

3R - 252

**GENERAL
CORRESPONDENCE**

YEAR(S):

1996-1995



TIERRA
ENVIRONMENTAL
COMPANY Inc.

P.O. DRAWER 15250
FARMINGTON, NM 87401

RECEIVED
DIVISION
JAN 22 1996
10 8 52

January 18, 1996

Mr. Bill Olsen, Hydrogeologist
New Mexico Oil Conservation Division
2040 South Pacheco
Santa Fe, New Mexico 87505

RE: APACHE JUNCTION CRUDE STATION

Dear Mr. Olsen:

I am in receipt of your letter dated January 10, 1996 regarding the above captioned location.

As contractor for Gary William's Energy, I apologize for the oversight on our part for not including the information you have requested in the original report.

All BTEX concentration levels at the site were obtained using a Thermo-Environmental Organic Vapor Meter, Model 580 B.

1. LACT Unit

Base of excavation:

LACT Pit # 1, 8' depth	14 ppm
LACT Pit # 2, 15' depth	70 ppm

2. Transfer Terminal

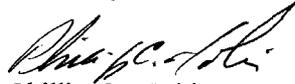
Base of test hole 24' level	139 ppm
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With regard to the tank bottoms and sludges removed from the storage tank, they were transported to the Tierra Landfarm Facility and are presently stored in a frac tank. Verbal permission was received by me via telephone from Roger Anderson (OCD) to remove the material from the location and transport it to the Tierra Landfarm for temporary secure storage pending the initial analysis. It was my opinion that the material stored in a frac tank on location was not secure. The initial TCLP analysis taken of the material at Apache Station was obtained from raw material in the tank prior to tank cleaning operations and subsequent removal. The analysis received after the material was removed from location indicated benzene level's of the material exceeded OCD standards. A TCLP

analysis of the actual waste material presently stored in the frac tank at Tierra is being conducted. Recent field screening with the previously described OVM indicate that BTEX level's are with in parameters. When the TCLP analysis of the actual waste material is received by Tierra they will be forwarded to you and permission requested at that time to spread and treat the material at our landfarm facility.

If you have any qestions or require additional information, please call me.

Sincerely,



Phillip C. Nobis

President

xc: Chris Hawley GWE
D.Foust, OCD Aztec

OIL CONSERVATION DIVISION
2040 S. Pacheco
Santa Fe, New Mexico 87505

January 10, 1996

CERTIFIED MAIL
RETURN RECEIPT NO. Z-765-962-537

Mr. Chris Hawley
Gary Williams Energy
Wynnewood Refining Company
P.O. Box 305
Wynnewood, Oklahoma 73098

RE: APACHE JUNCTION CRUDE STATION

Dear Mr. Hawley:

The New Mexico Oil Conservation Division (OCD) has reviewed Gary Williams Energy's (GWE) October 4 - October 31, 1995 "VOLUNTARY CLEAN-UP OF CRUDE OIL TRANSFER FACILITY, APACHE STATION SITE" which was submitted to the OCD on November 21, 1995 by their consultant Tierra Environmental Company, Inc. This document contains GWE's report on the investigation and remediation of crude contaminated soils at GWE's Apache Junction Crude Station located in the SE/4 of Sec. 33, T25N, R06W, NMPM, Rio Arriba County, New Mexico.

The investigation/remedial actions appear satisfactory. However, the OCD has the following comments and requests for information regarding the above referenced report:

1. The report does not include the benzene, toluene, ethylbenzene and xylene (BTEX) concentrations at the base of the excavation in the LACT unit area or at the 24 foot level of the test hole in the transfer area. Please provide the OCD with this information.
2. The report indicates that the tank bottoms from the crude storage tank were tested for RCRA hazardous waste characteristics and then with OCD verbal permission were transported to a frac tank at Tierra's OCD permitted landfarm facility. However, the report does not indicate what was ultimately done with these wastes. Please provide the OCD with the ultimate disposition of these wastes.

Mr. Chris Hawley
January 10, 1996
Page 2

Submission of the above requested information will allow the OCD to complete a review of the above referenced report.

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

Sincerely,



William C. Olson
Hydrogeologist
Environmental Bureau

xc: Denny Foust, OCD Aztec Office
Phillip C. Nobis, Tierra Environmental Corporation

Z 765 962 537


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**PROPOSED WORK PLAN
GROUNDWATER INVESTIGATION
OF THE EUNICE SOUTH GAS PLANT
LEA COUNTY, NEW MEXICO**

October 1995

RECEIVED

NOV 06 1995

Environmental Bureau
Oil Conservation Division

Prepared for

**Texaco Exploration and Production Inc.
P.O. Box 3109
Midland, Texas 79702**

Prepared by

**Geraghty & Miller, Inc.
1030 Andrews Hwy., Suite 120
Midland, Texas 79701
(915) 699-1381**

**PROPOSED WORK PLAN
GROUNDWATER INVESTIGATION
OF THE EUNICE SOUTH GAS PLANT
LEA COUNTY, NEW MEXICO**

October 31, 1995

Geraghty & Miller, Inc. is submitting this work plan to Texaco Exploration and Production Inc. for the evaluation of the Eunice South Gas Plant, Lea County, New Mexico. The plan was prepared in conformance with Geraghty & Miller's strict quality assurance/quality control procedures to ensure that the report meets the highest standards in terms of the methods used and the information presented. If you have any questions or comments concerning this report, please contact one of the individuals listed below.

Respectfully submitted,

GERAGHTY & MILLER, INC.



A. Joseph Reed
Senior Project Advisor/Associate



Allan T. Schmidt
Office Manager



**PROPOSED WORK PLAN
GROUNDWATER INVESTIGATION
OF THE EUNICE SOUTH GAS PLANT
LEA COUNTY, NEW MEXICO**

The purpose of this work plan is to provide the procedures for evaluating the occurrence of phase separated hydrocarbons, dissolved hydrocarbon and high chloride and total dissolved solids in the groundwater in the vicinity of the Northern Natural Gas Company's Eunice Compressor Station which adjoins the north boundary of the Texaco Eunice South Gas Plant, in Lea County, New Mexico. A preliminary study of the Northern Natural Gas Company site has been performed by D. B. Stephens & Associates, Inc., at the direction of Enron Operations Corp. This study revealed that the hydraulic gradient regionally and locally was generally to the south, with a detailed map of the site showing a trough in the water table with the direction of the water movement in the trough to the southwest. The detailed map, however, reflected only about one tenth of a foot of change in water level elevation across the property.

The study indicated that phase separated hydrocarbons were measured in MW-3, on the western side of the Northern Natural Gas Company's compressor station, which appears to be up the hydraulic gradient of the Texaco Eunice South Gas Plant. There is also an indication of dissolved hydrocarbons in the groundwater under the southern one third of the Northern Natural Gas property. The chlorides and total dissolved solids also increase in a generally southerly direction across the Northern Natural Gas property. Benzene, toluene, ethylbenzene and xylenes (BTEX) were indicated in the soils above the water table in BH-14, just south of Monitor Well No. 3 which has the phase separated hydrocarbons. BTEX was also found in the soils just above the water table in SB-1, drilled south of BH-14. These two boreholes are apparently down the hydraulic gradient from MW-3.

There were apparently four former unlined pits used in association with the Eunice South Gas Plant in past operations. The pits were located off of the southwest corner of the Northern Gas Company property, on the southeastern part of the Northern Gas Company property and southeast of the Northern Natural Gas property. Based on the hydrology depicted so far by the



previous studies, three of the pits should be down gradient of the Northern Natural Gas Company property, and one is in the property itself. The New Mexico Oil Conservation Division (OCD) is requesting that the unlined pits be evaluated for their potential impact on the Northern Natural Gas property.

It is recommended that six monitor wells be drilled initially to determine the presence or absence of phase separated hydrocarbons, the concentration of dissolved hydrocarbons and concentration of the chloride and total dissolved solids in the groundwater at the six locations (see attached map). One of the locations is between the former gas plant waste pit (located off of the southwest corner of the Northern Natural Gas Company property) and MW-3 (located northeast of the pit) and one is located just north of MW-3. Another proposed monitor well is located south of the Northern Natural Gas former pipeline liquids above ground storage tank which was located on the southwest corner of their property. This monitor well location is between the former Eunice South waste pit and the gasoline/slop oil tanks at the Eunice South gas plant. Another well is proposed on the Eunice South Gas Plant property south of Monitor Well No. 7. The fifth well is located south of the former pit located on the southeast part of the Northern Natural Gas property. The sixth well is located to the southeast of the Northern Natural Gas property on the Eunice South Gas Plant property between the Northern property and the two former unlined pits on the Eunice South property.

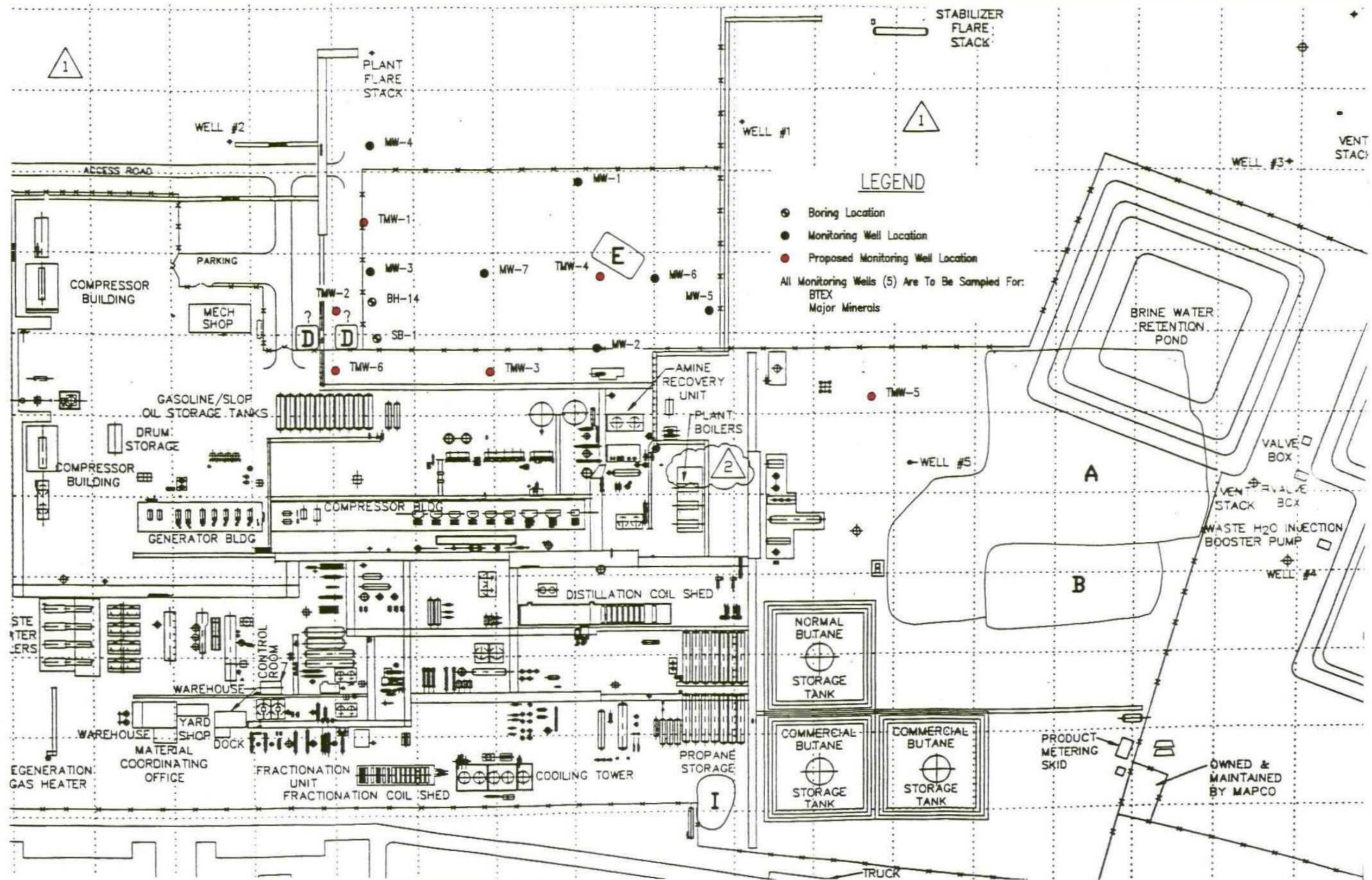
The wells will be drilled approximately 15 feet into the first water in the aquifer, and screened from 5 feet above the water table to 15 feet below the water table (see attached schematic). Water levels will be measured on all six new monitor wells plus existing monitor wells within the Northern Natural Gas property to evaluate the groundwater flow direction. The new and existing monitor wells will be examined closely for phase separated hydrocarbons on the water table, and the groundwater itself will be sampled and analyzed for BTEX, TPH, polynuclear aromatics, RCRA metals and major minerals. If any monitor wells indicate phase separated hydrocarbons, the thickness of the hydrocarbons will be determined, and a sample of the hydrocarbons will be taken and analyzed using a GC/FID screen and GC/MS VOA analysis. The GC/FID analysis will be carried out following modified EPA Method 8015 optimized for



petroleum analysis. The GC/MS VOA analysis will be run by purge-and-trap GC/MS following modified EPA Method 8260. Up to three soil samples per new monitor well will be collected for BTEX and TPH analyses to evaluate vertical hydrocarbon contamination, and the drill cuttings will be carefully examined during drilling to evaluate the possibility of stratified phase separated hydrocarbons. An inventory of water wells within a one-half mile to one mile radius of the plant site will be conducted to add additional water level data to determine the direction of groundwater movement, and to evaluate background water quality. The wells inventoried will be sampled for BTEX, TPH and major minerals including calcium, magnesium, sodium, potassium, chloride, sulfate, bicarbonate, carbonate and total dissolved solids. Two samples, one up gradient and one down gradient, of the plant sites will also be analyzed for polynuclear aromatics and RCRA metals.

Upon completion of this phase of the investigation, the results of the evaluation will be summarized in a written report, the data tabulated and posted on maps and presented to the OCD for their information. If the testing indicates additional information is required to delineate phase separated and/or dissolved hydrocarbons, such recommendations will be presented in the report for OCD review and approval.





GERAGHTY & MILLER, INC.
Environmental Services
A Healdemil company

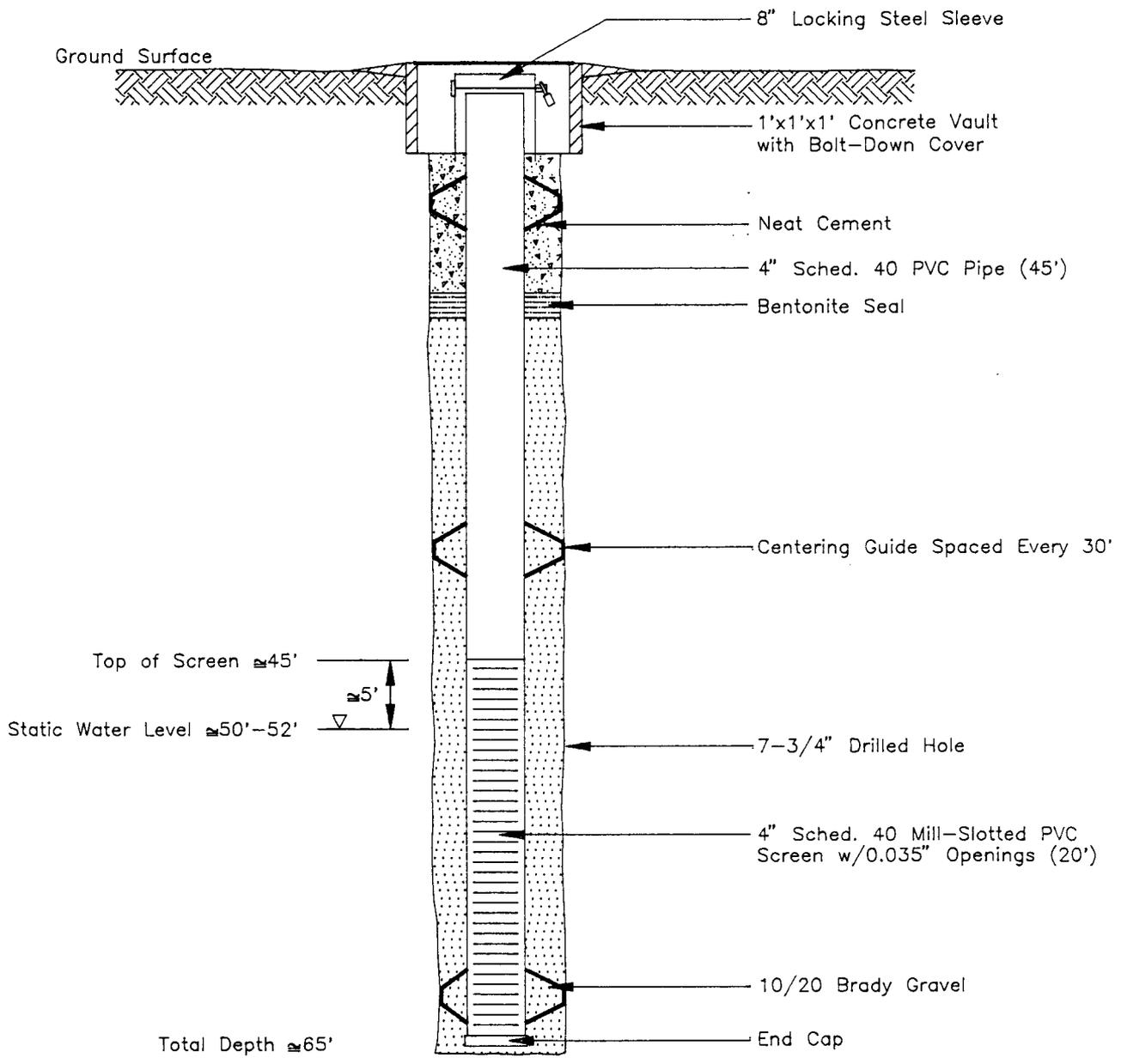
TEXACO EXPLORATION AND PRODUCTION, INC.
EUNICE SOUTH GAS PLANT

EXISTING SOIL BORING AND MONITORING WELL LOCATIONS AND PROPOSED MONITORING WELL LOCATIONS

LEA COUNTY, NEW MEXICO

FIGURE

DWG DATE: 31OCT95 | PRJCT NO.: MTO387.001 | FILE: TEXACO | DRAWING: MT38701C.DWG | CHECKED: H. ROBOTHAM | APPROVED: H. ROBOTHAM | DRAFTER: H. CLARDY




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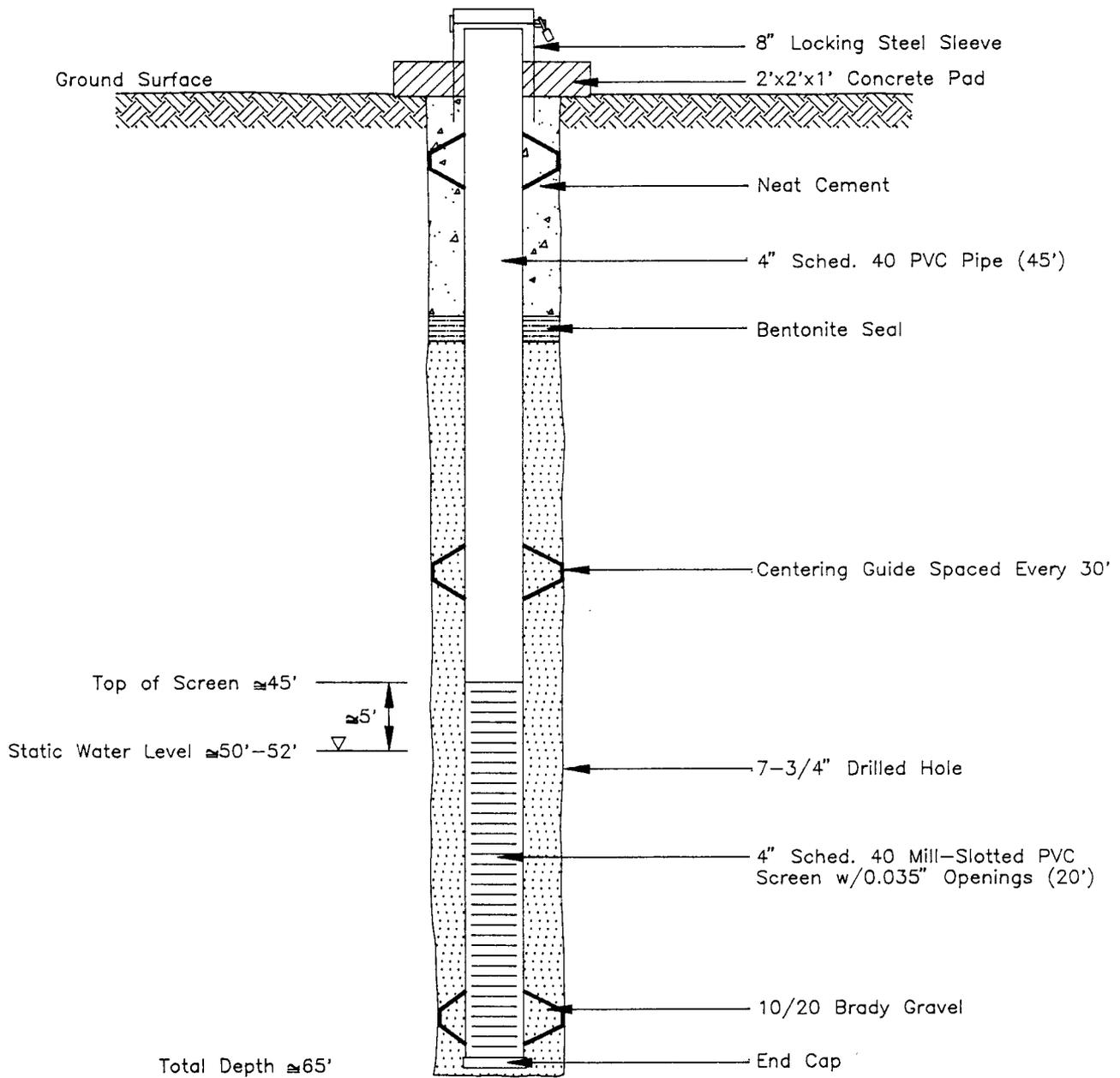
TEXACO EXPLORATION AND PRODUCTION, INC.
 SOUTH EUNICE GAS PLANT SITE INVESTIGATION

**DESIGN FOR PROPOSED MONITOR WELLS
 FOR BELOW GROUND INSTALLATION**

LEA COUNTY, NEW MEXICO

FIGURE

DWG. DATE: 31 OCT 95 | PROJECT NO.: MTD387.001 | FILE: TEXACO | DRAWING: MT387018.DWG | CHECKED: H. ROBOTHAM | APPROVED: H. ROBOTHAM | DRAFTER: H. CLARDY



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TEXACO EXPLORATION AND PRODUCTION, INC.
 SOUTH EUNICE GAS PLANT SITE INVESTIGATION

**DESIGN FOR PROPOSED MONITOR WELLS
 FOR ABOVE GROUND INSTALLATION**

LEA COUNTY, NEW MEXICO

FIGURE