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# REPORTS

DATE:

1993

**FINAL REPORT**  
**ENVIRONMENTAL DUE DILIGENCE ASSESSMENT**  
**NEW MEXICO SWEET SYSTEM AND**  
**NEW MEXICO SOUR SYSTEM**

**RECEIVED**

**NOV 15 1993**

**OIL CONSERVATION DIV.**  
**SANTA FE**

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**AUGUST 1993**

## SECTION 7

### DELAWARE STATION

#### 7.1 SITE LOCATION AND DESCRIPTION

The Delaware Station is located approximately 3 miles south-southwest of Eunice, Lea County, New Mexico. The site location is shown in Figure 7-1. Delaware Station is a crude oil pumping station and storage facility where oil from gathering lines is pumped into a trunk line.

The Delaware Station site layout is shown in Figure 7-2. Above-ground facilities include a 400 BBL cone-top crude oil storage tank (tank 826), and above-ground piping. Soils inside the tank dike and surrounding the sump are stained with hydrocarbons. The extent of hydrocarbon staining is depicted in Figure 7-2.

The Delaware Station is located in an active oil field. A producing oil well is located approximately 200 feet east of the station. An area of weathered hydrocarbons, probably associated with a former oil well, is located approximately 100 feet west of the site.

The 0.34-acre site is leased by SPLC. The station and tank are currently idle. SPLC personnel reported that a second tank was situated south of the existing tank within the existing tank dikes.

#### 7.2 PREVIOUS INVESTIGATION RESULTS AND CONCLUSIONS

CURA, Inc. performed a baseline assessment of soil and groundwater conditions at the Delaware Station in December, 1992. CURA advanced two borings at the locations shown in Figure 7-2. Soil samples collected from the borings contained BTEX at concentrations ranging from 0.007 mg/kg to 0.011 mg/kg, and TPH concentrations ranging from 13 to 19 mg/kg. The deeper boring was advanced to a total depth of 12 feet.

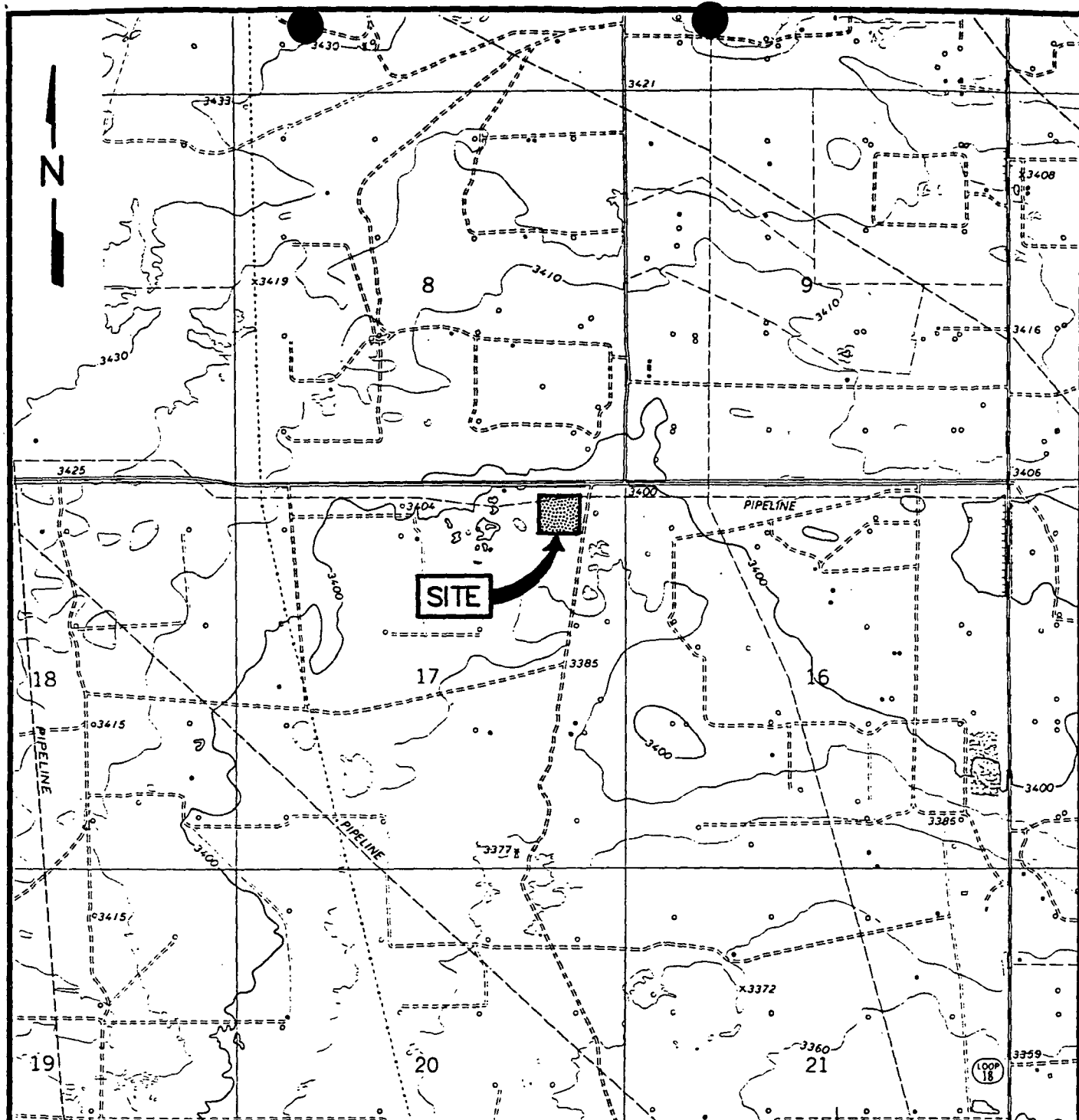
#### 7.3 SITE SAMPLING

After the records review, site inspection and CURA report review, WESTON recommended sampling at Delaware Station to address the following environmental issues:

- potential PCB contamination in the sump,
- potential lead contamination of soil surrounding tank, and
- soil staining inside tank dike.

The sample locations are shown on Figure 7-2. Analytical results are provided in Table 7-1.

SS-01 collected from surface soils adjacent to the tank contained less than 8.7 mg/kg total lead. Background sample SS-03 collected approximately 20 feet south of the south fence contained 5.3 mg/kg lead. Although the lead concentration in sample SS-01 is greater than the lead concentration in the background sample, the lead concentrations are probably not statistically significant. No further action is recommended.



0 1000 2000



SCALE IN FEET



BASE MAP FROM:  
U.S. DEPT. OF THE INTERIOR  
GEOLOGICAL SURVEY  
EUNICE QUADRANGLE  
NEW MEXICO  
7.5 MINUTE SERIES (TOPOGRAPHIC)  
1969 SERIES (REV. 1979)  
SCALE 1:24,000

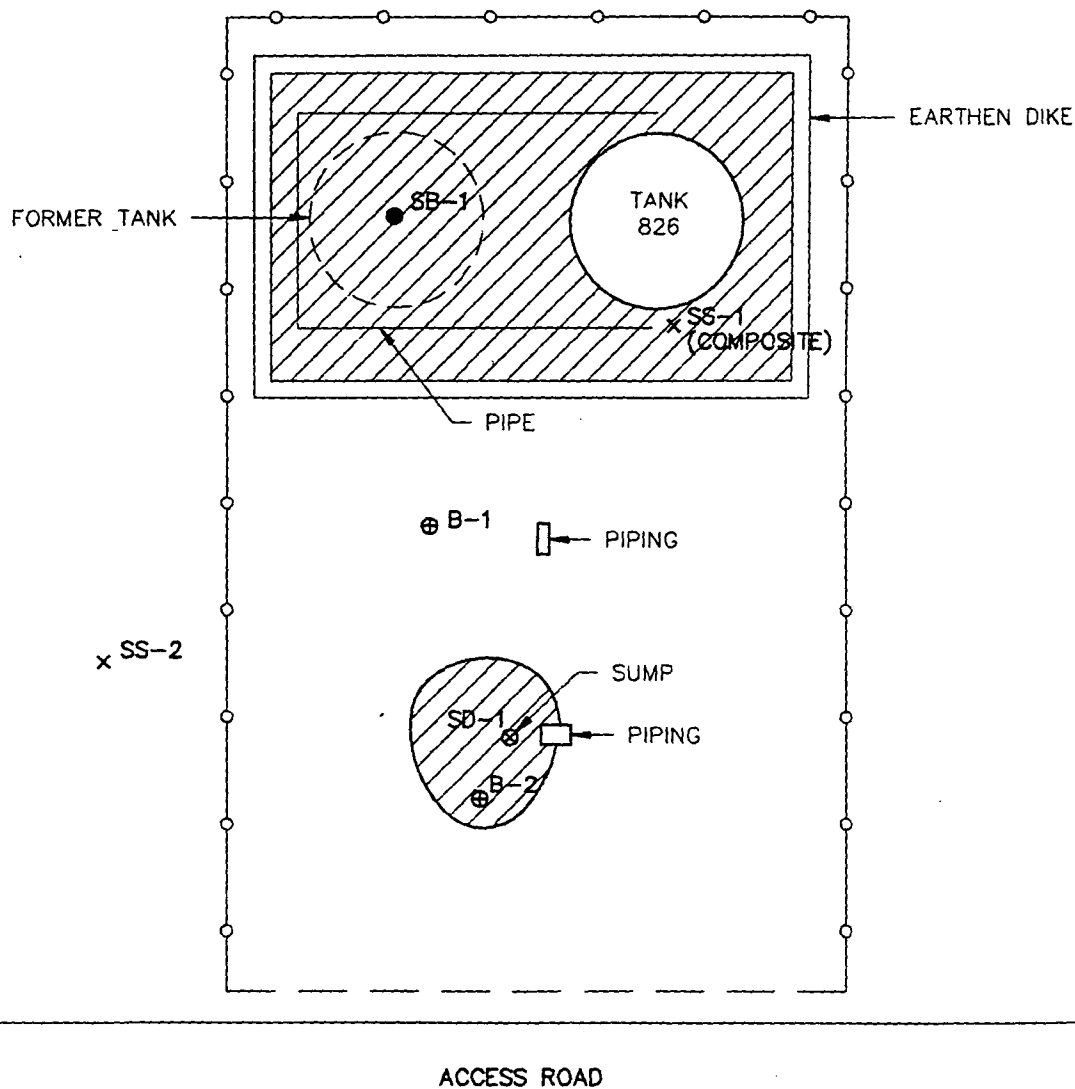
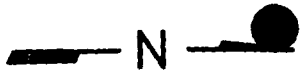
**WESTON**  
ENGINEERS ARCHITECTS

## FIGURE 7-1

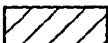
DELAWARE STATION LOCATION  
LEA COUNTY, NEW MEXICO

EOTT ENERGY CORPORATION  
SPLC PIPELINE ENVIRONMENTAL ASSESSMENT

W.O. NO. : 10326-001-001-0010



### LEGEND

- ⊕ B-1 CURA SOIL BORING LOCATION
- × SS-1 SURFACE SOIL SAMPLE LOCATION
- ⊗ SD-1 SEDIMENT SAMPLE LOCATION
- SB-1 WESTON SOIL BORING LOCATION
-  HYDROCARBON STAINING

NOT TO SCALE

**WESTON**  
MANAGERS DESIGNERS/CONSULTANTS

## FIGURE 7-2

### DELAWARE STATION SITE PLAN

EOTT ENERGY CORPORATION  
SPLC PIPELINE ENVIRONMENTAL ASSESSMENT

W.O. NO. : 10326-001-001-0000

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No PCBs were detected in SD-01 collected from the sump.

Boring SB-01 was advanced into stained soils inside the tank dike. A description of the soils encountered in this boring is as follows:

0 in. - 6 in.	Oil-stained pea gravel
6 in. - 1.0 ft.	Oil-stained sand, hydrocarbon odor OVA = >1,000 ppm off cuttings
1.0 ft. - 2.0 ft.	Oil-stained sand
2.0 ft. - 2.5 ft.	Oil-stained sandy clay OVA = >700 ppm off cuttings
2.5 ft. - 2.75 ft.	Oil-stained sandy clay OVA = >1,000 ppm in sample headspace

One sample, SB-01 was collected at a depth between 1.0 and 1.5 feet. SB-01 contained 20.58 mg/kg BTEX and 7,530 mg/kg TPH.

#### 7.4 COMPLIANCE ISSUES

##### Air Issues for Tank 826

This tank is currently out of service and does not require a permit. Based on the available information, an air permit would not be required for this tank if it is returned to service and is operated at a constant crude oil level. The tank appears to be in compliance with other New Mexico and federal regulations.

#### 7.5 LIABILITY ISSUES

##### Hydrocarbon Contaminated Soil

The WESTON sampling identified hydrocarbon contamination to a depth of at least 3 feet at the location of the former tank. Additional investigation is needed to identify the extent of hydrocarbon impacts in this area. Soil remediation could be required by the OCD if BTEX and TPH were present at depths sufficient to threaten groundwater, or if groundwater is found to be contaminated.

Because of the relatively high concentrations of hydrocarbons in the soil, particularly BTEX, WESTON recommends installation of a monitoring well to determine if the site groundwater has been impacted from site operations.

##### Groundwater Contamination

The nature and magnitude of soil hydrocarbon contamination, and the location of the contamination below a former tank which may have been the source of contamination from past leaks, indicate that groundwater contamination is possible. If the site groundwater contains constituents above the New Mexico water quality criteria concentrations, groundwater remediation to the criteria discussed in Section 2.1.4 will likely be necessary.

### Regulatory Database Search

The regulatory database search identified one environmental risk site near the Delaware Station. A 600-BBL oil spill was reported by Conoco 2 miles south of Eunice off Highway 18. Although the exact spill location could not be determined, the spill may have occurred in the vicinity of the Delaware Station. Additional work is needed to identify the exact location of the spill and determine whether or not it represents an environmental liability at the station.

**TABLE 7-1**  
**DELAWARE STATION ANALYTICAL RESULTS**  
**EOTT ENVIRONMENTAL ASSESSMENT OF THE**  
**SPLC ZONE III PIPELINE**

SAMPLE NUMBER: LOCATION: DATE COLLECTED:	SB-01 ADJACENT TO TANK 6/23/93	SS-02 BACKGROUND 6/23/93	SB-01 INSIDE TANK DIKE 6/23/93	SD-01 SUMP 6/23/93			
ORGANICS (mg/kg): <sup>1</sup>							
Benzene	NA	NA	0.58	NA			
Toluene	NA	NA	<0.16	NA			
Ethylbenzene	NA	NA	5.0	NA			
Total Xylenes	NA	NA	15.0	NA			
TOTAL BTX <sup>2</sup>	NA	NA	20.58	NA			
TPH <sup>3</sup>	NA	NA	7530	NA			
TOTAL PCBs <sup>4</sup>	NA	NA	NA	<13			
METALS (mg/kg):							
Silver	NA	NA	NA	NA			
Arsenic	NA	NA	NA	NA			
Barium	NA	NA	NA	NA			
Cadmium	NA	NA	NA	NA			
Chromium	NA	NA	NA	NA			
Mercury	NA	NA	NA	NA			
Lead	<8.7	5.3	NA	NA			
Selenium	NA	NA	NA	NA			

- 1 "NA" = not analyzed.
- 2 "BTX" = total benzene, toluene, ethylbenzene, and xylenes.
- 3 "TPH" = total petroleum hydrocarbons.
- 4 "PCBs" = polychlorinated biphenyls.