project Location: SW/4 Sec23 T21S R37E

ENRON TRANSPORTATION SERVICES  
ATTN: MR. WAYNE BRUNETTE  
P.O. BOX 1660  
MIDLAND, TEXAS 79703  
FAX: 684-3456  
FAX: 505-394-2601 (Pat McCasland)

Sampling Date: 03/27/01  
Receiving Date: 03/27/01  
Analysis Date: 03/28/01

ELT#	FIELD CODE	TDS mg/L
38550	DONJ32701EWEST	6774
38551	DONJ32701ESOUTH	4584
BLANK		<10

METHODS: EPA 160.1

Raland K. Tuttle  
Raland K. Tuttle

3-28-01  
Date

# ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

## ENRON TRANSPORTATION SERVICES

ATTN: MR. WAYNE BRUNETTE

P.O. BOX 1660

MIDLAND, TEXAS 79703

FAX: 684-3456

FAX: 505-394-2601 (Pat McCasland)

Sample Type: Water

Sample Condition: Intact/ Iced/ 2.0 deg. C

Project #: None Given

Project Name: Don Jones Ranch

Project Location: SW/4 Sec23 T21S R37E

Sampling Date: 03/27/01

Receiving Date: 03/27/01

Analysis Date: 03/28/01

Field Code: DONJ32701ESOUTH

EPA SW846 8270 (mg/L)	REPORT LIMIT	ELT#	RPD	%EA	%DEV
Naphthalene	0.005	ND			1.8
Acenaphthylene	0.005	ND			-4.5
Acenaphthene	0.005	ND	9	93	-5.9
Fluorene	0.005	ND			-4.3
Phenanthrene	0.005	ND			6.6
Anthracene	0.005	ND			10.6
Fluoranthene	0.005	ND			-10.2
Pyrene	0.005	ND	20	76	-17.9
Benzo[a]anthracene	0.005	ND			-16.5
Chrysene	0.005	ND			-10.2
Benzo[b]fluoranthene	0.005	ND			10.2
Benzo[k]fluoranthene	0.005	ND			-12.9
Benzo [a]pyrene	0.005	ND			-11.7
Indeno[1,2,3-cd]pyrene	0.005	ND			-1.8
Dibenz[a,h]anthracene	0.005	ND			6.8
Benzo[g,h,i]perylene	0.005	ND			-11.9
% RECOVERY					
Nitrobenzene-d5 SURR		106			
2-Fluorobiphenyl SURR		100			
p-Terphenyl-d14 SURR		129			

ND= not detected at report limit.

Method: EPA SW 846 8270C , 3510

Roland K. Tuttle

3-28-01

Date

# ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

## ENRON TRANSPORTATION SERVICES

ATTN: MR. WAYNE BRUNETTE

P.O. BOX 1660

MIDLAND, TEXAS 79703

FAX: 684-3456

FAX: 505-394-2601 (Pat McCasland)

Sample Type: Water

Sampling Date: 03/27/01

Sample Condition: Intact/ Iced/ 2.0 deg. C

Receiving Date: 03/27/01

Project #: None Given

Analysis Date: 03/28/01

Project Name: Don Jones Ranch

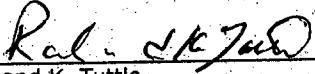
Field Code: DONJ32701EWEST

Project Location: SW/4 Sec23 T21S R37E

EPA SW846 8270 (mg/L)	REPORT LIMIT	ELT#	RPD	%EA	%DEV
Naphthalene	0.005	ND			1.8
Acenaphthylene	0.005	ND			-4.5
Acenaphthene	0.005	ND	9	93	-5.9
Fluorene	0.005	ND			-4.3
Phenanthrene	0.005	ND			6.6
Anthracene	0.005	ND			10.6
Fluoranthene	0.005	ND			-10.2
Pyrene	0.005	ND	20	76	-17.9
Benzo[a]anthracene	0.005	ND			-16.5
Chrysene	0.005	ND			-10.2
Benzo[b]fluoranthene	0.005	ND			10.2
Benzo[k]fluoranthene	0.005	ND			-12.9
Benzo [a]pyrene	0.005	ND			-11.7
Indeno[1,2,3-cd]pyrene	0.005	ND			-1.8
Dibenz[a,h]anthracene	0.005	ND			6.8
Benzo[g,h,i]perylene	0.005	ND			-11.9
% RECOVERY					
Nitrobenzene-d5 SURR		89			
2-Fluorobiphenyl SURR		103			
p-Terphenyl-d14 SURR		121			

ND= not detected at report limit.

Method: EPA SW 846 8270C , 3510

  
Raland K. Tuttle

Date

3-28-01

# TraceAnalysis, Inc.

6151 Aberdeen Avenue, Ste. 9  
Lubbock, Texas 79424  
Tel (806) 744-1296  
Fax (806) 744-1298  
1 (800) 378-1296

Phone #: 915. 556.0190

Fax #:

DAE

## ANALYSIS REQUEST

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST					LAB ORDER ID: 4				
(Circle or Specify Method No.)									
Turn Around Time if different from start date					Turn Around Time if different from start date				
Custodians/Catchers					Custodians/Catchers				
Initials					Initials				
10/27/01					10/27/01				
PCB's 8082/608					PCB's 8082/608				
GC-MS 5ml Vol. 620B/625					GC-MS 5ml Vol. 620B/625				
GC-MS 5ml Vol. 620B/624					GC-MS 5ml Vol. 620B/624				
TCLP Vitrification					TCLP Vitrification				
TCLP Semi-Vitrification					TCLP Semi-Vitrification				
TCLP Vitrification					TCLP Vitrification				
RCI					RCI				
PAH 8270C					PAH 8270C				
MTE 8021B/602					MTE 8021B/602				
TPH 44674/1003					TPH 44674/1003				
Total Metals Ag A3 Be Cd Cr Pb Se Hg 6010B/200.7					Total Metals Ag A3 Be Cd Cr Pb Se Hg 6010B/200.7				
TCP/Metals Ag A3 Be Cd Cr Pb Se Hg 6010B/200.7					TCP/Metals Ag A3 Be Cd Cr Pb Se Hg 6010B/200.7				
GC-MS 5ml Vol. 620B/624					GC-MS 5ml Vol. 620B/624				
PCB's 8082/608					PCB's 8082/608				
GC-MS 5ml Vol. 620B/623					GC-MS 5ml Vol. 620B/623				
TCLP Petroleum					TCLP Petroleum				
TCLP Vitrification					TCLP Vitrification				
TCLP Semi-Vitrification					TCLP Semi-Vitrification				
TCLP Vitrification					TCLP Vitrification				
TCLP Semi-Vitrification					TCLP Semi-Vitrification				
TCLP Vitrification					TCLP Vitrification				
RCI					RCI				
PAH 8270C					PAH 8270C				
MTE 8021B/602					MTE 8021B/602				
TPH 44674/1003					TPH 44674/1003				
Total Metals Ag A3 Be Cd Cr Pb Se Hg 6010B/200.7					Total Metals Ag A3 Be Cd Cr Pb Se Hg 6010B/200.7				
TCP/Metals Ag A3 Be Cd Cr Pb Se Hg 6010B/200.7					TCP/Metals Ag A3 Be Cd Cr Pb Se Hg 6010B/200.7				
GC-MS 5ml Vol. 620B/623					GC-MS 5ml Vol. 620B/623				
PCB's 8082/608					PCB's 8082/608				
GC-MS 5ml Vol. 620B/624					GC-MS 5ml Vol. 620B/624				
TCLP Petroleum					TCLP Petroleum				
TCLP Vitrification					TCLP Vitrification				
TCLP Semi-Vitrification					TCLP Semi-Vitrification				
TCLP Vitrification					TCLP Vitrification				
TCLP Semi-Vitrification					TCLP Semi-Vitrification				
TCLP Vitrification					TCLP Vitrification				
RCI					RCI				
PAH 8270C					PAH 8270C				
MTE 8021B/602					MTE 8021B/602				
TPH 44674/1003					TPH 44674/1003				
Total Metals Ag A3 Be Cd Cr Pb Se Hg 6010B/200.7					Total Metals Ag A3 Be Cd Cr Pb Se Hg 6010B/200.7				
TCP/Metals Ag A3 Be Cd Cr Pb Se Hg 6010B/200.7					TCP/Metals Ag A3 Be Cd Cr Pb Se Hg 6010B/200.7				
GC-MS 5ml Vol. 620B/623					GC-MS 5ml Vol. 620B/623				
PCB's 8082/608					PCB's 8082/608				
GC-MS 5ml Vol. 620B/624					GC-MS 5ml Vol. 620B/624				
TCLP Petroleum					TCLP Petroleum				
TCLP Vitrification					TCLP Vitrification				
TCLP Semi-Vitrification					TCLP Semi-Vitrification				
TCLP Vitrification					TCLP Vitrification				
TCLP Semi-Vitrification					TCLP Semi-Vitrification				
TCLP Vitrification					TCLP Vitrification				
RCI					RCI				
PAH 8270C					PAH 8270C				
MTE 8021B/602					MTE 8021B/602				
TPH 44674/1003					TPH 44674/1003				
Total Metals Ag A3 Be Cd Cr Pb Se Hg 6010B/200.7					Total Metals Ag A3 Be Cd Cr Pb Se Hg 6010B/200.7				
TCP/Metals Ag A3 Be Cd Cr Pb Se Hg 6010B/200.7					TCP/Metals Ag A3 Be Cd Cr Pb Se Hg 6010B/200.7				
GC-MS 5ml Vol. 620B/623					GC-MS 5ml Vol. 620B/623				
PCB's 8082/608					PCB's 8082/608				
GC-MS 5ml Vol. 620B/624					GC-MS 5ml Vol. 620B/624				
TCLP Petroleum					TCLP Petroleum				
TCLP Vitrification					TCLP Vitrification				
TCLP Semi-Vitrification					TCLP Semi-Vitrification				
TCLP Vitrification					TCLP Vitrification				
TCLP Semi-Vitrification					TCLP Semi-Vitrification				
TCLP Vitrification					TCLP Vitrification				
RCI					RCI				
PAH 8270C					PAH 8270C				
MTE 8021B/602					MTE 8021B/602				
TPH 44674/1003					TPH 44674/1003				
Total Metals Ag A3 Be Cd Cr Pb Se Hg 6010B/200.7					Total Metals Ag A3 Be Cd Cr Pb Se Hg 6010B/200.7				
TCP/Metals Ag A3 Be Cd Cr Pb Se Hg 6010B/200.7					TCP/Metals Ag A3 Be Cd Cr Pb Se Hg 6010B/200.7				
GC-MS 5ml Vol. 620B/623					GC-MS 5ml Vol. 620B/623				
PCB's 8082/608					PCB's 8082/608				
GC-MS 5ml Vol. 620B/624					GC-MS 5ml Vol. 620B/624				
TCLP Petroleum					TCLP Petroleum				
TCLP Vitrification					TCLP Vitrification				
TCLP Semi-Vitrification					TCLP Semi-Vitrification				
TCLP Vitrification					TCLP Vitrification				
TCLP Semi-Vitrification					TCLP Semi-Vitrification				
TCLP Vitrification					TCLP Vitrification				
RCI					RCI				
PAH 8270C					PAH 8270C				
MTE 8021B/602					MTE 8021B/602				

# TRACEANALYSIS, INC.

6701 Aberdeen Avenue, Suite 9   Lubbock, Texas 79424   800•378•1296   806•794•1296   FAX 806•794•1298  
155 McCutcheon, Suite H   El Paso, Texas 79932   888•588•3443   915•585•3443   FAX 915•585•4944

E-Mail: lab@traceanalysis.com

## Analytical and Quality Control Report

Wayne Brunette  
Enron Pipeline Services  
5805 East Highway 80  
Midland, Tx. 79701

Report Date: April 10, 2001

Order ID Number: A01032722

Project Number: PO2001-10930  
Project Name: Don Jones Turner Pump  
Project Location: SW/4 Sec23 T215 R37E

Enclosed are the Analytical Results and Quality Control Data Reports for the following samples submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
167630	DONJ3270GWEST	Water	3/27/01	:	3/27/01
167631	DONJ32701GSOUTH	Water	3/27/01	:	3/27/01

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

This report consists of a total of 16 pages and shall not be reproduced except in its entirety including the chain of custody (COC), without written approval of TraceAnalysis, Inc.



Dr. Blair Leftwich, Director

## Analytical Report

### Sample: 167630 - DONJ3270GWEST

Analysis: Alkalinity      Analytical Method: E 310.1      QC Batch: QC10192      Date Analyzed: 4/4/01  
Analyst: RS      Preparation Method: N/A      Prep Batch: PB08771      Date Prepared: 4/4/01

Param	Flag	Result	Units	Dilution	RDL
Hydroxide Alkalinity		<1.0	mg/L as CaCo3	1	1
Carbonate Alkalinity		<1.0	mg/L as CaCo3	1	1
Bicarbonate Alkalinity		242	mg/L as CaCo3	1	1
Total Alkalinity		242	mg/L as CaCo3	1	1

### Sample: 167630 - DONJ3270GWEST

Analysis: BTEX      Analytical Method: S 8021B      QC Batch: QC10108      Date Analyzed: 3/28/01  
Analyst: JW      Preparation Method: E 5030B      Prep Batch: PB08696      Date Prepared: 3/28/01

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.001	mg/L	1	0.001
Toluene		<0.001	mg/L	1	0.001
Ethylbenzene		<0.001	mg/L	1	0.001
M,P,O-Xylene		<0.001	mg/L	1	0.001
Total BTEX		<0.001	mg/L	1	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.085	mg/L	1	0.10	85	72 - 128
4-BFB		0.076	mg/L	1	0.10	76	72 - 128

### Sample: 167630 - DONJ3270GWEST

Analysis: Conductivity      Analytical Method: SM 2510B      QC Batch: QC10160      Date Analyzed: 4/2/01  
Analyst: JS      Preparation Method: N/A      Prep Batch: PB08739      Date Prepared: 4/2/01

Param	Flag	Result	Units	Dilution	RDL
Specific Conductance		6400	µMHOS/cm	1	

### Sample: 167630 - DONJ3270GWEST

Analysis: Ion Chromatography (IC)      Analytical Method: E 300.0      QC Batch: QC10042      Date Analyzed: 3/27/01  
Analyst: JS      Preparation Method: N/A      Prep Batch: PB08633      Date Prepared: 3/27/01

Param	Flag	Result	Units	Dilution	RDL
CL		1900	mg/L	50	0.50
Fluoride		2.7	mg/L	5	0.20
Nitrate-N		1.1	mg/L	5	0.20
Sulfate		170	mg/L	5	0.50

Report Date: April 10, 2001  
PO2001-10930

Order Number: A01032722  
Don Jones Turner Pump

Page Number: 3 of 16  
SW/4 Sec23 T215 R37E

**Sample: 167630 - DONJ3270GWEST**

Analysis: PAH      Analytical Method: S 8270C      QC Batch: QC10172      Date Analyzed: 3/31/01  
Analyst: RC      Preparation Method: E 3510C      Prep Batch: PB08748      Date Prepared: 3/29/01

Param	Flag	Result	Units	Dilution	RDL
Naphthalene		<0.005	mg/L	1	0.005
Acenaphthylene		<0.005	mg/L	1	0.005
Acenaphthene		<0.005	mg/L	1	0.005
Fluorene		<0.005	mg/L	1	0.005
Phenanthrene		<0.005	mg/L	1	0.005
Anthracene		<0.005	mg/L	1	0.005
Fluoranthene		<0.005	mg/L	1	0.005
Pyrene		<0.005	mg/L	1	0.005
Benzo(a)anthracene		<0.005	mg/L	1	0.005
Chrysene		<0.005	mg/L	1	0.005
Benzo(b)fluoranthene		<0.005	mg/L	1	0.005
Benzo(k)fluoranthene		<0.005	mg/L	1	0.005
Benzo(a)pyrene		<0.005	mg/L	1	0.005
Indeno(1,2,3-cd)pyrene		<0.005	mg/L	1	0.005
Dibenzo(a,h)anthracene		<0.005	mg/L	1	0.005
Benzo(g,h,i)perylene		<0.005	mg/L	1	0.005

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		52.9	mg/L	1	80	66	35 - 114
2-Fluorobiphenyl		51.26	mg/L	1	80	64	43 - 116
Terphenyl-d14		63.71	mg/L	1	80	79	33 - 141

**Sample: 167630 - DONJ3270GWEST**

Analysis: Salts      Analytical Method: E 200.7      QC Batch: QC10294      Date Analyzed: 4/4/01  
Analyst: LDB      Preparation Method: E 3005 A      Prep Batch: PB08726      Date Prepared: 4/3/01

Param	Flag	Result	Units	Dilution	RDL
Dissolved Calcium		611	mg/L	1	0.05
Dissolved Magnesium		236	mg/L	1	0.05
Dissolved Potassium		16.0	mg/L	1	0.05
Dissolved Sodium		361	mg/L	1	0.05

**Sample: 167630 - DONJ3270GWEST**

Analysis: TDS      Analytical Method: E 160.1      QC Batch: QC10169      Date Analyzed: 3/30/01  
Analyst: JS      Preparation Method: N/A      Prep Batch: PB08746      Date Prepared: 3/29/01

Param	Flag	Result	Units	Dilution	RDL
Total Dissolved Solids		3900	mg/L	5	10

**Sample: 167630 - DONJ3270GWEST**

Analysis: TPH DRO      Analytical Method: Mod. 8015B      QC Batch: QC10081      Date Analyzed: 3/29/01  
Analyst: BP      Preparation Method: 3510C - Mod.      Prep Batch: PB08664      Date Prepared: 3/29/01

Report Date: April 10, 2001  
PO2001-10930

Order Number: A01032722  
Don Jones Turner Pump

Page Number: 4 of 16  
SW/4 Sec23 T215 R37E

Param	Flag	Result	Units	Dilution	RDL
DRO		<5	mg/L	0.10	50

Sample: 167630 - DONJ3270GWEST

Analysis: TPH GRO      Analytical Method: 8015B      QC Batch: QC10109      Date Analyzed: 3/28/01  
Analyst: JW      Preparation Method: 5030      Prep Batch: PB08696      Date Prepared: 3/28/01

Param	Flag	Result	Units	Dilution	RDL
GRO		<0.1	mg/L	1	0.10

Sample: 167630 - DONJ3270GWEST

Analysis: pH      Analytical Method: E 150.1      QC Batch: QC10148      Date Analyzed: 3/27/01  
Analyst: RS      Preparation Method: N/A      Prep Batch: PB08730      Date Prepared: 3/27/01

Param	Flag	Result	Units	Dilution	RDL
pH		7.3	s.u.	1	1

Sample: 167631 - DONJ32701GSOUTH

Analysis: Alkalinity      Analytical Method: E 310.1      QC Batch: QC10192      Date Analyzed: 4/4/01  
Analyst: RS      Preparation Method: N/A      Prep Batch: PB08771      Date Prepared: 4/4/01

Param	Flag	Result	Units	Dilution	RDL
Hydroxide Alkalinity		<1.0	mg/L as CaCO <sub>3</sub>	1	1
Carbonate Alkalinity		<1.0	mg/L as CaCO <sub>3</sub>	1	1
Bicarbonate Alkalinity		154	mg/L as CaCO <sub>3</sub>	1	1
Total Alkalinity		154	mg/L as CaCO <sub>3</sub>	1	1

Sample: 167631 - DONJ32701GSOUTH

Analysis: BTEX      Analytical Method: S 8021B      QC Batch: QC10108      Date Analyzed: 3/28/01  
Analyst: JW      Preparation Method: E 5030B      Prep Batch: PB08696      Date Prepared: 3/28/01

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.001	mg/L	1	0.001
Toluene		<0.001	mg/L	1	0.001
Ethylbenzene		<0.001	mg/L	1	0.001
M,P,O-Xylene		<0.001	mg/L	1	0.001
Total BTEX		<0.001	mg/L	1	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.084	mg/L	1	0.10	84	72 - 128
4-BFB		0.074	mg/L	1	0.10	74	72 - 128

Sample: 167631 - DONJ32701GSOUTH

Analysis: Conductivity      Analytical Method: SM 2510B      QC Batch: QC10160      Date Analyzed: 4/2/01  
Analyst: JS      Preparation Method: N/A      Prep Batch: PB08739      Date Prepared: 4/2/01

Report Date: April 10, 2001  
PO2001-10930

Order Number: A01032722  
Don Jones Turner Pump

Page Number: 5 of 16  
SW/4 Sec23 T215 R37E

Param	Flag	Result	Units	Dilution	RDL
Specific Conductance		5100	µMHOS/cm	1	

Sample: 167631 - DONJ32701GSOUTH

Analysis: Ion Chromatography (IC) Analytical Method: E 300.0 QC Batch: QC10042 Date Analyzed: 3/27/01  
Analyst: JS Preparation Method: N/A Prep Batch: PB08633 Date Prepared: 3/27/01

Param	Flag	Result	Units	Dilution	RDL
CL		1500	mg/L	50	0.50
Fluoride		2.6	mg/L	5	0.20
Nitrate-N		1.1	mg/L	5	0.20
Sulfate		200	mg/L	5	0.50

Sample: 167631 - DONJ32701GSOUTH

Analysis: PAH Analytical Method: S 8270C QC Batch: QC10172 Date Analyzed: 3/31/01  
Analyst: RC Preparation Method: E 3510C Prep Batch: PB08748 Date Prepared: 3/29/01

Param	Flag	Result	Units	Dilution	RDL
Naphthalene		<0.005	mg/L	1	0.005
Acenaphthylene		<0.005	mg/L	1	0.005
Acenaphthene		<0.005	mg/L	1	0.005
Fluorene		<0.005	mg/L	1	0.005
Phenanthrene		<0.005	mg/L	1	0.005
Anthracene		<0.005	mg/L	1	0.005
Fluoranthene		<0.005	mg/L	1	0.005
Pyrene		<0.005	mg/L	1	0.005
Benzo(a)anthracene		<0.005	mg/L	1	0.005
Chrysene		<0.005	mg/L	1	0.005
Benzo(b)fluoranthene		<0.005	mg/L	1	0.005
Benzo(k)fluoranthene		<0.005	mg/L	1	0.005
Benzo(a)pyrene		<0.005	mg/L	1	0.005
Indeno(1,2,3-cd)pyrene		<0.005	mg/L	1	0.005
Dibenz(a,h)anthracene		<0.005	mg/L	1	0.005
Benzo(g,h,i)perylene		<0.005	mg/L	1	0.005

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		45.02	mg/L	1	80	56	35 - 114
2-Fluorobiphenyl		51.11	mg/L	1	80	63	43 - 116
Terphenyl-d14		50.78	mg/L	1	80	63	33 - 141

Sample: 167631 - DONJ32701GSOUTH

Analysis: Salts Analytical Method: E 200.7 QC Batch: QC10294 Date Analyzed: 4/4/01  
Analyst: LDB Preparation Method: E 3005 A Prep Batch: PB08726 Date Prepared: 4/3/01

Param	Flag	Result	Units	Dilution	RDL
Dissolved Calcium		475	mg/L	1	0.05
Dissolved Magnesium		181	mg/L	1	0.05
Dissolved Potassium		13.1	mg/L	1	0.05

Continued ...

Report Date: April 10, 2001  
PO2001-10930

Order Number: A01032722  
Don Jones Turner Pump

Page Number: 6 of 16  
SW/4 Sec23 T215 R37E

...Continued Sample: 167631 Analysis: Salts

Param	Flag	Result	Units	Dilution	RDL
Dissolved Sodium		302	mg/L	1	0.05

Sample: 167631 - DONJ32701GSOUTH

Analysis: TDS      Analytical Method: E 160.1      QC Batch: QC10169      Date Analyzed: 3/30/01  
Analyst: JS      Preparation Method: N/A      Prep Batch: PB08746      Date Prepared: 3/29/01

Param	Flag	Result	Units	Dilution	RDL
Total Dissolved Solids		3000	mg/L	5	10

Sample: 167631 - DONJ32701GSOUTH

Analysis: TPH DRO      Analytical Method: Mod. 8015B      QC Batch: QC10081      Date Analyzed: 3/29/01  
Analyst: BP      Preparation Method: 3510C - Mod.      Prep Batch: PB08664      Date Prepared: 3/29/01

Param	Flag	Result	Units	Dilution	RDL
DRO		<5	mg/L	0.10	50

Sample: 167631 - DONJ32701GSOUTH

Analysis: TPH GRO      Analytical Method: 8015B      QC Batch: QC10109      Date Analyzed: 3/28/01  
Analyst: JW      Preparation Method: 5030      Prep Batch: PB08696      Date Prepared: 3/28/01

Param	Flag	Result	Units	Dilution	RDL
GRO		<0.1	mg/L	1	0.10

Sample: 167631 - DONJ32701GSOUTH

Analysis: pH      Analytical Method: E 150.1      QC Batch: QC10148      Date Analyzed: 3/27/01  
Analyst: RS      Preparation Method: N/A      Prep Batch: PB08730      Date Prepared: 3/27/01

Param	Flag	Result	Units	Dilution	RDL
pH		7.4	s.u.	1	1

## Quality Control Report Method Blank

Method Blank      QCBatch: QC10042

Param	Flag	Results	Units	Reporting Limit
CL		<0.5	mg/L	0.50
Fluoride		<0.2	mg/L	0.20
Nitrate-N		<0.2	mg/L	0.20
Sulfate		<0.5	mg/L	0.50

Method Blank      QCBatch: QC10081

Param	Flag	Results	Units	Reporting Limit
DRO		<5	mg/L	50

Method Blank      QCBatch: QC10108

Param	Flag	Results	Units	Reporting Limit
Benzene		<0.001	mg/L	0.001
Toluene		<0.001	mg/L	0.001
Ethylbenzene		<0.001	mg/L	0.001
M,P,O-Xylene		<0.001	mg/L	0.001
Total BTEX		<0.001	mg/L	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.088	mg/L	1	0.10	88	72 - 128
4-BFB		0.079	mg/L	1	0.10	79	72 - 128

Method Blank      QCBatch: QC10109

Param	Flag	Results	Units	Reporting Limit
GRO		<0.1	mg/L	0.10

Method Blank      QCBatch: QC10160

Param	Flag	Results	Units	Reporting Limit
Specific Conductance		2.9	µMHOS/cm	

Report Date: April 10, 2001  
PO2001-10930

Order Number: A01032722  
Don Jones Turner Pump

Page Number: 8 of 16  
SW/4 Sec23 T215 R37E

Method Blank QCBatch: QC10169

Param	Flag	Results	Units	Reporting Limit
Total Dissolved Solids		<10	mg/L	10

Method Blank QCBatch: QC10172

Param	Flag	Results	Units	Reporting Limit
Naphthalene		<0.005	mg/L	0.005
Acenaphthylene		<0.005	mg/L	0.005
Acenaphthene		<0.005	mg/L	0.005
Fluorene		<0.005	mg/L	0.005
Phenanthrene		<0.005	mg/L	0.005
Anthracene		<0.005	mg/L	0.005
Fluoranthene		<0.005	mg/L	0.005
Pyrene		<0.005	mg/L	0.005
Benzo(a)anthracene		<0.005	mg/L	0.005
Chrysene		<0.005	mg/L	0.005
Benzo(b)fluoranthene		<0.005	mg/L	0.005
Benzo(k)fluoranthene		<0.005	mg/L	0.005
Benzo(a)pyrene		<0.005	mg/L	0.005
Indeno(1,2,3-cd)pyrene		<0.005	mg/L	0.005
Dibenzo(a,h)anthracene		<0.005	mg/L	0.005
Benzo(g,h,i)perylene		<0.005	mg/L	0.005

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		41.47	mg/L	1	80	51	35 - 114
2-Fluorobiphenyl		41.3	mg/L	1	80	51	43 - 116
Terphenyl-d14		39.98	mg/L	1	80	49	33 - 141

Method Blank QCBatch: QC10192

Param	Flag	Results	Units	Reporting Limit
Hydroxide Alkalinity		<0.005	mg/L as CaCo3	1
Carbonate Alkalinity		<0.005	mg/L as CaCo3	1
Bicarbonate Alkalinity		<0.005	mg/L as CaCo3	1
Total Alkalinity		<0.005	mg/L as CaCo3	1

Method Blank QCBatch: QC10294

Param	Flag	Results	Units	Reporting Limit
Dissolved Calcium		<5.0	mg/L	0.05
Dissolved Magnesium		<5.0	mg/L	0.05
Dissolved Potassium		<5.0	mg/L	0.05

Continued ...

*Continued*

Param	Flag	Results	Units	Reporting Limit
Dissolved Sodium		<5.0	mg/L	0.05

## Quality Control Report Duplicate Samples

Duplicate      QCBatch: QC10148

Param	Flag	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
pH		8.7	8.7	s.u.	1	0	0.99

Duplicate      QCBatch: QC10160

Param	Flag	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Specific Conductance		2422	2400	µMHOS/cm	1	0	4.6

Duplicate      QCBatch: QC10169

Param	Flag	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Total Dissolved Solids		3570	3900	mg/L	1	8	14

Duplicate      QCBatch: QC10192

Param	Flag	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Hydroxide Alkalinity		<1.0	<1.0	mg/L as CaCO <sub>3</sub>	1	0	7
Carbonate Alkalinity		<1.0	<1.0	mg/L as CaCO <sub>3</sub>	1	0	7
Bicarbonate Alkalinity		32	34	mg/L as CaCO <sub>3</sub>	1	6	7
Total Alkalinity		32	34	mg/L as CaCO <sub>3</sub>	1	6	7

## Quality Control Report Lab Control Spikes and Duplicate Spikes

Laboratory Control Spikes      QCBatch: QC10042

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
CL	11.67	11.75	mg/L	1	12.50	<0.5	93	0	90 - 110	20
Fluoride	2.37	2.44	mg/L	1	2.50	<0.2	94	2	90 - 110	20
Nitrate-N	2.41	2.42	mg/L	1	2.50	<0.2	96	0	90 - 110	20

*Continued ...*

...Continued

Param	LCS	LCSD	Units	Dil.	Spike	Matrix	% Rec	RPD	% Rec	RPD
	Result	Result			Amount Added				Limit	
Sulfate	11.73	11.81	mg/L	1	12.50	<0.5	93	0	90 - 110	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

### Laboratory Control Spikes

QCBatch: QC10081

Param	LCS	LCSD	Units	Dil.	Spike	Matrix	% Rec	RPD	% Rec	RPD
	Result	Result			Amount Added				Limit	
DRO	26	22	mg/L	0.10	25	<5	104	168	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS	LCSD	Units	Dilution	Spike	LCS	LCSD	Recovery
	Result	Result			Amount			
n-Octane	18	18	mg/L	1	25	72	72	70 - 130

### Laboratory Control Spikes

QCBatch: QC10108

Param	LCS	LCSD	Units	Dil.	Spike	Matrix	% Rec	RPD	% Rec	RPD
	Result	Result			Amount Added				Limit	
MTBE	0.1	0.09	mg/L	1	0.10	<0.001	100	10	80 - 120	20
Benzene	0.088	0.094	mg/L	1	0.10	<0.001	88	6	80 - 120	20
Toluene	0.09	0.095	mg/L	1	0.10	<0.001	90	5	80 - 120	20
Ethylbenzene	0.089	0.094	mg/L	1	0.10	<0.001	89	5	80 - 120	20
M,P,O-Xylene	0.263	0.28	mg/L	1	0.30	<0.001	87	6	80 - 120	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS	LCSD	Units	Dilution	Spike	LCS	LCSD	Recovery
	Result	Result			Amount			
TFT	0.085	0.085	mg/L	1	0.10	85	85	72 - 128
4-BFB	0.091	0.091	mg/L	1	0.10	91	91	72 - 128

### Laboratory Control Spikes

QCBatch: QC10109

Param	LCS	LCSD	Units	Dil.	Spike	Matrix	% Rec	RPD	% Rec	RPD
	Result	Result			Amount Added				Limit	
GRO	0.95	1	mg/L	1	1	<0.1	95	5	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

### Laboratory Control Spikes

QCBatch: QC10172

Continued ...

...Continued

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
Naphthalene	55.59	56.36	mg/L	1	80	<0.005	69	1	21 - 133	20
Acenaphthylene	59.01	59.00	mg/L	1	80	<0.005	73	0	33 - 145	20
Acenaphthene	60.67	60.82	mg/L	1	80	<0.005	75	0	47 - 145	20
Fluorene	62.52	61.61	mg/L	1	80	<0.005	78	1	59 - 121	20
Phenanthrene	57.09	56.82	mg/L	1	80	<0.005	71	0	54 - 120	20
Anthracene	59.79	59.5	mg/L	1	80	<0.005	74	0	27 - 133	20
Fluoranthene	48.2	52.12	mg/L	1	80	<0.005	60	7	26 - 137	20
Pyrene	69.56	63.14	mg/L	1	80	<0.005	86	9	52 - 115	20
Benzo(a)anthracene	57.35	57.71	mg/L	1	80	<0.005	71	0	80 - 120	20
Chrysene	91.17	90.31	mg/L	1	80	<0.005	113	0	80 - 120	20
Benzo(b)fluoranthene	55.46	55.94	mg/L	1	80	<0.005	69	0	33 - 143	20
Benzo(k)fluoranthene	62.58	62.67	mg/L	1	80	<0.005	78	0	17 - 168	20
Benzo(a)pyrene	59.20	58.98	mg/L	1	80	<0.005	74	0	24 - 159	20
Indeno(1,2,3-cd)pyrene	58.11	59.17	mg/L	1	80	<0.005	72	1	0 - 171	20
Dibenzo(a,h)anthracene	67.96	70.68	mg/L	1	80	<0.005	84	3	0 - 227	20
Benzo(g,h,i)perylene	57.05	57.92	mg/L	1	80	<0.005	71	1	0 - 219	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
Nitrobenzene-d5	55.07	56.38	mg/L	1	80	68	70	35 - 114
2-Fluorobiphenyl	54.96	55.37	mg/L	1	80	68	69	43 - 116
Terphenyl-d14	51.91	47.91	mg/L	1	80	64	59	33 - 141

### Laboratory Control Spikes

QCBatch: QC10294

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
Dissolved Calcium	104	103	mg/L	1	100	<5.0	104	0	75 - 125	20
Dissolved Magnesium	104	102	mg/L	1	100	<5.0	104	1	75 - 125	20
Dissolved Potassium	108	108	mg/L	1	100	<5.0	108	0	75 - 125	20
Dissolved Sodium	106	104	mg/L	1	100	<5.0	106	1	75 - 125	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

### Quality Control Report Matrix Spikes and Duplicate Spikes

### Matrix Spikes

QCBatch: QC10042

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
CL	77.58	78.11	mg/L	1	62.50	21	90	0	52 - 131	20
Fluoride	14.10	13.91	mg/L	1	12.50	2.5	92	1	80 - 113	20

Continued ...

*Continued*

Param	MS Result	MSD Result	Units	Dil.	Spike		% Rec	RPD	% Rec Limit	RPD Limit
					Amount Added	Matrix Result				
Nitrate-N	13.26	13.17	mg/L	1	12.50	1.6	93	0	86 - 110	20
Sulfate	80.20	79.96	mg/L	1	62.50	22	93	0	71 - 121	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spikes      QCBatch: QC10294

Param	MS Result	MSD Result	Units	Dil.	Spike		% Rec	RPD	% Rec Limit	RPD Limit
					Amount Added	Matrix Result				
Dissolved Calcium	1234	1233	mg/L	1	1000	188	104	0	75 - 125	20
Dissolved Magnesium	1256	1270	mg/L	1	1000	221	103	1	75 - 125	20
Dissolved Potassium	1125	1136	mg/L	1	1000	18.8	110	0	75 - 125	20
Dissolved Sodium	1414	1400	mg/L	1	1000	389	102	1	75 - 125	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

### Quality Control Report Continuing Calibration Verification Standards

CCV (1)      QCBatch: QC10042

Param	Flag	Units	CCVs	CCVs	CCVs	Percent	Date Analyzed
			True Conc.	Found Conc.	Percent Recovery	Recovery Limits	
Bromide		mg/L	2.50	2.33	93	90 - 110	3/27/01
CL		mg/L	12.50	11.55	92	90 - 110	3/27/01
Fluoride		mg/L	2.50	2.36	94	90 - 110	3/27/01
Nitrate-N		mg/L	2.50	2.42	96	90 - 110	3/27/01
Sulfate		mg/L	12.50	11.68	93	90 - 110	3/27/01

ICV (1)      QCBatch: QC10042

Param	Flag	Units	CCVs	CCVs	CCVs	Percent	Date Analyzed
			True Conc.	Found Conc.	Percent Recovery	Recovery Limits	
Bromide		mg/L	2.50	2.27	90	90 - 110	3/27/01
CL		mg/L	12.50	11.50	92	90 - 110	3/27/01
Fluoride		mg/L	2.50	2.34	93	90 - 110	3/27/01
Nitrate-N		mg/L	2.50	2.36	94	90 - 110	3/27/01
Sulfate		mg/L	12.50	11.57	92	90 - 110	3/27/01

CCV (1)      QCBatch: QC10081

Report Date: April 10, 2001  
PO2001-10930

Order Number: A01032722  
Don Jones Turner Pump

Page Number: 13 of 16  
SW/4 Sec23 T215 R37E

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/L	250	218	84	85 - 115	3/29/01
n-Octane		mg/L	250	210	84	85 - 115	3/29/01

ICV (1) QCBatch: QC10081

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/L	250	240	93	85 - 115	3/29/01
n-Octane		mg/L	250	188	75	85 - 115	3/29/01

CCV (1) QCBatch: QC10108

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.092	92	85 - 115	3/28/01
Benzene		mg/L	0.10	0.093	93	85 - 115	3/28/01
Toluene		mg/L	0.10	0.094	94	85 - 115	3/28/01
Ethylbenzene		mg/L	0.10	0.092	92	85 - 115	3/28/01
M,P,O-Xylene		mg/L	0.30	0.273	91	85 - 115	3/28/01

CCV (2) QCBatch: QC10108

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.096	96	85 - 115	3/28/01
Benzene		mg/L	0.10	0.088	88	85 - 115	3/28/01
Toluene		mg/L	0.10	0.09	90	85 - 115	3/28/01
Ethylbenzene		mg/L	0.10	0.088	88	85 - 115	3/28/01
M,P,O-Xylene		mg/L	0.30	0.261	87	85 - 115	3/28/01

ICV (1) QCBatch: QC10108

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.099	99	85 - 115	3/28/01
Benzene		mg/L	0.10	0.088	88	85 - 115	3/28/01
Toluene		mg/L	0.10	0.09	90	85 - 115	3/28/01
Ethylbenzene		mg/L	0.10	0.088	88	85 - 115	3/28/01
M,P,O-Xylene		mg/L	0.30	0.262	87	85 - 115	3/28/01

Report Date: April 10, 2001  
PO2001-10930

Order Number: A01032722  
Don Jones Turner Pump

Page Number: 14 of 16  
SW/4 Sec23 T215 R37E

CCV (1) QCBatch: QC10109

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/L	1	1.06	106	85 - 115	3/28/01

CCV (2) QCBatch: QC10109

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/L	1	1.06	106	85 - 115	3/28/01

ICV (1) QCBatch: QC10109

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/L	1	1.06	106	85 - 115	3/28/01

CCV (1) QCBatch: QC10148

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
pH		s.u.	7	7.0	100	-0.1 s.u. - +0.1 s.u.	3/27/01

ICV (1) QCBatch: QC10148

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
pH		s.u.	7	7.0	100	-0.1 s.u. - +0.1 s.u.	3/27/01

CCV (1) QCBatch: QC10160

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Specific Conductance		µMHOS/cm	1412	1414	100	90 - 110	4/2/01

ICV (1) QCBatch: QC10160

Report Date: April 10, 2001  
PO2001-10930

Order Number: A01032722  
Don Jones Turner Pump

Page Number: 15 of 16  
SW/4 Sec23 T215 R37E

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Specific Conductance		µMHOS/cm	1412	1436	101	90 - 110	4/2/01

CCV (1) QCBatch: QC10169

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Dissolved Solids		mg/L	1000	1008	100	90 - 110	3/30/01

ICV (1) QCBatch: QC10169

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Dissolved Solids		mg/L	1000	980	98	90 - 110	3/30/01

CCV (1) QCBatch: QC10172

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Naphthalene		mg/L	60	61.21	102	80 - 120	3/31/01
Acenaphthylene		mg/L	60	60.28	100	80 - 120	3/31/01
Acenaphthene		mg/L	60	60.55	100	80 - 120	3/31/01
Fluorene		mg/L	60	59.42	99	80 - 120	3/31/01
Phenanthrene		mg/L	60	60.14	100	80 - 120	3/31/01
Anthracene		mg/L	60	59.43	99	80 - 120	3/31/01
Fluoranthene		mg/L	60	52.06	86	80 - 120	3/31/01
Pyrene		mg/L	60	63.36	105	80 - 120	3/31/01
Benzo(a)anthracene		mg/L	60	61.02	101	80 - 120	3/31/01
Chrysene		mg/L	60	60.65	101	80 - 120	3/31/01
Benzo(b)fluoranthene		mg/L	60	61.22	102	80 - 120	3/31/01
Benzo(k)fluoranthene		mg/L	60	58.95	98	80 - 120	3/31/01
Benzo(a)pyrene		mg/L	60	60.96	101	80 - 120	3/31/01
Indeno(1,2,3-cd)pyrene		mg/L	60	66.13	110	80 - 120	3/31/01
Dibenzo(a,h)anthracene		mg/L	60	62.54	104	80 - 120	3/31/01
Benzo(g,h,i)perylene		mg/L	60	64.7	107	80 - 120	3/31/01
Nitrobenzene-d5		mg/L	60	61.64	102	80 - 120	3/31/01
2-Fluorobiphenyl		mg/L	60	58.91	98	80 - 120	3/31/01
Terphenyl-d14		mg/L	60	61.04	101	80 - 120	3/31/01

CCV (1) QCBatch: QC10192

Report Date: April 10, 2001  
PO2001-10930

Order Number: A01032722  
Don Jones Turner Pump

Page Number: 16 of 16  
SW/4 Sec23 T215 R37E

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Hydroxide Alkalinity		mg/L as CaCo3	0	<1.0	0	90 - 110	4/4/01
Carbonate Alkalinity		mg/L as CaCo3	0	236	0	90 - 110	4/4/01
Bicarbonate Alkalinity		mg/L as CaCo3	0	10	0	90 - 110	4/4/01
Total Alkalinity		mg/L as CaCo3	250	246	98	90 - 110	4/4/01

ICV (1) QCBatch: QC10192

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Hydroxide Alkalinity		mg/L as CaCo3	0	<1.0	0	90 - 110	4/4/01
Carbonate Alkalinity		mg/L as CaCo3	0	240	0	90 - 110	4/4/01
Bicarbonate Alkalinity		mg/L as CaCo3	0	<1.0	0	90 - 110	4/4/01
Total Alkalinity		mg/L as CaCo3	250	240	96	90 - 110	4/4/01

CCV (1) QCBatch: QC10294

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Calcium		mg/L	25	25	100	75 - 125	4/4/01
Dissolved Magnesium		mg/L	25	25.5	102	75 - 125	4/4/01
Dissolved Potassium		mg/L	25	25.1	100	75 - 125	4/4/01
Dissolved Sodium		mg/L	25	25.7	102	75 - 125	4/4/01

ICV (1) QCBatch: QC10294

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Calcium		mg/L	25	24.5	98	75 - 125	4/4/01
Dissolved Magnesium		mg/L	25	25.3	101	75 - 125	4/4/01
Dissolved Potassium		mg/L	25	25.9	103	75 - 125	4/4/01
Dissolved Sodium		mg/L	25	26.2	104	75 - 125	4/4/01



# ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

EOTT ENERGY  
ATTN: MR. WAYNE BRUNETTE  
P.O. BOX 1660  
MIDLAND, TEXAS 79703  
FAX: 684-3456  
FAX: 505-394-2601 (Pat Mc Casland)

Sample Type: Water

Sample Condition: Intact/ Iced/ HCl/ 3 deg. C

Project #: None Given

Project Name: Don Jones Turner Pump

Project Location: SW 1/4 Sec 23 T21S R37E

Sampling Date: 03/29/01

Receiving Date: 03/30/01

Analysis Date: 04/02/01

ELT#	FIELD CODE	BENZENE mg/L	TOLUENE mg/L	ETHYLBENZENE mg/L	m,p-XYLENE mg/L	o-XYLENE mg/L
38654	DONJ32901BH3	<0.001	0.003	0.003	0.005	0.002
%IA		89	95	99	98	99
%EA		89	95	99	98	99
BLANK		<0.001	<0.001	<0.001	<0.001	<0.001

METHODS: EPA SW 846-8021B, 5030

Roland K. Tuttle  
Roland K. Tuttle

4-9-01  
Date

# ENVIRONMENTAL LAB OF INC.

"Don't Treat Your Soil Like Dirt!"

EOTT ENERGY  
ATTN: MR. WAYNE BRUNETTE  
P.O. BOX 16660  
MIDLAND, TEXAS 79703  
FAX: 684-3456  
FAX: 505-394-2601 (Pat McCasland)

Sample Type: Water

Sample Condition: Intact/Iced/ HCl/ 3 deg C

Project #: None Given

Project Name: Don Jones Turner Pump

Project Location: SW 1/4 Sec23 T21S R37E

Sampling Date: 03/29/01

Receiving Date: 03/30/01

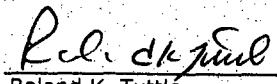
Analysis Date: 04/06/01

ELT#	FIELD CODE	GRO C6-C10 mg/L	DRO >C10-C28 mg/L
------	------------	-----------------------	-------------------------

38654	DONJ32901BH3	<0.5	<0.5
-------	--------------	------	------

% IA	99	112
% EA	93	111
BLANK	<0.5	<0.5

Methods: EPA SW 846-8015M GRO/DRO

  
Raland K. Tuttle

4-9-01  
Date

# ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

EOTT ENERGY  
 ATTN: MR. WAYNE BRUNETTE  
 P.O. BOX 1660  
 MIDLAND, TEXAS 79703  
 FAX: 684-3456  
 FAX: 505-394-2601 (Pat McCasland)

Sample Type: Water

Sample Condition: Intact/ Iced/ 3 deg C

Project #: None Given

Project Name: Don Jones Turner Pump

Project Location: SW/4 Sec23 T21S R37E

Sampling Date: 03/29/01

Receiving Date: 03/30/01

Analysis Date: See Below

ELT#	FIELD CODE	pH s.u.	Conductivity uS/cm	Chloride mg/L	Sulfate mg/L	Carbonate mg/L	Bicarbonate mg/L
38654	DONJ32901BH3	7.02	3160	532	708	<2	524
QUALITY CONTROL		7.01	1417	5140	48.5	*	*
TRUE VALUE		7.00	1413	5000	50.0	*	*
% IA		100	100	103	97	*	*
BLANK		*	*	<10	<0.5	<2	<2
ANALYSIS DATE		3/30/01	3/30/01	4/2/01	4/4/01	4/2/01	4/2/01

METHODS: EPA 325.3, 375.4, 310.1, 150.1, 120.1

Raland K. Tuttle

Raland K. Tuttle

4/9/01

Date

# ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

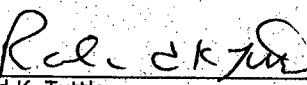
EOTT ENERGY  
ATTN: MR. WAYNE BRUNETTE  
P.O. BOX 1660  
MIDLAND, TEXAS 79703  
FAX: 684-3456  
FAX: 505-394-2601 (Pat McCasland)

Sample Type: Water  
Sample Condition: Intact/ Iced/ 3 deg. C  
Project #: None Given  
Project Name: Don Jones Turner Pump  
Project Location: SW 1/4 Sec23 T21S R37E

Sampling Date: 03/29/01  
Receiving Date: 03/30/01  
Analysis Date: 04/04/01

ELT#	FIELD CODE	Na mg/L	Ca mg/L	Mg mg/L	K mg/L
38654	DONJ32901BH3	288.6	196.2	133.9	19.05
% INSTRUMENT ACCURACY	99	100	99	99	99
% EXTRACTION ACCURACY	87	97	101	85	85
BLANK	<0.01	<0.01	<0.001	<0.05	<0.05

METHODS: SW846-6010B

  
Raland K. Tuttle

4/9/01  
Date

# ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

ENRON TRANSPORTATION SERVICES  
ATTN: MR. WAYNE BRUNETTE  
P.O. BOX 1660  
MIDLAND, TEXAS 79703  
FAX: 684-3456  
FAX: 505-394-2601 (Pat McCasland)

Sample Type: Water  
Sample Condition: Intact/ Iced/ 3 deg. C  
Project #: None Given  
Project Name: Don Jones Turner Pump  
Project Location: SW 1/4 Sec23 T21S R37E

Sampling Date: 03/29/01  
Receiving Date: 03/30/01  
Analysis Date: 04/02/01

ELT#	FIELD CODE	TDS mg/L
38654	DONJ32901BH3	2657
BLANK		<10

METHODS: EPA 160.1

Roland K. Tuttle  
Roland K. Tuttle

4-9-01  
Date



**Client:** EOTT Energy Corp.  
**Attn:** Wayne Brunette  
**Address:** 5805 East Highway 80  
 Midland Tx 79701  
**Phone:** 915 684-3479 **FAX:** 915 684-3456

#### REPORT OF ANALYSIS

Parameter	Result	Units	RQL <sup>5</sup>	Blank	Date	Method <sup>6</sup>	Data Qual <sup>7</sup>	Prec. <sup>2</sup>	Recov. <sup>3</sup>	CCV <sup>4</sup>	LCS <sup>4</sup>
Volatile organics-8260	--	--	--	--	07/17/01	624 & 8260b	--	--	--	--	--
1,1,1,2-Tetrachloroethane	<5	µg/L	5	<5	07/17/01	624 & 8260b	--	1.8	98.2	97.9	99.6
1,1,1-Trichloroethane	<5	µg/L	5	<5	07/17/01	624 & 8260b	--	6.8	85.6	90.4	95.6
1,1,2,2-Tetrachloroethane	<5	µg/L	5	<5	07/17/01	624 & 8260b	--	3.1	100.5	91.7	94.5
1,1,2-Trichloroethane	<5	µg/L	5	<5	07/17/01	624 & 8260b	--	4.1	97.3	94.8	98.9
1,1-Dichloroethane	<5	µg/L	5	<5	07/17/01	624 & 8260b	--	8.6	84	87.6	94.7
1,1-Dichloroethene	<5	µg/L	5	<5	07/17/01	624 & 8260b	--	7.3	78.8	89.6	93.5
1,2,3-Trichloropropane	<5	µg/L	5	<5	07/17/01	624 & 8260b	--	9.2	103.4	95.7	110.1
1,2,4-Trichlorobenzene	<5	µg/L	5	<5	07/17/01	624 & 8260b	--	1.6	97.8	88.8	96.1
1,2-Dibromo-3-chloropropane	<10	µg/L	10	<10	07/17/01	624 & 8260b	--	1.2	97.4	94.4	102.7
1,2-Dibromoethane	<5	µg/L	5	<5	07/17/01	624 & 8260b	--	4.8	100.7	97.3	99
1,2-Dichlorobenzene	<5	µg/L	5	<5	07/17/01	624 & 8260b	--	0.3	97.2	96.1	99.3
1,2-Dichloroethane	<5	µg/L	5	<5	07/17/01	624 & 8260b	--	0.7	91.4	90.7	93.3
1,2-Dichloropropane	<5	µg/L	5	<5	07/17/01	624 & 8260b	--	4	95.5	94.5	94.9
1,3-Dichlorobenzene	<5	µg/L	5	<5	07/17/01	624 & 8260b	--	0.3	96.9	94.7	99.7
1,4-Dichloro-2-butene	<100	µg/L	100	<100	07/17/01	624 & 8260b	--	3.2	102.5	94.1	103.7
1,4-Dichlorobenzene	<5	µg/L	5	<5	07/17/01	624 & 8260b	--	0.4	94.9	94	97.5
1,4-Dioxane	<100	µg/L	100	<100	07/17/01	624 & 8260b	--	2.6	94.6	92.1	98.3
2-Butanone (MEK)	<10	µg/L	20	<20	07/17/01	624 & 8260b	--	3.4	48.8	89.1	100.7
2-Hexanone	<20	µg/L	10	<10	07/17/01	624 & 8260b	--	4.6	69.8	93.1	98.2
4-Methyl-2-pentanone (MBK)	<10	µg/L	10	<10	07/17/01	624 & 8260b	--	5.4	94.5	91.4	96

This analytical report is respectfully submitted by AnalySys, Inc. The enclosed results have been carefully reviewed and, to the best of my knowledge, the analytical results are consistent with AnalySys, Inc.'s Quality Assurance/Quality Control Program. © Copyright 2000, AnalySys, Inc., Austin, TX. All rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means without the express written consent of AnalySys, Inc.

Respectfully Submitted,  
*Richard Laster*  
 Richard Laster

1. Quality assurance data is for the sample batch which included this sample.
2. Precision (PREC) is the absolute value of the relative percent (%) difference between duplicate measurements.
3. Recovery (Recov.) is the percent (%) of analyte recovered from a spiked sample.
4. Calibration Verification (CCV) and Laboratory Control Sample (LCS) results are expressed as the percent (%) recovery of analyte from a known standard or matrix.
5. Reporting Quantitation Limits (RQL), typically at or above the Practical Quantitation Limit (PQL) of the analytical method.
6. Method numbers typically denote USEPA procedures.
7. Data Qualifiers are J = analyte potentially present between the PQL and the MDL. B = Analyte detected in associated method blank(s). S1 =MS and/or MSD recovery exceed advisory limits. S2 =Post digestion spike (PDS) recovery exceeds advisory limits. S3 =MS and/or MSD and PDS recoveries exceed advisory limits. P =Precision higher than advisory limit. M =Matrix interference.

**REPORT OF ANALYSISIS-cont.**

Parameter	Result	Units	RQL <sup>5</sup>	Blank	Date	Method <sup>6</sup>	Data Qual <sup>7</sup>	Prec. <sup>2</sup>	Recov. <sup>3</sup>	CCV <sup>4</sup>	LCS <sup>4</sup>
Acetone	<50	µg/L	50	<50	07/17/01	624 & 8260b	---	6.5	32.4	85.9	93.5
Acetonitrile	<100	µg/L	100	<100	07/17/01	624 & 8260b	---	7.5	81.2	85.9	100.8
Acrolein	<50	µg/L	50	<50	07/17/01	624 & 8260b	---	2.8	61.6	89.8	105.3
Acrylonitrile	<50	µg/L	50	<50	07/17/01	624 & 8260b	---	4.3	100	107.7	126.1
Allyl chloride	<5	µg/L	5	<5	07/17/01	624 & 8260b	---	8.4	73.6	80.7	81.1
Benzene	<5	µg/L	5	<5	07/17/01	624 & 8260b	---	1.3	93.7	95.8	94.3
Bromodichloromethane	<5	µg/L	5	<5	07/17/01	624 & 8260b	---	1.9	94.3	92.8	96.8
Bromoform	<5	µg/L	5	<5	07/17/01	624 & 8260b	---	3.8	98.3	95	103.8
Bromomethane	<10	µg/L	10	<10	07/17/01	624 & 8260b	---	17.2	70.5	80.7	88.9
Carbon disulfide	<10	µg/L	10	<10	07/17/01	624 & 8260b	---	7	79.4	103.1	102.9
Carbon tetrachloride	<5	µg/L	5	<5	07/17/01	624 & 8260b	---	1.7	93.8	97	97.6
Chlorobenzene	<5	µg/L	5	<5	07/17/01	624 & 8260b	---	0.3	95.5	95.2	97.8
Chloroethane	<10	µg/L	10	<10	07/17/01	624 & 8260b	---	8.2	79.4	86.9	91.9
Chloroform	<5	µg/L	5	<5	07/17/01	624 & 8260b	---	12.1	84.5	88.9	98.3
Chloromethane	<10	µg/L	10	<10	07/17/01	624 & 8260b	---	10.2	71.9	86.2	93.6
cis-1,3-Dichloropropene	<5	µg/L	5	<5	07/17/01	624 & 8260b	---	1.7	94.3	91	91.8
Dibromochloromethane	<5	µg/L	5	<5	07/17/01	624 & 8260b	---	1.9	99.5	96.5	102.2
Dibromomethane	<5	µg/L	5	<5	07/17/01	624 & 8260b	---	2.6	95.1	91	96.5
Dichlorodifluoromethane	<10	µg/L	10	<10	07/17/01	624 & 8260b	---	7.7	54.9	72.9	82.4
Ethyl methacrylate	<5	µg/L	5	<5	07/17/01	624 & 8260b	---	7	97.3	91.6	97.6
Ethylbenzene	<5	µg/L	5	<5	07/17/01	624 & 8260b	---	2.7	97.3	97.4	94.3
Iodomethane	<5	µg/L	5	<5	07/17/01	624 & 8260b	---	19	63	76.1	79.6
Isobutanol	<100	µg/L	100	<100	07/17/01	624 & 8260b	---	1.2	85.7	86.7	102.4
m,p-Xylenes	<5	µg/L	5	<5	07/17/01	624 & 8260b	---	1.7	99	98.3	95.6
Methacrylonitrile	<100	µg/L	100	<100	07/17/01	624 & 8260b	---	5	85.3	87	99.3
o-Xylene	<5	µg/L	5	<5	07/17/01	624 & 8260b	---	3.2	97.6	97	96
Propionitrile	<100	µg/L	100	<100	07/17/01	624 & 8260b	---	3.5	87.4	88.4	103.2
Styrene	<5	µg/L	5	<5	07/17/01	624 & 8260b	---	2.5	98.8	97.7	97.5
Tetrachloroethene	<5	µg/L	5	<5	07/17/01	624 & 8260b	J	2.5	99.1	95.8	93.6
Toluene	<5	µg/L	5	<5	07/17/01	624 & 8260b	---	1.3	90.4	94.5	91.6
trans-1,2-Dichloroethylene	<5	µg/L	5	<5	07/17/01	624 & 8260b	---	8.6	85.2	90.7	99

*Linn & Sons Inc.*

Client: EOTT Energy Corp.  
Attn: Wayne Brunette

Project ID: 2000-10930 Don Jones Turner Pump SE Bath  
Sample Name: DJ71201SEBATH

**REPORT OF ANALYSIS-cont.**

Parameter	Result	Units	RQL <sup>5</sup>	Blank	Date	Method <sup>6</sup>	Data Qual <sup>7</sup>	Prec. <sup>2</sup>	Reco <sup>3</sup>	CCV <sup>4</sup>	LCS <sup>4</sup>
trans-1,3-Dichloropropene	<5	µg/L	5	<5	07/17/01	624 & 8260b	---	3.8	99.7	93.5	100.5
Trichloroethene	<5	µg/L	5	<5	07/17/01	624 & 8260b	---	0.6	91.1	98.6	99.8
Trichlorofluoromethane	<10	µg/L	10	<10	07/17/01	624 & 8260b	---	7.2	79.4	87.3	94.1
Vinyl acetate	<10	µg/L	10	<10	07/17/01	624 & 8260b	---	9.6	122.9	63.2	75.9
Vinyl chloride	<10	µg/L	10	<10	07/17/01	624 & 8260b	---	11.9	75.3	88.3	91.4
2-Chloro-1,3-butadiene*TIC	ND	µg/L	20	ND	07/17/01	624 & 8260b	---	---	---	---	---

**QUALITY ASSURANCE DATA<sup>1</sup>**

4221 Friedrich Lane, Suite 190, Austin, TX 78744 &  
2209 N. Padre Island Dr., Corpus Christi, TX 78408  
(512) 444-5896 • FAX (512) 447-4766

Report# /Lab ID#: 116301  
Sample Matrix: water

*Turner*  
5  
*Inc.*

Client: EOTT Energy Corp.  
Attn: Wayne Brunette

**REPORT OF SURROGATE RECOVERY**

Surrogate Compound	Method	Recovery	Recovery Limit	Data Qualifiers
1,2-Dichloroethane-d4	624 & 8260b	101.2	80-120	---
4-Bromofluorobenzene	624 & 8260b	97	86-115	---
Toluene-d8	624 & 8260b	94.9	88-110	---

Data Qualifiers: D= Surrogates diluted and X= Surrogates outside advisory recovery limits.

Project ID: 2000-10930 Don Jones Turner Pump SE Bath  
Sample Name: DJ71201SEBATH

Report# /Lab ID#: 116301  
Sample Matrix: water

221 Preurich Lane, Suite 190, Austin, TX 78744 &  
2209 N. Padre Island Dr., Corpus Christi, TX 7840408  
(512) 444-5896 • FAX (512) 447-4766

Report #/Lab ID#: 116301 Matrix: water  
Client: EOTT Energy Corp. Attn: Wayne Brunette  
Project ID: 2000-10930 Don Jones Turner Pump SE Bath  
Sample Name: D171201SEBATH

**Sample Temperature/Condition <=6°C**

The typical sample temperature criteria (except for metals by ICP, GFAA and AA and a very few other tests) is <= 6°C. Possible exceptions include samples submitted to laboratory within such a short time after sampling that cooling measures used in the field and during transport had insufficient time to achieve desired temperatures in the samples (see sample collection and sample receipt times) and samples where the temperature could not be measured due to sample submission in a manner precluding temperature measurement without impacting sample integrity (ex. in a bottle with no cooler).

**Sample Bottles & Preservation**

- Sample received in appropriate container(s) and appear to be appropriately preserved.
- Sample received in appropriate container(s). State of sample preservation unknown.
- Sample received in inappropriate container(s) and/or with unknown state of preservation.

**J flag Discussion**

A J flag data qualifier indicates (as required under TNRCC-TRRP reporting requirements) that the raw calculated analyte concentration in the sample (uncorrected for background levels/blanks and other potential sources of sampling and analytical contamination), though less than the Reported Quantitation Limit (RQL) is greater than the Detection Limit. Because the reported result is below the quantitation limit for this project/sample (or test procedure), GC/MS organics results may or MAY NOT have been verified as to the presence and relative ratio of target ions (eg. the material causing the J flag "hit" in such situations may be nothing more than background ion-fragment noise.)

**Comments pertaining to Data Qualifiers and QC data:**

Parameter	Qualif	Comment
Tetrachloroethene	J	See J-flag discussion above.

**Notes:**

**Client:** EOTT Energy Corp.  
**Attn:** Wayne Brunette  
**Address:** 5805 East Highway 80  
 Midland  
**Phone:** 915 684-3479    **FAX:** 915 684-3456  
**Tx:** 79701

**REPORT OF ANALYSIS**

Parameter	Result	Units	ROL <sup>5</sup>	Blank	Date	Method <sup>6</sup>	Data Qual <sup>7</sup>	Prec. <sup>2</sup>	Recov. <sup>3</sup>	CCV <sup>4</sup>	LCS <sup>8</sup>
Metals Dig.-Hg	---	---	---	---	07/31/01	7470&245.1	---	---	---	---	---
Metals Dig.-HNO <sub>3</sub>	---	---	---	---	07/19/01	3015	---	---	---	---	---
Aluminum/ICP	0.424	mg/L	0.2	<0.2	07/23/01	6010 & 200.7	---	0.79	110.89	100.63	112.56
Arsenic/ICP	<0.05	mg/L	0.05	<0.05	07/23/01	6010 & 200.7	---	1.3	103.43	105.2	101.3
Barium/ICP	0.0753	mg/L	0.01	<0.01	07/23/01	6010 & 200.7	---	4.03	103.1	100.25	102.18
Boron/ICP	0.289	mg/L	0.02	<0.02	07/23/01	6010 & 200.7	---	3.38	101.87	91.38	99.08
Cadmium/ICP	<0.005	mg/L	0.005	<0.005	07/23/01	6010 & 200.7	---	0.96	104.11	107.25	104.03
Chromium/ICP	<0.01	mg/L	0.01	<0.01	07/23/01	6010 & 200.7	---	0.71	100.22	101.75	97.84
Cobalt/ICP	<0.02	mg/L	0.02	<0.02	07/23/01	6010 & 200.7	---	0.46	100.87	103.25	102.6
Copper/ICP	<0.02	mg/L	0.02	<0.02	07/23/01	6010 & 200.7	J	1.65	102.43	94.2	97.85
Iron/ICP	<0.05	mg/L	0.05	<0.05	07/23/01	6010 & 200.7	J	0.74	90.23	108.63	88.45
Lead/ICP	<0.02	mg/L	0.02	<0.02	07/23/01	6010 & 200.7	---	0.73	101.97	109.85	101.6
Manganese/ICP	<0.01	mg/L	0.01	<0.01	07/23/01	6010 & 200.7	---	1.89	103.96	106.5	103.15
Mercury/CVAA	<0.0002	mg/L	0.0002	<0.0002	07/31/01	245.1&7470	---	1.79	112.12	112	99.33
Molybdeum/ICP	<0.02	mg/L	0.02	<0.02	07/23/01	6010 & 200.7	---	1.48	100.27	100.63	98.11
Nickel/ICP	<0.02	mg/L	0.02	<0.02	07/23/01	6010 & 200.7	---	0.46	98.19	109.38	100.26
Selenium/ICP	<0.05	mg/L	0.05	<0.05	07/23/01	6010 & 200.7	---	1.08	101.43	102.63	103.6
Silver/GFAA	<0.002	mg/L	0.002	<0.002	07/23/01	272.2&7761	---	0.99	93.58	112.5	95
Zinc/ICP	0.0175	mg/L	0.01	<0.01	07/23/01	6010 & 200.7	---	0.6	101.46	102.75	102.39

**QUALITY ASSURANCE DATA<sup>1</sup>**

Report# / Lab ID#: 116302	Report Date: 07/20/01
Project ID: 2000-10930	Don Jones Turner Pump SE Bath
Sample Name: DJ71201SEBATH	
Sample Matrix: water	
Date Received: 07/13/2001	Time: 12:35
Date Sampled: 07/12/2001	Time: 10:30

This analytical report is respectfully submitted by AnalySys, Inc. The enclosed results have been carefully reviewed and, to the best of my knowledge, the analytical results are consistent with AnalySys, Inc.'s Quality Assurance/Quality Control Program. © Copyright 2000, AnalySys, Inc., Austin, TX. All rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means without the express written consent of AnalySys, Inc.

*Richard Laster*  
 Respectfully Submitted,  
*Richard Laster*

Richard Laster

1. Quality assurance data is for the sample batch which included this sample. 2. Precision (PREC) is the absolute value of the relative percent (%) difference between duplicate measurements. 3. Recovery (Recov.) is the percent (%) of analyte recovered from a spiked sample. 4. Calibration Verification (CCV) and Laboratory Control Sample (LCS) results are expressed as the percent (%) recovery of analyte from a known standard or matrix. 5. Reporting Quantitation Limits (RQL), typically at or above the Practical Quantitation Limit (PQL) of the analytical method. 6. Method numbers typically denote USEPA procedures. Less than ("<") values reflect nominal quantitation limits adjusted for any required dilutions. 7. Data Qualifiers are J = analyte potentially present between the PQL and the MDL. B = Analyte detected in associated method blank(s). S1 =MS and/or MSD recovery exceed advisory limits. S2 =Post digestion spike (PDS) recovery exceeds advisory limit. S3 =MS and/or MSD and PDS recoveries exceed advisory limits. P =Precision higher than advisory limit. M =Matrix interference.

**Exceptions Report:**

Report #/Lab ID#: 116302 Matrix: water  
Client: EOTT Energy Corp. Attn: Wayne Brunette  
Project ID: 2000-10930 Don Jones Turner Pump SE Bath  
Sample Name: DJ71201SEBATH

**Sample Temperature/Condition <=6°C**

The typical sample temperature criteria (except for metals by ICP, GFAA and AA and a very few other tests) is <= 6°C. Possible exceptions include samples submitted to laboratory within such a short time after sampling that cooling measures used in the field and during transport had insufficient time to achieve desired temperatures in the samples (see sample collection and sample receipt times) and samples where the temperature could not be measured due to sample submission in a manner precluding temperature measurement without impacting sample integrity (ex. in a bottle with no cooler).

**Sample Bottles & Preservation**

- Sample received in appropriate container(s) and appear to be appropriately preserved.
- Sample received in appropriate container(s). State of sample preservation unknown.
- Sample received in inappropriate container(s) and/or with unknown state of preservation.

**J flag Discussion**

A J flag data qualifier indicates (as required under TNRCQC-TRRP reporting requirements) that the raw calculated analyte concentration in the sample (uncorrected for background levels/blanks and other potential sources of sampling and analytical contamination), though less than the Reported Quantitation Limit (RQL) is greater than the Detection Limit. Because the reported result is below the quantitation limit for this project/sample (or test procedure), GC/MS organics results may or MAY NOT have been verified as to the presence and relative ratio of target ions (eg. the material causing the J flag "hit" in such situations may be nothing more than background ion-fragment noise.)

**Comments pertaining to Data Qualifiers and QC data:**

Parameter	Qualif	Comment
Copper/ICP	J	See J-flag discussion above.
Iron/ICP	J	See J-flag discussion above.

Notes:

7/17/2005  
inC.

4221 Friedrich Lane, Suite 190, Austin, TX 78744 &  
2209 N. Padre Island Dr., Corpus Christi, TX 78408  
(512) 444-5896 • FAX (512) 447-4766

Client: EOTT Energy Corp.  
Attn: Wayne Brunette  
Address: 5805 East Highway 80  
Midland  
Tx 79701  
Phone: 915 684-3479 FAX: 915 684-3456

#### REPORT OF ANALYSIS

Parameter	Result	Units	RQL <sup>5</sup>	Blank	Date	Method 6	Data Qual <sup>7</sup>	Prec <sup>2</sup>	Recov <sup>3</sup>	CCV <sup>4</sup>	LCS <sup>4</sup>
A/BN extraction-PAH	---	---	---	---	07/19/01	3520	---	---	---	---	---
Extractable organics-PAH	---	---	---	---	07/31/01	8270c	---	---	---	---	---
1-Methylnaphthalene	<0.05	µg/L	0.05	<0.05	07/31/01	8270c	---	-NA-	-NA-	97.9	-NA-
2-Methylnaphthalene	<0.05	µg/L	0.05	<0.05	07/31/01	8270c	---	-NA-	-NA-	100.7	-NA-
Benzalpyrene	<0.05	µg/L	0.05	<0.05	07/31/01	8270c	---	6	72.2	107.9	64.7
Naphthalene	<0.05	µg/L	0.05	<0.05	07/31/01	8270c	J	13.4	60.2	95.4	50.7

#### QUALITY ASSURANCE DATA<sup>1</sup>

This analytical report is respectfully submitted by AnalySys, Inc. The enclosed results have been carefully reviewed and, to the best of my knowledge, the analytical results are consistent with AnalySys, Inc.'s Quality Assurance/Quality Control Program. © Copyright 2000, AnalySys, Inc., Austin, TX. All rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means without the express written consent of AnalySys, Inc.

Respectfully Submitted,

*Richard Laster*

Richard Laster

1. Quality assurance data is for the sample batch which included this sample.
2. Precision (PREC) is the absolute value of the relative percent (%) difference between duplicate measurements.
3. Recovery (Recov.) is the percent (%) of analyte recovered from a spiked sample.
4. Calibration Verification (CCV) and Laboratory Control Sample (LCS) results are expressed as the percent (%) recovery of analyte from a known standard or matrix.
5. Reporting Quantitation Limits (RQL), typically at or above the Practical Quantitation Limit (PQL) of the analytical method.
6. Method numbers typically denote USEPA procedures. Less than ("<") values reflect nominal quantitation limits adjusted for any required dilutions.
7. Data Qualifiers are J = analyte potentially present between the PQL and the MDL. B = Analyte detected in associated method blank(s). S1 =MS and/or MSD recovery exceed advisory limits. S2 =Post digestion spike (PDS) recovery exceeds advisory limit. S3 =MS and/or MSD and PDS recoveries exceed advisory limits. P =Precision higher than advisory limit. M =Matrix interference.



Report #/Lab ID#:116303 Matrix:water  
Client: EOTT Energy Corp. Attn: Wayne Brunette  
Project ID: 2000-10930 Don Jones Turner Pump SE Bath  
Sample Name: DJ71201SEBATH

**Sample Temperature/Condition <=6°C**

The typical sample temperature criteria (except for metals by ICP, GFAA and AA and a very few other tests) is <= 6°C. Possible exceptions include samples submitted to laboratory within such a short time after sampling that cooling measures used in the field and during transport had insufficient time to achieve desired temperatures in the samples (see sample collection and sample receipt times) and samples where the temperature could not be measured due to sample submission in a manner precluding temperature measurement without impacting sample integrity (ex. in a bottle with no cooler).

**Sample Bottles & Preservation**

- Sample received in appropriate container(s) and appear to be appropriately preserved.
- Sample received in appropriate container(s). State of sample preservation unknown.
- Sample received in inappropriate container(s) and/or with unknown state of preservation.

**J flag Discussion**

A J flag data qualifier indicates (as required under TNRCC-TRRP reporting requirements) that the raw calculated analyte concentration in the sample (uncorrected for background levels/blanks and other potential sources of sampling and analytical contamination), though less than the Reported Quantitation Limit (RQL) is greater than the Detection Limit. Because the reported result is below the quantitation limit for this project/sample (or test procedure), GC/MS organics results may or MAY NOT have been verified as to the presence and relative ratio of target ions (eg. the material causing the J flag "hit" in such situations may be nothing more than background ion-fragment noise.)

**Comments pertaining to Data Qualifiers and QC data:**

Parameter	Qualif	Comment
Naphthalene	J	See J-flag discussion above.

Notes:

**AnalySys**  
Inc.

4221 Friedrich Lane, Suite 190, Austin, TX 78744 &

2209 N. Padre Island Dr., Corpus Christi, TX 78408

(512) 444-5896 • FAX (512) 447-4766

**Client:** EOTT Energy Corp.  
**Attn:** Wayne Brunette  
**Address:** 5805 East Highway 80  
Midland  
Tx 79701  
**Phone:** 915 684-3479 **FAX:** 915 684-3456

#### REPORT OF ANALYSIS

Parameter	Result	Units	RQL <sup>5</sup>	Blank	Date	Method <sup>6</sup>	Data Qual <sup>7</sup>	Prec. <sup>2</sup>	Recov. <sup>3</sup>	CCV <sup>4</sup>	LCS <sup>4</sup>
Petroleum hydrocarbons	0.523	mg/L	0.25	<0.25	07/30/01	418.1	---	0.69	71.65	88.75	105.13

This analytical report is respectfully submitted by AnalySys, Inc. The enclosed results have been carefully reviewed and, to the best of my knowledge, the analytical results are consistent with AnalySys, Inc.'s Quality Assurance/Quality Control Program. © Copyright 2000, AnalySys, Inc., Austin, TX. All rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means without the express written consent of AnalySys, Inc.

Respectfully Submitted,

*Richard Laster*

Richard Laster

1. Quality assurance data is for the sample batch which included this sample. 2. Precision (PREC) is the absolute value of the relative percent (%) difference between duplicate measurements. 3. Recovery (Recov.) is the percent (%) of analyte recovered from a spiked sample. 4. Calibration Verification (CCV) and Laboratory Control Sample (LCS) results are expressed as the percent (%) recovery of analyte from a known standard or matrix. 5. Reporting Quantitation Limits (RQL), typically at or above the Practical Quantitation Limit (PQL) of the analytical method. 6. Method numbers typically denote USEPA procedures. Less than ("<") values reflect nominal quantitation limits adjusted for any required dilutions. 7. Data Qualifiers are I = analyte potentially present between the PQL and the MDL, B =Analyte detected in associated method blank(s). S1 =MS and/or MSD recovery exceed advisory limits. S2 =Post digestion spike (PDS) recovery exceeds advisory limit. S3 =MS and/or MSD and PDS recoveries exceed advisory limits. P =Precision higher than advisory limit. M =Matrix interference.

Report# /Lab ID#: 116304	Report Date: 08/02/01
Project ID: 2000-10930	Don Jones Turner Pump SE Bath
Sample Name: DJ71201SEBATH	
Sample Matrix: water	
Date Received: 07/13/2001	Time: 12:35
Date Sampled: 07/12/2001	Time: 10:30

#### QUALITY ASSURANCE DATA<sup>1</sup>

**Client:** EOTT Energy Corp.  
**Attn:** Wayne Brunette  
**Address:** 5805 East Highway 80  
 Midland  
**Phone:** 915 684-3479    **FAX:** 915 684-3456

#### REPORT OF ANALYSIS

Parameter	Result	Units	RQL <sup>5</sup>	Blank	Date	Method <sup>6</sup>	Data Qual <sup>7</sup>	Prec. <sup>2</sup>	Recov. <sup>3</sup>	CCV <sup>4</sup>	LCS <sup>4</sup>
Conductance	3500	µS/cm	1	<1	07/16/01	120.1&9050	---	0.8	-NA-	-NA-	-NA-
Metals Dig.-HNO <sub>3</sub>	---	---	---	---	07/19/01	3015	---	---	---	---	---
pH	7	pH units	---	---	07/16/01	150.1&9040	---	0	-NA-	-NA-	-NA-
Total dissolved solids	5300	mg/L	1	<1	07/18/01	160.1	---	0.5	-NA-	-NA-	-NA-
Calcium/ICP	44.8	mg/L	10	<10	07/26/01	6010 & 200.7	---	0.26	97.98	97.45	101.42
Iron/ICP	<0.05	mg/L	0.05	<0.05	07/23/01	6010 & 200.7	J	0.74	90.23	108.63	88.45
Magnesium/ICP	20.2	mg/L	5	<5	07/26/01	6010 & 200.7	---	0.23	96.44	94.7	95.77
Manganese/ICP	<0.01	mg/L	0.01	<0.01	07/23/01	6010 & 200.7	---	1.89	103.96	106.5	103.15
Potassium/AA	11.9	mg/L	0.5	<0.5	07/24/01	258.1&7610	---	4.67	91.95	96.68	98.53
Sodium/ICP	201	mg/L	50	<50	07/26/01	6010 & 200.7	---	0.62	100.98	107.55	97.88
Alkalinity, total	150	mg/L	10	<10	07/19/01	310.1	---	0.58	-NA-	-NA-	-NA-
Chloride	1560	mg/L	50	<50	07/19/01	325.2&9251	---	0.38	111.02	112.44	98.22
Fluoride	1.9	mg/L	0.05	<0.05	07/16/01	340.2	---	6.5	112.98	91.8	91.8
Nitrate/Nitrite-N	0.222	mg/L	0.01	<0.01	07/23/01	353.1	---	3.3	105.6	103.03	99.49
Sulfate	191	mg/L	5	<5	07/20/01	375.4&9038	---	2	100.11	97.93	101.2

This analytical report is respectfully submitted by AnalySys, Inc. The enclosed results have been carefully reviewed and, to the best of my knowledge, the analytical results are consistent with AnalySys, Inc.'s Quality Assurance/Quality Control Program. © Copyright 2000, AnalySys, Inc., Austin, TX. All rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means without the express written consent of AnalySys, Inc.

Respectfully Submitted,

Richard Laster

1. Quality assurance data is for the sample batch which included this sample. 2. Precision (PREC) is the absolute value of the relative percent (%) difference between duplicate measurements. 3. Recovery (Recov.) is the percent (%) of analyte recovered from a spiked sample. 4. Calibration Verification (CCV) and Laboratory Control Sample (LCS) results are expressed as the percent (%) recovery of analyte from a known standard or matrix. 5. Reporting Quantitation Limits (RQL), typically at or above the Practical Quantitation Limit (PQL) of the analytical method. 6. Method numbers typically denote USEPA procedures. Less than ("<") values reflect nominal quantitation limits adjusted for any required dilutions. 7. Data Qualifiers are J = analyte potentially present between the PQL and the MDL, B = Analyte detected in associated method blank(s). S1 = MS and/or MSD recovery exceed advisory limits. S2 =Post digestion spike (PDS) recovery exceeds advisory limit. S3 =MS and/or MSD and PDS recoveries exceed advisory limits. P =Precision higher than advisory limit. M =Matrix interference.

**Exceptions Report:**

Report #/Lab ID#: 116305 Matrix: water

Client: EOTT Energy Corp.

Project ID: 2000-10930 Don Jones Turner Pump SE Bath

Sample Name: DJ71201SEBATH

Attn: Wayne Brunette

**Sample Temperature/Condition <=6°C**

The typical sample temperature criteria (except for metals by ICP, GFAA and AA and a very few other tests) is <= 6°C. Possible exceptions include samples submitted to laboratory within such a short time after sampling that cooling measures used in the field and during transport had insufficient time to achieve desired temperatures in the samples (see sample collection and sample receipt times) and samples where the temperature could not be measured due to sample submission in a manner precluding temperature measurement without impacting sample integrity (ex. in a bottle with no cooler).

**Sample Bottles & Preservation**

- Sample received in appropriate container(s) and appear to be appropriately preserved.
- Sample received in appropriate container(s). State of sample preservation unknown.
- Sample received in inappropriate container(s) and/or with unknown state of preservation.

**J flag Discussion**

A J flag data qualifier indicates (as required under TNRCC-TRRP reporting requirements) that the raw calculated analyte concentration in the sample (uncorrected for background levels/blanks and other potential sources of sampling and analytical contamination), though less than the Reported Quantitation Limit (RQL) is greater than the Detection Limit. Because the reported result is below the quantitation limit for this project/sample (or test procedure), GC/MS organics results may or MAY NOT have been verified as to the presence and relative ratio of target ions (eg. the material causing the J flag "hit" in such situations may be nothing more than background ion-fragment noise.)

**Comments pertaining to Data Qualifiers and QC data:**

Parameter	Qualif	Comment
Iron/ICP	J	See J-flag discussion above.

Notes:

## Environmental Lab, Inc.

12600 W. 112th Street, Suite 100  
913-563-1800 FAX (913) 563-1713

MANUFACTURE OF CULTIVATION RECORD AND ANALYSIS REQUEST

Project Number:  
11/14/96 BANISTER EOTICompany Address:  
EOTIPhone # 913-563-1800  
FAX# 913-563-1713

## ANALYSIS REQUEST

L.S.# (LAB USE) C/N/Y	FIELD CODE	VOLUME/AMOUNT	SUBSTRATE	PRESERVATIVE	MEASURED	TIME	DATE	OTHER	SAMPLES													
									SOIL	AIR	SLUDGE	OTHER	ICL	INHODS	ICL	TDS	TCLP VOLATILE	TCLP SOLID VOLATILE	TCPL Metals AG A-B-Cd-Cu-Pb-Hg-Ba	TCPL VOLATILE	TCPL SOLID VOLATILE	RCI
38655	E DJ532701BH1-2	1	X	X	X	3:29	7/30	X														
38656	E DJ532701BH1-5	1	X	X	X	3:29	7/30	X														
38657	E DJ532701BH1-10	1	X	X	X	3:29	7/30	X														
38658	E DJ532701BH1-15	1	X	X	X	3:29	7/30	X														
38659	E DJ532701BH1-20	1	X	X	X	3:29	7/30	X														
38660	E DJ532701BH2-2	1	X	X	X	3:29	7/30	X														
38661	E DJ532701BH2-5	1	X	X	X	3:29	7/30	X														
38662	E DJ532701BH2-10	1	X	X	X	3:29	7/30	X														
38663	E DJ532701BH2-15	1	X	X	X	3:29	7/30	X														
38664	E DJ532701BH2-20	1	X	X	X	3:29	7/30	X														
38665	E DJ532701BH2-25	1	X	X	X	3:29	7/30	X														

RECORDED BY:	Date:	Time:	REMARKS:
<i>Frankie Stiles</i>	3-30-01	4:40	Revised by: _____
RECORDED BY:	Date:	Time:	REMARKS:
<i>Patricia Oates</i>	3-30-01	9:35	Received by: _____
RECORDED BY:	Date:	Time:	REMARKS:
<i>Patricia Oates</i>	3-30-01	9:35	Original to W. Brunette & P. McCasland
RECORDED BY:	Date:	Time:	REMARKS:
<i>Patricia Oates</i>	3-30-01	10:05	FAX to W. Brunette & P. McCasland

0823 TR

0823

Truck Cycles

FAX to W. Brunette &amp; P. McCasland

Original to W. Brunette &amp; P.I.

Received by:

Time:

306

306



## Environmental Lab

215) 563-1800 FAX (915) 563-1713

## CHART-OF-CUSTOMER RECORD AND ANALYSIS REQUEST

Project Number:  
Customer Name & Address:  
Project #:

11408 Brunette Soil

EOTI

Project Name:  
Project Location:  
Project #:

SW 1/4 Block 23 Taxis R37E Building 2 Soil

Sample Structure:

EGTT Taxis Taxis 200ft

Phone #: 415-563-1260 Fax: 415-563-1252

## ANALYSIS REQUEST

LAS# (LAB USE ONLY)	FIELD CODE	VOLUME/AMOUNT	CONTAINERS	MATRIX	METHOD	SAMPLE	PRESERVATIVE	SLUDGE	AIH	HGL	LNG	ICP	HNO3	OTHER	HCl	TDS	TCIP Violation	TCP/SOIL Violation	TCP Material AG AS BA CD CR PB HG GS	TCP Material AG AS BA CD CR PB HG GS	QTEX H1121D51030	G310-2005	RCI	C310-2005
38669	EDJ532801BH3-2	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
38670	EDJ532801BH3-5	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
38671	EDJ532801BH3-10	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
38672	EDJ532801BH3-15	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
38673	EDJ532801BH3-20	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
38674	EDJ532801BH3-25	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
38675	EDJ532801BH3-30	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
38676	EDJ532801BH3-35	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
38677	EDJ532801BH3-40	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
38678	EDJ532801BH3-45	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			

## REMARKS

Originals to W. Brunette & P. McCasland  
EPT.FAX + E-mail to W. Brunette  
+ P. McCasland 394-2601

38

38

38

38

38

Submitted by: Brinley Brunette	Date: 3.30.01	Time: 0823	Received by: Roger Dicke
Submitted by: Roger Dicke	Date: 3.30.01	Time: 0823	Received by: Laboratory
Submitted by: P. McCasland	Date: 3.30.01	Time: 0823	Received by: None

卷之三

109

卷之三

卷之三

10

卷之三

Company Name & Address

15

卷之三

۷۱

104

三

155

5/86

三十六

四

104

11

114

100

114

110

100

लेखनालय

12

Digitized by

جعفر بن محب

Digitized by Google

卷之三

#### **ANALYSES REQUEST**

Lettor/Replied by:		Date:	Time:	Received by:	Remarks
Frindley, Barbara		3-30	5:10 pm	Karen Kestner	Original to W. Brunette & P. McCloud EPT.
Brown, Irene					FAX + <del>or</del> E-mail to W. Brunette + P. McCloud 3/30/2001
		03-30-01	0823PM	Cat Carson	30C

# ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

EOTT ENERGY  
 ATTN: MR. WAYNE BRUNETTE  
 P.O. BOX 1660  
 MIDLAND, TEXAS 79703  
 FAX: 684-3456  
 FAX: 505-394-2601 (Pat Mc Casland)

Sample Type: Soil  
 Sample Condition: Intact/ Iced/ 3 deg. C  
 Project #: None Given  
 Project Name: EOTT Don Jones  
 Project Location: SW 1/4 Sec 23 T21S R37E

Sampling Date: 03/27/01  
 Receiving Date: 03/30/01  
 Analysis Date: 04/02/01

ELT #	FIELD CODE	BENZENE mg/kg	TOLUENE mg/kg	ETHYLBENZENE mg/kg	m,p-XYLENE mg/kg	o-XYLENE mg/kg
38655	EDJS32701BH1-2	<0.025	<0.025	<0.025	<0.025	<0.025
38656	EDJS32701BH1-5	<0.025	<0.025	<0.025	0.053	<0.025
38657	EDJS32701BH1-10	<0.025	<0.025	<0.025	<0.025	<0.025
38658	EDJS32701BH1-15	<0.025	<0.025	<0.025	<0.025	<0.025
38659	EDJS32701BH1-20	<0.025	<0.025	<0.025	<0.025	<0.025
38660	EDJS32701BH2-2	<0.025	<0.025	<0.025	<0.025	<0.025
38661	EDJS32701BH2-5	<0.025	<0.025	<0.025	<0.025	<0.025
38662	EDJS32701BH2-10	<0.025	<0.025	<0.025	<0.025	<0.025
38663	EDJS32701BH2-15	<0.025	<0.025	<0.025	<0.025	<0.025
38664	EDJS32701BH2-20	<0.025	<0.025	<0.025	<0.025	<0.025
38665	EDJS32701BH2-25	<0.025	<0.025	<0.025	<0.025	<0.025
38666	EDJS32701BH2-30	<0.025	<0.025	<0.025	<0.025	<0.025
38667	EDJS32701BH2-35	<0.025	<0.025	<0.025	<0.025	<0.025
%IA		86	93	96	94	96
%EA		94	100	105	105	106
BLANK		<0.025	<0.025	<0.025	<0.025	<0.025

METHODS: EPA SW 846-8021B ,5030

Roland K. Tuttle  
 Roland K. Tuttle

4-4-01  
 Date

# ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

EOTT ENERGY  
 ATTN: MR. WAYNE BRUNETTE  
 P.O. BOX 1660  
 MIDLAND, TEXAS 79703  
 FAX: 684-3456  
 FAX: 505-394-2601 (Pat Mc Casland)

Sample Type: Soil  
 Sample Condition: Intact/ Iced/ 3 deg. C  
 Project #: None Given  
 Project Name: EOTT Don Jones  
 Project Location: SW 1/4 Sec 23 T21S R37E

Sampling Date: See Below  
 Receiving Date: 03/30/01  
 Analysis Date: 04/03/01

ELT #	FIELD CODE	BENZENE mg/kg	TOLUENE mg/kg	ETHYLBENZENE mg/kg	m,p-XYLENE mg/kg	o-XYLENE mg/kg	SAMPLE DATE
38668	EDJS32701BH2-40	<0.025	<0.025	<0.025	<0.025	<0.025	03/27/01
38669	EDJS32801BH3-2	<0.025	<0.025	<0.025	<0.025	<0.025	03/28/01
38670	EDJS32801BH3-5	<0.025	<0.025	<0.025	<0.025	<0.025	03/28/01
38671	EDJS32801BH3-10	<0.025	<0.025	<0.025	<0.025	<0.025	03/28/01
38672	EDJS32801BH3-15	<0.025	<0.025	<0.025	<0.025	<0.025	03/28/01
38673	EDJS32801BH3-20	<0.025	<0.025	<0.025	<0.025	<0.025	03/28/01
38674	EDJS32801BH3-25	<0.025	<0.025	<0.025	<0.025	<0.025	03/28/01
%IA		97	104	109	109	109	
%EA		91	97	103	103	105	
BLANK		<0.025	<0.025	<0.025	<0.025	<0.025	

METHODS: EPA SW 846-8021B ,5030

R. C. Tuttle  
 Raland K. Tuttle

4-4-01  
 Date

# ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

EOTT ENERGY  
 ATTN: MR. WAYNE BRUNETTE  
 P.O. BOX 1660  
 MIDLAND, TEXAS 79703  
 FAX: 684-3456  
 FAX: 505-394-2601 (Pat Mc Casland)

Sample Type: Soil  
 Sample Condition: Intact/ Iced/ 3 deg. C  
 Project #: None Given  
 Project Name: EOTT Don Jones  
 Project Location: SW 1/4 Sec 23 T21S R37E

Sampling Date: See Below  
 Receiving Date: 03/30/01  
 Analysis Date: 04/03/01

ELT#	FIELD CODE	BENZENE mg/kg	TOLUENE mg/kg	ETHYLBENZENE mg/kg	m,p-XYLENE mg/kg	<i>o</i> -XYLENE mg/kg	SAMPLE DATE
38675	EDJS32801BH3-30	<0.025	<0.025	<0.025	0.035	<0.025	03/28/01
38676	EDJS32801BH3-35	<0.025	<0.025	<0.025	<0.025	<0.025	03/28/01
38677	EDJS32801BH3-40	<0.025	<0.025	<0.025	0.050	<0.025	03/28/01
38678	EDJS32801BH3-45	<0.025	<0.025	<0.025	<0.025	<0.025	03/28/01
38679	EDJS32901BH3-50	<0.025	<0.025	<0.025	<0.025	<0.025	03/29/01
38680	EDJS32901BH3-55	<0.025	<0.025	<0.025	<0.025	<0.025	03/29/01
%IA		94	98	103	111	104	
%EA		95	102	108	115	111	
BLANK		<0.025	<0.025	<0.025	<0.025	<0.025	

METHODS: EPA SW 846-8021B ,5030

R. C. Tuttle  
Randal K. Tuttle

4-4-01  
Date

# ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

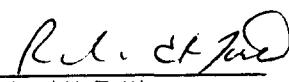
EOTT ENERGY  
 ATTN: MR. WAYNE BRUNETTE  
 P.O. BOX 16660  
 MIDLAND, TEXAS 79703  
 FAX: 684-3456  
 FAX: 505-394-2601 (Pat McCasland)

Sample Type: Soil  
 Sample Condition: Intact/Iced/ 3 deg C  
 Project #: None Given  
 Project Name: EOTT Don Jones  
 Project Location: SW 1/4 Sec23 T21S R37E

Sampling Date: See Below  
 Receiving Date: 03/30/01  
 Analysis Date: 03/30/01

ELT#	FIELD CODE	GRO	DRO	SAMPLE DATE
		C6-C10 mg/kg	>C10-C28 mg/kg	
38655	EDJ32701BH1-2	<10	44	03/27/01
38656	EDJ32701BH1-5	<10	128	03/27/01
38658	EDJ32701BH1-15	<10	119	03/27/01
38660	EDJ32701BH2-2	<10	<10	03/27/01
38661	EDJ32701BH2-5	<10	677	03/27/01
38662	EDJ32701BH2-10	<10	<10	03/27/01
38663	EDJ32701BH2-15	<10	<10	03/27/01
38664	EDJ32701BH2-20	<10	97	03/27/01
38665	EDJ32701BH2-25	<10	610	03/27/01
38666	EDJ32701BH2-30	<10	152	03/27/01
38667	EDJ32701BH2-35	<10	427	03/27/01
38668	EDJ32701BH2-40	<10	<10	03/27/01
38669	EDJ32801BH3-2	<10	<10	03/28/01
38670	EDJ32801BH3-5	<10	<10	03/28/01
38671	EDJ32801BH3-10	<10	<10	03/28/01
38672	EDJ32801BH3-15	<10	<10	03/28/01
38673	EDJ32801BH3-20	<10	<10	03/28/01
% IA		88	102	
%EA		104	116	
BLANK		<10	<10	

Methods: EPA SW 846-8015M GRO/DRO

  
 Raland K. Tuttle

4-4-01  
 Date

# ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

EOTT ENERGY  
 ATTN: MR. WAYNE BRUNETTE  
 P.O. BOX 16660  
 MIDLAND, TEXAS 79703  
 FAX: 684-3456  
 FAX: 505-394-2601 (Pat McCasland)

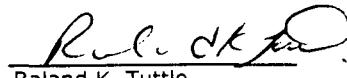
Sample Type: Soil  
 Sample Condition: Intact/Iced/ 3 deg C  
 Project #: None Given  
 Project Name: EOTT Don Jones  
 Project Location: SW 1/4 Sec23 T21S R37E

Sampling Date: See Below  
 Receiving Date: 03/30/01  
 Analysis Date: 03/30/01

ELT#	FIELD CODE	GRO C6-C10 mg/kg	DRO >C10-C28 mg/kg	SAMPLE DATE
38657	EDJ32701BH1-10	<10	79	03/27/01
38659	EDJ32701BH1-20	<10	238	03/27/01
38674	EDJ32801BH3-25	<10	<10	03/28/01
38675	EDJ32801BH3-30	<10	<10	03/28/01
38676	EDJ32801BH3-35	<10	<10	03/28/01
38677	EDJ32801BH3-40	<10	181	03/28/01
38678	EDJ32801BH3-45	<10	<10	03/28/01
38679	EDJ32901BH3-50	<10	<10	03/29/01
38680	EDJ32901BH3-55	<10	<10	03/29/01

% IA	99	112
%EA	96	116
BLANK	<10	<10

Methods: EPA SW 846-8015M GRO/DRO

  
 Roland K. Tuttle

4-4-01  
 Date

# ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

EOTT ENERGY  
ATTN: MR. WAYNE BRUNETTE  
P.O. BOX 16660  
MIDLAND, TEXAS 79703  
FAX: 684-3456  
FAX: 505-394-2601 (Pat McCasland)

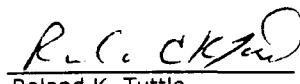
Sample Type: Soil  
Sample Condition: Intact/Iced/ 3 deg C  
Project #: None Given  
Project Name: EOTT Don Jones  
Project Location: SW 1/4 Sec23 T21S R37E

Sampling Date: See Below  
Receiving Date: 03/30/01  
Analysis Date: 04/04/01

ELT#	FIELD CODE	Chloride mg/kg	SAMPLE DATE
38657	EDJ32701BH1-10	277	03/27/01
38662	EDJ32701BH2-10	59	03/27/01
38671	EDJ32801BH3-10	44	03/28/01

QUALITY CONTROL	5140
TRUE VALUE	5000
% INSTRUMENT ACCURACY	103
BLANK	<10

Methods: EPA SW 846-9253

  
Roland K. Tuttle

4-4-01  
Date

# ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

EOTT ENERGY  
ATTN: MR. WAYNE BRUNETTE  
P.O. BOX 1660  
MIDLAND, TEXAS 79703  
FAX: 684-3456  
FAX: 505-394-2601 (Pat Mc Casland)

Sample Type: Soil  
Sample Condition: Intact/ Iced/ 3 deg. C  
Project #: None Given  
Project Name: EOTT Don Jones  
Project Location: SW 1/4 Sec 23 T21S R37E

Sampling Date: See Below  
Receiving Date: 03/30/01  
Analysis Date: 04/17/01

ELT#	FIELD CODE	Chloride mg/kg	Sample Date
38659	EDJS32701BH1-20	<10	3/27/01
38664	EDJS32701BH2-20	<10	3/27/01
38666	EDJS32701BH2-30	<10	3/27/01
38668	EDJS32701BH2-40	<20	3/27/01
38673	EDJ32801BH3-20	56	3/28/01
38675	EDJ32801BH3-30	57	3/28/01
38677	EDJ32801BH3-40	71	3/28/01
38679	EDJS32901BH3-50	<10	3/29/01

QUALITY CONTROL  
TRUE VALUE  
% INSTRUMENT ACCURACY  
BLANK

5052
5000
101
<10

METHODS: EPA SW 846-9253

Raland K. Tuttle  
Raland K. Tuttle

4-18-01  
Date



**Environmental Laboratory of Texas** Inc. 600 [REDACTED] i-20 [REDACTED] O [REDACTED] Tel. 79763 [REDACTED] CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST  
315) 563-1800 FAX (915) 563-1713

Project Manager:	ANALYSIS REQUEST										10f2							
Project Name & Address:																		
Project #:	Project Name:																	
Project Location:	Don Jones Turner Pump																	
Sample Signature																		
Bradley Blaine																		
Sec 23 T23 R37E																		
L.E.S. (USE) (C ONLY)	FIELD CODE	VOLUME/AMOUNT	WATER	SOIL	AIR	SLUDGE	LIQUID	H2O	ICP	HCl	TDS	TCIP Soluble Volatiles	Total Materials Ag As Be Cd Cr Pb Hg Ba	TCLP Volatiles	TCLP Soluble Volatiles	HCl	ANALYSIS REQUEST	10f2
38722	EDJTS33001 BH4-2	1	X	X	X	X	X	X	3-29 7:30	X	X	X	X	X	X	ANALYSIS REQUEST	10f2	
38723	EDJTS33001 BH4-5	1	X	X	X	X	X	X	3-29 8:00	X	X	X	X	X	X	ANALYSIS REQUEST	10f2	
38724	EDJTS33001 BH4-10	1	X	X	X	X	X	X	3-29 8:20	X	X	X	X	X	X	ANALYSIS REQUEST	10f2	
38725	EDJTS33001 BH4-15	1	X	X	X	X	X	X	3-29 8:45	X	X	X	X	X	X	ANALYSIS REQUEST	10f2	
38726	EDJTS33001 BH4-20	1	X	X	X	X	X	X	3-29 9:10	X	X	X	X	X	X	ANALYSIS REQUEST	10f2	
38727	EDJTS33001 BH4-2	1	X	X	X	X	X	X	3-29 10:30	X	X	X	X	X	X	ANALYSIS REQUEST	10f2	
38728	EDJTS33001 BH5-5	1	X	X	X	X	X	X	3-29 10:30	X	X	X	X	X	X	ANALYSIS REQUEST	10f2	
38729	EDJTS33001 BH5-10	1	X	X	X	X	X	X	3-29 11:30	X	X	X	X	X	X	ANALYSIS REQUEST	10f2	
38730	EDJTS33001 BH5-15	1	X	X	X	X	X	X	3-29 11:30	X	X	X	X	X	X	ANALYSIS REQUEST	10f2	
38731	EDJTS33001 BH5-20	1	X	X	X	X	X	X	3-29 11:40	X	X	X	X	X	X	ANALYSIS REQUEST	10f2	
38732	EDJTS33001 BH5-25	1	X	X	X	X	X	X	3-29 12:00	X	X	X	X	X	X	ANALYSIS REQUEST	10f2	
Submitted by:	Date:	Time:	Received by:										Remarks					
Bradley Blaine	4-4-01	9:00	Lady Miller										RCC 4:00°C					
Submitted by:	Date:	Time:	Received by:										Original to W. Brunette & P. McDaniel					
Lady Miller	4-4-01	13:15	Original to W. Brunette										FAX + E-mail to W. Brunette & P. McDaniel					
Submitted by:	Date:	Time:	Received by:										Original to W. Brunette					

**Environmental Lab of Texas** Inc. 1-20 E. 1st Street, Ottawa, IL 61355-79763  
 CHAIN OF CUSTODY RECORDS REQUEST  
 912) 563-1800 FAX (912) 563-1713

Project Manager:		ANALYSIS REQUEST		2062	
Name & Address:					
EOTT					
Project #:					
FAX#:					
Project Name:					
Don Jones Times Picayune					
Sampler Signature:					
Project Location:					
SW 1/4 Sec 23 T25 R37E Bradley Bluff					
COLLECTING INFORMATION					
LAB # (CITY)	FIELD CODE	MATRIX	PRESERVATIVE	SAMPLING METHOD	TIME
387 33 EDTS33001 BH5-30		X	X	X	3:39 10:30 X
387 34 EDTS33001 BH6-2		X	X	X	3:39 10:30 X
387 35 EDTS33001 BH6-5		X	X	X	3:39 10:30 X
387 36 EDTS33001 BH6-10		X	X	X	3:39 10:30 X
387 37 EDTS33001 BH6-15		X	X	X	3:39 10:30 X
387 38 EDTS33001 BH6-20		X	X	X	3:39 10:30 X
UTEX #1020151131					
TCLP Variables					
Total Metals Ag As Ba Cd Cr Pb Hg Be					
TCLP Semi Volatiles					
TDS					
RCI					
REMARKS					
REC: 4.0°C Originals to W. Brunette & P. McEland EPT.					
Requisitioned by: <i>Beth Miller</i>	Date: 4-4-01	Time: 9:00	Received by: <i>Cathy Miller</i>	Date: 13/3	FAX + <del>or</del> E-mail to W. Brunette & P. McEland + FAX to 912-563-1800
Requisitioned by: <i>Beth Miller</i>	Date: 4-4-01	Time: 13:3	Received by: FAX memory	Date: 13/3	Received by Laboratory



# ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

EOTT ENERGY  
ATTN: MR. WAYNE BRUNETTE  
P.O. BOX 1660  
MIDLAND, TEXAS 79703  
FAX: 684-3456  
FAX: 505-394-2601 (Pat Mc Casland)

Sample Type: Soil  
Sample Condition: Intact/ Iced/ 4.0 deg. C  
Project #: None Given  
Project Name: Don Jones Turner Pump  
Project Location: SW 1/4 Sec 23 T21S R37E

Sampling Date: 03/29/01  
Receiving Date: 03/30/01  
Analysis Date: 04/17/01

ELT #	FIELD CODE	Chloride mg/kg
38724	EDJS33001BH4-10	89
38726	EDJS33001BH4-20	44
38729	EDJS33001BH5-10	59
38731	EDJS33001BH5-20	<10
38733	EDJS33001BH5-30	51
38736	EDJS33001BH6-10	66
38738	EDJS33001BH6-20	41

QUALITY CONTROL	5052
TRUE VALUE	5000
% INSTRUMENT ACCURACY	101
BLANK	<10

METHODS: EPA SW 846-9253

Raland K. Tuttle  
Raland K. Tuttle

4-18-01  
Date

# ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

EOTT ENERGY  
ATTN: MR. WAYNE BRUNETTE  
P.O. BOX 1660  
MIDLAND, TEXAS 79703  
FAX: 684-3456  
FAX: 505-394-2601 (Pat Mc Casland)

Sample Type: Soil  
Sample Condition: Intact/ Iced/ 4.0 deg. C  
Project #: None Given  
Project Name: Don Jones Turner Pump  
Project Location: SW 1/4 Sec 23 T21S R37E

Sampling Date: 03/29/01  
Receiving Date: 04/04/01  
Analysis Date: 04/04/01

ELT#	FIELD CODE	BENZENE mg/kg	TOLUENE mg/kg	ETHYLBENZENE mg/kg	m,p-XYLENE mg/kg	o-XYLENE mg/kg
38722	EDJS33001BH4-2	<0.025	<0.025	<0.025	<0.025	<0.025
38723	EDJS33001BH4-5	<0.025	<0.025	<0.025	<0.025	<0.025
38724	EDJS33001BH4-10	<0.025	0.026	<0.025	0.050	<0.025
38725	EDJS33001BH4-15	<0.025	<0.025	<0.025	<0.025	<0.025
38726	EDJS33001BH4-20	<0.025	<0.025	<0.025	<0.025	<0.025
38727	EDJS33001BH5-2	<0.025	<0.025	<0.025	0.044	<0.025
38728	EDJS33001BH5-5	3.04	27.3	19.1	45.0	19.6
%IA		97	104	113	115	108
%EA		97	101	106	114	109
BLANK		<0.025	<0.025	<0.025	<0.025	<0.025

METHODS: EPA SW 846-8021B ,5030

Raland K. Tuttle

4-5-01  
Date

# ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

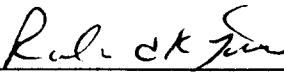
EOTT ENERGY  
ATTN: MR. WAYNE BRUNETTE  
P.O. BOX 1660  
MIDLAND, TEXAS 79703  
FAX: 684-3456  
FAX: 505-394-2601 (Pat Mc Casland)

Sample Type: Soil  
Sample Condition: Intact/ Iced/ 4.0 deg. C  
Project #: None Given  
Project Name: Don Jones Turner Pump  
Project Location: SW 1/4 Sec 23 T21S R37E

Sampling Date: 03/29/01  
Receiving Date: 04/04/01  
Analysis Date: 04/05/01

ELT #	FIELD CODE	BENZENE mg/kg	TOLUENE mg/kg	ETHYLBENZENE mg/kg	m,p-XYLENE mg/kg	o-XYLENE mg/kg
38729	EDJS33001BH5-10	2.81	27.1	16.7	39.8	13.8
38730	EDJS33001BH5-15	1.69	21.4	14.8	44.9	16.3
38731	EDJS33001BH5-20	<0.025	0.201	0.165	1.09	0.321
38732	EDJS33001BH5-25	<0.025	0.054	0.039	0.096	<0.025
38733	EDJS33001BH5-30	<0.025	<0.025	<0.025	<0.025	<0.025
38734	EDJS33001BH6-2	<0.025	<0.025	<0.025	<0.025	<0.025
38735	EDJS33001BH6-5	<0.025	<0.025	<0.025	<0.025	<0.025
38736	EDJS33001BH6-10	<0.025	<0.025	<0.025	<0.025	<0.025
38737	EDJS33001BH6-15	<0.025	<0.025	<0.025	<0.025	<0.025
38738	EDJS33001BH6-20	<0.025	<0.025	<0.025	<0.025	<0.025
%IA		99	107	109	109	109
%EA		85	85	90	88	101
BLANK		<0.025	<0.025	<0.025	<0.025	<0.025

METHODS: EPA SW 846-8021B ,5030

  
Raland K. Tuttle

4-5-01  
Date

# ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

EOTT ENERGY  
ATTN: MR. WAYNE BRUNETTE  
P.O. BOX 16660  
MIDLAND, TEXAS 79703  
FAX: 684-3456  
FAX: 505-394-2601 (Pat McCasland)

Sample Type: Soil  
Sample Condition: Intact/Iced/ 4.0 deg C  
Project #: None Given  
Project Name: Don Jones Turner Pump  
Project Location: SW 1/4 Sec23 T21S R37E

Sampling Date: 03/29/01  
Receiving Date: 04/04/01  
Analysis Date: 04/04/01

ELT#	FIELD CODE	GRO C6-C10 mg/kg	DRO >C10-C28 mg/kg
38722	EDJS33001BH4-2	<10	<10
38723	EDJS33001BH4-5	<10	<10
38724	EDJS33001BH4-10	<10	<10
38725	EDJS33001BH4-15	<10	<10
38726	EDJS33001BH4-20	<10	<10
38727	EDJS33001BH5-2	119	5586
38728	EDJS33001BH5-5	1348	2116
38729	EDJS33001BH5-10	1178	1428
38730	EDJS33001BH5-15	1513	1894
38731	EDJS33001BH5-20	48	122
38732	EDJS33001BH5-25	20	122
38733	EDJS33001BH5-30	<10	<10
38734	EDJS33001BH6-2	<10	<10
38735	EDJS33001BH6-5	<10	<10
38736	EDJS33001BH6-10	<10	<10
38737	EDJS33001BH6-15	<10	<10
38738	EDJS33001BH6-20	<10	<10
% IA		88	115
%EA		110	118
BLANK		<10	<10

Methods: EPA SW 846-8015M GRO/DRO

Roland K. Tuttle  
Raland K. Tuttle

4-5-01  
Date





# ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

ENRON TRANSPORTATION SERVICES  
ATTN: MR. WAYNE BRUNETTE  
5805 EAST HWY. 80  
MIDLAND, TEXAS 79701  
FAX: 684-3456  
FAX: 505-394-2601 (Pat McCasland)

Sample Type: Soil

Sample Condition: Intact/Iced/ -2.5 deg C

Project #: 2001-10930

Project Name: Turner Pump

Project Location: SW/4, Sec23, T21S, R37E, Lea Co., N.M.

Sampling Date: See Below

Receiving Date: 04/27/01

Analysis Date: 04/28/01

ELT#	FIELD CODE	GRO C6-C10 mg/kg	DRO >C10-C28 mg/kg	SAMPLE DATE
39819	ETPS42301BH1-2	<10	<10	4/23/01
39820	ETPS42301BH1-5	<10	<10	4/23/01
39821	ETPS42301BH1-10	<10	<10	4/23/01
39822	ETPS42301BH1-15	<10	<10	4/23/01
39823	ETPS42301BH1-20	<10	<10	4/23/01
39824	ETPS42301BH1-25	<10	<10	4/23/01
39825	ETPS42301BH1-30	<10	<10	4/23/01
39826	ETPS42401BH1-35	<10	133	4/24/01
39827	ETPS42401BH1-40	<10	<10	4/24/01
39828	ETPS42401BH1-45	<10	<10	4/24/01
39829	ETPS42401BF	<10	<10	
% IA		105	108	
%EA		110	106	
BLANK		<10	<10	

Methods: EPA SW 846-8015M GRO/DRO

Raland K. Tuttle  
Raland K. Tuttle

4-30-01  
Date

# ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

ENRON TRANSPORTATION SERVICES  
ATTN: MR. WAYNE BRUNETTE  
5805 EAST HWY. 80  
MIDLAND, TEXAS 79701  
FAX: 684-3456  
FAX: 505-394-2601 (Pat McCasland)

Sample Type: Soil

Sample Condition: Intact/Iced/ -2.5 deg C

Project #: 2001-10930

Project Name: Turner Pump

Project Location: SW/4, Sec23, T21S, R37E, Lea Co., N.M.

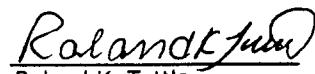
Sampling Date: See Below

Receiving Date: 04/27/01

Analysis Date: 04/30/01

ELT#	FIELD CODE	Chloride mg/kg	SAMPLE DATE
39819	ETPS42301BH1-2	195	4/23/01
39820	ETPS42301BH1-5	810	4/23/01
39821	ETPS42301BH1-10	402	4/23/01
39822	ETPS42301BH1-15	213	4/23/01
39823	ETPS42301BH1-20	230	4/23/01
39824	ETPS42301BH1-25	372	4/23/01
39825	ETPS42301BH1-30	504	4/23/01
39826	ETPS42401BH1-35	279	4/24/01
39827	ETPS42401BH1-40	300	4/24/01
39828	ETPS42401BH1-45	355	4/24/01
39829	ETPS42401BF	18	4/24/01
QUALITY CONTROL		5140	
TRUE VALUE		5000	
% INSTRUMENT ACCURACY		103	
BLANK		<10	

Methods: SW 846-9253

  
Raland K. Tuttle

4-30-01  
Date

# ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

ENRON TRANSPORTATION SERVICES  
 ATTN: MR. WAYNE BRUNETTE  
 5805 EAST HWY. 80  
 MIDLAND, TEXAS 79701  
 FAX: 684-3456  
 FAX: 505-394-2601 (Pat McCasland)

Sample Type: Soil  
 Sample Condition: Intact/ Iced/ -2.5 deg. C  
 Project #: 2001-10930  
 Project Name: Turner Pump  
 Project Location: SW/4, Sec23, T21S, R37E, Lea Co., N.M.

Sampling Date: See Below  
 Receiving Date: 04/27/01  
 Analysis Date: 04/28/01

ELT #	FIELD CODE	BENZENE mg/kg	TOLUENE mg/kg	ETHYLBENZENE mg/kg	m,p-XYLENE mg/kg	o-XYLENE mg/kg	SAMPLE DATE
39819	ETPS42301BH1-2	<0.025	<0.025	<0.025	<0.025	<0.025	4/23/01
39820	ETPS42301BH1-5	<0.025	<0.025	<0.025	<0.025	<0.025	4/23/01
39821	ETPS42301BH1-10	<0.025	<0.025	<0.025	<0.025	<0.025	4/23/01
39822	ETPS42301BH1-15	<0.025	<0.025	<0.025	<0.025	<0.025	4/23/01
39823	ETPS42301BH1-20	<0.025	<0.025	<0.025	<0.025	<0.025	4/23/01
39824	ETPS42301BH1-25	<0.025	<0.025	<0.025	<0.025	<0.025	4/23/01
39825	ETPS42301BH1-30	<0.025	<0.025	<0.025	<0.025	<0.025	4/23/01
39826	ETPS42401BH1-35	<0.025	<0.025	<0.025	<0.025	<0.025	4/24/01
39827	ETPS42401BH1-40	<0.025	<0.025	<0.025	<0.025	<0.025	4/24/01
39828	ETPS42401BH1-45	<0.025	<0.025	<0.025	<0.025	<0.025	4/24/01
39829	ETPS42401BF	<0.025	<0.025	<0.025	<0.025	<0.025	4/24/01
%IA		90	90	92	99	92	
%EA		98	101	103	114	105	

METHODS: EPA SW 846-8021B ,5030

Raland K. Tuttle  
 Raland K. Tuttle

430-01  
 Date



# ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

EOTT ENERGY  
ATTN: MR. WAYNE BRUNETTE  
P.O. BOX 1660  
MIDLAND, TEXAS 79703  
FAX: 684-3456  
FAX: 505-394-2601 (Pat Mc Casland)

Sample Type: Soil  
Sample Condition: Intact/ Iced/ 0 deg. C  
Project #: 2000-10930  
Project Name: Turner Pump  
Project Location: Eunice

Sampling Date: 04/05/01  
Receiving Date: 04/05/01  
Analysis Date: 04/06/01

ELT#	FIELD CODE	BENZENE mg/kg	TOLUENE mg/kg	ETHYLBENZENE mg/kg	m,p-XYLENE mg/kg	o-XYLENE mg/kg
38815	S4501ETPBHC1	<0.025	<0.025	<0.025	0.037	<0.025
38816	S4501ETPESWC1	<0.025	0.136	0.140	0.404	0.175
38817	S4501ETPNNSWC1	<0.025	<0.025	<0.025	<0.025	<0.025
38818	S4501ETPSSWC1	<0.025	<0.025	<0.025	<0.025	<0.025
38819	S4501ETPWSWC1	<0.025	<0.025	<0.025	<0.025	<0.025

%IA	99	101	105	114	107
%EA	98	96	102	114	98
BLANK	<0.025	<0.025	<0.025	<0.025	<0.025

METHODS: EPA SW 846-8021B ,5030

Raland K. Tuttle  
Raland K. Tuttle

4-11-01  
Date

# ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

EOTT ENERGY  
ATTN: MR. WAYNE BRUNETTE  
P.O. BOX 16660  
MIDLAND, TEXAS 79703  
FAX: 684-3456  
FAX: 505-394-2601 (Pat McCasland)

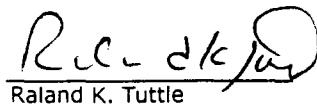
Sample Type: Soil  
Sample Condition: Intact/Iced/ 0 deg C  
Project #: 2000-10930  
Project Name: Turner Pump  
Project Location: Eunice

Sampling Date: 04/05/01  
Receiving Date: 04/05/01  
Analysis Date: 04/05/01

ELT#	FIELD CODE	GRO C6-C10 mg/kg	DRO >C10-C28 mg/kg
38815	S4501ETPBHC1	<10	<10
38816	S4501ETPESWC1	<10	<10
38817	S4501ETPNNSWC1	<10	<10
38818	S4501ETPSSWC1	<10	<10
38819	S4501ETPWSWC1	<10	<10

% IA	93	114
% EA	95	115
BLANK	<10	<10

Methods: EPA SW 846-8015M GRO/DRO

  
Raland K. Tuttle

4-11-01  
Date

# ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

EOTT ENERGY  
ATTN: MR. WAYNE BRUNETTE  
P.O. BOX 16660  
MIDLAND, TEXAS 79703  
FAX: 684-3456  
FAX: 505-394-2601 (Pat McCasland)

Sample Type: Soil  
Sample Condition: Intact/Iced/ 0 deg C  
Project #: 2000-10930  
Project Name: Turner Pump  
Project Location: Eunice

Sampling Date: 04/05/01  
Receiving Date: 04/05/01  
Analysis Date: 04/10/01

ELT#	FIELD CODE	Chloride mg/kg
38815	S4501ETPBHC1	14
38816	S4501ETPESWC1	31
38817	S4501ETPNNSWC1	<10
38818	S4501ETPSSWC1	11
38819	S4501ETPWSWC1	39

QUALITY CONTROL	5229
TRUE VALUE	5000
% INSTRUMENT ACCURACY	104
BLANK	<10

Methods: EPA SW 846-9253

  
Ralond K. Tuttle

4-11-01  
Date

Object Manager:

Jane Brunette EPT

Project #: 915 - 556 - C140

ANALYSIS REQUEST

DATE: 915 - 6/4 - 3456

EOTI

2001 - 1093C

Project Name:

Timber Creek

Sample Signature:

Roger Boone

Site Location:

Site Location:

FIELD CODE LAB USE ONLY	CONTAINERS ONLY	VOLUME/AMOUNT	WATER	SOIL	SLUDGE	LIQUID	PRESERVATIVE	METHOD	TIME	DATE	TITLE	NAME	PROJECT NUMBER	SAMPLE	Chloride							
1465	E1054/8C1	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

Original to W. Brunette & P. McCasland EPT.	FAX + E-mail to W. Brunette + P. McCasland 5/4/2001	Original to W. Brunette & P. McCasland EPT.
Received by: <i>Roger Boone</i>	Received by: <i>P. McCasland</i>	Received by: <i>W. Brunette</i>
Date: 4-20-01	Date: 4-20-01	Date: 4-20-01

# ENVIRONMENTAL LAB OF , Inc.

"Don't Treat Your Soil Like Dirt!"

EOTT ENERGY  
ATTN: MR. WAYNE BRUNETTE  
P.O. BOX 1660  
MIDLAND, TEXAS 79701  
FAX: 684-3456  
FAX: 505-394-2601 (Pat McCasland)

Sample Type: Soil  
Sample Condition: Intact/ Iced  
Project #: 2001-10930  
Project Name: Turner Pump  
Project Location: None Given

Sampling Date: 04/18/01  
Receiving Date: 04/20/01  
Analysis Date: 04/20/01

ELT#	FIELD CODE	BENZENE mg/kg	TOLUENE mg/kg	ETHYLBENZENE mg/kg	m,p-XYLENE mg/kg	o-XYLENE mg/kg
39465	ETPS41801	<0.025	<0.025	<0.025	0.047	<0.025
%IA		91	94	98	106	98
%EA		91	95	97	106	99
BLANK		<0.025	<0.025	<0.025	<0.025	<0.025

METHODS: EPA SW 846-8021B ,5030

Raland K. Tuttle  
Raland K. Tuttle

4-23-01  
Date

# ENVIRONMENTAL

LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

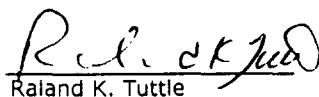
EOTT ENERGY  
ATTN: MR. WAYNE BRUNETTE  
P.O. BOX 1660  
MIDLAND, TEXAS 79701  
FAX: 684-3456  
FAX: 505-394-2601 (Pat McCasland)

Sample Type: Soil  
Sample Condition: Intact/ Iced  
Project #: 2001-10930  
Project Name: Turner Pump  
Project Location: None Given

Sampling Date: 04/18/01  
Receiving Date: 04/20/01  
Analysis Date: 04/21/01

ELT#	FIELD CODE	GRO C6-C10 mg/kg	DRO >C10-C28 mg/kg
39465	ETPS41801	<10	230
% IA		87	89
%EA		104	107
BLANK		<10	<10

Methods: EPA SW 846-8015M GRO/DRO

  
Roland K. Tuttle

4-23-01  
Date

# ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

EOTT ENERGY  
ATTN: MR. WAYNE BRUNETTE  
P.O. BOX 1660  
MIDLAND, TEXAS 79701  
FAX: 684-3456  
FAX: 505-394-2601 (Pat McCasland)

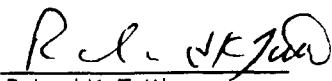
Sample Type: Soil  
Sample Condition: Intact/ Iced  
Project #: 2001-10930  
Project Name: Turner Pump  
Project Location: None Given

Sampling Date: 04/18/01  
Receiving Date: 04/20/01  
Analysis Date: 04/23/01

ELT#	FIELD CODE	Chloride mg/kg
39465	ETPS41801	44

QUALITY CONTROL	5051
TRUE VALUE	5000
% INSTRUMENT ACCURACY	101
BLANK	<10

Methods: EPA SW 846-9253

  
Ralond K. Tuttle

Date \_\_\_\_\_



# ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

EOTT ENERGY  
ATTN: MR. WAYNE BRUNETTE  
P.O. BOX 1660  
MIDLAND, TEXAS 79701  
FAX: 684-3456  
FAX: 505-394-2601 (Pat McCasland)

Sample Type: Soil  
Sample Condition: Intact/ Iced  
Project #: 2000-10930  
Project Name: Turner Pump  
Project Location: Eunice/ Don Jones

Sampling Date: 04/19/01  
Receiving Date: 04/20/01  
Analysis Date: 04/23/01

ELT#	FIELD CODE	Chloride mg/kg
39474	ETOS41901BH1	53
39475	ETPS41901SW1	367
39476	ETPS41901GS1	379

QUALITY CONTROL	5051
TRUE VALUE	5000
% INSTRUMENT ACCURACY	101
BLANK	<10

Methods: EPA SW 846-9253

Roland K. Tuttle  
Roland K. Tuttle

4-23-01  
Date

# ENVIRONMENTAL

LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

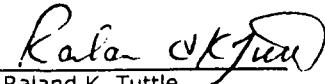
EOTT ENERGY  
ATTN: MR. WAYNE BRUNETTE  
P.O. BOX 1660  
MIDLAND, TEXAS 79701  
FAX: 684-3456  
FAX: 505-394-2601 (Pat McCasland)

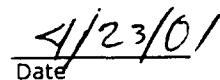
Sample Type: Soil  
Sample Condition: Intact/ Iced  
Project #: 2000-10930  
Project Name: Turner Pump  
Project Location: Eunice/ Don Jones

Sampling Date: 04/19/01  
Receiving Date: 04/20/01  
Analysis Date: 04/21/01

ELT#	FIELD CODE	GRO C6-C10 mg/kg	DRO >C10-C28 mg/kg
39474	ETOS41901BH1	<10	<10
39475	ETPS41901SW1	<10	1,110
39476	ETPS41901GS1	<10	<10
% IA		87	89
%EA		104	107
BLANK		<10	<10

Methods: EPA SW 846-8015M GRO/DRO

  
Raland K. Tuttle

  
Date

# ENVIRONMENTAL

LAB OF  , INC.

"Don't Treat Your Soil Like Dirt!"

EOTT ENERGY  
ATTN: MR. WAYNE BRUNETTE  
P.O. BOX 1660  
MIDLAND, TEXAS 79701  
FAX: 684-3456  
FAX: 505-394-2601 (Pat McCasland)

Sample Type: Soil  
Sample Condition: Intact/ Iced  
Project #: 2001-10930  
Project Name: Turner Pump  
Project Location: Eunice/ Don Jones

Sampling Date: 04/19/01  
Receiving Date: 04/20/01  
Analysis Date: 04/21/01

ELT#	FIELD CODE	BENZENE mg/kg	TOLUENE mg/kg	ETHYLBENZENE mg/kg	m,p-XYLENE mg/kg	o-XYLENE mg/kg
39474	ETPS41901BH1	<0.025	<0.025	<0.025	<0.025	<0.025
39475	ETPS41901SW1	<0.025	<0.025	<0.025	<0.025	<0.025
%IA		95	97	100	109	100
%EA		94	99	101	112	102
BLANK		<0.025	<0.025	<0.025	<0.025	<0.025

METHODS: EPA SW 846-8021B ,5030

Raland K. Tuttle

Raland K. Tuttle

4/23/01

Date

# ENVIRONMENTAL

LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

EOTT ENERGY  
ATTN: MR. WAYNE BRUNETTE  
P.O. BOX 1660  
MIDLAND, TEXAS 79701  
FAX: 684-3456  
FAX: 505-394-2601 (Pat McCasland)

Sample Type: Soil  
Sample Condition: Intact/ Iced  
Project #: 2001-10930  
Project Name: Turner Pump  
Project Location: Eunice/ Don Jones

Sampling Date: 04/19/01  
Receiving Date: 04/20/01  
Analysis Date: 04/21/01

ELT#	FIELD CODE	BENZENE mg/kg	TOLUENE mg/kg	ETHYLBENZENE mg/kg	m,p-XYLENE mg/kg	o-XYLENE mg/kg
39476	ETPS41901GS1	<0.025	<0.025	<0.025	<0.025	<0.025
%IA		90	97	101	102	103
%EA		94	101	105	105	106
BLANK		<0.025	<0.025	<0.025	<0.025	<0.025

METHODS: EPA SW 846-8021B ,5030

Roland K. Tuttle  
Roland K. Tuttle

4-23-01  
Date

**Attachment IV: Site Information and Metrics Form**

### Site Information and Metrics

SITE: Don Jones Turner Pump 4"	Assigned Site Reference # 2001-10930		
Company: EOTT Energy Pipeline			
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: Wayne Brunette			
Company Representative Telephone: 915.553.7557			
Company Telephone: 915.684.3479 Fax: 915.684.3456			
Fluid volume released (bbls) = 25 bbls	>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: EOTT Don Jones Turner Pump 4"			
Source of contamination: 4" steel pipeline (internal corrosion)			
Land Owner, i.e., BLM, ST, Fee, Other: Don Jones deeded			
LSP Dimensions: affected area = 50' x 10'			
LSP Area = 771 ft <sup>2</sup>			
Location of Reference Point (RP):			
Location distance and direction from RP:			
Latitude: 32° 27' 40N			
Longitude: 103° 08' 32W			
Elevation above mean sea level: ~ 3406 amsl			
Feet from South Section Line			
Feet from West Section Line			
Location- Unit or 1/4 = NE 1/4 of the SE 1/4 (Unit Letter: I)			
Location- Section = 22			
Location- Township = 21S			
Location- Range = 37E			
Surface water body within 1000' radius of site: None			
Domestic water wells within 1000' radius of site: 2 @ 75' north and 200' southeast			
Agricultural water wells within 1000' radius of site: None			
Public water supply wells within 1000' radius of site: None			
Depth from land surface to ground water (DG): 55' bgs			
Depth of contamination (DC): The lower most contamination >100 mg/Kg occurs at approximately 30' bgs			
Depth to ground water (DG - DC = DfGW) 25' bgs			
<b>1. Ground Water</b>	<b>2. Wellhead Protection Area</b>	<b>3. Distance to Surface Water Body</b>	
If 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	
If Depth to GW 50 to 99 feet: 10 points		200-100 horizontal 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	>1000 horizontal feet: 0 points	
Ground water Score = 20	Wellhead Protection Area Score= 20	Surface Water Score= 0	
Site Rank (1+2+3) = 20+20+0 = 40 points			
<b>Parameter</b>	<b>Total Site Ranking Score and Acceptable Concentrations</b>		
	>19	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