GW - 4

REPORTS

YEAR(S):

9/1996

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SUBSURFACE ENVIRONMENTAL ASSESSMENT

Texaco Exploration and Production, Inc.

Eunice #2 (North) Gas Plant

Lea County, New Mexico

September 1996

Prepared for

Prepared by

Highlander Environmental Corp.

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Environmental Bureau
Oil Conservation Division

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TEXACO EXPLORATION AND PRODUCTION, INC.
EUNICE #2 (NORTH) GAS PLANT
LEA COUNTY, NEW MEXICO.

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Prepared for:

TEXACO EXPLORATION AND PRODUCTION, INC.

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Midland, Texas

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SUBSURFACE ENVIRONMENTAL ASSESSMENT
TEXACO EXPLORATION AND PRODUCTION, INC.
EUNICE #2 (NORTH) GAS PLANT
LEA COUNTY, NEW MEXICO

1.0 INTRODUCTION

Texaco Exploration and Production, Inc. (Texaco) has retained Highlander Environmental Corp. (Highlander) to conduct a Subsurface Environmental Assessment (Assessment) at the Texaco Eunice #2 (North) Gas Plant (Site), located approximately .25 mile north of Eunice, New Mexico. The Site is situated in the southeast quarter (SE/4) of the northeast quarter (NE/4), and the NE/4 of the SE/4 of Section 28, Township 21 South, Range 37 East, Lea County, New Mexico. Figure 1 presents a Site location and topographic map. Figure 2 presents a Site drawing.

The Assessment was required by the State of New Mexico, Oil Conservation Division (OCD) after its review of Texaco's Groundwater Discharge Plan (Plan Number GW-004) for the Site. The Assessment was conducted between August 5-15, 1996.

1.1 Purpose and Scope

The purpose of the Assessment was to determine if subsurface releases of petroleum hydrocarbons to soil and groundwater have occurred from operations at the Site. The Assessment consisted of installing hand auger and machine rotary drilled soil borings at various Site operation areas and collection of soil samples for field and laboratory testing. One monitor well (MW-1) was also installed as part of a ongoing investigation to evaluate soil and groundwater conditions in the vicinity of the compressor building.

1.2 Regulatory Agency Correspondence

On February 14, 1996, Texaco submitted the document titled,"Groundwater Discharge Plan, Texaco Exploration & Production Eunice North Gas Processing Plant, Lea County, New Mexico" (Plan) to the New Mexico OCD. Prior to approval of the Plan the OCD, conducted an inspection of the Site

and required Texaco to conduct a subsurface evaluation of the Site to determine if process area sumps and waste management areas had impacted soil and groundwater at the Site. Highlander prepared a work plan titled, "Work Plan Attachment to Discharge Plan GO-004, Discharge Plan Requirements, Texaco Exploration and Production, Inc., Eunice #2 (North) Gas Plant", incorporated here by reference. The Work Plan was implemented on August 5, 1996.

1.3 Previous Investigations

During October 1995, Texaco requested Highlander to conduct a subsurface investigation in the vicinity of the compressor building at the Site. The subsurface investigation was conducted to determine if impacts to the shallow soil were present as a result of leaks from the compressor engines.

The subsurface investigation consisted of installing thirteen shallow hand auger borings (AH-1 through AH-13), which were spaced approximately fifty feet apart along the north and south sides of the compressor building. The soil borings were advanced to a maximum depth of approximately fifteen feet below ground. Soil samples were collected at one and two foot increments from each boring for visual examination and field screening. The soil samples were field screened for petroleum hydrocarbons using a Thermo Environmental Instruments, Model 580 B Organic Vapor Meter (OVM). The soil sample field screening results indicated that soil was impacted by hydrocarbons at locations AH-4, AH-6, AH-7, AH-9, AH-10, AND AH-11. Twelve additional soil borings were installed to define the horizontal extent of the hydrocarbon impacts at these locations. Soil samples were also selected from each boring for laboratory analysis based on the field screening results. The soil samples were submitted to Trace Analysis, Inc., Lubbock, Texas and analyzed for Total Petroleum Hydrocarbons (TPH) by EPA method 418.1, total metals by EPA method SW-846-6010, polychlorinated biphenyl (PCB) by EPA method SW-846-8080, and benzene, toluene, ethyl benzene and xylene (collectively referred to as BTEX) by EPA method SW-846-8020.

The results of the laboratory analysis for TPH reported impacts to soil at depths ranging from approximately 1.0 to 15 feet below ground surface. The highest TPH reading reported was 142,000 milligrams per kilogram (mg/kg) from 4.0 feet below ground at location AH-4. The TPH level in soil at location AH-4 decreased to 226 mg/kg at a depth of approximately 10 feet below ground. Assuming a TPH target cleanup level of 1000 mg/kg in soil based on guidelines published by the New Mexico OCD, the vertical extent of TPH impact in soil was not defined at locations AH-6 and AH-8. The horizontal extent of TPH was defined in soil at locations AH-4, AH-6 and AH-7 and indicated that the TPH impact extended horizontally about 7 to 10 feet from the compressor building.

The BTEX analysis reported that benzene, toluene, and ethylbenzene were not present in the soil samples above the test method detection limits. Xylene was reported in soil samples from borings AH-5 and AH-7 at 0.555 mg/kg and 0.211 mg/kg, respectively. The results of PCB analysis of soil samples from borings AH-6 and AH-7 did not report PCB above the test method detection limits. The results of total metals analysis of the soil samples reported chromium at 64.9 mg/kg in soil from location AH-7, 1.0 to 1.5 feet.

A total chromium level of 1580 mg/kg was reported in the soil sample from boring AH-5 from 0.0 to 0.5 feet. The chromium level was elevated above concentrations typically found in soil for the Site and region. The preliminary results of the subsurface investigation were presented to Texaco in the report titled, "Subsurface Investigation of the Compressor Building at Texaco North Eunice Gas Plant, November 1995", which is presented in Appendix A.

On March 28, 1996 Highlander installed four additional hand auger soil borings in the vicinity of borings AH-6, AH-7, AH-8 and AH-11 and collected soil samples to delineate the vertical and horizontal extent of hydrocarbons in soil. Soil borings, AH-6-2, AH-7-2, AH-8-2, and AH-11-2 were extended to depths ranging from approximately 5.5 feet below ground (AH-11-2) to approximately 14 feet below ground (AH-7-2). Soil samples were collected from each boring and

analyzed for TPH by EPA method 418.1. The soil samples from borings AH-6-2 and AH-7-2 were also analyzed for gasoline range petroleum hydrocarbons using EPA method 8015 modified. Table 1 presents a summary of the laboratory analysis. Appendix B presents the analytical laboratory report.

Referring to Table 1, the analysis of soil samples from borings AH-6-2 (12.5 to 13.0 feet) and AH-7-2 (13.5 to 14.0 feet) reported TPH at 1420 mg/kg and 58,300 mg/kg, respectively. These results indicated that the vertical extent of petroleum hydrocarbons in soil at these locations was not defined. The laboratory analysis of soil samples from borings AH-6-2 (12.5 to 13.0 feet) and AH-7-2 (13.5 to 14.0 feet) for gasoline range petroleum hydrocarbons reported sample AH-6-2, 12.5 to 13.0 feet at <10,000 micrograms per kilogram (ug/kg) or less than 10 mg/kg and 35,100 ug/kg or 35.1 mg/kg in sample AH-7-2, 13.5 to 14.0 feet. These results suggest that the impacts to soil at locations AH-6-2 and AH-7-2 are likely the result of leaks and spills of oil from the compressor engines, rather than gasoline related hydrocarbons. The auger boring installed at location AH-7-2 was terminated on a dense layer of caliche, which would likely impede vertical movement of the hydrocarbons.

Soil samples from hand auger borings AH-8-2 and AH-11-2 were analyzed for TPH and reported 18 mg/kg and <10 mg/kg, respectively. These laboratory results indicate that the vertical extent of petroleum hydrocarbons in the soil at these locations was defined.

Texaco requested Highlander to install one monitor well to determine if hydrocarbons found in soil adjacent to the compressor building had impacted groundwater. The monitor well was installed in accordance with a Work Plan that was prepared by Highlander titled, "Monitor Well Work Plan, Texaco Exploration and Production, Inc., North Eunice Gas Plant, Lea County, New Mexico". The Work Plan was submitted to the OCD on April 18, 1996 and was approved on June 27, 1996.

Monitor well MW-1 was drilled on July 22, 1996 by Scarborough Drilling, Inc., Lamesa, Texas.

The monitor well was drilled to a depth of approximately 57 feet below ground using a truck mounted rotary drilling rig. Mud additive was used during drilling due to caving of unconsolidated sand underlying the Site. Soil samples were collected during drilling for field screening and laboratory analysis. The soil samples were field screened for petroleum hydrocarbons using the OVM. Based on the field screening results soil samples from depth intervals of 25 to 27 feet and 55 to 57 feet were submitted to the laboratory and analyzed for BTEX and TPH. The analysis were performed by Trace Analysis, Inc., Lubbock, Texas. Table 1 presents a summary of the laboratory soils analysis. Table 2 presents a summary of soil boring drilling and monitor well completion details. Table 3 presents the OVM field screening results. Appendix B presents the laboratory sample reports. Appendix C presents the soil boring sample logs. Appendix D presents the monitor well completion form.

Referring to Table 1, BTEX was not reported above the test method detection limit of 50 ug/kg in the soil sample from 25 to 27 feet below ground from monitor well MW-1. The soil sample from 55 to 57 feet below ground did not report benzene above the test method detection limit of 50 ug/kg. Toluene, ethylbenzene, and xylene were reported in the soil sample from 55 to 57 feet at concentrations of 243 ug/kg, 1130 ug/kg and 3443 ug/kg, respectively. The total BTEX concentration in the soil sample from 55 to 57 feet was 4816 ug/kg. The TPH levels reported in the soil samples were 17.6 mg/kg (25 to 27 feet) and 90.2 mg/kg (55 to 57 feet). Based on guidance published by the New Mexico OCD (Guidelines for Remediation of Leaks, Spills, and Releases, August 13, 1993), the BTEX and TPH levels in soil samples from monitor well MW-1 would not normally require remediation.

2.0 SITE SETTING

2.1 Topography

The topography of the Site gently slopes from west to east. The elevation of the Site ranges from about 1330 feet above mean sea level (AMSL) along the west side to about 1325 feet AMSL along the east side. Storm water runoff generally follows the topography of the Site. The nearest

surface water body to the Site is greater than two miles east. There is one water well at the Site (Water Well #1) which is used for industrial purposes (i.e. cooling towers, etc.).

2.2 Soils

The Site is underlain by soils of the Pyote Series and Berino Series (Turner, et.al., 1974). The Pyote Series is represented by the Pyote and Maljamar fine sands (0 to 3 percent slopes) soil. The Berino Series is represented by the Berino-Cacique loamy fine sands association (0 to 3 percent) soil.

The Pyote and Maljamar fine sands (PU) is the predominant soil type at the Site and consists of a surface layer of fine grained brown sand, approximately 30 inches thick. The surface layer is underlain by several subsoil strata consisting of fine sandy loam, varying from strong brown to light brown in color and approximately 30 inches thick. The Pyote and Maljamar fine sands soil has moderately rapid permeability and low corrosivity potential to uncoated steel. The principal uses of Pyote and Maljamar fine sands soil are range, wildlife habitat and recreational areas. The Pyote and Maljamar fine sand soil occupies the central part of the Site.

The Berino-Cacique loamy fine sands association (BE) is present along the north and south boundaries of the Site. The Berino-Cacique loamy fine sands soil consists of a thin surface layer, approximately 6 inches thick of reddish-brown loamy fine sand. The surface layer is underlain by several substrata consisting of sandy clay loam, varying in color from red to light brown and approximately 54 inches thick. The Berino-Cacique loamy fine sands soil has a moderate permeability and moderate corrosivity potential to uncoated steel. Uses of Berino-Cacique loamy fine sands soil include rangeland, recreational areas and wildlife habitat.

2.2 Geology

The Site is underlain by deposits of Recent-age windblown sand ranging in thickness from about a few feet to as much as 40 feet. The windblown sand deposits consist of unconsolidated fine to medium grained sand. The windblown sand is underlain by the Pliocene-age Ogallala Formation.

The Ogallala Formation consists of semiconsolidated deposits of fine grained calcareous sand, capped by a layer of caliche. The Ogallala Formation also contains minor amounts of clay, silt and gravel (Nicholson and Clebsch, 1961 and Brown, 1976). The Ogallala Formation ranges in thickness from a few inches to about 300 feet.

2.3 Groundwater

Groundwater occurs in the Pliocene-age Ogallala Formation. The Ogallala Formation, commonly referred to as the High Plains Aquifer, occurs under unconfined conditions. The regional direction of groundwater flow in the vicinity of the Site is from west-northwest to south-southeast. Recharge to the Ogallala Formation occurs through infiltration of precipitation from rainfall and snow melt. Discharge from the Ogallala Formation occurs principally through pumping from wells.

Based on Site-specific data, depth-to-groundwater beneath the Site is approximately fifty-three feet below ground surface.

3.0 ENVIRONMENTAL INVESTIGATION AREAS

3.1 North Sumps

The north sumps are located near the northeast corner of the Site, adjacent to the east fence. There are two sumps at this location. The sumps are constructed of concrete and metal, and the area measures approximately 10 x 50 feet. The north sumps contain oil and water from compressor engines, salt water from water treaters, and blowdown water that contains phosphates and sulfides from boilers, and condensates. Liquids are collected in the sumps and pumped through a single line to the waste oil and water storage area, located on the west side of the Site. Section 3.4 discusses the waste oil and water storage area. Figure 2 presents a Site drawing showing the location of the north sumps.

3.2 North Sump of Engine Room

This sump is located north of the engine room of the compressor building, located on the north side of the Site. The sump is constructed of metal and measures approximately 2.5 feet in diameter (top opening) and approximately 5.0 feet deep.

The sump contains water and water treatment chemicals, (i.e., sodium nitrate and sodium molybdate) from the compressor engines cooling systems. The water is dumped into the sump when a compressor engine is blown down. The fluids are returned to the engine cooling system. Figure 2 presents a Site drawing showing the location of the north sump of engine room.

3.3 South Sump of Engine Room

The sump is located south of the engine room of the compressor building. The sump is constructed of metal and measures approximately 1.5 feet in diameter (top opening) and approximately 6.0 feet deep.

The sump contains oil from leaks from the compressor engines and water from washing engines and leakage from cooling water lines. Figure 2 presents a Site drawing showing the location of the south sump of engine room.

3.4 Waste Oil and Water Storage Area

The waste oil and water storage area is located on the west side of the Site, and consists of a above-ground storage tank (AST), used for storage of oil from inlet scrubbers, fluids (i.e., oil, water and condensate) from the south sump of the engine room, and fluids from the north sumps. The AST is located within a diked area measuring approximately 105 x 115 feet..

The oil and water is separated at the waste oil and water storage area, after which, the oil is sold and the water is pumped to a disposal well off site. Figure 2 presents a Site drawing showing the location of the waste oil and water storage area.

3.5 Trash Pit

The trash pit is located near the southwest corner of the Site in an area used for equipment salvage and storage. The trash pit measures approximately 40 x 40 feet , and is approximately 3 to 4 feet deep. The trash pit has been used for disposal of trash and construction debris. Figure 2 presents a Site drawing showing the location of the trash pit.

4.0 ENVIRONMENTAL INVESTIGATION ACTIVITIES

4.1 Hand Auger Soil Borings

Two hand auger soil borings were installed using a three inch diameter stainless-steel bucket-type hand auger. The hand auger soil borings were installed near the north sump of the engine room (AH-1) and near the south sump of the engine room (AH-1). Figure 2 presents the locations of the hand auger soil borings.

Soil samples were collected at various depth intervals from each hand auger soil boring for potential laboratory testing and headspace gas screening. All samples collected for potential laboratory analysis were collected and preserved according to EPA protocols, and analyzed within appropriate holding times. A portion of each soil sample was collected for headspace gas screening using an OVM to provide supporting data and determine which samples would be selected for laboratory analysis. A lithological sample log for each boring was prepared from descriptions of soil samples and are presented in Appendix C. Table 2 presents a summary of drilling details for the hand augered soil borings.

The auger bucket was thoroughly washed between each borehole location and sampling event using potable water and laboratory grade detergent, followed by rinsing with deionized water. Soil cuttings were placed on plastic, covered and retained onsite until proper disposal was arranged. The hand augered boreholes were plugged to ground surface after completions of field activities using a cement and bentonite grout.

4.2 Rotary Drilled Soil Borings

Highlander supervised drilling of ten rotary drilled boreholes at the Site. Two rotary drilled boreholes (BH-1 and BH-2) were located near the north sump. Eight rotary drilled boreholes (BH-1 through BH-8) were drilled adjacent to the containment berm surrounding the AST at the waste oil and water storage area. Boreholes BH-1 through BH-4 were drilled along the outside edge of the containment dike, and boreholes BH-5 through BH-8 were drilled inside of the containment dike. Figure 2 presents a Site drawing showing the locations of the rotary drilled boreholes.

The boreholes were drilled by Scarborough Drilling, Inc., Lamesa, Texas using a truck-mounted rotary drilling rig. Air was used during rotary drilling and soil samples were collected using a 2-foot long split spoon sampler. Soil samples were collected for potential laboratory testing and headspace gas screening. All soil samples collected for potential laboratory analysis were collected and preserved according to EPA protocols and analyzed within appropriate holding times. A portion of each soil sample was collected for headspace gas screening using the OVM to provide supporting data and determine which samples would be selected for laboratory analysis. Lithological sample logs were prepared for the rotary drilled boreholes from descriptions of soil samples. Appendix C presents the lithological sample logs. Table 2 presents a summary of soil boring drilling details.

The split spoon sampler was thoroughly washed between each borehole and sampling event using potable water and laboratory grade detergent, followed by rinsing with deionized water. The drilling rig and all down-hole equipment (i.e., drill rods, bits, etc.) were thoroughly washed between boreholes using a high pressure hot water washer. The drill cuttings were placed on plastic in a secured area onsite and covered until proper disposal was arranged. Following completion of field activities the boreholes were plugged to ground surface with cement and bentonite grout.

4.3 Soil Headspace Gas Survey

The soil headspace gas survey is a measurement of the relative concentration of volatile organic constituents in soil. The Ambient Temperature Headspace (ATH) method was used at the Site for the soil headspace gas survey. The ATH method consists of collecting discrete or composite soil samples from a drilled borehole and placing the sample in a clean plastic sample bag, leaving a vacant headspace in the top of the bag. The bag is sealed and after approximately fifteen minutes at ambient temperature storage the concentration of organic vapors in the sample bag headspace is measured using a photo ionization detector (PID).

Soil samples collected during the investigation were collected during rotary drilling using a split spoon sampler or from bucket auger samples during hand auger drilling. Soil sample were collected from different depth intervals and a portion of the soil samples from each sampling interval was placed in a plastic bag and field screen for organic vapors. The soil samples were field screened using a Thermo Environmental Equipment Model 580B, Organic Vapor Meter (OVM). The OVM was calibrated to a 100 parts per million (ppm) isobutylene gas standard and has a detection limit of .1 ppm. Table 3 presents a summary of soil headspace gas readings of soil samples. The soil headspace gas readings are also presented on the lithological sample logs presented in Appendix C.

4.4 Soil Sampling and Analysis

Soil samples were collected at various depth intervals from each borehole during hand auger and rotary drilling. A portion of each soil sample was field screened for organic vapors using the OVM (Section 4.3). Based on the OVM headspace measurements, approximately one to three soil samples were selected from each boring for laboratory testing. Generally, the soil sample exhibiting the highest OVM headspace reading from the upper, middle and lower portion of the soil column was selected for laboratory analysis.

The soil samples from borings drilled in the vicinity of the north sump, waste oil and water storage area, engine room sumps and trash pit were analyzed for volatile organic compounds (EPA method

SW-846-8240), semi-volatile organic compounds (EPA method SW-846-8270), and total metal (EPA methods SW -846-3051, 6010, and 7471). Soil samples collected during drilling of the monitor well (MW-1) were analyzed for BTEX by EPA method SW- 846-8020, and total petroleum hydrocarbons (TPH) by EPA method 418.1. Soil samples collected from boreholes BH-5, BH-6, BH-7, and BH-8, installed in the vicinity of the waste oil and water area were also analyzed for BTEX.

A soil sample from borehole BH-2 (50 to 52 feet) near the north sump was analyzed by Gas Chromatography (GC) capillary column GC-FID method to determine the source of hydrocarbons in the soil sample. Appendix B presents the analytical laboratory reports, chain of custody forms, and Quality Assurance/Quality Control (QA/QC) documentation. Table 1 presents a summary of the BTEX and TPH analysis of soil samples. Table 4 presents a summary of volatile organic and semi-volatile organic parameters detected in soil samples. Table 5 presents the results of metals analysis of soil samples.

4.5 Groundwater Sampling and Analysis

On June 14, 1996 and August 1, 1996, Highlander collected samples of groundwater from a Site water supply well (water well #1) and monitor well MW-1, respectively. Figure 2 presents a Site drawing showing the locations of the wells.

Prior to purging and sampling, the surface of the groundwater was inspected in each well for the presence of petroleum hydrocarbon product. A clean disposable PVC bailer was lowered into each well and a groundwater sample was retrieved from the top of the water column. No petroleum hydrocarbon product was observed on the groundwater in monitor well MW-1 and water well #1.

Following hydrocarbon product inspection, monitor well MW-1 was developed by bailing. A minimum of 3 casing volumes of groundwater was removed from the well. Groundwater removed from the monitor well was contained in 55-gallon steel drums and retained onsite until disposal was

arranged. Water well #1 contained a submergible pump and was allowed to pump for approximately 30 to 45 minutes prior to sampling.

Groundwater samples were collected from monitor well MW-1 using a clean dedicated disposable PVC bailer and nylon line. The groundwater samples from water well #1 were collected from a sample port installed at the well head. Groundwater was carefully transferred to appropriately labeled and preserved containers provided by the analytical laboratory (Trace Analysis, Inc., Lubbock, Texas). The groundwater samples from water well #1 were analyzed for volatile and polynuclear aromatic (PAH) organic compounds by EPA methods SW-846-8240 and 8200, respectively. A groundwater sample from Water Well #1 was also field filtered and analyzed for metals (arsenic, barium, cadmium, chromium, lead, mercury, selenium, silver) and major ions (potassium, magnesium, calcium, sodium, chloride, fluoride, sulfate, alkalinity, and nitrate) by EPA methods SW- 846-3051, 6010, and 7471. A groundwater sample was collected from water well #1 and field filtered for chromium analysis by EPA method SW-846-3051. Groundwater from monitor well MW-1 was analyzed for BTEX and TPH by EPA methods 8020 and 418.1, respectively. Appendix B presents the analytical laboratory reports, chain of custody control forms, and QA/QC documentation. Table 6 presents a summary of volatile and PAH organic compounds detected in the groundwater samples. Table 7 presents a summary of metals and ion analysis of groundwater samples.

5.0 ENVIRONMENTAL INVESTIGATION RESULTS

5.1 Soil analysis

5.1.1 Waste oil and Water Storage Area

Eight rotary drilled boreholes (BH-1 through BH-8) were drilled in the vicinity of the waste oil and water storage area. Boreholes BH-1 through BH-4 were drilled adjacent to the outside edge of the berm surrounding the AST. Boreholes BH-5 through BH-8 were drilled on the inside of the bermed area. Figure 2 presents a Site drawing showing the waste oil and water storage area. Figure 3 presents a detailed drawing of the waste oil and water storage area and the locations of boreholes BH-1 through BH-8.

The boreholes installed outside the diked area (BH-1 through BH-4) did not show visual impact to the subsurface soil. The OVM headspace readings of soil samples from boreholes BH-1, BH-2, and BH-3 only showed traces of hydrocarbon impact. The OVM headspace readings ranged from 1 ppm to 4 ppm throughout the depth of the boreholes. The OVM headspace readings of soil samples from borehole BH-4 showed the OVM readings increased from 28 ppm at a depth of 10 feet to a high of 154 ppm at a depth of 25 to 27 feet. Below a depth of 27 feet the OVM readings decreased below 39 ppm, and 8 ppm at 35 to 37 feet.. Soil samples from boreholes BH-1 through BH-4 were not submitted for laboratory testing since OVM headspace readings decreased below 100 ppm.

The boreholes installed inside the diked area (BH-5 through BH-8) showed visual impact from petroleum hydrocarbons from ground surface to a depth of approximately 3 to 5 feet below ground surface. The most heavily impacted soils were located in the southeast corner of the diked area. Visual observations in this area suggested that the hydrocarbon staining was likely the result of ponding of fluids. Headspace gas readings of soil samples from boreholes BH-5, BH-6, and BH-7 ranged from 353 ppm to 588 ppm from ground surface to approximately 15 to 20 feet below ground surface. The OVM headspace readings decreased to below 50 ppm or less below depths from 20 to 27 feet in boreholes BH-5 through BH-7. The OVM headspace gas results from boreholes BH-5 through BH-7 suggest that hydrocarbons were spilled at the surface and migrated vertically until contacting less permeable layers of caliche or clay. Borehole BH-8 showed elevated OVM readings from ground surface to approximately 7 feet below ground. The OVM readings ranged from 99 ppm (0.5 to 1.0 feet) to 435 ppm (5 to 7 feet). Below 7 feet, the OVM readings decreased to less than 50 ppm to 2 ppm at a depth of 10 feet below ground.

Soil samples were selected for BTEX analysis from boreholes BH-5 (5 to 7 feet and 35 to 37 feet), BH-6 (40 to 42 feet), BH-7 (35 to 37 feet), and BH-8 (25 to 27 feet). Table 1 presents a summary of the analysis. Referring to Table 1, BTEX was not reported above the test method detection limits in the soil samples, except sample BH-5, 5 to 7 feet. Benzene was reported below the test method detection limit in sample BH-5, 5 to 7 feet. Toluene, ethylbenzene, and xylene was reported at 663

ug/kg, 12,500 ug/kg, and 25,343 ug/kg, respectively.

Soil samples from boreholes BH-5 (5 to 7 feet), BH-6 (5 to 7 feet), and BH-8 (5 to 7 feet) were analyzed for volatile and semi-volatile organic compounds and total metals (arsenic, barium, cadmium, chromium, lead, mercury, selenium, silver). The volatile and semi-volatile analysis are summarized in Table 4. Table 5 presents a summary of the metals analysis.

Referring to Table 4, no semi-volatile organic constituents were detected in the soil samples above test method detection limits. Volatile organic compounds detected included benzene in the soil samples from borings BH-6 (1310 ug/kg) and BH-8 (384 ug/kg). Toluene was detected in the sample from borehole BH-5 (663 ug/kg), and ethylbenzene was detected in samples from boreholes BH- 5 (12,500 ug/kg), BH-6 (30,700 ug/kg), and BH-8 (1460 ug/kg). Xylene was reported in soil samples from boreholes BH-5 (12,180 ug/kg), BH-6 (14,700 ug/kg), and BH-8 (1148 ug/kg).

Based on the New Mexico OCD guidance document titled, "Guidelines for Remediation of Leaks, Spills and Releases (August 13, 1993)", the levels of benzene and total BTEX in soil samples from borings drilled in the vicinity of the waste oil and water storage area were below the recommended remediation action levels and would therefore, not require remediation. The field and laboratory analysis suggest that the hydrocarbon impacts to soil are the result of surface spills, rather than a subsurface release of hydrocarbons.

The results of total metals analysis of soil samples from boreholes BH-5, BH-6 and BH-8 only detected barium (170 mg/kg to 210 mg/kg) and chromium (11.0 mg/kg). The metals analysis were consistent with regional concentrations and do not indicate an environmental impact.

5.1.2 Sump (North of Engine Room)

One hand auger boring was installed next to the sump to evaluate the environmental conditions of subsurface soil. The auger hole (AH-1) was installed to a depth of approximately 8.4 feet below

ground surface. Soil samples were collected and showed no visual impact from petroleum hydrocarbons. The results of OVM headspace readings from soil samples revealed background levels (<1.0 ppm) throughout the depth of the auger hole. One soil sample (8.2 to 8.4 feet) was collected and analyzed for volatile and semi-volatile organic compounds. Table 4 presents a summary of the analysis, which reported no levels of volatile and semi-volatile organic constituents above test method detection limits.

The results of field and laboratory tests does not indicate that a release from the sump has occurred.

5.1.3 Sump (South of Engine Room)

One hand auger boring (AH-1) was advanced to a depth of approximately 6.8 feet below ground adjacent to the sump. A dense layer of caliche was encountered at the bottom of the boring. Soil samples were collected and reveled no visual impact to soil from petroleum hydrocarbons. The OVM headspace readings of soil samples recorded background levels (<1.0 ppm) throughout the borehole. One soil sample from approximately 6.4 to 6.8 feet below ground was analyzed for volatile and semi-volatile organic compounds. Table 4 presents a summary of the laboratory analysis, which reported no volatile and semi-volatile organic compounds above test method detection limits. The results of field and laboratory tests do not indicate that a release from the sump has occurred.

5.1.4 North Sumps (Northeast of Facility)

Two boreholes (BH-1 and BH-2) were drilled adjacent to the north sumps. The boreholes were installed approximately 10 feet east of the sumps. The location of the sumps and boreholes are shown in Figure 2.

The results of OVM headspace readings of soil samples from boreholes BH-1 reported levels from 28 ppm (15 to 17 feet) to 421 ppm (50 to 52 feet). The OVM headspace readings from borehole BH-2 reported levels from 29 ppm (40 to 42 feet) to 497 ppm (20 to 22 feet). The OVM readings

indicated that impacts to soil from petroleum hydrocarbons have resulted from surface spills and subsurface releases since levels are elevated from ground surface to depths of approximately 52 feet (top of groundwater).

Two soil samples from each borehole (10 to 12 feet and 50 to 52 feet) were selected for laboratory analysis. The soil samples were analyzed for volatile and semi-volatile organic compounds and total metals. Table 4 presents a summary of the volatile and semi-volatile organic analysis. Table 5 presents a summary of the total metals analysis.

Referring to Table 4, benzene was below the test method detection limit of 250 ug/kg in the 10 to 12 feet depth interval soil samples from borings BH-1 and BH-2. Benzene was reported at 4500 ug/kg and 5680 ug/kg in the 50 to 52 feet depth interval samples from borings BH-1 and BH-2, respectively. Toluene levels were reported at 33,400 ug/kg (BH-1, 50 to 52 feet), 2090 ug/kg (BH-2, 10 to 12 feet) and 27,400 ug/kg (BH-2, 50 to 52 feet). Ethylbenzene levels in the soil samples ranged from 1380 ug/kg (BH-1, 10 to 12) to 20,200 ug/kg (BH-1, 50 to 52 feet). Xylene ranged from 1130 ug/kg (BH-1, 10 to 12 feet) to 43,000 ug/kg (BH-1, 50 to 52 feet). No other volatile organic compounds were detected in the soil samples.

Semi-volatile organic compounds detected in the soil samples were naphthalene, 2-methyl naphthalene, and anthracene. Naphthalene was reported at 9.46 mg/kg in the 10 to 12 feet depth interval sample only. The levels of 2-methyl naphthalene in the soil samples ranged from 4.37 mg/kg (BH-2, 10 to 12 feet) to 37.54 mg/kg (BH-1, 10 to 12 feet). Anthracene (7.02 mg/kg) was only detected in the soil sample from 10 to 12 feet in borehole BH-1. The presence of these constituents suggests impact to soil has occurred from diesel range hydrocarbons. The soil sample from borehole BH-2, 50 to 52 feet was analyzed by capillary column GC-FID method and reported a hydrocarbon pattern consistent with diesel range hydrocarbons.

The benzene and total BTEX levels in the 10 to 12 feet depth interval samples from boreholes BH-1 and BH-2 are below the OCD recommended remediation action levels of 10 mg/kg and 50 mg/kg, respectively. The benzene levels in soil samples from the 50 to 52 feet depth intervals from locations BH-1 and BH-2 are also below the OCD recommended remediation action level. However, the total BTEX levels in the 50 to 52 feet depth interval samples from boreholes BH-1 (101,100 ug/kg) and BH-2 (76,960 ug/kg) exceed the OCD recommended remediation action level of 50 mg/kg. The results of analysis of soil samples from the 50 to 52 feet depth intervals may suggest that the elevated BTEX levels are the result of capillary movement of hydrocarbons in soil from vertical fluctuation of the groundwater surface. The field observations also indicated that petroleum hydrocarbon product may be present in soil at the groundwater interface. The results of field and laboratory analysis of soil samples from borings BH-1 and BH-2 indicates that the hydrocarbon impacts to soil have occurred from surface spills and subsurface releases from the sumps.

The results of metals analysis of soil samples from borings BH-1 and BH-2 reported barium (91.5 mg/kg to 121.0 mg/kg) and chromium (5.4 mg/kg) above test method detection limits.. The barium and chromium levels detected in the soil samples were consistent with regional levels and do not indicate an environmental impact.

5.1.5 Trash Pit

One hand auger boring (AH-1) was placed near the center of the trash pit to investigate the environmental condition of subsurface soil. Hand auger boring AH-1 was installed to a depth of approximately 4.7 feet below ground surface. Two soil samples from depths of 2.0 to 2.5 feet below ground and 4.5 to 4.7 feet below ground were collected and field screened for organic vapors with the OVM. The OVM headspace readings from the soil samples were consistent with background readings (<1 ppm). One soil sample from a depth of 4.5 to 4.7 feet below ground was selected for analysis of volatile and semi-volatile organic, and total metals. Table 4 presents a summary of the volatile and semi-volatile organic analysis. Table 5 presents a summary of the total metals analysis.

Referring to Table 4, no levels of volatile and semi-volatile organic compounds were detected in the soil sample above test method detection limits. The results of total metals analysis detected arsenic (10.4 mg/kg) and barium (163.0 mg/kg) above the test method detection limits. The results of volatile and semi-volatile organic and metals analysis of soil from the trash pit does indicate that an environmental impact has occurred. The metals concentrations were consistent with the regional and Site levels for arsenic and barium.

5.2 Groundwater Sample Results

Groundwater samples were collected from the Site water well (water well #1) and monitor well MW-1. The groundwater samples from monitor well MW-1 and water well #1 were analyzed for volatile and PAH organic compounds. Groundwater samples were also collected from water well #1 and field filtered for metals analysis. A groundwater sample from monitor well MW-1 was collected for BTEX and TPH. Table 6 presents a summary of the volatile and PAH organic compounds. Table 7 present a summary of the metals analysis.

Referring to Table 6, no PAH organic compounds were reported in the groundwater samples from water well #1. Dichlorodifluoromethane (113 ug/L) was the only volatile organic compound detected in the groundwater sample from water well #1. There is no drinking water quality standard for dichlorofluoromethane. Benzene, toluene, ethylbenzene, and xylene were detected in the groundwater sample from monitor well MW-1 at concentrations of 9ug/L, 69 ug/L, 169 ug/l and 329 ug/L, respectively. The State of New Mexico Water Quality Regulations for BTEX in groundwater of 10,000 mg/L TDS concentration or less are 0.01 mg/L (benzene), 0.75 mg/L (toluene), 0.75 mg/L (ethylbenzene) and 0.62 mg/L (xylene). The BTEX levels reported in the groundwater sample from monitor well MW-1 are well below the groundwater standards. The TPH level reported in the groundwater sample from well MW-1 was 582 ug/L. There is no drinking water quality standard for TPH in groundwater.

Referring to Table 7, chromium was reported in the groundwater samples from water well #1 at 0.66

Note: The additive effects of these Toxic pollutants cannot exceed a cancer incidence rate of 1×10^{-6}

See 1101.TT

Is however a 1101.TT toxic pollutant.

BTEX is a Toxic Pollutant per 1101.TT

mg/L and 0.82 mg/L. The chromium levels exceeded the water quality standard for chromium in groundwater of 0.05 mg/L for groundwater with a TDS concentration of 10,000 mg/L, or less. The levels of fluoride (2.6 mg/L), nitrate (10.4 mg/L), and chloride (782 mg/L) also exceeded the water quality standards of 1.6 mg/L (fluoride), 10.0 mg/L (nitrate), and 250 mg/L (chloride).

What is the
Δ Depth between
water and ~~1,000 mg/kg~~
level.
≥ Δ Depth ≤ 50'
then 100 mg/kg
applies.

Can it be
shown that
the caliche
is not fractured?
Caliche is not
a good barrier!
(Fracturing)

6.0 CONCLUSIONS

1. The horizontal extent of TPH was defined in soil at auger hole locations AH-4, AH-6 and AH-7. The TPH impact appears to extend approximately 7 to 10 feet from the compressor building. Vertical extent of TPH impact was not defined at auger hole locations AH-6 and AH-8 during this investigation. Target cleanup level of 1,000 mg/kg for TPH was used for delineation purposes.
2. Impacts to soil at auger hole locations AH-6-2 and AH-7-2 are likely from the leaks and spills of oil from the compressor engines. A dense layer of caliche encountered during the installation of AH-7-2 would likely impede vertical migration of hydrocarbons.
3. Based on the New Mexico OCD August 13, 1993 guidance document, the BTEX and TPH levels in soil samples from monitor well MW-1 would not normally require remediation.
4. The primary source of fresh groundwater in the vicinity of the study area is the Ogallala Formation. Groundwater occurs under unconfined conditions, with a hydraulic gradient direction towards the south-southeast.
5. The field and laboratory analysis suggest that hydrocarbon impacts to soil are the result of surface spills, rather than a subsurface release of hydrocarbons at the Waste Oil and Water Storage Area. The metals analysis on the samples from this area does not suggest that a subsurface release from the AST has occurred.
6. Investigation performed at the Sump (North of Engine Room) revealed that no semi-volatile organic constituents were present in soil samples above test method detection levels. The results of field and laboratory tests does not indicate that a release from this sump has occurred.
7. Investigation performed at the Sump (South of Engine Room) revealed that no semi-volatile organic constituents were present in soil samples above test method detection levels. The results of field and laboratory tests does not indicate that a release from this sump has occurred.
8. The North Sump (Northeast of Facility) vicinity appears to be impacted from surface spills or leaks. Analysis of a soil sample from 50-52 feet for GC-FID and semi-volatiles indicated

diesel range hydrocarbons.

9. At the North Sump area, the benzene and BTEX levels at 10-12 feet depth intervals from boreholes BH-1 and BH-2 are below OCD recommended action levels. However, at 50-52 feet depth intervals for BH-1 and BH-2 exceed the OCD recommended action level of 50 mg/kg for BTEX.. Elevated BTEX levels at 50-52 feet BGS may be due to the capillary movement of hydrocarbons in soil from vertical fluctuation of the groundwater surface. The results of field and laboratory analysis of soil samples from borings BH-1 and BH-2 indicated that the hydrocarbon impacts to soil have occurred from surface spills and subsurface releases from the sumps.

10. Trash pit subsurface soil samples results of volatile and semi-volatile organic and metal analysis does not indicate that an environmental impact has occurred.

11. Dichlorodifluoromethane (113 µg/L) was the only volatile organic compound detected in the groundwater sample from water well #1. There is no drinking water quality standard available for dichlorodifluoromethane.

12. The BTEX levels reported in the groundwater sample from monitor well MW-1 are well below the groundwater standards. The TPH level reported in the groundwater sample from well MW-1 was 582 ug/L. There is no drinking water quality standard TPH in groundwater.

13. The chromium levels exceeded the water quality standard for chromium in groundwater of 0.005 mg/L for groundwater with TDS of 10,000 mg/L or less. The levels of fluoride (2.6 mg/L), nitrate (10.4 mg/L), and chloride (782 mg/L) also exceeded the water quality standards of 1.6 mg/L (fluoride), 10.0 mg/L (nitrate), and 250 mg/L (chloride).

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Table 1: Summary of BTEX and TRPH Analysis of Soil Samples
Texaco Exploration and Production Inc. Eunice #2 (North) Gas Plant
Lea County, New Mexico

Investigation Area	Soil Boring No.	Sample Depth (Ft.)	Sample Date	Benzene (ug/kg)	Toluene (ug/kg)	Ethylbenzene (ug/kg)	Xylene (ug/kg)	Total BTEX (ug/kg)	TRPHC (mg/kg)	TRPHC Gasoline Range (ug/kg)
Compressor Building	AH-6-2	12.5-13.0	3/28/96	--	--	--	--	--	1420	<10,000
	AH-7-2	13.5-14.0	3/28/96	--	--	--	--	--	58,300	35,100
	AH-8-2	8.0-8.5	3/28/96	--	--	--	--	--	18	--
	AH-11-2	5.0-5.5	3/28/96	--	--	--	--	--	<10	--
	MW-1	25-27	7/22/96	<50	<50	<50	<50	<50	17.6	--
	MW-1	55-57	7/22/96	<50	243	1,130	3,443	4,816	90.2	--
Waste Oil and	BH-5	5-7	7/24/96	<500	663	12,500	12,180	25,343	--	--
Water Storage Area	BH-5	35-37	7/24/96	<50	<50	<50	<50	<50	--	--
	BH-6	40-42	7/24/96	<50	<50	<50	<50	<50	--	--
	BH-7	35-37	7/24/96	<50	<50	<50	<50	<50	--	--
	BH-8	25-27	7/24/96	<50	<50	<50	<50	<50	--	--

Notes: All analysis performed by Trace Analysis, Inc., Lubbock, Texas
1. Ft: Denotes sample depth interval in feet below ground surface
2. ug/kg: Denotes analytic concentration in micrograms per kilogram
3. --: No data available

Table 2: Summary of Soil Boring and Monitor Well Drilling and Completion Details
Texaco Exploration and Production Inc., Eunice #2 (North) Gas Plant
Lea County, New Mexico

Drilling Area	Soil Boring/ Monitor Well No.	Date Drilled	Drilled Depth Feet, BGL	Ground Elev. Feet, MSL	Top of Csg. Elev. Feet, @ MSL	Well Diameter Inches	Well Screen Interval Ft., BGL	Depth-to Ground Water Feet, BGL
Compressor	MW-1	7/22/96	68'	3428.78	3428.59	4"	48'-68'	52.65
Plant Water Well	WW-1	--	100'	3428.78	--	6"	--	53.43
North Sump	BH-1	7/29/96	52'	3424.85	--	--	--	--
	BH-2	7/29/96	52'	3425.03	--	--	--	--
N. Sump E.R.	AH-1	8/09/96	6.8	3428.09	--	--	--	--
S. Sump E.R.	AH-1	8/09/96	8.4	3427.72				
Trash Pit	AH-1	8/09/96	4.7	3426.92	--	--	--	--

Table 3: SUMMARY OF OVM HEADSPACE GAS READINGS ON SOIL SAMPLES, TEXACO EXPLORATION & PRODUCTION,INC., EUNICE #2 (NORTH) GAS PLANT, LEA COUNTY, EUNICE, NEW MEXICO

Investigation Area	Soil Boring No.	Soil Sample No.	Sample Depth (ft)	OVM Reading (ppm)	Comments
Waste Oil and Water Storage Area					
	BH-1	1	5-7	1	
		2	10-12	2	
		3	15-17	2	
		4	20-22	3	
		5	25-27	2	
		6	30-32	2	
	BH-2	1	5-7	1	
		2	10-12	2	
		3	15-17	2	
		4	20-22	4	
		5	25-27	2	
	BH-3	1	5-7	1	
		2	10-12	2	
		3	15-17	2	
		4	20-22	1	
		5	25-27	1	
	BH-4	1	5-7	5	
		2	10-12	28	
		3	15-17	58	
		4	20-22	69	
		5	25-27	154	
		6	30-32	39	
		7	35-37	8	
	BH-5	1	5-7	588	
		2	10-12	500	
		3	15-17	353	
		4	19-20	143	
		5	25-27	7	
		6	30-32	12	
		7	35-37	3	
	BH-6	1	5-7	478	
		2	10-12	496	
		3	15-17	418	
		4	20-22	487	
		5	25-27	35	
		6	30-32	33	
		7	35-37	13	
		8	40-42	6	

Note: OVM soil headspace gas readings are in parts per million (ppm) of total ionizable hydrocarbon.

Table 3: Continue

SUMMARY OF OVM HEADSPACE GAS READINGS ON SOIL SAMPLES, TEXACO EXPLORATION & PRODUCTION,INC., EUNICE #2 (NORTH) GAS PLANT, LEA COUNTY, EUNICE, NEW MEXICO

Investigation Area	Soil Boring No.	Soil Sample No.	Sample Depth (Ft)	OVM Reading, (ppm)	Comments
Waste Oil and Water Storage Area					
	BH-7	1	0.5-1	489	
		2	5-7	415	
		3	10-12	450	
		4	15-17	153	
		5	20-22	26	
		6	25-27	19	
		7	30-32	7	
		8	35-37	6	
	BH-8	1	0.5-1	99	
		2	5-7	435	
		3	10-12	5	
		4	15-17	18	
		5	20-22	43	
		6	25-27	2	
North Sump					
	BH-1	1	5-7	206	
		2	10-12	233	
		3	15-17	28	
		4	20-22	239	
		5	25-27	207	
		6	30-32	122	
		7	35-37	159	
		8	40-42	69	
		9	45-47	255	
		10	50-52	421	
	BH-2	1	5-7	415	
		2	10-12	448	
		3	15-17	177	
		4	20-22	497	
		5	25-27	384	
		6	30-32	440	
		7	35-37	127	
		8	40-42	29	
		9	45-47	327	
		10	50-52	-	

Note: OVM soil headspace gas readings are in parts per million (ppm) of total ionizable hydrocarbon.

Table 3: Continue

SUMMARY OF OVM HEADSPACE GAS READINGS ON SOIL SAMPLES, TEXACO EXPLORATION & PRODUCTION,INC., EUNICE #2 (NORTH) GAS PLANT, LEA COUNTY, EUNICE, NEW MEXICO

Investigation Area	Soil Boring No.	Soil Sample No.	Sample Depth (Ft)	OVM Reading, ppm	Comments
Monitor Well (MW-1)					
	MW-1 (BH-1)	1	0-5	6	
		2	10-12	2	
		3	15-17	3	
		4	20-22	2	
		5	25-27	4	
		6	30-32	7	
		7	35-37	1	
		8	40-42	2	
		9	45-47	2	
		10	50-52	2	
		11	55-57	414	
Sump South of Engine Room					
	AH-1	1	2-2.5	0	
		2	4-4.5	0	
		3	6-6.3	0	
		4	6.3-6.8	1	
Sump North of Engine Room	AH-1	1	2-2.5	0	
		2	4-4.5	0	
		3	6-6.5	0	
		4	8.2-8.4	0	
Trash Pit					
	AH-1	1	2-2.5	0	
		2	4.5-4.7	0	

Note: OVM soil headspace gas readings are in parts per million (ppm) of total ionizable hydrocarbon.

Table 4: Summary of Volatile and Semi-Volatile Organic Parameters Detected in Soil Samples
Texaco Exploration and Production Inc. Eunice #2 (North) Gas Plant
Lea County, New Mexico

				Volatile				Semi-Volatile		
Investigation Area	Soil Boring No.	Sample Depth (Ft.)	Sample Date	Benzene (ug/kg)	Toluene (ug/kg)	Ethylbenzene (ug/kg)	Xylene (ug/kg)	Naphthalene (mg/kg)	2-methyl naphthalene (mg/kg)	Anthracene (mg/kg)
North Sump	BH-1	10-12	7/29/96	<250	<250	1380	1130	9.46	37.54	7.02
	BH-1	50-52	7/29/96	4500	33,400	20,200	43,000	<5.0	10.8	<5.0
	BH-2	10-12	7/29/96	<250	2090	6200	11,330	<2.5	4.37	<2.5
	BH-2	50-52	7/29/96	5680	27,400	14,400	29,480	<2.5	9.26	<2.5
North Sump of E.R.	AH-1	8.2-8.4	8/09/96	<25	<25	<25	<25	<0.25	<0.25	<0.25
South Sump of E.R.	AH-1	6.4-6.8	8/09/96	<25	<25	<25	<25	<0.25	<0.25	<0.25
Waste Oil and	BH-5	5-7	7/24/96	<500	663	12,500	12,180	<2.5	<2.5	<2.5
Water Storage Area	BH-6	5-7	7/24/96	1310	<100	30,700	14,700	<2.5	<2.5	<2.5
	BH-8	5-7	7/25/96	384	<100	1460	1148	<2.5	<2.5	<2.5
Trash Pit	AH-1	4.5-4.7	8/09/96	<25	<25	<25	<25	<0.25	<0.25	<0.25

Notes: All analysis performed by Trace Analysis, Inc., Lubbock, Texas
1. Feet: Denotes sample depth interval in feet below ground surface
2. ug/kg: Denotes analytic concentration in micrograms per kilogram
3. mg/kg: Denotes analytic concentration in milligrams per kilogram
4. <: Denotes analytic concentration below test method detection limit
5. --: No data available

Table 5: Summary of Metals Analysis of Soil Samples
Texaco Exploration and Production Inc. Eunice #2 (North) Gas Plant
Lea County, New Mexico

Investigation Area	Soil Boring No.	Sample Depth (Ft.)	Sample Date	Arsenic (mg/kg)	Barium (mg/kg)	Cadmium (mg/kg)	Chromium (mg/kg)	Lead (mg/kg)	Mercury (mg/kg)	Selenium (mg/kg)	Silver (mg/kg)
North Sump	BH-1	10-12	7/29/96	<10.0	91.5	<2.0	5.4	<10.0	<0.25	<10.0	<0.50
	BH-1	50-52	7/29/96	<10.0	<20.0	<2.0	<5.0	<10.0	<0.25	<10.0	<0.50
	BH-2	10-12	7/29/96	<10.0	121.0	<2.0	<5.0	<10.0	<0.25	<10.0	<0.50
	BH-2	50-52	7/29/96	<20.0	<20.0	<2.0	<5.0	<10.0	<0.25	<10.0	<0.50
North Sump of E.R.	AH-1	8.2-8.4	8/09/96	17.4	93.1	<2.0	12.2	<10.0	<0.25	<10.0	<0.50
South Sump of E.R.	AH-1	6.4-6.8	8/09/96	<10.0	213.0	<2.0	20.3	<10.0	<0.25	<10.0	<0.50
Waste Oil and	BH-5	5-7	7/24/96	<20.0	170.0	<2.0	<5.0	<10.0	<0.25	<10.0	<0.50
Water Storage Area	BH-6	5-7	7/24/96	<10.0	170.0	<2.0	<5.0	<10.0	<0.25	<10.0	<0.50
	BH-8	5-7	7/25/96	<20.0	210.0	<2.0	11.0	<10.0	<0.25	<10.0	<0.50
Trash Pit	AH-1	4.5-4.7	8/09/96	10.4	163.0	<2.0	<5.0	<10.0	<0.25	<10.0	<0.5

Notes: All analysis performed by Trace Analysis, Inc., Lubbock, Texas

1. Feet: Denotes sample depth interval in feet below ground surface
2. mg/kg: Denotes analytic concentration in milligrams per kilogram
3. <: Denotes analytic concentration below test method detection limit

Table 6: Summary of Volatile and Polynuclear Aromatic Hydrocarbon and TRPHC Analysis of Ground Water Samples
Texaco Exploration and Production Inc. Eunice #2 (North) Gas Plant
Lea County, New Mexico

Well Number	Sample Date	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Xylene (ug/L)	Total BTEX (ug/L)	TRPHC (ug/L)	PAH (mg/L)	Dichlorodi-Fluoromethane (ug/L)
Water Well #1	6/14/96	--	--	--	--	--	--	<0.001	113
MW-1	8/01/96	9	69	82	169	329	582	--	--

Notes: All analysis performed by Trace Analysis, Inc., Lubbock, Texas

1. ug/L: Denotes analytic concentration in micrograms per liter
2. <: Denotes analytic concentration below the analytical test method detection limit
3. --: No data available

Table 7: Summary of Metals and General Chemistry Analysis of Ground Water Samples
Texaco Exploration and Production Inc. Eunice #2 (North) Gas Plant
Lea County, New Mexico

Well Number	Sample Date	Arsenic (mg/L)	Cadmium (mg/L)	Chromium (mg/L)	Lead (mg/L)	Mercury (mg/L)	Selenium (mg/L)	Silver (mg/L)	Barium (mg/L)
Water Well #1	6/14/96	<0.1	<0.02	0.66	<0.1	<0.001	<0.1	<0.01	<0.2
Water Well #1	8/01/96	--	--	0.82	--	--	--	--	--

Well Number	Sample Date	Potassium (mg/L)	Magnesium (mg/L)	Calcium (mg/L)	Sodium (mg/L)	Chloride (mg/L)	Fluoride (mg/L)	Sulfate (mg/L)	Alkalinity (mg/L)	Nitrate (mg/L)
Water Well #1	6/14/96	12.4	142	268	393	782	2.6	913	340	10.4
MW-1	8/01/96	--	--	--	--	--	--	--	--	--

Notes: All analysis performed by Trace Analysis, Inc., Lubbock, Texas

1. mg/L.: Denotes analytic concentration in milligrams per liter
2. <: Denotes analytic concentration below the test method detection limit
3. --: No data available

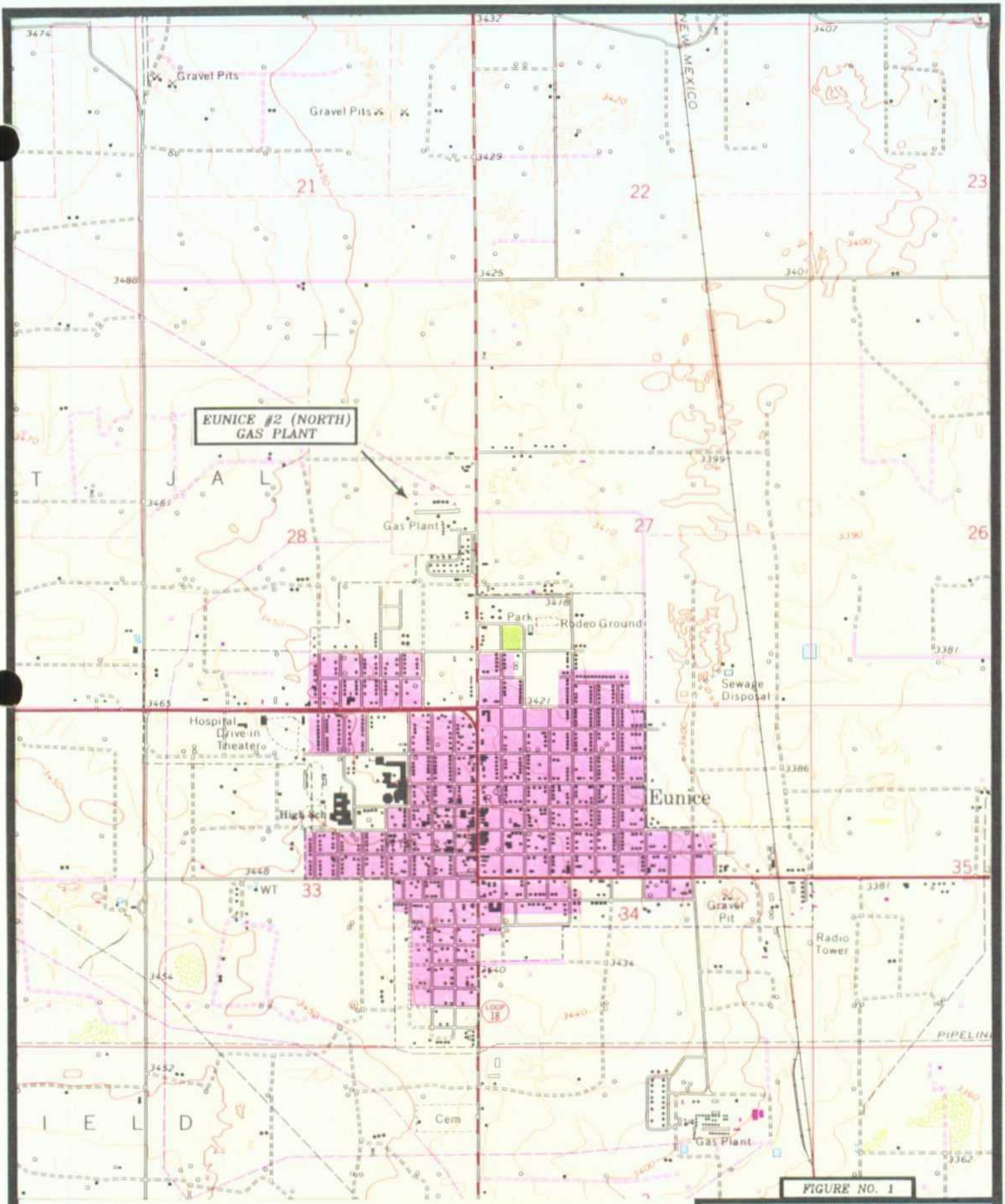


FIGURE NO. 1

LEA COUNTY, NEW MEXCIO

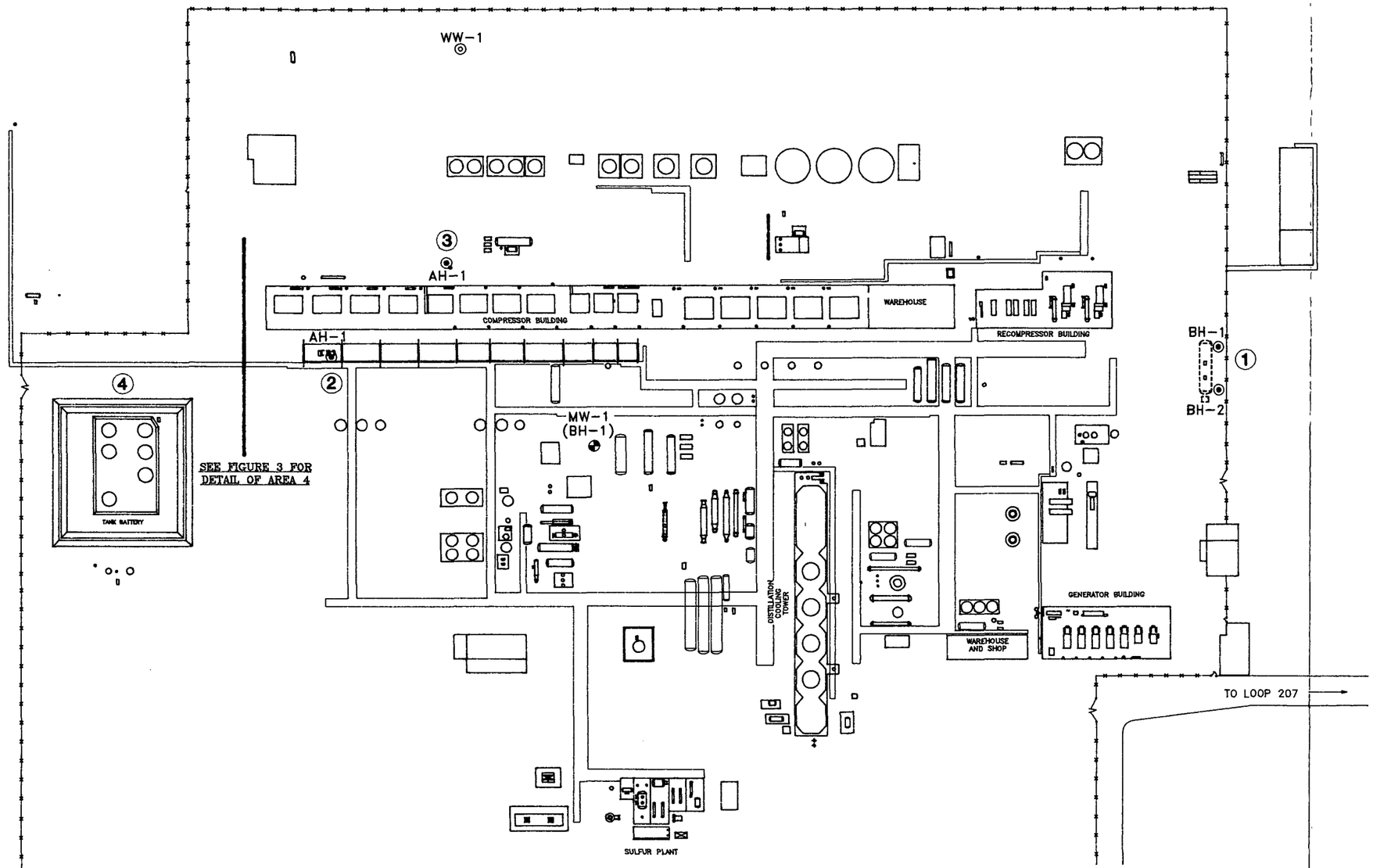
TEXACO
EXPLORATION & PRODUCTION

TOPOGRAPHIC MAP

HIGHLANDER ENVIRONMENTAL
MIDLAND, TEXAS

TAKEN FROM U.S.G.S.
RATTLESNAKE CANYON, NM
7.5' QUADRANGLE

SCALE: 1"=2,000'



SCALE
(IN FEET)

25 0 50 100

LEGEND

BH-1 ◉ BOREHOLE LOCATION

MW-1 ◔ MONITOR WELL LOCATION

WW-1 ◎ WATER WELL LOCATION

ENVIRONMENTAL INVESTIGATION AREAS

1. NORTH SUMP
2. SUMP SOUTH OF ENGINE ROOM
3. SUMP NORTH OF ENGINE ROOM
4. WASTE OIL & WATER STORAGE AREA
5. TRASH PIT

FIGURE NO. 2

LEA COUNTY, NEW MEXICO

TEXACO
EXPLORATION & PRODUCTION, INC.

EUNICE #2 (NORTH) GAS PLANT)
SITE MAP

HIGHLANDER ENVIRONMENTAL
MIDLAND, TEXAS

DATE: 9/18/96

DWN. BY: R.C.P.

FILE: C:\787\NTH-SITE

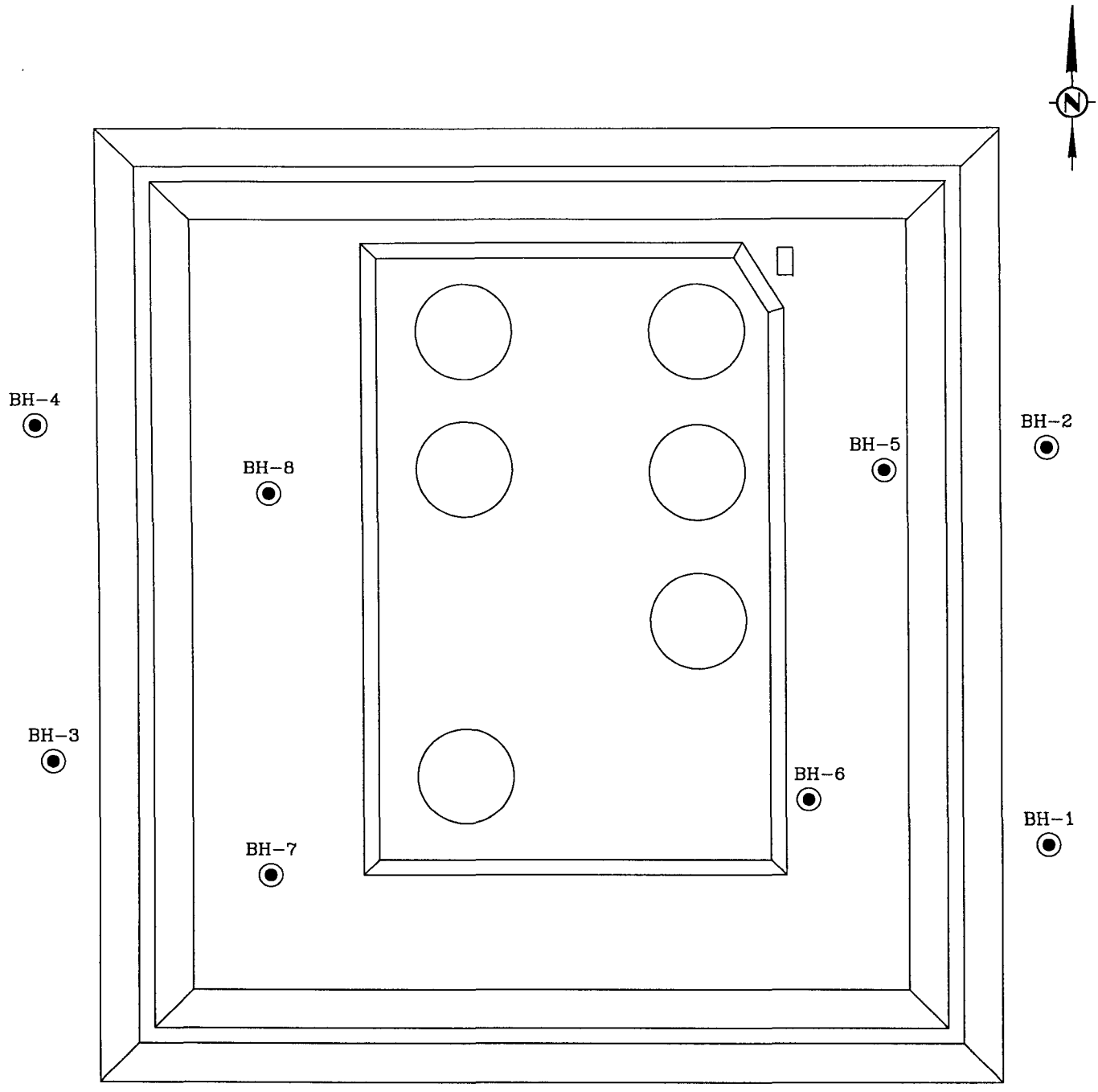


FIGURE NO. 3

LEA COUNTY, NEW MEXICO

TEXACO
EXPLORATION & PRODUCTION, INC.

WASTE OIL AND WATER STORAGE AREA

HIGHLANDER ENVIRONMENTAL
MIDLAND, TEXAS

DATE: 9/18/96
DWN. BY: R.C.P.
FILE: C:\787\WAST-OIL

LEGEND
BH-1 ◉ BOREHOLE LOCATION

SCALE
(IN FEET)
10 0 10 20

Highlander Environmental Corp.

Midland, Texas

SUBSURFACE INVESTIGATION OF COMPRESSOR BUILDING AT TEXACO NORTH EUNICE GAS PROCESSING PLANT EDDY COUNTY, NEW MEXICO

Performed for
TEXACO EXPLORATION AND PRODUCTION INC.

I. INTRODUCTION

Highlander Environmental was retained by Texaco Exploration and Production Inc. to perform a Phase II Environmental Assessment at the Texaco North Eunice Gas Plant is located north of Eunice, New Mexico. The purpose of the investigation was to assess the extent of the hydrocarbon impacted soil next to a compressor building at the plant. The vertical and horizontal extents of soil impact were assessed by installing shallow hand borings, referred to in this report as "auger holes".

II. SOIL ASSESSMENT

A. Auger Holes

From October 17 to 20, 1995, Highlander Environmental personnel installed shallow auger holes on the north and south sides of the compressor building. The locations are shown on Figure 1. Auger holes were installed due to the overhead, surface, and underground piping located around the compressor building which limited access to any type of drilling rig. The shallow auger holes that were installed next to the compressor building were located in a hand dug trench approximately 1.0 to 2.0 feet deep under the surface piping. Based on field observations, Highlander installed a total of 13 holes next to the compressor building to define the vertical extent of the hydrocarbon impact and 12 out from the compressor building to define horizontal extent. The auger holes were installed approximately every 50 feet along the south and north sides of the compressor building. A total of 8 were placed along the north side for

vertical extent and 6 for horizonal extent. Five auger holes were installed on the south side to establish vertical extent and 6 to establish horizonal extent.

These auger holes were placed using a three-inch stainless steel bucket-type hand auger. Soil samples were collected at 1.0 or 2.0 foot intervals. The soil samples collected were immediately sealed in a clean, glass sample jar with zero head space and placed in a cooler and chilled. All samples collected for potential laboratory analysis were preserved according to EPA standards, and analyzed within the appropriate holding times. A portion of the sample was field screened with an Organic Vapor Meter (OVM) for organic vapors to provide supporting data and to determine which samples would be selected for analysis.

Between sampling intervals, the auger bucket was decontaminated using water and laboratory grade detergent. The decon wash water and soil cuttings were placed into separate drums onsite until proper disposal is arranged. Additional soil cuttings were placed on plastic and covered. Soil descriptions were noted in the field sampling logs. The auger holes were cemented to surface after the completion of the activities.

The samples were shipped to Trace Analysis Inc. in Lubbock, Texas for analysis of Total Petroleum Hydrocarbons (TPH) by method EPA 418.1, total metals by method SW 846-6010, polychlorinated biphenyls (PCB) by method SW 846-8080 and Benzene, Toluene Ethyl-benzene and Xylene (BTEX) by method EPA SW 846-8020. The laboratory reports, methodology, and chain of custody for the analyses are found in Appendix A. Depending on sample locations, some or all of the above analyses were run on selected samples.

The soil samples selected for total metals and PCB analysis were collected from what appeared to be the most impacted areas. The soil samples collected from these areas were not selected for TPH evaluation due to the evident hydrocarbon staining in the soil. Soil samples were selected for BTEX analysis based upon OVM readings.

III. SOIL SAMPLE RESULTS

A. NORTH SIDE COMPRESSOR BUILDING

A total of eight auger holes (AH-1, AH-2, AH-3, AH-4, AH-5, AH-6, AH-7, and AH-8) were installed on the north side of the compressor building to define the vertical extent of hydrocarbon impact. Visual inspection of the soil indicated the black impacted subsurface soil

thickness varied at each auger hole location. Auger hole AH-8 did not show any visual evident of impact and AH-1, AH-2, and AH-3 showed trace amounts of impact on the surface. Auger holes AH-4, AH-5, AH-7 appeared to have visual impact extending from the surface to 1.5 to 2.0 feet below surface. Auger hole AH-6 showed the black stained soil extending from surface to approximately 5.5 feet below surface.

The soil samples selected for TPH analysis to define the vertical extent show impact extending from 1.0 up to 15.0 feet below surface. Auger holes AH-1, AH-2, and AH-3 indicate shallow impact below 100 mg/kg at 1.0 foot below surface and AH-5 shows non-detectable levels below 2.0 feet. Auger holes AH-4 and AH-7 indicate deeper impact to the subsurface soil in these areas. Auger hole AH-4 had a TPH level of 142,000 mg/kg at 4.0 feet which decreased to 226 mg/kg at a depth of 10.0 feet below surface. Auger hole AH-7 showed a TPH level of 37,000 mg/kg at 5.0 feet which decreased to 420 mg/kg at a depth of 15.0 feet below surface. Auger hole AH-6 showed a slight decrease in TPH from 1,450 mg/kg at 6.3 feet to 1,210 mg/kg at 8.0 feet below surface. Auger hole AH-8 indicated an increasing TPH level from 859 mg/kg at 1.0 foot to 2,770 mg/kg at 3.0 feet below surface.

Soil samples were selected for BTEX analysis from the samples with elevated OVM readings. The samples did not show any detectable levels of BTEX, except for a trace of xylene at 0.555 mg/kg and 0.211 mg/kg found in AH-5 and AH-7. The PCB analysis for AH-6 and AH-7 did not show any detectable levels. The total metal analysis showed detectable levels of barium, chromium, lead, and mercury in auger holes AH-4, AH-5, AH-6, and AH-7. The barium levels ranged from 41.3 mg/kg to 1,900 mg/kg and the chromium ranged from 24.8 mg/kg to 1,580 mg/kg. Total lead of 64.4 mg/kg was detected in AH-5, and 0.34 mg/kg mercury was detected in AH-6.

Auger holes AH-4B, AH-6B, and AH-7B were installed to define the horizonal extent of the impact. Auger holes AH-4B and AH-6B were placed 8.0 feet away and AH-7B was placed 10.0 feet from the compressor building. The analysis for AH-6B and AH-7B showed non-detectable levels of TPH in the subsurface soil at a depth of 3.0 feet. The analysis in AH-4B at 3.7 feet below surface indicated a TPH of 173 mg/kg. The impact appears to taper north from the compressor building. The horizonal extent of the impact appears to extend approximately 7.0 to 9.0 feet from the building in the area of AH-4, AH-6, and AH-7.

B. SOUTH SIDE COMPRESSOR BUILDING

A total of five auger holes (AH-9, AH-10, AH-11, AH-12, and AH-13) were installed to define the vertical extent on the south side of the compressor building. In the area of AH-9, AH-10, and AH-11, the impacted black soil measured approximately 0.5 to 1.0 thick from the surface. Auger holes AH-12 and AH-13 showed a trace amounts of staining on the surface.

Some of the soil samples collected for delineation showed a decreasing TPH levels with depth. The deeper soil samples collected below the black impacted soil did not show any staining in the subsurface soil. Soil samples from AH-9, AH-10, AH-12, and AH-13 indicated a shallow impact below 1,000 mg/kg of TPH at 1.5 to 2.5 feet below surface. The area of AH-11 showed an increasing TPH level with depth ranging from 296 mg/kg at 2.0 feet to 2,390 mg/kg at 3.5 feet below surface.

One sample at 4.0-4.5 feet below surface from AH-10 was selected for BTEX analysis due to the OVM reading of 16 ppm. The analysis did not showed any detectable levels of BTEX in the soil. Two soil samples for total metals and PCB's analysis were collected at a depth of 0-0.5 feet from what appeared to be most stained areas found in AH-10 and AH-11. The total metal analysis detected levels of barium and chromium in the soil. Samples from AH-10 and AH-11 showed barium level of 46.4 mg/kg and 38.7 mg/kg, respectively. Auger hole AH-10 had a chromium level of 32.6 mg/kg, and AH-11 showed a chromium level of 20.7 mg/kg. The PCB analysis did not show any detectable levels in the soil.

Auger holes AH-9A, AH-10B, and AH-11A were installed to define the horizonal extent of the hydrocarbon impact. The impact found near the compressor building appear to taper out from the building. The impact around AH-10 and AH-11 appears to extend approximately 12 to 15 feet south from the compressor building. The impact surrounding AH-9 appears to extend approximately 5 feet from the compressor building.

IV. CONCLUSIONS

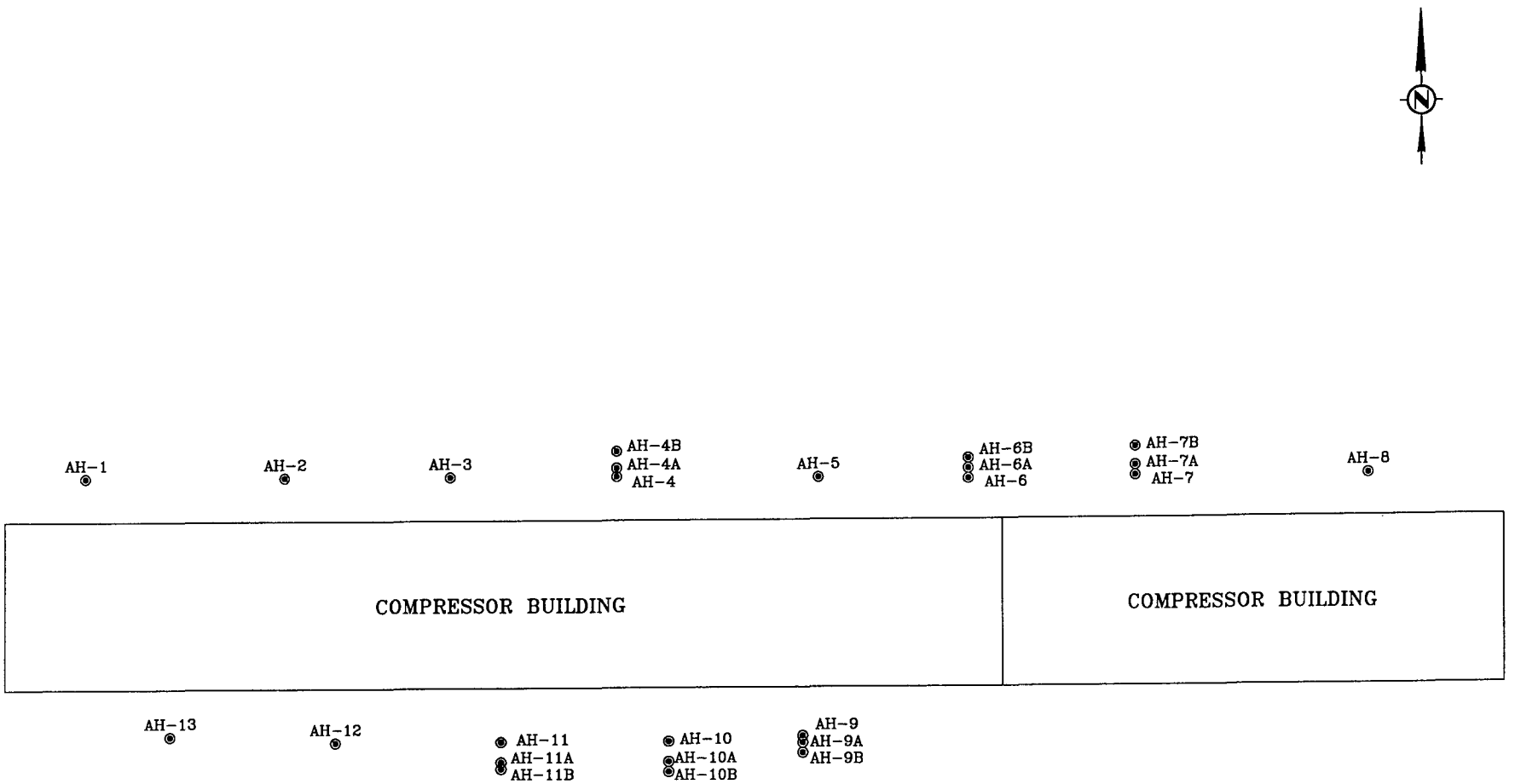
A. NORTH SIDE COMPRESSOR

1. Auger holes AH-1, AH-2, and AH-3 installed north of the compressor building showed traces of shallow hydrocarbon impact at 1.0 feet below surface. Auger hole AH-5 showed non-detectable levels of TPH at 2.0 feet below surface.

2. The areas of AH-4 and AH-7 show the impact decreasing below 1,000 mg/kg TPH at 10.0 feet and 15.0 feet, respectively.
3. Auger holes AH-6 and AH-8 indicated TPH levels above 1,000 mg/kg at 8.0 feet and 3.0 feet below surface. These areas have not been vertically delineated.
4. The horizonal extent of the impact appears to extend approximately 7.0 to 10.0 feet from the building in the area of AH-4, AH-6, and AH-7.
5. No PCB's were detected in any sample.
6. No BTEX were detected in any of the samples, except for traces of xylene at 0.211 mg/kg and 0.555 mg/kg found in AH-5 and AH-7, respectively.
7. Visual inspection of the soil indicated the black impacted subsurface soil thickness varied at each auger hole location. Auger hole AH-8 did not show any visual evident of impact and AH-1, AH-2, and AH-3 showed traces amounts of impact on the surface. Auger holes AH-4, AH-5, AH-7 appeared to have visual impact extending from the surface to 1.5 to 2.0 feet below surface. Auger hole AH-6 exhibited black stained soil extending from surface to approximately 5.5 feet below surface.
8. The sample from auger hole AH-5, (0-0.5') had elevated levels of barium, chromium, lead, and a trace of cadmium.
9. The sample collected from AH-6 at 3.2-3.9 feet below surface had a trace of mercury at 0.34 mg/kg.
10. The sample collected from AH-7 at 1.0-1.5 feet below surface had an elevated chromium level of 64.9 mg/kg.

B. SOUTH SIDE COMPRESSOR

1. The areas around auger holes AH-9, AH-10, AH-12, and AH-13 installed on the south side of the compressor building appear to have a shallow impact at 1.5 to 2.5 below surface. The TPH levels in these areas were found to be below 1,000 mg/kg.
2. The area around auger hole AH-11 had a TPH level of 2,390 mg/kg at 3.5 feet below surface, and the hydrocarbon impact is not vertically defined in this area.
3. The horizonal extent of the impact appears to extend approximately 12 to 15 feet south from the compressor building in the areas of AH-10 and AH-11. The area surrounding AH-9 appeared to have TPH impact extending approximately 5 feet from the compressor building.
4. There were no detectable levels of BTEX or PCB in the samples from the south side of the compressor building area.
5. In the areas of AH-9, AH-10, and AH-11, the impacted black soil measured approximately 0.5 to 1.0 feet thick from the surface. Auger holes AH-12 and AH-13 showed trace amounts of staining on the surface.
6. The total metal analysis did not detect levels metals which would appear to be of regulatory concern.



NOT TO SCALE

FIGURE NO. 1

LEA COUNTY, NEW MEXICO

TEXACO
EXPLORATION AND PRODUCTION

EUNICE #2 (NORTH) GAS PLANT
PLANT COMPRESSOR BUILDING
SITE PLAN

DATE: 11/1/95
DWN. BY: R.C.P.
FILE: 707-SAMP

HIGHLANDER ENVIRONMENTAL
MIDLAND, TEXAS

Soil Sample Analysis
for TPH, BTEX, and PCB's
(concentration in mg/kg)

Sample I.D.	Depth	OVM	TPH	B	T	E	X	PCB
AH-1	*1.0-1.4	0	76	-	-	-	-	-
	2.0-2.4	0	-	-	-	-	-	-
AH-2	*1.0-1.4	0	60	-	-	-	-	-
	2.0-2.4	0	-	-	-	-	-	-
	4.0-4.5	0	-	-	-	-	-	-
AH-3	0-0.5	6	-	-	-	-	-	-
	*1.0-1.4	0	95	-	-	-	-	-
	2.0-2.5	0	-	-	-	-	-	-
	2.5-3.0	0	-	-	-	-	-	-
	4.0-4.5	0	-	-	-	-	-	-
AH-4	0-0.5	15	-	-	-	-	-	-
	3.5-4.0	91	-	-	-	-	-	-
	*4.0-4.5	167	142,000	<0.05	<0.05	<0.05	<0.05	-
	6.0-6.5	59	7,210	-	-	-	-	-
	8.0-8.5	16	1,300	-	-	-	-	-
	9.0-9.5	6	-	-	-	-	-	-
	*10-10.5	8	226	<0.05	<0.05	<0.05	<0.05	-
	11.0-11.5	7	-	-	-	-	-	-
	*12.0-12.5	6	261	-	-	-	-	-
AH-5	*0.5-1.0	63	-	<0.05	<0.05	<0.05	0.555	-
	*2.0-2.5	1	<5	<0.05	<0.05	<0.05	<0.05	-
	*4.0-4.5	0	<5	-	-	-	-	-
	5.0-5.5	0	-	-	-	-	-	-

* Samples Selected for analysis

Soil Sample Analysis
for TPH, BTEX, and PCB's
(concentration in mg/kg)

Sample ID	Depth	OVM	TPH	B	T	E	X	PCB
AH-6	1.6-2.4	6	-	-	-	-	-	-
	*3.2-3.9	31	-	<0.05	<0.05	<0.05	<0.05	<0.25
	*6.3-6.8	1	1,450	<0.05	<0.05	<0.05	<0.05	-
	*8.0-8.5	1	1,210	-	-	-	-	-
AH-7	1.0-1.5	13	-	-	-	-	-	<0.25
	3.0-3.5	45	-	-	-	-	-	-
	*5.0-5.5	112	37,000	<0.05	<0.05	<0.05	<0.05	-
	7.0-7.5	39	-	-	-	-	-	-
	8.0-8.5	8	-	-	-	-	-	-
	*10.0-10.5	14	13,900	-	-	-	-	-
	*12.0-12.5	49	-	<0.05	<0.05	<0.05	0.211	-
	*13.0-13.5	50	4,670	-	-	-	-	-
	*15.0-15.5	315/334	420	<0.05	<0.05	<0.05	<0.05	-
AH-8	*1.0-1.5	0	859	-	-	-	-	-
	*3.0-3.5	0	2,770	-	-	-	-	-
AH-9	*0-0.5	15	56,910	-	-	-	-	-
	*2.0-2.5	0	9	-	-	-	-	-
AH-10	0-0.5	14	-	-	-	-	-	<0.25
	1.0-1.5	3	-	-	-	-	-	-
	*2.0-2.5	6	469	-	-	-	-	-
	2.5-3.0	6	-	-	-	-	-	-
	*4.0-4.5	16	589	<0.05	<0.05	<0.05	<0.05	-
	5.5-6.0	3	-	-	-	-	-	-
	*8.0-8.5	6	<4.81	-	-	-	-	-

* Samples Selected for analysis

Soil Sample Analysis
for TPH, BTEX, and PCB's
(concentration in mg/kg)

Sample ID	Depth	OVM	TPH	B	T	E	X	PCB
AH-11	0-0.5	13	-	-	-	-	-	<0.25
	1.0-1.5	3	-	-	-	-	-	-
	*2.0-2.5	0	296	-	-	-	-	-
	3.0-3.5	1	-	-	-	-	-	-
	*3.5-4.0	0	2,390	-	-	-	-	-
AH-12	*0.5-1.0	0	2,540	-	-	-	-	-
	*1.5-2.0	0	77	-	-	-	-	-
AH-13	*0.5-1.0	0	90	-	-	-	-	-
	*2.5-3.0	0	146	-	-	-	-	-
AH-4A	3.0-3.5	61	-	-	-	-	-	-
AH-4B	*3.7-4.2	0	173	-	-	-	-	-
AH-6A	3.0-3.5	11	-	-	-	-	-	-
AH-6B	*3.0-3.5	0	<5	-	-	-	-	-
AH-7A	-	-	-	-	-	-	-	-
AH-7B	*3.0-3.5	0	<5	-	-	-	-	-
AH-9A	*3.0-3.5	0	8	-	-	-	-	-
AH-10A	-	-	-	-	-	-	-	-
AH-10B	*3.0-3.3	0	13	-	-	-	-	-
AH-11A	*2.0-2.5	0	<5	-	-	-	-	-

* Samples Selected for analysis

Soil Sample Analysis
for Total Metals
(concentrations in mg/kg)

Sample I.D.	Depth	As	Ba	Cd	Cr	Pb	Se	Ag	Hg
AH-4	0-0.5	<20	25.8	<2	24.1	<10	<20	<5	<0.25
AH-5	0-0.5	<20	1,900	2.7	1,580	64.4	<20	<5	<0.25
AH-6	3.2-3.9	<20	41.3	<2	24.8	<10	<20	<5	0.34
AH-7	1.0-1.5	<20	98.9	<2	64.9	<10	<20	<5	<0.25
AH-10	0-0.5	<20	46.4	<2	32.6	<10	<20	<5	<0.25
AH-11	0-0.5	<20	38.7	<2	20.7	<10	<20	<5	<0.25

6701 Aberdeen Avenue
Lubbock, Texas 79424
806•794•1296
FAX 806•794•1298

ANALYTICAL RESULTS FOR
HIGHLANDER SERVICES CORP.
Attention: Ike Tavarez
306 W. Wall, Suite 320
Midland, TX 79701

April 3, 1996
Receiving Date: 03/30/96
Sample Type: Soil
Project No: 707
Project Location: Texaco North Eunice Gas Plant

Extraction Date: 04/02/96
Analysis Date: 04/03/96
Sampling Date: 03/28/96
Sample Condition: Intact & Cool
Sample Received by: McD
Project Name: Compressor Investigation

TA#	FIELD CODE	TRPHC (mg/kg)
T50410	AH-6-2 12.5-13.0'	1,420
T50411	AH-7-2 13.5-14.0'	58,300
T50413	AH-8-2 8.0-8.5'	18
T50414	AH-11-2 5.0-5.5'	<10
QC	Quality Control	104
Reporting Limit		10
RPD		3
% Extraction Accuracy		98
% Instrument Accuracy		104

METHODS: EPA SW 846-3550 High Level; EPA 418.1.
TRPHC SPIKE: 250 mg/kg TRPHC.
TRPHC QC: 100 mg/L TRPHC.

4-5-96

Director, Dr. Blair Leftwich — DATE
Director, Dr. Bruce McDonell

6701 Aberdeen Avenue
Lubbock, Texas 79424
806•794•1296
FAX 806•794•1298

ANALYTICAL RESULTS FOR
HIGHLANDER SERVICES CORP.
Attention: Ike Tavarez
306 W. Wall, Suite 320
Midland, TX 79701

April 8, 1996
Receiving Date: 03/30/96
Sample Type: Soil
Project No: 707
Project Location: Texaco North Eunice Gas Plant

Extraction Date: 04/05/96
Analysis Date: 04/05/96
Sampling Date: 03/28/96
Sample Condition: Intact & Cool
Sample Received by: McD
Project Name: Compressor Investigation

TA#	FIELD CODE	TRPHC Gasoline Range (ug/kg)
T50410	AH-6-2 12.5-13.0'	<10,000
T50411	AH-7-2 13.5-14.0'	35,100
QC	Quality Control	986
Reporting Limit		10,000
RPD		14
% Extraction Accuracy		92
% Instrument Accuracy		99

METHODS: EPA SW 846-5030; 8015 Modified.
TRPHC SPIKE: 50,000 ug/kg TRPHC.
TRPHC QC: 1,000 ug/L TRPHC.

Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonell

4/8/96
DATE

Highlander Services Corp.

306 W. Wall • Suite 320 • Midland, TX 79701 • (915)682-4559

Analysis Request and Chain of Custody Record

Page 1 of 1

Project No.: 707

~~Client~~/Project: Texaco / Texaco North Eunice Gas Plant, Compressor Investigation.

Field Sample No./Identification			Date and Time	Grab	Comp	Sample Type(Liquid Sludge,Ect.)	Preser-vative	ANALYSIS REQUESTED
AH-6-2	~~50~~08	10-10.5'	3/28/96	x		Soil	ice	Hold
	09	12.0-12.5'	3/28/96	x		Soil	ice	Hold
	10	12.5-13.0'	3/28/96	x		Soil	ice	TPH (418.1) 8015 6 per Ike 4-4-96
AH-7-2	11	13.5-14.0'	3/28/96	x		Soil	ice	TPH (418.1) 8015 6 "
AH-8-2	12	6.0-6.5'	3/28/96	x		Soil	ice	Hold
	13	8.0-8.5'	3/28/96	x		Soil	ice	TPH (418.1)
AH-11-2	14	5.0-5.5'	3/28/96	x		Soil	ice	TPH (418.1)

Samplers: (Print) Ike Tavarez, Tim Reed.

Relinquished by: (Signature) [signature] Date: 3/29/96 Time: 4:30

Recieved by: (Signature) Helen Shelton Date: 3/29/96 Time: 4:30 pm

Relinquished by: (Signature) Helen Shelton Date: 3/29/96 Time: 7:00 PM

Recieved by: (Signature) [signature] Date: 3/30/96 Time:

Relinquished by: (Signature) Date: Time:

Data Results ~~To~~:
1. Ike Tavarez
2.

Results by:

Rush Charges Authorized Yes ___ No ___

Delivered To: Trace Lab

REMARKS: HighTPHs. XC> (341)

90AP

90AP

Please Fill out all copies – Deliverer retains White copy for file – Lab retains Yellow copy & Return Pink copy to Highlander Services Corp. at above address

7 samples - HS

high 8015

TRACE ANALYSIS, INC.
6701 Aberdeen Avenue Lubbock, Texas 79424 806•794•1296 FAX 806•794•1298

ANALYTICAL RESULTS FOR
HIGHLANDER SERVICES CORP.
Attention: Ike Tavarez
306 W. Wall, Suite 320
Midland, TX 79701

August 5, 1996
Receiving Date: 07/29/96
Sample Type: Soil
Project No: 787
Project Location: NA

Prep Date: 07/30/96
Analysis Date: 07/30/96
Sampling Date: 07/22/96
Sample Condition: Intact & Cool
Sample Received by: SH
Client/Project: Texaco/Texaco North Eunice Gas Plant

TA#	Field Code	TRPHC (ug/kg)	BENZENE (ug/kg)	TOLUENE (ug/kg)	ETHYL-BENZENE (ug/kg)	M,P,O XYLENE (ug/kg)	TOTAL BTEX (ug/kg)
T56291	MW-1 (25'-27')	17,600	<50	<50	<50	<50	<50
T56292	MW-1 (55'-57')	90,200	<50	243	1,130	3,443	4,816
QC	Quality Control	99,740	101	99	99	295	
Reporting Limit		10,000	50	50	50	50	
RPD		3	3	3	3	3	
% Extraction Accurac		111	94	90	88	87	
% Instrument Accuracy		100	101	99	99	98	

METHODS: EPA SW 846-8020, 5030, 3550 HIGH LEVEL; EPA 418.1.
CHEMIST: TRPHC: AG BTEX: RW
BTEX SPIKE: 2,500 ug/kg BTEX. BTEX QC: 100 ug/L BTEX.
TRPHC SPIKE: 250,000 ug/kg TRPHC.
TRPHC QC: 100,000 ug/L TRPHC.

Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonell

8-5-96
Date

Highlander Services Corp.

306 W. Wall • Suite 320 • Midland, TX 79701 • (915)682-4559

Analysis Request and Chain of Custody Record

Project No. 787

Client/Project: TEXACO / TEXACO North Eunice Gas Plant

Field Sample No./ Identification	Date and Time	Grab	Comp	Sample Type(Liquid Sludge,Ect.)	Preservative	ANALYSIS REQUESTED	
MW-1 (25-27') Monitor well.	7/22/96	~		Soil	14	TPH, BTEX	56291
MW-1 (55'-57')	7/22/96	~		Soil	14	TPH, BTEX	92

Samplers: (Print)

IKE Tavarez

Results by: _____

Rush Charges Authorized

Yes ___ No ___

Relinquished by: (Signature) Jim Reed — Date: 7/26/96 Time: 4:30 PM

Relinquished by: (Signature) Helen Shelton — Date: 7/27/96 Time: 2:20PM

Relinquished by: (Signature) — Date: Time:

Delivered To: Trace

REMARKS:

Recieved by: (Signature) — Date: 7/26/96 Time: 4:50pm

Recieved by: (Signature) — Date: 7-29-96 Time: 10:00A CT

Data Results To:

1. IKE Tavarez

2.

Please Fill out all copies – Deliverer retains White copy for file – Lab retains Yellow copy & Return Pink copy to Highlander Services Corp. at above address

Hobbs, NM (393)

TRACE ANALYSIS, INC.
6701 Aberdeen Avenue Lubbock, Texas 79424 806•794•1296 FAX 806•794•1298

ANALYTICAL RESULTS FOR
HIGHLANDER SERVICES CORP.
Attention: Ike Tavarez
306 W. Wall, Suite 320
Midland, TX 79701

August 13, 1996
Receiving Date: 07/29/95
Sample Type: Soil
Project No: 787
Project Location: N. Eunice Gas Plant, NM

Prep Date: 08/09/96
Analysis Date: 08/09/96
Sampling Date: 07/24-25/96
Sample Condition: Intact & Cool
Sample Received by: SH
Project Name: Texaco

TA#	Field Code	BENZENE (ug/kg)	TOLUENE (ug/kg)	ETHYL-BENZENE (ug/kg)	M,P,O XYLENE (ug/kg)	TOTAL BTEX (ug/kg)
T56273	BH-5 (35-37'), SOA	<50	<50	<50	<50	<50
T56281	BH-6 (40-42'), SOA	<50	<50	<50	<50	<50
T56287	BH-7 (35-37'), SOA	<50	<50	<50	<50	<50
T56290	BH-8 (25-27'), SOA	<50	<50	<50	<50	<50
QC	Quality Control	104	105	105	317	
Reporting Limit		50	50	50	50	
RPD		2	2	3	2	
% Extraction Accuracy		96	94	95	94	
% Instrument Accuracy		104	105	105	106	

METHODS: EPA SW 846-8020, 5030.
CHEMIST: RW
BTEX SPIKE: 5,000 ug/kg BTEX.
BTEX QC: 100 ug/L BTEX.

Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonell

8-13-96
Date

6701 Aberdeen Avenue
Lubbock, Texas 79424
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ANALYTICAL RESULTS FOR
HIGHLANDER SERVICES CORP.
Attention: Ike Tavarez
306 W. Wall, Suite 320
Midland, TX 79701

August 12, 1996
Receiving Date: 08/02/96
Sample Type: Soil
Project No: 787
Project Location: N. Eunice Gas Plant, NM

Prep Date: 08/06/96
Analysis Date: 08/06/96
Sampling Date: 07/29/96
Sample Condition: Intact & Cool
Sample Received by: ML
Project Name: Texaco

TA #T56559
Field Code: BH-1 10-12', (NS)

EPA 8240 Compounds	Concentration (ug/kg)	Reporting Limit
Dichlorodifluoromethane	ND	250
Chloromethane	ND	250
Vinyl chloride	ND	250
Bromomethane	ND	1,250
Chloroethane	ND	250
Trichlorofluoromethane	ND	250
1,1-Dichloroethene	ND	250
Iodomethane	ND	1,250
Carbon disulfide	ND	250
Methylene chloride	ND	1,250
trans-1,2-Dichloroethene	ND	250
1,1-Dichloroethane	ND	250
Vinyl acetate	ND	250
2-Butanone	ND	12,500
Chloroform	ND	250
1,1,1-Trichloroethane	ND	250
1,2-Dichloroethane	ND	250
Benzene	ND	250
Carbon Tetrachloride	ND	250
1,2-Dichloropropane	ND	250
Trichloroethene	ND	250
Bromodichloromethane	ND	250
cis-1,3-Dichloropropene	ND	250
4-Methyl-2-pentanone	ND	12,500
trans-1,3-Dichloropropene	ND	250
Toluene	ND	250
1,1,2-Trichloroethane	ND	250
2-Hexanone	ND	12,500

HIGHLANDER SERVICES CORP.
Project No: 787
Project: Texaco/Texaco North Eunice Gas Plant, NM

TA #T56559
Field Code: BH-1 10-12', (NS)

EPA 8240 Compounds	Concentration (ug/kg)	Reporting Limit
Dibromochloromethane	ND	250
Tetrachloroethene	ND	250
Chlorobenzene	ND	250
Ethylbenzene	1,380	250
m & p-Xylene	1,130	250
Bromoform	ND	250
Styrene	ND	250
o-Xylene	ND	250
1,1,2,2-Tetrachloroethane	ND	250
trans 1,4-Dichloro-2-butene	ND	1,250
cis 1,4-Dichloro-2-butene	ND	1,250
1,4-Dichlorobenzene	ND	500
1,3-Dichlorobenzene	ND	500
1,2-Dichlorobenzene	ND	500

Tentatively Identified Compounds and Estimated Concentrations (ug/kg)

	RT	CONC.
(1) Decane	19.52	10,700
(2) 1,3,5-trimethyl benzene	19.72	5,270
(3) 1,2,4-trimethyl benzene	20.46	6,830
(4) 1-methyl-3-propyl benzene	21.65	4,120
(6) Undecane	21.77	7,120
(7) 1-ethyl-2,4-dimethyl benzene	24.84	6,370
(8) Unidentified Hydrocarbons	16.50	4,080
(9) Unidentified Hydrocarbons	19.64	4,100
(10) Unidentified Hydrocarbons	20.88	4,960
(11) Unidentified Hydrocarbons	24.25	4,660

SURROGATES	**% RECOVERY**
Dibromofluoromethane	97
Toluene-d8	98
4-Bromofluorobenzene	101

ND = Not Detected

METHODS: EPA SW 846-5030; EPA 8260.
CHEMIST: RP

Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonell

8-12-96
Date

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ANALYTICAL RESULTS FOR
HIGHLANDER SERVICES CORP.
Attention: Ike Tavarez
306 W. Wall, Suite 320
Midland, TX 79701

August 12, 1996
Receiving Date: 08/02/96
Sample Type: Soil
Project No: 787
Project Location: N. Eunice Gas Plant, NM

Prep Date: 08/06/96
Analysis Date: 08/06/96
Sampling Date: 07/29/96
Sample Condition: Intact & Cool
Sample Received by: ML
Project Name: Texaco

TA #T56567
Field Code: BH-1 50-52', (NS)

EPA 8240 Compounds	Concentration (ug/kg)	Reporting Limit
Dichlorodifluoromethane	ND	1,000
Chloromethane	ND	1,000
Vinyl chloride	ND	1,000
Bromomethane	ND	5,000
Chloroethane	ND	1,000
Trichlorofluoromethane	ND	1,000
1,1-Dichloroethene	ND	1,000
Iodomethane	ND	5,000
Carbon disulfide	ND	1,000
Methylene chloride	ND	5,000
trans-1,2-Dichloroethene	ND	1,000
1,1-Dichloroethane	ND	1,000
Vinyl acetate	ND	1,000
2-Butanone	ND	50,000
Chloroform	ND	1,000
1,1,1-Trichloroethane	ND	1,000
1,2-Dichloroethane	ND	1,000
Benzene	4,500	1,000
Carbon Tetrachloride	ND	1,000
1,2-Dichloropropane	ND	1,000
Trichloroethene	ND	1,000
Bromodichloromethane	ND	1,000
cis-1,3-Dichloropropene	ND	1,000
4-Methyl-2-pentanone	ND	50,000
trans-1,3-Dichloropropene	ND	1,000
Toluene	33,400	1,000
1,1,2-Trichloroethane	ND	1,000
2-Hexanone	ND	50,000

Project No: 787
Project: Texaco/Texaco North Eunice Gas Plant, NM

TA #T56567
Field Code: BH-1 50-52', (NS)

EPA 8240 Compounds	Concentration (ug/kg)	Reporting Limit
Dibromochloromethane	ND	1,000
Tetrachloroethene	ND	1,000
Chlorobenzene	ND	1,000
Ethylbenzene	20,200	1,000
m & p-Xylene	30,800	1,000
Bromoform	ND	1,000
Styrene	ND	1,000
o-Xylene	12,200	1,000
1,1,2,2-Tetrachloroethane	ND	1,000
trans 1,4-Dichloro-2-butene	ND	5,000
cis 1,4-Dichloro-2-butene	ND	5,000
1,4-Dichlorobenzene	ND	2,000
1,3-Dichlorobenzene	ND	2,000
1,2-Dichlorobenzene	ND	2,000

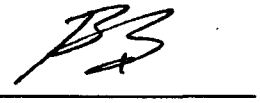
Tentatively Identified Compounds and Estimated Concentrations (ug/kg)

	RT	CONC.
(1) Methyl cyclohexane	13.33	58,600
(2) cis-1,3-dimethyl cyclohexane	14.76	19,600
(3) ethyl-cyclohexane	16.25	22,800
(4) Decane	19.52	21,400
(5) 1,3,5-trimethyl benzene	20.45	20,600
(6) Unidentified Hydrocarbons	11.69	61,800
(7) Unidentified Hydrocarbons	12.30	64,800
(8) Unidentified Hydrocarbons	14.04	30,800
(9) Unidentified Hydrocarbons	14.28	21,200

SURROGATES	**% RECOVERY**
Dibromofluoromethane	100
Toluene-d8	100
4-Bromofluorobenzene	101

ND = Not Detected

METHODS: EPA SW 846-5030; EPA 8260.
CHEMIST: RP



8-12-96

Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonell

Date

6701 Aberdeen Avenue
Lubbock, Texas 79424
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ANALYTICAL RESULTS FOR
HIGHLANDER SERVICES CORP.
Attention: Ike Tavarez
306 W. Wall, Suite 320
Midland, TX 79701

August 12, 1996
Receiving Date: 08/02/96
Sample Type: Soil
Project No: 787
Project Location: N. Eunice Gas Plant, NM

Prep Date: 08/06/96
Analysis Date: 08/06/96
Sampling Date: 07/29/96
Sample Condition: Intact & Cool
Sample Received by: ML
Project Name: Texaco

TA #T56569
Field Code: BH-2 10-12', (NS)

EPA 8240 Compounds	Concentration (ug/kg)	Reporting Limit
Dichlorodifluoromethane	ND	250
Chloromethane	ND	250
Vinyl chloride	ND	250
Bromomethane	ND	1,250
Chloroethane	ND	250
Trichlorofluoromethane	ND	250
1,1-Dichloroethene	ND	250
Iodomethane	ND	1,250
Carbon disulfide	ND	250
Methylene chloride	ND	1,250
trans-1,2-Dichloroethene	ND	250
1,1-Dichloroethane	ND	250
Vinyl acetate	ND	250
2-Butanone	ND	12,500
Chloroform	ND	250
1,1,1-Trichloroethane	ND	250
1,2-Dichloroethane	ND	250
Benzene	ND	250
Carbon Tetrachloride	ND	250
1,2-Dichloropropane	ND	250
Trichloroethene	ND	250
Bromodichloromethane	ND	250
cis-1,3-Dichloropropene	ND	250
4-Methyl-2-pentanone	ND	12,500
trans-1,3-Dichloropropene	ND	250
Toluene	2,090	250
1,1,2-Trichloroethane	ND	250
2-Hexanone	ND	12,500

HIGHLANDER SERVICES CORP.
Project No: 787
Project: Texaco/Texaco North Eunice Gas Plant, NM

TA #T56569
Field Code: BH-2 10-12', (NS)

EPA 8240 Compounds	Concentration (ug/kg)	Reporting Limit
Dibromochloromethane	ND	250
Tetrachloroethene	ND	250
Chlorobenzene	ND	250
Ethylbenzene	6,200	250
m & p-Xylene	8,770	250
Bromoform	ND	250
Styrene	ND	250
o-Xylene	2,560	250
1,1,2,2-Tetrachloroethane	ND	250
trans 1,4-Dichloro-2-butene	ND	1,250
cis 1,4-Dichloro-2-butene	ND	1,250
1,4-Dichlorobenzene	ND	500
1,3-Dichlorobenzene	ND	500
1,2-Dichlorobenzene	ND	500

Tentatively Identified Compounds and Estimated Concentrations (ug/kg)

		RT	CONC.
(1)	3-methyl Hexane	11.69	7,630
(2)	Methyl cyclohexane	13.34	17,800
(3)	cis-1,3-dimethyl cyclohexane	14.77	11,900
(4)	ethyl-cyclohexane	16.26	12,900
(5)	2-methyl Octane	16.50	12,300
(6)	Decane	19.52	12,800
(7)	Unidentified Hydrocarbons	12.30	16,200
(8)	Unidentified Hydrocarbons	14.05	17,000
(9)	Unidentified Hydrocarbons	14.28	12,600
(10)	Unidentified Hydrocarbons	16.70	10,500

SURROGATES	**% RECOVERY**
Dibromofluoromethane	102
Toluene-d8	98
4-Bromofluorobenzene	103

ND = Not Detected

METHODS: EPA SW 846-5030; EPA 8260.
CHEMIST: RP

Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonell

8-12-96
Date

6701 Aberdeen Avenue
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ANALYTICAL RESULTS FOR
HIGHLANDER SERVICES CORP.
Attention: Ike Tavarez
306 W. Wall, Suite 320
Mid 0

August 12, 1996
Receiving Date: 08/02/96
Sample Type: Soil
Project No: 787
Project Location: N. Eunice Gas Plant, NM

Prep Date: 08/06/96
Analysis Date: 08/06/96
Sampling Date: 07/29/96
Sample Condition: Intact & Cool
Sample Received by: ML
Project Name: Texaco

TA #T56577
Field Code: BH-2 50-52', (NS)

EPA 8240 Compounds	Concentration (ug/kg)	Reporting Limit
Dichlorodifluoromethane	ND	1,000
Chloromethane	ND	1,000
Vinyl chloride	ND	1,000
Bromomethane	ND	5,000
Chloroethane	ND	1,000
Trichlorofluoromethane	ND	1,000
1,1-Dichloroethene	ND	1,000
Iodomethane	ND	5,000
Carbon disulfide	ND	1,000
Methylene chloride	ND	5,000
trans-1,2-Dichloroethene	ND	1,000
1,1-Dichloroethane	ND	1,000
Vinyl acetate	ND	1,000
2-Butanone	ND	50,000
Chloroform	ND	1,000
1,1,1-Trichloroethane	ND	1,000
1,2-Dichloroethane	ND	1,000
Benzene	5,680	1,000
Carbon Tetrachloride	ND	1,000
1,2-Dichloropropane	ND	1,000
Trichloroethene	ND	1,000
Bromodichloromethane	ND	1,000
cis-1,3-Dichloropropene	ND	1,000
4-Methyl-2-pentanone	ND	50,000
trans-1,3-Dichloropropene	ND	1,000
Toluene	27,400	1,000
1,1,2-Trichloroethane	ND	1,000
2-Hexanone	ND	50,000

HIGHLANDER SERVICES CORP.
Project No: 787
Project: Texaco/Texaco North Eunice Gas Plant, NM

TA #T56577
Field Code: BH-2 50-52', (NS)

EPA 8240 Compounds	Concentration (ug/kg)	Reporting Limit
Dibromochloromethane	ND	1,000
Tetrachloroethene	ND	1,000
Chlorobenzene	ND	1,000
Ethylbenzene	14,400	1,000
m & p-Xylene	21,500	1,000
Bromoform	ND	1,000
Styrene	ND	1,000
o-Xylene	7,980	1,000
1,1,2,2-Tetrachloroethane	ND	1,000
trans 1,4-Dichloro-2-butene	ND	5,000
cis 1,4-Dichloro-2-butene	ND	5,000
1,4-Dichlorobenzene	ND	2,000
1,3-Dichlorobenzene	ND	2,000
1,2-Dichlorobenzene	ND	2,000

Tentatively Identified Compounds and Estimated Concentrations (ug/kg)

		RT	CONC.
(1)	Methyl-cyclopentane	10.62	19,700
(2)	Methyl cyclohexane	13.34	41,800
(3)	ethyl-cyclohexane	16.25	15,400
(4)	Decane	19.51	18,700
(5)	Unidentified Hydrocarbons	11.68	52,700
(6)	Unidentified Hydrocarbons	12.30	49,200
(7)	Unidentified Hydrocarbons	14.04	21,400
(8)	Unidentified Hydrocarbons	16.49	12,900
(9)	Unidentified Hydrocarbons	18.73	13,300

SURROGATES	**% RECOVERY**
Dibromofluoromethane	100
Toluene-d8	101
4-Bromofluorobenzene	101

ND = Not Detected

METHODS: EPA SW 846-5030; EPA 8260.
CHEMIST: RP

Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonell

8-12-96
Date

6701 Aberdeen Avenue
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ANALYTICAL RESULTS FOR
HIGHLANDER SERVICES CORP.
Attention: Ike Tavarez
306 W. Wall, Suite 320
Midland, TX 79701

August 26, 1996
Receiving Date: 08/15/96
Sample Type: Soil
Project No: 787
Project Location: Texaco
North Eunice Gas Plant, NM
TA #: T57221
Field Code: #1 N. Sump./E.R. 8.2-8.4'

Prep Date: 08/22/96
Analysis Date: 08/22/96
Sampling Date: 08/09/96
Sample Condition: Intact & Cool
Sample Received by: SH
Project Name: Texaco

EPA 8240 Compounds	Concentration (ug/kg)	Reporting Limit
Dichlorodifluoromethane	ND	25
Chloromethane	ND	25
Vinyl chloride	ND	25
Bromomethane	ND	125
Chloroethane	ND	25
Trichlorofluoromethane	ND	25
1,1-Dichloroethene	ND	25
Iodomethane	ND	125
Carbon disulfide	ND	25
Methylene chloride	ND	125
trans-1,2-Dichloroethene	ND	25
1,1-Dichloroethane	ND	25
Vinyl acetate	ND	25
2-Butanone	ND	1,250
Chloroform	ND	25
1,1,1-Trichloroethane	ND	25
1,2-Dichloroethane	ND	25
Benzene	ND	25
Carbon Tetrachloride	ND	25
1,2-Dichloropropane	ND	25
Trichloroethene	ND	25
Bromodichloromethane	ND	25
cis-1,3-Dichloropropene	ND	25
4-Methyl-2-pentanone	ND	1,250
trans-1,3-Dichloropropene	ND	25
Toluene	ND	25
1,1,2-Trichloroethane	ND	25
2-Hexanone	ND	1,250

HIGHLANDER SERVICES CORP.
Project No: 787
Project Name: Texaco

TA #T57221
Field Code: #1 N. Sump./E.R. 8.2-8.4'

EPA 8240 Compounds	Concentration (ug/kg)	Reporting Limit
Dibromochloromethane	ND	25
Tetrachloroethene	ND	25
Chlorobenzene	ND	25
Ethylbenzene	ND	25
m & p-Xylene	ND	25
Bromoform	ND	25
Styrene	ND	25
o-Xylene	ND	25
1,1,2,2-Tetrachloroethane	ND	25
trans 1,4-Dichloro-2-butene	ND	125
cis 1,4-Dichloro-2-butene	ND	125
1,4-Dichlorobenzene	ND	50
1,3-Dichlorobenzene	ND	50
1,2-Dichlorobenzene	ND	50

SURROGATES	% RECOVERY
Dibromofluoromethane	99
Toluene-d8	104
4-Bromofluorobenzene	107

ND = Not Detected

METHODS: EPA SW 846-5030; EPA 8260.
CHEMIST: RP

Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonell

8-26-96
Date

6701 Aberdeen Avenue
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ANALYTICAL RESULTS FOR
HIGHLANDER SERVICES CORP.
Attention: Ike Tavarez
306 W. Wall, Suite 320
Midland, TX 79701

August 26, 1996
Receiving Date: 08/15/96
Sample Type: Soil
Project No: 787
Project Location: Texaco
North Eunice Gas Plant, NM
TA #: T57222
Field Code: #2 S. Sump./E.R. 6.4-6.8'

Prep Date: 08/22/96
Analysis Date: 08/22/96
Sampling Date: 08/09/96
Sample Condition: Intact & Cool
Sample Received by: SH
Project Name: Texaco

EPA 8240 Compounds	Concentration (ug/kg)	Reporting Limit
Dichlorodifluoromethane	ND	25
Chloromethane	ND	25
Vinyl chloride	ND	25
Bromomethane	ND	125
Chloroethane	ND	25
Trichlorofluoromethane	ND	25
1,1-Dichloroethene	ND	25
Iodomethane	ND	125
Carbon disulfide	ND	25
Methylene chloride	ND	125
trans-1,2-Dichloroethene	ND	25
1,1-Dichloroethane	ND	25
Vinyl acetate	ND	25
2-Butanone	ND	1,250
Chloroform	ND	25
1,1,1-Trichloroethane	ND	25
1,2-Dichloroethane	ND	25
Benzene	ND	25
Carbon Tetrachloride	ND	25
1,2-Dichloropropane	ND	25
Trichloroethene	ND	25
Bromodichloromethane	ND	25
cis-1,3-Dichloropropene	ND	25
4-Methyl-2-pentanone	ND	1,250
trans-1,3-Dichloropropene	ND	25
Toluene	ND	25
1,1,2-Trichloroethane	ND	25
2-Hexanone	ND	1,250

Project No: 787
Project Name: Texaco

TA #T57222
Field Code: #2 S. Sump./E.R. 6.4-6.8'

EPA 8240 Compounds	Concentration (ug/kg)	Reporting Limit
Dibromochloromethane	ND	25
Tetrachloroethene	ND	25
Chlorobenzene	ND	25
Ethylbenzene	ND	25
m & p-Xylene	ND	25
Bromoform	ND	25
Styrene	ND	25
o-Xylene	ND	25
1,1,2,2-Tetrachloroethane	ND	25
trans 1,4-Dichloro-2-butene	ND	125
cis 1,4-Dichloro-2-butene	ND	125
1,4-Dichlorobenzene	ND	50
1,3-Dichlorobenzene	ND	50
1,2-Dichlorobenzene	ND	50

Tentatively Identified Compounds and Estimated Concentrations (ug/kg)

	RT	CONC.
(1) cis-bicyclo[4.3.0]-3-nonene	6.02	49
(2) Unidentified Hydrocarbons	19.92	33
(3) Unidentified Hydrocarbons	21.40	29
(4) Unidentified Hydrocarbons	21.60	96
(5) Unidentified Hydrocarbons	22.20	30
(6) Unidentified Hydrocarbons	22.42	36
(7) Unidentified Hydrocarbons	22.68	52
(8) Unidentified Hydrocarbons	23.18	34
(9) Unidentified Hydrocarbons	23.36	28

SURROGATES	% RECOVERY
Dibromofluoromethane	99
Toluene-d8	99
4-Bromofluorobenzene	104

ND = Not Detected

METHODS: EPA SW 846-5030; EPA 8260.
CHEMIST: RP

Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonell

8-26-96
Date

6701 Aberdeen Avenue
Lubbock, Texas 79424
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ANALYTICAL RESULTS FOR
HIGHLANDER SERVICES CORP.
Attention: Ike Tavarez
306 W. Wall, Suite 320
Midland, TX 79701

August 26, 1996
Receiving Date: 08/15/96
Sample Type: Soil
Project No: 787
Project Location: Texaco
North Eunice Gas Plant, NM
TA #: T57223
Field Code: Trash Pit Area 4.5-4.7'

Prep Date: 08/22/96
Analysis Date: 08/22/96
Sampling Date: 08/09/96
Sample Condition: Intact & Cool
Sample Received by: SH
Project Name: Texaco

EPA 8240 Compounds	Concentration (ug/kg)	Reporting Limit
Dichlorodifluoromethane	ND	25
Chloromethane	ND	25
Vinyl chloride	ND	25
Bromomethane	ND	125
Chloroethane	ND	25
Trichlorofluoromethane	ND	25
1,1-Dichloroethene	ND	25
Iodomethane	ND	125
Carbon disulfide	ND	25
Methylene chloride	ND	125
trans-1,2-Dichloroethene	ND	25
1,1-Dichloroethane	ND	25
Vinyl acetate	ND	25
2-Butanone	ND	1,250
Chloroform	ND	25
1,1,1-Trichloroethane	ND	25
1,2-Dichloroethane	ND	25
Benzene	ND	25
Carbon Tetrachloride	ND	25
1,2-Dichloropropane	ND	25
Trichloroethene	ND	25
Bromodichloromethane	ND	25
cis-1,3-Dichloropropene	ND	25
4-Methyl-2-pentanone	ND	1,250
trans-1,3-Dichloropropene	ND	25
Toluene	ND	25
1,1,2-Trichloroethane	ND	25
2-Hexanone	ND	1,250

Project No: 787
Project Name: Texaco

TA #T57223
Field Code: Trash Pit Area 4.5-4.7'

EPA 8240 Compounds	Concentration (ug/kg)	Reporting Limit
Dibromochloromethane	ND	25
Tetrachloroethene	ND	25
Chlorobenzene	ND	25
Ethylbenzene	ND	25
m & p-Xylene	ND	25
Bromoform	ND	25
Styrene	ND	25
o-Xylene	ND	25
1,1,2,2-Tetrachloroethane	ND	25
trans 1,4-Dichloro-2-butene	ND	125
cis 1,4-Dichloro-2-butene	ND	125
1,4-Dichlorobenzene	ND	50
1,3-Dichlorobenzene	ND	50
1,2-Dichlorobenzene	ND	50

Tentatively Identified Compounds and Estimated Concentrations (ug/kg)

	RT	CONC.
(1) Dimethyl sulfoxide	6.19	42
(2) Unidentified Hydrocarbons	5.93	46

SURROGATES	% RECOVERY
Dibromofluoromethane	88
Toluene-d8	99
4-Bromofluorobenzene	103

ND = Not Detected

METHODS: EPA SW 846-5030; EPA 8260.
CHEMIST: RP

BL

Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonell

8-26-96

Date

6701 Aberdeen Avenue
Lubbock, Texas 79424
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FAX 806•794•1298

ANALYTICAL RESULTS FOR
HIGHLANDER SERVICES CORP.
Attention: Ike Tavarez
306 W. Wall, Suite 320
Midland, TX 79701

August 6, 1996
Receiving Date: 07/29/96
Sample Type: Soil
Project No: 787
Project Location: N. Eunice Gas Plant, NM

Prep Date: 08/02/96
Analysis Date: 08/02/96
Sampling Date: 07/24/96
Sample Condition: Intact & Cool
Sample Received by: SH
Project Name: Texaco

TA #T56268
Field Code: BH-5 (5-7'), SOA

EPA 8240 Compounds	Concentration (ug/kg)	Reporting Limit
Dichlorodifluoromethane	ND	500
Chloromethane	ND	500
Vinyl chloride	ND	500
Bromomethane	ND	2,500
Chloroethane	ND	500
Trichlorofluoromethane	ND	500
1,1-Dichloroethene	ND	500
Iodomethane	ND	2,500
Carbon disulfide	ND	500
Methylene chloride	ND	2,500
trans-1,2-Dichloroethene	ND	500
1,1-Dichloroethane	ND	500
Vinyl acetate	ND	500
2-Butanone	ND	25,000
Chloroform	ND	500
1,1,1-Trichloroethane	ND	500
1,2-Dichloroethane	ND	500
Benzene	ND	500
Carbon Tetrachloride	ND	500
1,2-Dichloropropane	ND	500
Trichloroethene	ND	500
Bromodichloromethane	ND	500
cis-1,3-Dichloropropene	ND	500
4-Methyl-2-pentanone	ND	25,000
trans-1,3-Dichloropropene	ND	500
Toluene	663	500
1,1,2-Trichloroethane	ND	500
2-Hexanone	ND	25,000

Project No: 787
Project: Texaco/Texaco North Eunice Gas Plant, NM

TA #T56268
Field Code: BH-5 (5-7'), SOA

EPA 8240 Compounds	Concentration (ug/kg)	Reporting Limit
Dibromochloromethane	ND	500
Tetrachloroethene	ND	500
Chlorobenzene	ND	500
Ethylbenzene	12,500	500
m & p-Xylene	9,780	500
Bromoform	ND	500
Styrene	ND	500
o-Xylene	2,400	500
1,1,2,2-Tetrachloroethane	ND	500
trans 1,4-Dichloro-2-butene	ND	2,500
cis 1,4-Dichloro-2-butene	ND	2,500
1,4-Dichlorobenzene	ND	1,000
1,3-Dichlorobenzene	ND	1,000
1,2-Dichlorobenzene	ND	1,000
Tentatively Identified Compounds	**CONC**	**RT**
methyl-cyclohexane	20,700	13.33
Octane	52,900	14.91
ethyl-cyclohexane	35,500	16.26
3-methyl Nonane	30,700	18.13
Decane	58,900	19.51
Unidentified Hydrocarbons	24,200	14.04
Unidentified Hydrocarbons	45,700	16.49
Unidentified Hydrocarbons	42,300	16.70
Unidentified Hydrocarbons	27,000	18.71
Unidentified Hydrocarbons	25,900	19.64

SURROGATES	% RECOVERY
Dibromofluoromethane	99
Toluene-d8	98
4-Bromofluorobenzene	101

*ND = Not Detected

METHODS: EPA SW 846-5030; EPA 8260.
CHEMIST: RP

8-6-96

Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonell

Date

6701 Aberdeen Avenue
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ANALYTICAL RESULTS FOR
HIGHLANDER SERVICES CORP.
Attention: Ike Tavarez
306 W. Wall, Suite 320
Midland, TX 79701

August 6, 1996
Receiving Date: 07/29/96
Sample Type: Soil
Project No: 787
Project Location: N. Eunice Gas Plant, NM

Prep Date: 08/02/96
Analysis Date: 08/02/96
Sampling Date: 07/24/96
Sample Condition: Intact & Cool
Sample Received by: SH
Project Name: Texaco

TA #T56275
Field Code: BH-6 (5-7'), SOA

EPA 8240 Compounds	Concentration (ug/kg)	Reporting Limit
Dichlorodifluoromethane	ND	100
Chloromethane	ND	100
Vinyl chloride	ND	100
Bromomethane	ND	500
Chloroethane	ND	100
Trichlorofluoromethane	ND	100
1,1-Dichloroethene	ND	100
Iodomethane	ND	500
Carbon disulfide	ND	100
Methylene chloride	ND	500
trans-1,2-Dichloroethene	ND	100
1,1-Dichloroethane	ND	100
Vinyl acetate	ND	100
2-Butanone	ND	5,000
Chloroform	ND	100
1,1,1-Trichloroethane	ND	100
1,2-Dichloroethane	ND	100
Benzene	1,310	100
Carbon Tetrachloride	ND	100
1,2-Dichloropropane	ND	100
Trichloroethene	ND	100
Bromodichloromethane	ND	100
cis-1,3-Dichloropropene	ND	100
4-Methyl-2-pentanone	ND	5,000
trans-1,3-Dichloropropene	ND	100
Toluene	ND	100
1,1,2-Trichloroethane	ND	100
2-Hexanone	ND	5,000

Project No: 787
Project: Texaco/Texaco North Eunice Gas Plant, NM

TA #T56275
Field Code: BH-6 (5-7'), SOA

EPA 8240 Compounds	Concentration (ug/kg)	Reporting Limit
Dibromochloromethane	ND	100
Tetrachloroethene	ND	100
Chlorobenzene	ND	100
Ethylbenzene	30,700*	100
m & p-Xylene	14,700	100
Bromoform	ND	100
Styrene	ND	100
o-Xylene	ND	100
1,1,2,2-Tetrachloroethane	ND	100
trans 1,4-Dichloro-2-butene	ND	500
cis 1,4-Dichloro-2-butene	ND	500
1,4-Dichlorobenzene	ND	200
1,3-Dichlorobenzene	ND	200
1,2-Dichlorobenzene	ND	200
Tentatively Identified Compounds	**CONC**	**RT**
Cyclohexane	43,900	11.66
1,2-dimethyl-cyclopentane	17,900	12.30
1,2,4-trimethyl cyclopentane	15,700	13.64
1,2,3-trimethyl cyclopentane	18,500	13.86
cis-1,3-dimethyl cyclohexane	73,800	14.77
ethyl-cyclohexane	33,200	16.26
Unidentified Hydrocarbons	20,100	13.25
Unidentified Hydrocarbons	25,200	14.04
Unidentified Hydrocarbons	22,700	16.50
Unidentified Hydrocarbons	16,600	16.70

SURROGATES	**% RECOVERY**
Dibromofluoromethane	93
Toluene-d8	109
4-Bromofluorobenzene	111

***ND = Not Detected**

***Estimated Concentration. Response over standard range.**

METHODS: EPA SW 846-5030; EPA 8260.
CHEMIST: RP

Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonell

8-6-96
Date

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ANALYTICAL RESULTS FOR
HIGHLANDER SERVICES CORP.
Attention: Ike Tavarez
306 W. Wall, Suite 320
Midland, TX 79701

August 6, 1996
Receiving Date: 07/29/96
Sample Type: Soil
Project No: 787
Project Location: N. Eunice Gas Plant, NM

Prep Date: 08/02/96
Analysis Date: 08/02/96
Sampling Date: 07/25/96
Sample Condition: Intact & Cool
Sample Received by: SH
Project Name: Texaco

TA #T56288
Field Code: BH-8 (5-7'), SOA

EPA 8240 Compounds	Concentration (ug/kg)	Reporting Limit
Dichlorodifluoromethane	ND	100
Chloromethane	ND	100
Vinyl chloride	ND	100
Bromomethane	ND	500
Chloroethane	ND	100
Trichlorofluoromethane	ND	100
1,1-Dichloroethene	ND	100
Iodomethane	ND	500
Carbon disulfide	ND	100
Methylene chloride	ND	500
trans-1,2-Dichloroethene	ND	100
1,1-Dichloroethane	ND	100
Vinyl acetate	ND	100
2-Butanone	ND	5,000
Chloroform	ND	100
1,1,1-Trichloroethane	ND	100
1,2-Dichloroethane	ND	100
Benzene	384	100
Carbon Tetrachloride	ND	100
1,2-Dichloropropane	ND	100
Trichloroethene	ND	100
Bromodichloromethane	ND	100
cis-1,3-Dichloropropene	ND	100
4-Methyl-2-pentanone	ND	5,000
trans-1,3-Dichloropropene	ND	100
Toluene	ND	100
1,1,2-Trichloroethane	ND	100
2-Hexanone	ND	5,000

Project No: 787
Project: Texaco/Texaco North Eunice Gas Plant, NM

TA #T56288
Field Code: BH-8 (5-7'), SOA

EPA 8240 Compounds	Concentration (ug/kg)	Reporting Limit
Dibromochloromethane	ND	100
Tetrachloroethene	ND	100
Chlorobenzene	ND	100
Ethylbenzene	1,460	100
m & p-Xylene	941	100
Bromoform	ND	100
Styrene	ND	100
o-Xylene	207	100
1,1,2,2-Tetrachloroethane	ND	100
trans 1,4-Dichloro-2-butene	ND	500
cis 1,4-Dichloro-2-butene	ND	500
1,4-Dichlorobenzene	ND	200
1,3-Dichlorobenzene	ND	200
1,2-Dichlorobenzene	ND	200
Tentatively Identified Compounds	**CONC**	**RT**
methyl-cyclopentane	5,860	10.62
2-methyl-heptane	3,840	14.04
cis-1,3-dimethyl-cyclohexane	6,080	14.76
ethyl-cyclohexane	5,770	16.25
Decane	5,280	19.51
Undecane	3,850	21.76
Unidentified Hydrocarbons	20,200	11.68
Unidentified Hydrocarbons	7,820	12.30
Unidentified Hydrocarbons	3,930	13.24
Unidentified Hydrocarbons	4,390	14.28

SURROGATES	**% RECOVERY**
Dibromofluoromethane	96
Toluene-d8	96
4-Bromofluorobenzene	103

***ND = Not Detected**

METHODS: EPA SW 846-5030; EPA 8260.
CHEMIST: RP

Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonell

8-6-96
Date

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ANALYTICAL RESULTS FOR
HIGHLANDER SERVICES CORP.
Attention: Ike Tavarez
306 W. Wall, Suite 320
Midland, TX 79701

August 16, 1996
Receiving Date: 08/02/96
Sample Type: Soil
Project No: 787
Project Location: Texaco North Eunice Gas Plant, NM

Prep Date: 08/07/96
Analysis Date: 08/07/96
Sampling Date: 07/29/96
Sample Condition: I & C
Sample Received by: ML
Project Name: Texaco

TA #T56577
Field Code: BH-2 50-52'

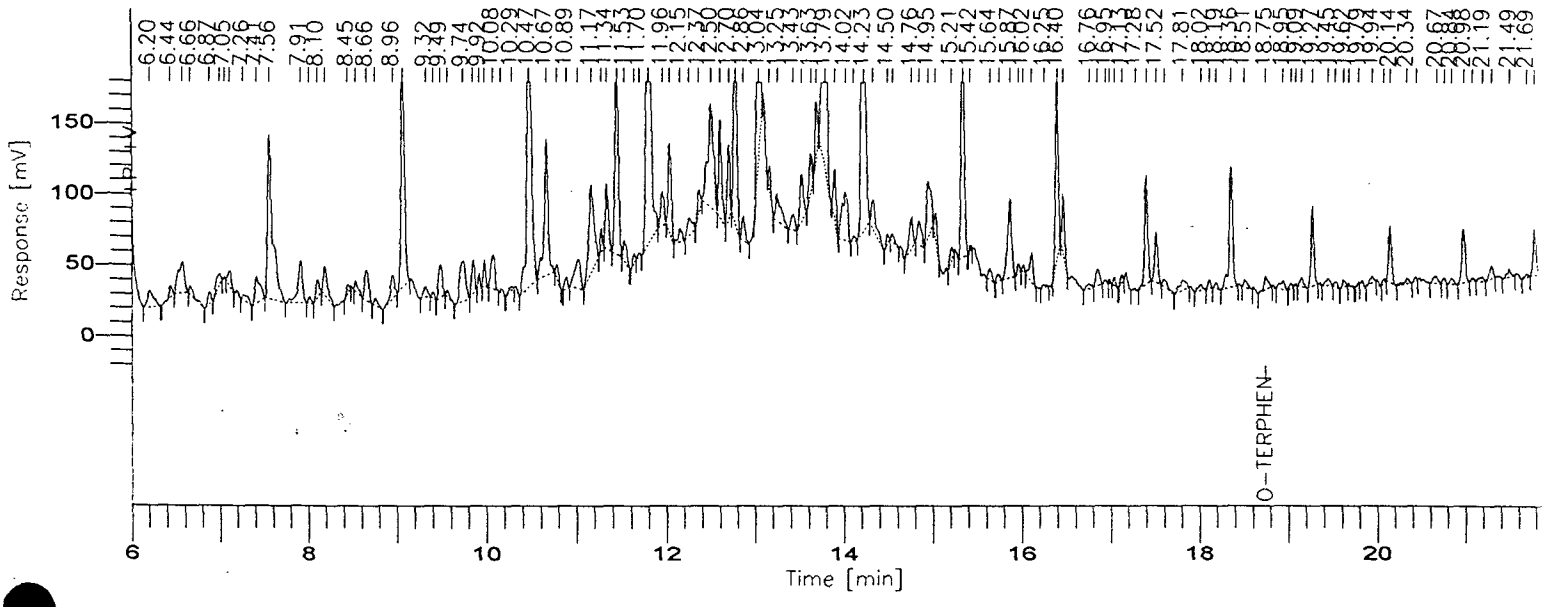
Sample 56577, when analyzed by capillary column GC-FID eluted peaks in a time frame and pattern consistent with diesel.

8-16-96

Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonell

DATE

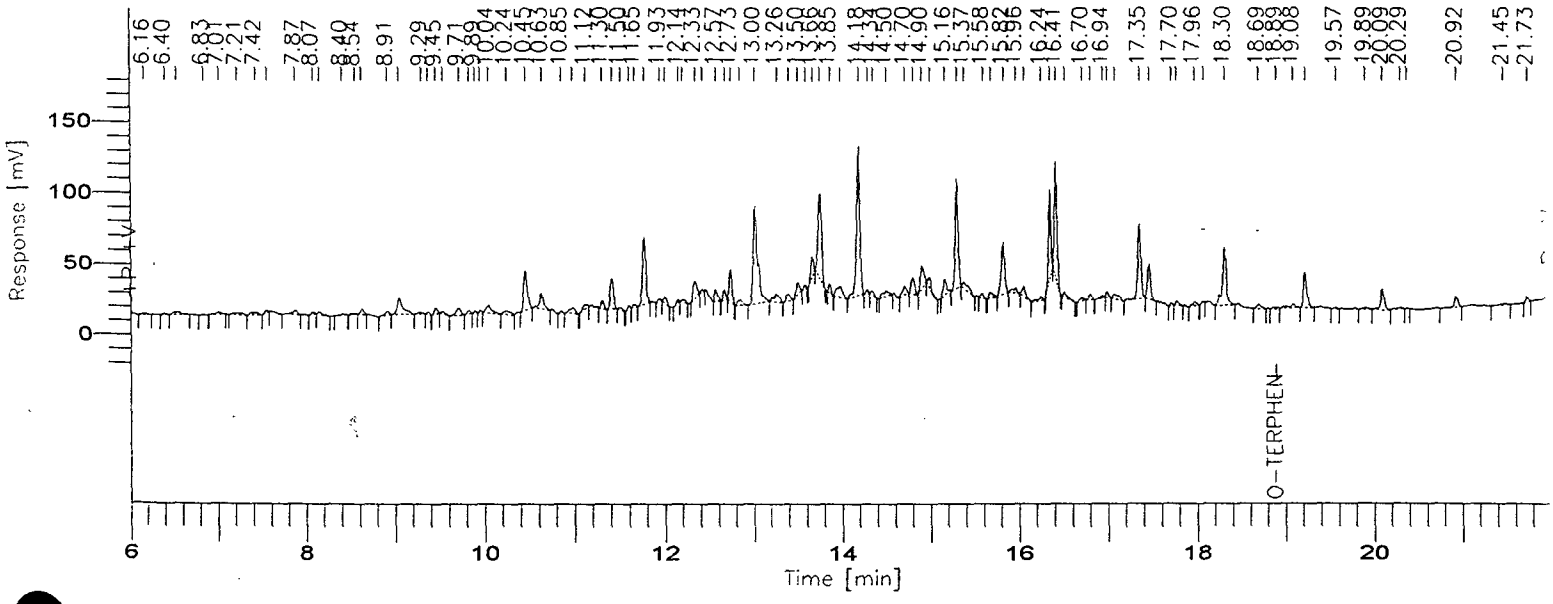
Software Version: 4.1<0G07>
Date: 8/15/96 11:15 AM
Sample Name : 56577*10
Data File : C:\TC4\DATA3\D815002.RAW Date: 8/15/96 10:51 AM
Sequence File: C:\TC4\SEQUENCE\DIES0815.SEQ Cycle: 2 Channel : A
Instrument : AUTOSYS_-_GC3 Rack/Vial: 0/2 Operator:
Sample Amount : 1.0000 Dilution Factor : 10.00



DIESEL REPORT

Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	Area [%]	Raw Amount	Adjusted Amount
	DIESEL	13.850	12834251.97	5.01e+06	99.75	1000.5640	10005.6399
103	O-Terphenyl-Surr	18.750	32527.86	9549.20	0.25	0.2569	2.5691
			12866779.83	5.02e+06	100.00	1000.8209	10008.2090

Software Version: 4.1<0G07>
Date: 8/15/96 04:14 PM
Sample Name : DIES QC
Data File : C:\TC4\DATA3\D815009.RAW Date: 8/15/96 03:50 PM
Sequence File: C:\TC4\SEQUENCE\DIES0815.SEQ Cycle: 9 Channel : A
Instrument : AUTOSYS - GC3 Rack/Vial: 0/9 Operator:
Sample Amount : 1.0000 Dilution Factor : 1.00



DIESEL REPORT

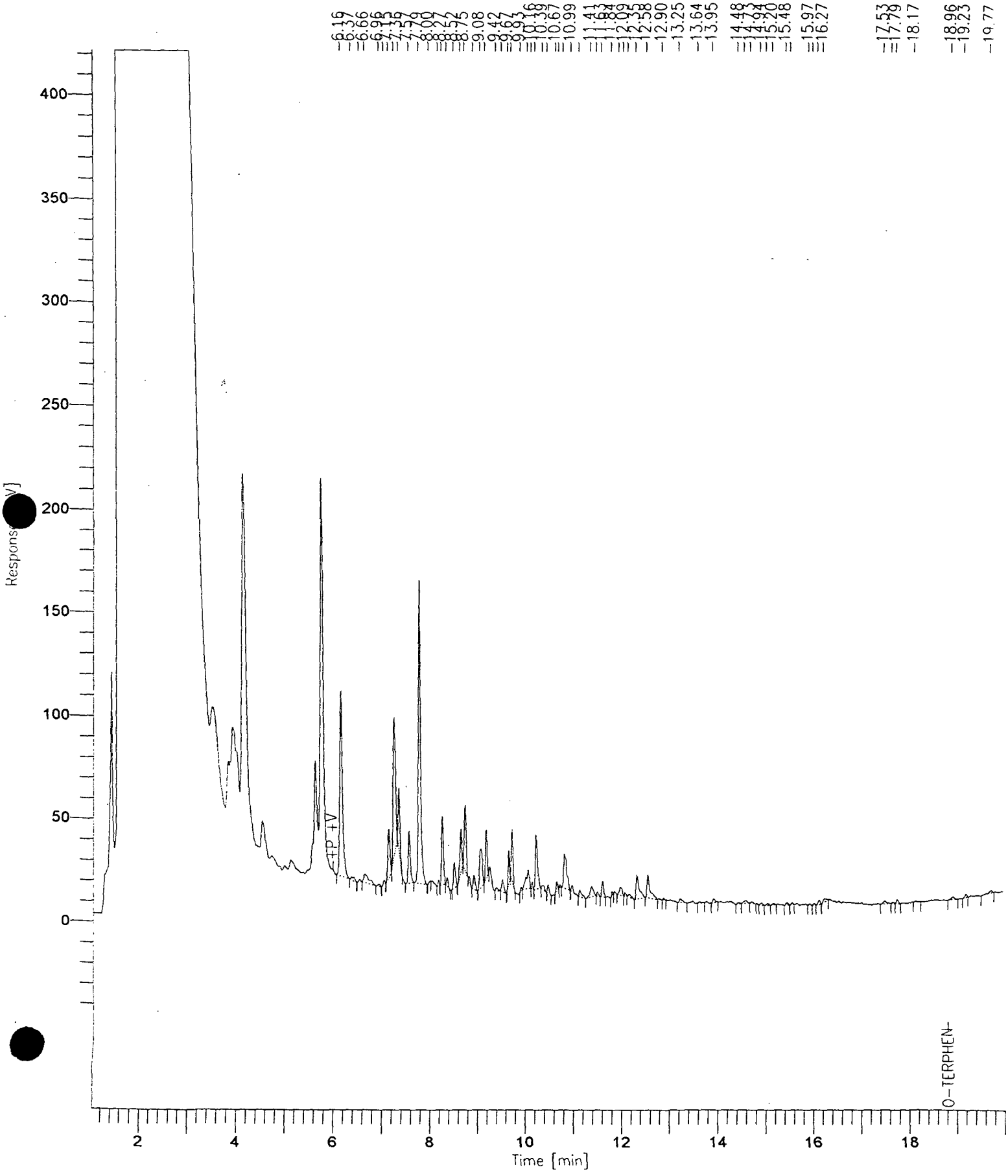
Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	Area [%]	Raw Amount	Adjusted Amount
	DIESEL	13.850	2813256.83	1.03e+06	99.77	219.3228	219.3228
90	O-Terphenyl-Surr	18.889	6441.73	1599.91	0.23	0.0509	0.0509
			2819698.56	1.03e+06	100.00	219.3736	219.3736

Chromatogram

Sample Name : GASOLINE
FileName : D:\DATA3\807D018.RAW
Method :
[redacted]rt Time : 1.04 min
[redacted]e Factor: 0.0

End Time : 20.03 min
Plot Offset: -48 mV

Sample #: 13
Date : 8/16/96 09:03 AM
Time of Injection: 8/8/96 11:56 AM
Low Point : -48.14 mV
Plot Scale: 470.0 mV



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ANALYTICAL RESULTS FOR
HIGHLANDER SERVICES CORP.
Attention: Ike Tavarez
306 W. Wall, Suite 320
Midland, TX 79701

August 16, 1996
Receiving Date: 08/02/96
Sample Type: Soil
Sampling Date: 07/29/96
Sample Condition: I & C
Sample Received by: ML
Project No: 787
Project Location: N. Eunice Gas Plant, NM
Project Name: Texaco
Extraction Date: 08/05/96
Analysis Date: 08/09/96

FIELD CODE: BH-1 10-12', (NS)
TA# : T56559

8270 Compounds	Reporting Limit	Concentration (mg/kg)	QC	RPD	%EA	%IA
N-Nitrosodimethylamine	5.0	ND				
2-Picoline	5.0	ND				
Methyl methanesulfonate	5.0	ND				
Ethyl methanesulfonate	5.0	ND				
Phenol	5.0	ND	107	12	53	107
Aniline	25.0	ND				
bis(2-Chloroethyl)ether	25.0	ND				
2-Chlorophenol	25.0	ND		5	45	
1,3-Dichlorobenzene	5.0	ND				
1,4-Dichlorobenzene	5.0	ND	99	3	49	99
Benzyl alcohol	25.0	ND				
1,2-Dichlorobenzene	5.0	ND				
2-Methylphenol	5.0	ND				
bis(2-chloroisopropyl)ether	25.0	ND				
4-Methylphenol/3-Methylphenol	5.0	ND				
Acetophenone	25.0	ND				
n-Nitrosodi-n-propylamine	5.0	ND		2	49	
Hexachloroethane	5.0	ND				
Nitrobenzene	5.0	ND				
N-Nitrosopiperidine	25.0	ND				
Isophorone	25.0	ND				
2-Nitrophenol	25.0	ND	98			98
2,4-Dimethylphenol	25.0	ND				
bis(2-Chloroethoxy)methane	5.0	ND				
Benzoic acid	50.0	ND				
2,4-Dichlorophenol	25.0	ND	108			108
1,2,4-Trichlorobenzene	5.0	ND		3	58	
a,a-Dimethylphenethylamine	50.0	ND				
Naphthalene	5.0	9.46				

Project No: 787

Project Name: Texaco

FIELD CODE: BH-1 10-12', (NS)

TA#: T56559

8270 Compounds	Reporting Limit	Concentration (mg/kg)	QC	RPD	%EA	%IA
4-Chloroaniline	25.0	ND				
2,6-Dichlorophenol	25.0	ND				
Hexachlorobutadiene	5.0	ND	118			118
N-Nitroso-di-n-butylamine	25.0	ND				
4-Chloro-3-methylphenol	25.0	ND	101	1	55	101
2-Methylnaphthalene	5.0	37.54				
1,2,4,5-Tetrachlorobenzene	5.0	ND				
Hexachlorocyclopentadiene	5.0	ND				
2,4,6-Trichlorophenol	25.0	ND	96			96
2,4,5-Trichlorophenol	25.0	ND				
2-Chloronaphthalene	5.0	ND				
1-Chloronaphthalene	5.0	ND				
2-Nitroaniline	25.0	ND				
Dimethylphthalate	5.0	ND				
Acenaphthylene	5.0	ND				
2,6-Dinitrotoluene	5.0	ND				
3-Nitroaniline	25.0	ND				
Acenaphthene	5.0	ND	107	1	66	107
2,4-Dinitrophenol	25.0	ND				
Dibenzofuran	25.0	ND				
Pentachlorobenzene	5.0	ND				
4-Nitrophenol	25.0	ND		2	66	
1-Napthylamine	25.0	ND				
2,4-Dinitrotoluene	5.0	ND		11	55	
2-Napthylamine	25.0	ND				
2,3,4,6-Tetrachlorophenol	25.0	ND				
Fluorene	5.0	ND				
Diethylphthalate	5.0	ND				
4-Chlorophenyl-phenylether	5.0	ND				
4-Nitroaniline	25.0	ND				
4,6-Dinitro-2-methylphenol	5.0	ND				
N-Nitrosodiphenylamine & Diphenylam	5.0	ND	119			119
Diphenylhydrazine	25.0	ND				

FIELD CODE: BH-1 10-12', (NS)
TA#: T56559

8270 Compounds	Reporting Limit	Concentration (mg/kg)	QC	RPD	%EA	%IA
4-Bromophenyl-phenylether	5.0	ND				
Phenacetin	25.0	ND				
Hexachlorobenzene	5.0	ND				
4-Aminobiphenyl	25.0	ND				
Pentachlorophenol	25.0	ND	107	4	65	107
Pentachloronitrobenzene	25.0	ND				
Pronamide	5.0	ND				
Phenanthrene	5.0	ND				
Anthracene	5.0	7.02				
Di-n-butylphthalate	5.0	ND				
Fluoranthene	5.0	ND	115			115
Benzidine	50.0	ND				
Pyrene	5.0	ND		5	114	
-Dimethylaminoazobenzene	5.0	ND				
Butylbenzylphthalate	5.0	ND				
Benzo[a]anthracene	5.0	ND				
3,3-Dichlorobenzidine	5.0	ND				
Chrysene	5.0	ND				
bis(2-Ethylhexyl)phthalate	5.0	ND				
Di-n-octlphthalate	5.0	ND				
Benzo[b]fluoranthene	5.0	ND				
7,12-Dimethylbenz(a)anthracene	5.0	ND				
Benzo[k]fluoranthene	5.0	ND				
Benzo[a]pyrene	5.0	ND	117			117
3-Methylcholanthrene	5.0	ND				
Dibenzo(a,j)acridine	5.0	ND				
Indeno[1,2,3-cd]pyrene	5.0	ND				
Dibenz[a,h]anthracene	5.0	ND				
Benzo[g,h,i]perylene	5.0	ND				

HIGHLANDER SERVICES CORP.
Project No: 787
Project Name: Texaco
Field Code: BH-1 10-12', (NS)
TA#: T56559

8080 Compounds	Reporting Limit	Concentration (mg/kg)	QC	RPD	%EA	%IA
a-BHC	0.0125	ND	---	11	76	96
b-BHC	0.0125	ND	---	15	78	100
g-BHC	0.0125	ND	---	6	70	100
d-BHC	0.0125	ND	---	12	98	96
Heptachlor	0.0125	ND	---	32	86	100
Aldrin	0.0125	ND	---	11	76	100
Heptachlor epoxide	0.0125	ND	---	5	86	104
Endosulfan-1	0.0125	ND	---	5	74	100
Endosulfan-2	0.025	ND	---	0	72	104
P,P'-DDE	0.025	ND	---	8	73	94
Dieldrin	0.025	ND	---	3	75	105
Endrin	0.025	ND	---	0	66	106
P,P'-DDD	0.025	ND	---	7	81	104
Endrin Aldehyde	0.025	ND	---	---	---	108
Endosulfan Sulfate/P,P'-DDT	0.025	ND	---	15	86	114
Endrin Ketone	0.025	ND	---	5	84	112
Methoxychlor	0.125	ND	---	1	71	112
a-Chlordane	0.0125	ND	---	0	76	102
g-Chlordane	0.0125	ND	---	6	70	96
Toxaphene	1.25	ND	---	1	67	103
PCB's	2.5	ND	0.53	0	102	106

TENTATIVELY IDENTIFIED COMPOUNDS AND ESTIMATED CONCENTRATIONS (mg/kg)

		RT.	CONC.			RT	CONC.
(1)	Decane	5.33	98.3	(13)	Octadecane	12.31	168
(2)	Dodecane	6.87	126	(14)	2,6,10-trimethyl-dodecane	12.40	93.5
(3)	Unknown	7.28	36.6				
(4)	Tridecane	7.71	165	(15)	Nonadecane	13.20	177
(5)	2,6,10-trimethyl-dodecane	8.37	68.5	(16)	Eicosane	4.04	10
				(17)	Heneicosane	14.86	81.0
(6)	Tetradecane	8.59	313	(18)	Docasane	15.65	62.2
(7)	2,3-dimethyl-naphthalene	9.06	69.9				
(8)	5-propyldecane	9.16	79.3				
(9)	Pentadecane	9.51	260				
(10)	Hexadecane	10.45	213				
(11)	5,8-diethyldodecane	10.90	75.6				
(12)	Heptadecane	11.40	233				

ND = NOT DETECTED

	% RECOVERY
2-Fluorophenol SURR	91
Phenol-d6 SURR	68
Nitrobenzene-d5 SURR	115
2-Fluorobiphenyl SURR	113
2,4,6-Tribromophenol SURR	100
Terphenyl-d14 SURR	129

METHOD: EPA SW 846-8270, 3550, 8080.
CHEMIST: RD/CC/MB/RCD

Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonell

8-16-96
Date

6701 Aberdeen Avenue
Lubbock, Texas 79424
806•794•1296
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ANALYTICAL RESULTS FOR
HIGHLANDER SERVICES CORP.
Attention: Ike Tavarez
306 W. Wall, Suite 320
Midland, TX 79701

August 16, 1996
Receiving Date: 08/02/96
Sample Type: Soil
Sampling Date: 07/29/96
Sample Condition: I & C
Sample Received by: ML
Project No: 787
Project Location: N. Eunice Gas Plant, NM
Project Name: Texaco
Extraction Date: 08/05/96
Analysis Date: 08/09/96

FIELD CODE: BH-1 50-52', (NS)
TA# : T56567

8270 Compounds	Reporting Limit	Concentration (mg/kg)	QC	RPD	%EA	%IA
N-Nitrosodimethylamine	5.0	ND				
2-Picoline	5.0	ND				
Methyl methanesulfonate	5.0	ND				
Ethyl methanesulfonate	5.0	ND				
Phenol	5.0	ND	107	12	53	107
Aniline	25.0	ND				
bis(2-Chloroethyl)ether	25.0	ND				
2-Chlorophenol	25.0	ND		5	45	
1,3-Dichlorobenzene	5.0	ND				
1,4-Dichlorobenzene	5.0	ND	99	3	49	99
Benzyl alcohol	25.0	ND				
1,2-Dichlorobenzene	5.0	ND				
2-Methylphenol	5.0	ND				
bis(2-chloroisopropyl)ether	25.0	ND				
4-Methylphenol/3-Methylphenol	5.0	ND				
Acetophenone	25.0	ND				
n-Nitrosodi-n-propylamine	5.0	ND		2	49	
Hexachloroethane	5.0	ND				
Nitrobenzene	5.0	ND				
N-Nitrosopiperidine	25.0	ND				
Isophorone	25.0	ND				
2-Nitrophenol	25.0	ND	98			98
2,4-Dimethylphenol	25.0	ND				
bis(2-Chloroethoxy)methane	5.0	ND				
Benzoic acid	50.0	ND				
2,4-Dichlorophenol	25.0	ND	108			108
1,2,4-Trichlorobenzene	5.0	ND		3	58	
a,a-Dimethylphenethylamine	50.0	ND				
Naphthalene	5.0	ND				

Project No: 787

Project Name: Texaco

FIELD CODE: BH-1 50-52', (NS)

TA#: T56567

8270 Compounds	Reporting Limit	Concentration (mg/kg)	QC	RPD	%EA	%IA
4-Chloroaniline	25.0	ND				
2,6-Dichlorophenol	25.0	ND				
Hexachlorobutadiene	5.0	ND	118			118
N-Nitroso-di-n-butylamine	25.0	ND				
4-Chloro-3-methylphenol	25.0	ND	101	1	55	101
2-Methylnaphthalene	5.0	10.8				
1,2,4,5-Tetrachlorobenzene	5.0	ND				
Hexachlorocyclopentadiene	5.0	ND				
2,4,6-Trichlorophenol	25.0	ND	96			96
2,4,5-Trichlorophenol	25.0	ND				
2-Chloronaphthalene	5.0	ND				
1-Chloronaphthalene	5.0	ND				
2-Nitroaniline	25.0	ND				
Dimethylphthalate	5.0	ND				
Acenaphthylene	5.0	ND				
[illegible]-Dinitrotoluene	5.0	ND				
3-Nitroaniline	25.0	ND				
Acenaphthene	5.0	ND	107	1	66	107
2,4-Dinitrophenol	25.0	ND				
Dibenzofuran	25.0	ND				
Pentachlorobenzene	5.0	ND				
4-Nitrophenol	25.0	ND		2	66	
1-Napthylamine	25.0	ND				
2,4-Dinitrotoluene	5.0	ND		11	55	
2-Napthylamine	25.0	ND				
2,3,4,6-Tetrachlorophenol	25.0	ND				
Fluorene	5.0	ND				
Diethylphthalate	5.0	ND				
4-Chlorophenyl-phenylether	5.0	ND				
4-Nitroaniline	25.0	ND				
4,6-Dinitro-2-methylphenol	5.0	ND				
[illegible]-Nitrosodiphenylamine & Diphenylam	5.0	ND	119			119
Diphenylhydrazine	25.0	ND				

FIELD CODE: BH-1 50-52', (NS)
TA#: T56567

8270 Compounds	Reporting Limit	Concentration (mg/kg)	QC	RPD	%EA	%IA
4-Bromophenyl-phenylether	5.0	ND				
Phenacetin	25.0	ND				
Hexachlorobenzene	5.0	ND				
4-Aminobiphenyl	25.0	ND				
Pentachlorophenol	25.0	ND	107	4	65	107
Pentachloronitrobenzene	25.0	ND				
Pronamide	5.0	ND				
Phenanthrene	5.0	ND				
Anthracene	5.0	ND				
Di-n-butylphthalate	5.0	ND				
Fluoranthene	5.0	ND	115			115
Benzidine	50.0	ND				
Pyrene	5.0	ND		5	114	
p-Dimethylaminoazobenzene	5.0	ND				
Butylbenzylphthalate	5.0	ND				
Benzo[a]anthracene	5.0	ND				
3,3-Dichlorobenzidine	5.0	ND				
Chrysene	5.0	ND				
bis(2-Ethylhexyl)phthalate	5.0	ND				
Di-n-octlphthalate	5.0	ND				
Benzo[b]fluoranthene	5.0	ND				
7,12-Dimethylbenz(a)anthracene	5.0	ND				
Benzo[k]fluoranthene	5.0	ND				
Benzo[a]pyrene	5.0	ND	117			117
3-Methylcholanthrene	5.0	ND				
Dibenzo(a,j)acridine	5.0	ND				
Indeno[1,2,3-cd]pyrene	5.0	ND				
Dibenz[a,h]anthracene	5.0	ND				
Benzo[g,h,i]perylene	5.0	ND				

HIGHLANDER SERVICES CORP.
Project No: 787
Project Name: Texaco
Field Code: BH-1 50-52', (NS)
TA#: T56567

8080 Compounds	Reporting Limit	Concentration (mg/kg)	QC	RPD	%EA	%IA
a-BHC	0.0125	ND	---	11	76	96
b-BHC	0.0125	ND	---	15	78	100
g-BHC	0.0125	ND	---	6	70	100
d-BHC	0.0125	ND	---	12	98	96
Heptachlor	0.0125	ND	---	32	86	100
Aldrin	0.0125	ND	---	11	76	100
Heptachlor epoxide	0.0125	ND	---	5	86	104
Endosulfan-1	0.0125	ND	---	5	74	100
Endosulfan-2	0.025	ND	---	0	72	104
P,P'-DDE	0.025	ND	---	8	73	94
Dieldrin	0.025	ND	---	3	75	105
Endrin	0.025	ND	---	0	66	106
P,P'-DDD	0.025	ND	---	7	81	104
Endrin Aldehyde	0.025	ND	---	---	---	108
Endosulfan Sulfate/P,P'-DDT	0.025	ND	---	15	86	114
Endrin Ketone	0.025	ND	---	5	84	112
Methoxychlor	0.125	ND	---	1	71	112
a-Chlordane	0.0125	ND	---	0	76	102
g-Chlordane	0.0125	ND	---	6	70	96
Toxaphene	1.25	ND	---	1	67	103
PCB's	0.25	ND	0.53	0	102	106

TENTATIVELY IDENTIFIED COMPOUNDS AND ESTIMATED CONCENTRATIONS (mg/kg)

		RT.	CONC.			RT	CONC.
(1)	Decane	5.34	74.8	(12)	Octadecane	12.29	73.9
(2)	Undecane	6.10	68.6	(13)	Nonadecane	13.18	82.3
(3)	Dodecane	6.87	78.0	(14)	Eicosane	14.03	50.5
(4)	Tridecane	7.70	158	(15)	Heneicosane	14.85	45.0
(5)	Unknown	8.17	47.0				
(6)	2,6,10-trimethyl-dodecane	8.38	41.3				
(7)	Tetradecane	8.59	216				
(8)	2,6,11-trimethyl-dodecane	9.15	52.0				
(9)	Pentadecane	9.50	151				
(10)	Hexadecane	10.44	97.4				
(11)	Heptadecane	11.38	119				

ND = NOT DETECTED

	% RECOVERY
2-Fluorophenol SURR	84
Phenol-d6 SURR	64
Nitrobenzene-d5 SURR	107
2-Fluorobiphenyl SURR	113
2,4,6-Tribromophenol SURR	91
Terphenyl-d14 SURR	122

METHOD: EPA SW 846-8270, 3550, 8080.
CHEMIST: RD/CC/MB/RCD

Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonell

8-16-96
Date

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ANALYTICAL RESULTS FOR
HIGHLANDER SERVICES CORP.
Attention: Ike Tavarez
306 W. Wall, Suite 320
Midland, TX 79701

August 16, 1996
Receiving Date: 08/02/96
Sample Type: Soil
Sampling Date: 07/29/96
Sample Condition: I & C
Sample Received by: ML
Project No: 787
Project Location: N. Eunice Gas Plant, NM
Project Name: Texaco
Extraction Date: 08/05/96
Analysis Date: 08/09/96

FIELD CODE: BH-2 10-12', (NS)
TA# : T56569

8270 Compounds	Reporting Limit	Concentration (mg/kg)	QC	RPD	%EA	%IA
N-Nitrosodimethylamine	2.5	ND				
2-Picoline	2.5	ND				
Methyl methanesulfonate	2.5	ND				
Ethyl methanesulfonate	2.5	ND				
Phenol	2.5	ND	107	12	53	107
Aniline	12.5	ND				
bis(2-Chloroethyl)ether	12.5	ND				
2-Chlorophenol	12.5	ND		5	45	
1,3-Dichlorobenzene	2.5	ND				
1,4-Dichlorobenzene	2.5	ND	99	3	49	99
Benzyl alcohol	12.5	ND				
1,2-Dichlorobenzene	2.5	ND				
2-Methylphenol	2.5	ND				
bis(2-chloroisopropyl)ether	12.5	ND				
4-Methylphenol/3-Methylphenol	2.5	ND				
Acetophenone	12.5	ND				
n-Nitrosodi-n-propylamine	2.5	ND		2	49	
Hexachloroethane	2.5	ND				
Nitrobenzene	2.5	ND				
N-Nitrosopiperidine	12.5	ND				
Isophorone	12.5	ND				
2-Nitrophenol	12.5	ND	98			98
2,4-Dimethylphenol	12.5	ND				
bis(2-Chloroethoxy)methane	2.5	ND				
Benzoic acid	25.0	ND				
2,4-Dichlorophenol	12.5	ND	108			108
1,2,4-Trichlorobenzene	2.5	ND		3	58	
a,a-Dimethylphenethylamine	25.0	ND				
Naphthalene	2.5	ND				

Project No: 787

Project Name: Texaco

FIELD CODE: BH-2 10-12', (NS)

TA#: T56569

8270 Compounds	Reporting Limit	Concentration (mg/kg)	QC	RPD	%EA	%IA
4-Chloroaniline	12.5	ND				
2,6-Dichlorophenol	12.5	ND				
Hexachlorobutadiene	2.5	ND	118			118
N-Nitroso-di-n-butylamine	12.5	ND				
4-Chloro-3-methylphenol	12.5	ND	101	1	55	101
2-Methylnaphthalene	2.5	4.37				
1,2,4,5-Tetrachlorobenzene	2.5	ND				
Hexachlorocyclopentadiene	2.5	ND				
2,4,6-Trichlorophenol	12.5	ND	96			96
2,4,5-Trichlorophenol	12.5	ND				
2-Chloronaphthalene	2.5	ND				
1-Chloronaphthalene	2.5	ND				
2-Nitroaniline	12.5	ND				
Dimethylphthalate	2.5	ND				
Acenaphthylene	2.5	ND				
/6-Dinitrotoluene	2.5	ND				
3-Nitroaniline	12.5	ND				
Acenaphthene	2.5	ND	107	1	66	107
2,4-Dinitrophenol	12.5	ND				
Dibenzofuran	12.5	ND				
Pentachlorobenzene	2.5	ND				
4-Nitrophenol	12.5	ND		2	66	
1-Napthylamine	12.5	ND				
2,4-Dinitrotoluene	2.5	ND		11	55	
2-Napthylamine	12.5	ND				
2,3,4,6-Tetrachlorophenol	12.5	ND				
Fluorene	2.5	ND				
Diethylphthalate	2.5	ND				
4-Chlorophenyl-phenylether	2.5	ND				
4-Nitroaniline	12.5	ND				
4,6-Dinitro-2-methylphenol	2.5	ND				
-Nitrosodiphenylamine & Diphenylam	2.5	ND	119			119
Diphenylhydrazine	12.5	ND				

FIELD CODE: BH-2 10-12', (NS)
TA#: T56569

8270 Compounds	Reporting Limit	Concentration (mg/kg)	QC	RPD	%EA	%IA
4-Bromophenyl-phenylether	2.5	ND				
Phenacetin	12.5	ND				
Hexachlorobenzene	2.5	ND				
4-Aminobiphenyl	12.5	ND				
Pentachlorophenol	12.5	ND	107	4	65	107
Pentachloronitrobenzene	12.5	ND				
Pronamide	2.5	ND				
Phenanthrene	2.5	ND				
Anthracene	2.5	ND				
Di-n-butylphthalate	2.5	ND				
Fluoranthene	2.5	ND	115			115
Benzidine	25.0	ND				
yrene	2.5	ND		5	114	
p-Dimethylaminoazobenzene	2.5	ND				
Butylbenzylphthalate	2.5	ND				
Benzo[a]anthracene	2.5	ND				
3,3-Dichlorobenzidine	2.5	ND				
Chrysene	2.5	ND				
bis(2-Ethylhexyl)phthalate	2.5	ND				
Di-n-octlphthalate	2.5	ND				
Benzo[b]fluoranthene	2.5	ND				
7,12-Dimethylbenz(a)anthracene	2.5	ND				
Benzo[k]fluoranthene	2.5	ND				
Benzo[a]pyrene	2.5	ND	117			117
3-Methylcholanthrene	2.5	ND				
Dibenzo(a,j)acridine	2.5	ND				
Indeno[1,2,3-cd]pyrene	2.5	ND				
Dibenz[a,h]anthracene	2.5	ND				
Benzo[g,h,i]perylene	2.5	ND				

HIGHLANDER SERVICES CORP.
Project No: 787
Project Name: Texaco
Field Code: BH-2 10-12', (NS)
TA#: T56569

8080 Compounds	Reporting Limit	Concentration (mg/kg)	QC	RPD	%EA	%IA
a-BHC	0.0125	ND	---	11	76	96
b-BHC	0.0125	ND	---	15	78	100
g-BHC	0.0125	ND	---	6	70	100
d-BHC	0.0125	ND	---	12	98	96
Heptachlor	0.0125	ND	---	32	86	100
Aldrin	0.0125	ND	---	11	76	100
Heptachlor epoxide	0.0125	ND	---	5	86	104
Endosulfan-1	0.0125	ND	---	5	74	100
Endosulfan-2	0.025	ND	---	0	72	104
P,P'-DDE	0.025	ND	---	8	73	94
Dieldrin	0.025	ND	---	3	75	105
Endrin	0.025	ND	---	0	66	106
P,P'-DDD	0.025	ND	---	7	81	104
Endrin Aldehyde	0.025	ND	---	---	---	108
Endosulfan Sulfate/P,P'-DDT	0.025	ND	---	15	86	114
Endrin Ketone	0.025	ND	---	5	84	112
Methoxychlor	0.125	ND	---	1	71	112
a-Chlordane	0.0125	ND	---	0	76	102
g-Chlordane	0.0125	ND	---	6	70	96
Toxaphene	1.25	ND	---	1	67	103
PCB's	0.25	ND	0.53	0	102	106

TENTATIVELY IDENTIFIED COMPOUNDS AND ESTIMATED CONCENTRATIONS (mg/kg)

		RT.	CONC.			RT	CONC.
(1)	Decane	5.33	20.1	(12)	Octadecane	12.28	27.7
(2)	Dodecane	6.87	20.5	(13)	Nonadecane	13.18	26.2
(3)	Tridecane	7.69	50.4	(14)	Eicosane	14.03	23.2
(4)	2,6,10-trimethyl-dodecane	8.37	16.6	(15)	Heneicosane	14.85	21.6
				(16)	Docasane	15.63	18.6
(5)	Tetradecane	8.57	75.3	(17)	Tricosane	16.38	18.1
(6)	2,3-dimethyl-naphthalene	9.06	12.6	(18)	Tetracosane	17.11	16.5
				(19)	Hexatriacontane	17.81	16.9
(7)	4-methyltetradecane	9.15	22.2	(20)	Hexacosane	18.48	15.4
(8)	Pentadecane	9.50	48.9				
(9)	Hexadecane	10.43	31.7				
(10)	Heptadecane	11.36	31.0				
(11)	2-methyldecane	11.42	14.0				

ND = NOT DETECTED

	% RECOVERY
2-Fluorophenol SURR	78
Phenol-d6 SURR	90
Nitrobenzene-d5 SURR	115
2-Fluorobiphenyl SURR	114
2,4,6-Tribromophenol SURR	86
Terphenyl-d14 SURR	118

METHOD: EPA SW 846-8270, 3550, 8080.
CHEMIST: RD/CC/MB/RCD

Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonell

8-16-96
Date

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ANALYTICAL RESULTS FOR
HIGHLANDER SERVICES CORP.
Attention: Ike Tavarez
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August 16, 1996
Receiving Date: 08/02/96
Sample Type: Soil
Sampling Date: 07/29/96
Sample Condition: I & C
Sample Received by: ML
Project No: 787
Project Location: N. Eunice Gas Plant, NM
Project Name: Texaco
Extraction Date: 08/05/96
Analysis Date: 08/09/96

FIELD CODE: BH-2 50-52', (NS)
TA# : T56577

8270 Compounds	Reporting Limit	Concentration (mg/kg)	QC	RPD	%EA	%IA
N-Nitrosodimethylamine	2.5	ND				
2-Picoline	2.5	ND				
Methyl methanesulfonate	2.5	ND				
Ethyl methanesulfonate	2.5	ND				
Phenol	2.5	ND	107	12	53	107
Aniline	12.5	ND				
bis(2-Chloroethyl)ether	12.5	ND				
2-Chlorophenol	12.5	ND		5	45	
1,3-Dichlorobenzene	2.5	ND				
1,4-Dichlorobenzene	2.5	ND	99	3	49	99
Benzyl alcohol	12.5	ND				
1,2-Dichlorobenzene	2.5	ND				
2-Methylphenol	2.5	ND				
bis(2-chloroisopropyl)ether	12.5	ND				
4-Methylphenol/3-Methylphenol	2.5	ND				
Acetophenone	12.5	ND				
n-Nitrosodi-n-propylamine	2.5	ND		2	49	
Hexachloroethane	2.5	ND				
Nitrobenzene	2.5	ND				
N-Nitrosopiperidine	12.5	ND				
Isophorone	12.5	ND				
2-Nitrophenol	12.5	ND	98			98
2,4-Dimethylphenol	12.5	ND				
bis(2-Chloroethoxy)methane	2.5	ND				
Benzoic acid	25.0	ND				
2,4-Dichlorophenol	12.5	ND	108			108
1,2,4-Trichlorobenzene	2.5	ND		3	58	
a,a-Dimethylphenethylamine	25.0	ND				
Naphthalene	2.5	ND				

Project No: 787

Project Name: Texaco

FIELD CODE: BH-2 50-52', (NS)

TA#: T56577

8270 Compounds	Reporting Limit	Concentration (mg/kg)	QC	RPD	%EA	%IA
4-Chloroaniline	12.5	ND				
2,6-Dichlorophenol	12.5	ND				
Hexachlorobutadiene	2.5	ND	118			118
N-Nitroso-di-n-butylamine	12.5	ND				
4-Chloro-3-methylphenol	12.5	ND	101	1	55	101
2-Methylnaphthalene	2.5	9.26				
1,2,4,5-Tetrachlorobenzene	2.5	ND				
Hexachlorocyclopentadiene	2.5	ND				
2,4,6-Trichlorophenol	12.5	ND	96			96
2,4,5-Trichlorophenol	12.5	ND				
2-Chloronaphthalene	2.5	ND				
1-Chloronaphthalene	2.5	ND				
2-Nitroaniline	12.5	ND				
Dimethylphthalate	2.5	ND				
Acenaphthylene	2.5	ND				
,6-Dinitrotoluene	2.5	ND				
3-Nitroaniline	12.5	ND				
Acenaphthene	2.5	ND	107	1	66	107
2,4-Dinitrophenol	12.5	ND				
Dibenzofuran	12.5	ND				
Pentachlorobenzene	2.5	ND				
4-Nitrophenol	12.5	ND		2	66	
1-Napthylamine	12.5	ND				
2,4-Dinitrotoluene	2.5	ND		11	55	
2-Napthylamine	12.5	ND				
2,3,4,6-Tetrachlorophenol	12.5	ND				
Fluorene	2.5	ND				
Diethylphthalate	2.5	ND				
4-Chlorophenyl-phenylether	2.5	ND				
4-Nitroaniline	12.5	ND				
4,6-Dinitro-2-methylphenol	2.5	ND				
-Nitrosodiphenylamine & Diphenylam	2.5	ND	119			119
Diphenylhydrazine	12.5	ND				

FIELD CODE: BH-2 50-52', (NS)
TA#: T56577

8270 Compounds	Reporting Limit	Concentration (mg/kg)	QC	RPD	%EA	%IA
4-Bromophenyl-phenylether	2.5	ND				
Phenacetin	12.5	ND				
Hexachlorobenzene	2.5	ND				
4-Aminobiphenyl	12.5	ND				
Pentachlorophenol	12.5	ND	107	4	65	107
Pentachloronitrobenzene	12.5	ND				
Pronamide	2.5	ND				
Phenanthrene	2.5	ND				
Anthracene	2.5	ND				
Di-n-butylphthalate	2.5	ND				
Fluoranthene	2.5	ND	115			115
Benzidine	25.0	ND				
Pyrene	2.5	ND		5	114	
p-Dimethylaminoazobenzene	2.5	ND				
Butylbenzylphthalate	2.5	ND				
Benzo[a]anthracene	2.5	ND				
3,3-Dichlorobenzidine	2.5	ND				
Chrysene	2.5	ND				
bis(2-Ethylhexyl)phthalate	2.5	ND				
Di-n-octlphthalate	2.5	ND				
Benzo[b]fluoranthene	2.5	ND				
7,12-Dimethylbenz(a)anthracene	2.5	ND				
Benzo[k]fluoranthene	2.5	ND				
Benzo[a]pyrene	2.5	ND	117			117
3-Methylcholanthrene	2.5	ND				
Dibenzo(a,j)acridine	2.5	ND				
Indeno[1,2,3-cd]pyrene	2.5	ND				
Dibenz[a,h]anthracene	2.5	ND				
Benzo[g,h,i]perylene	2.5	ND				

HIGHLANDER SERVICES CORP.
Project No: 787
Project Name: Texaco
Field Code: BH-2 50-52', (NS)
TA#: T56577

8080 Compounds	Reporting Limit	Concentration (mg/kg)	QC	RPD	%EA	%IA
a-BHC	0.0125	ND	---	11	76	96
b-BHC	0.0125	ND	---	15	78	100
g-BHC	0.0125	ND	---	6	70	100
d-BHC	0.0125	ND	---	12	98	96
Heptachlor	0.0125	ND	---	32	86	100
Aldrin	0.0125	ND	---	11	76	100
Heptachlor epoxide	0.0125	ND	---	5	86	104
Endosulfan-1	0.0125	ND	---	5	74	100
Endosulfan-2	0.025	ND	---	0	72	104
P,P'-DDE	0.025	ND	---	8	73	94
Dieldrin	0.025	ND	---	3	75	105
Endrin	0.025	ND	---	0	66	106
P,P'-DDD	0.025	ND	---	7	81	104
Endrin Aldehyde	0.025	ND	---	---	---	108
Endosulfan Sulfate/P,P'-DDT	0.025	ND	---	15	86	114
Endrin Ketone	0.025	ND	---	5	84	112
Methoxychlor	0.125	ND	---	1	71	112
a-Chlordane	0.0125	ND	---	0	76	102
g-Chlordane	0.0125	ND	---	6	70	96
Toxaphene	1.25	ND	---	1	67	103
PCB's	2.5	ND	0.53	0	102	106

TENTATIVELY IDENTIFIED COMPOUNDS AND ESTIMATED CONCENTRATIONS (mg/kg)

	RT.	CONC.		RT	CONC.
(1) Decane	5.34	37.1	(9) Octadecane	12.28	23.7
(2) Undecane	6.10	35.8	(10) Nonadecane	13.17	23.3
(3) Dodecane	6.87	37.6			
(4) Tridecane	7.70	75.8			
(5) 2,6,10-trimethyl-dodecane	8.37	26.9			
(6) Tetradecane	8.59	109			
(5) 2,6,11-trimethyl-dodecane	9.15	34.0			
(6) Pentadecane	9.51	70.5			
(7) Hexadecane	10.44	38.1			
(8) Heptadecane	11.37	35.0			

ND = NOT DETECTED

	% RECOVERY
2-Fluorophenol SURR	90
Phenol-d6 SURR	68
Nitrobenzene-d5 SURR	110
2-Fluorobiphenyl SURR	114
2,4,6-Tribromophenol SURR	100
Terphenyl-d14 SURR	107

METHOD: EPA SW 846-8270, 3550, 8080.
CHEMIST: RD/CC/MB/RCD

Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonell

8-16-96
Date

6701 Aberdeen Avenue
Lubbock, Texas 79424
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ANALYTICAL RESULTS FOR
HIGHLANDER SERVICES CORP.
Attention: Ike Tavarez
306 W. Wall, Suite 320
Midland, TX 79701

August 12, 1996
Receiving Date: 07/29/96
Sample Type: Soil
Sampling Date: 07/24/96
Sample Condition: I & C
Sample Received by: SH
Project Name: Texaco
Project Location: N. Eunice Gas Plant, NM
Extraction Date: 07/30/96
Analysis Date: 08/04/96

FIELD CODE: BH-5 (5-7'), SOA
TA# : T56268

8270 Compounds	Reporting Limit	Concentration (mg/kg)	QC	RPD	%EA	%IA
N-Nitrosodimethylamine	2.5	ND				
2-Picoline	2.5	ND				
Methyl methanesulfonate	2.5	ND				
Ethyl methanesulfonate	2.5	ND				
Phenol	2.5	ND	100	2	53	100
Aniline	12.5	ND				
bis(2-Chloroethyl)ether	12.5	ND				
2-Chlorophenol	12.5	ND		5	48	
1,3-Dichlorobenzene	2.5	ND				
1,4-Dichlorobenzene	2.5	ND	95	2	47	95
Benzyl alcohol	12.5	ND				
1,2-Dichlorobenzene	2.5	ND				
2-Methylphenol	2.5	ND				
bis(2-chloroisopropyl)ether	12.5	ND				
4-Methylphenol/3-Methylphenol	2.5	ND				
Acetophenone	12.5	ND				
n-Nitrosodi-n-propylamine	2.5	ND		0	47	
Hexachloroethane	2.5	ND				
Nitrobenzene	2.5	ND				
N-Nitrosopiperidine	12.5	ND				
Isophorone	12.5	ND				
2-Nitrophenol	12.5	ND	97			97
2,4-Dimethylphenol	12.5	ND				
bis(2-Chloroethoxy)methane	2.5	ND				
Benzoic acid	25.0	ND				
2,4-Dichlorophenol	12.5	ND	101			101
1,2,4-Trichlorobenzene	2.5	ND		3	56	
a,a-Dimethylphenethylamine	25.0	ND				
Naphthalene	2.5	ND				

Project Location: N. Eunice Gas Plant, NM

Project Name: Texaco

FIELD CODE: BH-5 (5-7'), SOA

[redacted]#: T56268

8270 Compounds	Reporting Limit	Concentration (mg/kg)	QC	RPD	%EA	%IA
4-Chloroaniline	12.5	ND				
2,6-Dichlorophenol	12.5	ND				
Hexachlorobutadiene	2.5	ND	104			104
N-Nitroso-di-n-butylamine	12.5	ND				
4-Chloro-3-methylphenol	12.5	ND	98	0	48	98
2-Methylnaphthalene	2.5	ND				
1,2,4,5-Tetrachlorobenzene	2.5	ND				
Hexachlorocyclopentadiene	2.5	ND				
2,4,6-Trichlorophenol	12.5	ND	94			94
2,4,5-Trichlorophenol	12.5	ND				
2-Chloronaphthalene	2.5	ND				
1-Chloronaphthalene	2.5	ND				
2-Nitroaniline	12.5	ND				
Dimethylphthalate	2.5	ND				
[redacted]cenaphthylene	2.5	ND				
[redacted]2,6-Dinitrotoluene	2.5	ND				
3-Nitroaniline	12.5	ND				
Acenaphthene	2.5	ND	104	3	61	104
2,4-Dinitrophenol	12.5	ND				
Dibenzofuran	12.5	ND				
Pentachlorobenzene	2.5	ND				
4-Nitrophenol	12.5	ND		5	42	
1-Napthylamine	12.5	ND				
2,4-Dinitrotoluene	2.5	ND		11	52	
2-Napthylamine	12.5	ND				
2,3,4,6-Tetrachlorophenol	12.5	ND				
Fluorene	2.5	ND				
Diethylphthalate	2.5	ND				
4-Chlorophenyl-phenylether	2.5	ND				
4-Nitroaniline	12.5	ND				
4,6-Dinitro-2-methylphenol	2.5	ND				
[redacted]-Nitrosodiphenylamine & Diphenylam	2.5	ND	106			106
Diphenylhydrazine	12.5	ND				

FIELD CODE: BH-5 (5-7'), SOA
TA#: T56268

8270 Compounds	Reporting Limit	Concentration (mg/kg)	QC	RPD	%EA	%IA
4-Bromophenyl-phenylether	2.5	ND				
Phenacetin	12.5	ND				
Hexachlorobenzene	2.5	ND				
4-Aminobiphenyl	12.5	ND				
Pentachlorophenol	12.5	ND	110	6	61	110
Pentachloronitrobenzene	12.5	ND				
Pronamide	2.5	ND				
Phenanthrene	2.5	ND				
Anthracene	2.5	ND				
Di-n-butylphthalate	2.5	ND				
Fluoranthene	2.5	ND	107			107
Benzidine	25.0	ND				
rene	2.5	ND				
p-Dimethylaminoazobenzene	2.5	ND				
Butylbenzylphthalate	2.5	ND				
Benzo[a]anthracene	2.5	ND				
3,3-Dichlorobenzidine	2.5	ND				
Chrysene	2.5	ND				
bis(2-Ethylhexyl)phthalate	2.5	ND				
Di-n-octlphthalate	2.5	ND				
Benzo[b]fluoranthene	2.5	ND				
7,12-Dimethylbenz(a)anthracene	2.5	ND				
Benzo[k]fluoranthene	2.5	ND				
Benzo[a]pyrene	2.5	ND	102			102
3-Methylcholanthrene	2.5	ND				
Dibenzo(a,j)acridine	2.5	ND				
Indeno[1,2,3-cd]pyrene	2.5	ND				
Dibenz[a,h]anthracene	2.5	ND				
Benzo[g,h,i]perylene	2.5	ND				

HIGHLANDER SERVICES CORP.
Project Location: N. Eunice Gas Plant, NM
Project Name: Texaco

Field Code: BH-5 (5-7'), SOA

TA#: T56268

8080 Compounds	Reporting Limit	Concentration (mg/kg)	QC	RPD	%EA	%IA
a-BHC	0.0125	ND	---	6	70	96
b-BHC	0.0125	ND	---	6	66	112
g-BHC	0.0125	ND	---	1	61	100
d-BHC	0.0125	ND	---	4	90	108
Heptachlor	0.0125	ND	---	12	132	100
Aldrin	0.0125	ND	---	5	74	108
Heptachlor epoxide	0.0125	ND	---	5	82	112
Endosulfan-1	0.0125	ND	---	0	76	100
Endosulfan-2	0.025	ND	---	0	84	118
P,P'-DDE	0.025	ND	---	3	67	104
Dieldrin	0.025	ND	---	2	88	106
Endrin	0.025	ND	---	1	41	104
P,P'-DDD	0.025	ND	---	5	66	106
Endrin Aldehyde	0.025	ND	---	---	---	112
Endosulfan Sulfate/P,P'-DDT	0.025	ND	---	14	107	115
Endrin Ketone	0.025	ND	---	1	118	118
Methoxychlor	0.125	ND	---	1	67	111
a-Chlordane	0.0125	ND	---	1	67	112
g-Chlordane	0.0125	ND	---	6	68	104
Toxaphene	1.25	ND	---	4	136	102
PCB's	2.5	ND	0.525	2	86	105

TENTATIVELY IDENTIFIED COMPOUNDS AND ESTIMATED CONCENTRATIONS (mg/kg)

	RT.	CONC.
(1) Nonane	4.59	23.9
(2) Unknown	4.88	14.3
(3) Unknown	4.94	7.5
(4) Unknown	5.12	15.2
(5) 1-ethyl-4-methylbenzene	5.18	9.8
(6) Decane	5.40	45.7
(7) 1,2,4-trimethylbebzebe	5.68	8.6
(8) 2-methyldecane	5.89	5.9
(9) Undecane	6.16	19.8
(10) Dodecane	6.94	11.6
(11) Tridecane	7.77	7.8

	% RECOVERY
2-Fluorophenol SURR	78
Phenol-d6 SURR	52
Nitrobenzene-d5 SURR	78
2-Fluorobiphenyl SURR	92
2,4,6-Tribromophenol SURR	78
Terphenyl-d14 SURR	120

METHOD: EPA SW 846-8270, 3550, 8080.
CHEMIST: RD/CC/MB
ND = NOT DETECTED

Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonell

8-18-95
Date

6701 Aberdeen Avenue
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ANALYTICAL RESULTS FOR
HIGHLANDER SERVICES CORP.
Attention: Ike Tavarez
306 W. Wall, Suite 320
Midland, TX 79701

August 12, 1996
Receiving Date: 07/29/96
Sample Type: Soil
Sampling Date: 07/24/96
Sample Condition: I & C
Sample Received by: SH
Project Name: Texaco
Project Location: N. Eunice Gas Plant, NM
Extraction Date: 07/30/96
Analysis Date: 08/04/96

FIELD CODE: BH-6 (5-7'), SOA
TA# : T56275

8270 Compounds	Reporting Limit	Concentration (mg/kg)	QC	RPD	%EA	%IA
N-Nitrosodimethylamine	2.5	ND				
2-Picoline	2.5	ND				
Methyl methanesulfonate	2.5	ND				
Ethyl methanesulfonate	2.5	ND				
Phenol	2.5	ND	100	2	53	100
Aniline	12.5	ND				
bis(2-Chloroethyl)ether	12.5	ND				
2-Chlorophenol	12.5	ND		5	48	
1,3-Dichlorobenzene	2.5	ND				
1,4-Dichlorobenzene	2.5	ND	95	2	47	95
Benzyl alcohol	12.5	ND				
1,2-Dichlorobenzene	2.5	ND				
2-Methylphenol	2.5	ND				
bis(2-chloroisopropyl)ether	12.5	ND				
4-Methylphenol/3-Methylphenol	2.5	ND				
Acetophenone	12.5	ND				
n-Nitrosodi-n-propylamine	2.5	ND		0	47	
Hexachloroethane	2.5	ND				
Nitrobenzene	2.5	ND				
N-Nitrosopiperidine	12.5	ND				
Isophorone	12.5	ND				
2-Nitrophenol	12.5	ND	97			97
2,4-Dimethylphenol	12.5	ND				
bis(2-Chloroethoxy)methane	2.5	ND				
Benzoic acid	25.0	ND				
2,4-Dichlorophenol	12.5	ND	101			101
1,2,4-Trichlorobenzene	2.5	ND		3	56	
a,a-Dimethylphenethylamine	25.0	ND				
Naphthalene	2.5	ND				

Project Location: N. Eunice Gas Plant, NM

Project Name: Texaco

FIELD CODE: BH-6 (5-7'), SOA

TA#: T56275

8270 Compounds	Reporting Limit	Concentration (mg/kg)	QC	RPD	%EA	%IA
4-Chloroaniline	12.5	ND				
2,6-Dichlorophenol	12.5	ND				
Hexachlorobutadiene	2.5	ND	104			104
N-Nitroso-di-n-butylamine	12.5	ND				
4-Chloro-3-methylphenol	12.5	ND	98	0	48	98
2-Methylnaphthalene	2.5	ND				
1,2,4,5-Tetrachlorobenzene	2.5	ND				
Hexachlorocyclopentadiene	2.5	ND				
2,4,6-Trichlorophenol	12.5	ND	94			94
2,4,5-Trichlorophenol	12.5	ND				
2-Chloronaphthalene	2.5	ND				
1-Chloronaphthalene	2.5	ND				
2-Nitroaniline	12.5	ND				
Dimethylphthalate	2.5	ND				
Acenaphthylene	2.5	ND				
2,6-Dinitrotoluene	2.5	ND				
3-Nitroaniline	12.5	ND				
Acenaphthene	2.5	ND	104	3	61	104
2,4-Dinitrophenol	12.5	ND				
Dibenzofuran	12.5	ND				
Pentachlorobenzene	2.5	ND				
4-Nitrophenol	12.5	ND		5	42	
1-Napthylamine	12.5	ND				
2,4-Dinitrotoluene	2.5	ND		11	52	
2-Napthylamine	12.5	ND				
2,3,4,6-Tetrachlorophenol	12.5	ND				
Fluorene	2.5	ND				
Diethylphthalate	2.5	ND				
4-Chlorophenyl-phenylether	2.5	ND				
4-Nitroaniline	12.5	ND				
4,6-Dinitro-2-methylphenol	2.5	ND				
N-Nitrosodiphenylamine & Diphenylam	2.5	ND	106			106
Diphenylhydrazine	12.5	ND				

FIELD CODE: BH-6 (5-7'), SOA
TA#: T56275

8270 Compounds	Reporting Limit	Concentration (mg/kg)	QC	RPD	%EA	%IA
4-Bromophenyl-phenylether	2.5	ND				
Phenacetin	12.5	ND				
Hexachlorobenzene	2.5	ND				
4-Aminobiphenyl	12.5	ND				
Pentachlorophenol	12.5	ND	110	6	61	110
Pentachloronitrobenzene	12.5	ND				
Pronamide	2.5	ND				
Phenanthrene	2.5	ND				
Anthracene	2.5	ND				
Di-n-butylphthalate	2.5	ND				
Fluoranthene	2.5	ND	107			107
Benzidine	25.0	ND				
ene	2.5	ND				
p-Dimethylaminoazobenzene	2.5	ND				
Butylbenzylphthalate	2.5	ND				
Benzo[a]anthracene	2.5	ND				
3,3-Dichlorobenzidine	2.5	ND				
Chrysene	2.5	ND				
bis(2-Ethylhexyl)phthalate	2.5	ND				
Di-n-octlphthalate	2.5	ND				
Benzo[b]fluoranthene	2.5	ND				
7,12-Dimethylbenz(a)anthracene	2.5	ND				
Benzo[k]fluoranthene	2.5	ND				
Benzo[a]pyrene	2.5	ND	102			102
3-Methylcholanthrene	2.5	ND				
Dibenzo(a,j)acridine	2.5	ND				
Indeno[1,2,3-cd]pyrene	2.5	ND				
Dibenz[a,h]anthracene	2.5	ND				
Benzo[g,h,i]perylene	2.5	ND				

HIGHLANDER SERVICES CORP.
Project Location: N. Eunice Gas Plant, NM
Project Name: Texaco

Field Code: BH-6 (5-7'), SOA

TA#: T56275

8080 Compounds	Reporting Limit	Concentration (mg/kg)	QC	RPD	%EA	%IA
a-BHC	0.0125	ND	---	6	70	96
b-BHC	0.0125	ND	---	6	66	112
g-BHC	0.0125	ND	---	1	61	100
d-BHC	0.0125	ND	---	4	90	108
Heptachlor	0.0125	ND	---	12	132	100
Aldrin	0.0125	ND	---	5	74	108
Heptachlor epoxide	0.0125	ND	---	5	82	112
Endosulfan-1	0.0125	ND	---	0	76	100
Endosulfan-2	0.025	ND	---	0	84	118
P,P'-DDE	0.025	ND	---	3	67	104
Dieldrin	0.025	ND	---	2	88	106
Endrin	0.025	ND	---	1	41	104
P,P'-DDD	0.025	ND	---	5	66	106
Endrin Aldehyde	0.025	ND	---	---	---	112
Endosulfan Sulfate/P,P'-DDT	0.025	ND	---	14	107	115
Endrin Ketone	0.025	ND	---	1	118	118
Methoxychlor	0.125	ND	---	1	67	111
a-Chlordane	0.0125	ND	---	1	67	112
g-Chlordane	0.0125	ND	---	6	68	104
Toxaphene	1.25	ND	---	4	136	102
PCB's	2.5	ND	0.525	2	86	105

TENTATIVELY IDENTIFIED COMPOUNDS AND ESTIMATED CONCENTRATIONS (mg/kg)

		RT.	CONC.
(1)	Nonane	4.58	9.4
(2)	2,6-dimethyloctane	4.88	10.3
(3)	Unknown	5.12	9.1
(4)	Decane	5.40	25.2
(5)	Undecane	6.16	11.2
(6)	2,6,10,14-tetramethyl-pentadecane	9.23	7.3
(7)	2,6,11,15-tetramethylhexadecane	11.52	6.8
(8)	2,6,10,14-tetramethylhexadecane	12.47	6.8

ND = NOT DETECTED

	% RECOVERY
2-Fluorophenol SURR	72
Phenol-d6 SURR	70
Nitrobenzene-d5 SURR	80
2-Fluorobiphenyl SURR	84
2,4,6-Tribromophenol SURR	68
Terphenyl-d14 SURR	106

METHOD: EPA SW 846-8270, 3550, 8080.
CHEMIST: RD/CC/MB

8-12-96

Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonell

Date

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ANALYTICAL RESULTS FOR
HIGHLANDER SERVICES CORP.
Attention: Ike Tavarez
306 W. Wall, Suite 320
Midland, TX 79701

August 12, 1996
Receiving Date: 07/29/96
Sample Type: Soil
Sampling Date: 07/25/96
Sample Condition: I & C
Sample Received by: SH
Project Name: Texaco
Project Location: N. Eunice Gas Plant, NM
Extraction Date: 07/30/96
Analysis Date: 08/04/96

FIELD CODE: BH-8 (5-7'), SOA
TA# : T56288

8270 Compounds	Reporting Limit	Concentration (mg/kg)	QC	RPD	%EA	%IA
N-Nitrosodimethylamine	2.5	ND				
2-Picoline	2.5	ND				
Methyl methanesulfonate	2.5	ND				
Ethyl methanesulfonate	2.5	ND				
Phenol	2.5	ND	100	2	53	100
Aniline	12.5	ND				
bis(2-Chloroethyl)ether	12.5	ND				
2-Chlorophenol	12.5	ND		5	48	
1,3-Dichlorobenzene	2.5	ND				
1,4-Dichlorobenzene	2.5	ND	95	2	47	95
Benzyl alcohol	12.5	ND				
1,2-Dichlorobenzene	2.5	ND				
2-Methylphenol	2.5	ND				
bis(2-chloroisopropyl)ether	12.5	ND				
4-Methylphenol/3-Methylphenol	2.5	ND				
Acetophenone	12.5	ND				
n-Nitrosodi-n-propylamine	2.5	ND		0	47	
Hexachloroethane	2.5	ND				
Nitrobenzene	2.5	ND				
N-Nitrosopiperidine	12.5	ND				
Isophorone	12.5	ND				
2-Nitrophenol	12.5	ND	97			97
2,4-Dimethylphenol	12.5	ND				
bis(2-Chloroethoxy)methane	2.5	ND				
Benzoic acid	25.0	ND				
2,4-Dichlorophenol	12.5	ND	101			101
1,2,4-Trichlorobenzene	2.5	ND		3	56	
a,a-Dimethylphenethylamine	25.0	ND				
Naphthalene	2.5	ND				

Project Location: N. Eunice Gas Plant, NM

Project Name: Texaco

FIELD CODE: BH-8 (5-7'), SOA

[redacted]: T56288

8270 Compounds	Reporting Limit	Concentration (mg/kg)	QC	RPD	%EA	%IA
4-Chloroaniline	12.5	ND				
2,6-Dichlorophenol	12.5	ND				
Hexachlorobutadiene	2.5	ND	104			104
N-Nitroso-di-n-butylamine	12.5	ND				
4-Chloro-3-methylphenol	12.5	ND	98	0	48	98
2-Methylnaphthalene	2.5	ND				
1,2,4,5-Tetrachlorobenzene	2.5	ND				
Hexachlorocyclopentadiene	2.5	ND				
2,4,6-Trichlorophenol	12.5	ND	94			94
2,4,5-Trichlorophenol	12.5	ND				
2-Chloronaphthalene	2.5	ND				
1-Chloronaphthalene	2.5	ND				
2-Nitroaniline	12.5	ND				
Dimethylphthalate	2.5	ND				
[redacted]enaphthylene	2.5	ND				
[redacted]2,6-Dinitrotoluene	2.5	ND				
3-Nitroaniline	12.5	ND				
Acenaphthene	2.5	ND	104	3	61	104
2,4-Dinitrophenol	12.5	ND				
Dibenzofuran	12.5	ND				
Pentachlorobenzene	2.5	ND				
4-Nitrophenol	12.5	ND		5	42	
1-Napthylamine	12.5	ND				
2,4-Dinitrotoluene	2.5	ND		11	52	
2-Napthylamine	12.5	ND				
2,3,4,6-Tetrachlorophenol	12.5	ND				
Fluorene	2.5	ND				
Diethylphthalate	2.5	ND				
4-Chlorophenyl-phenylether	2.5	ND				
4-Nitroaniline	12.5	ND				
4,6-Dinitro-2-methylphenol	2.5	ND				
[redacted]Nitrosodiphenylamine & Diphenylam	2.5	ND	106			106
Diphenylhydrazine	12.5	ND				

FIELD CODE: BH-8 (5-7'), SOA
TA#: T56288

8270 Compounds	Reporting Limit	Concentration (mg/kg)	QC	RPD	%EA	%IA
4-Bromophenyl-phenylether	2.5	ND				
Phenacetin	12.5	ND				
Hexachlorobenzene	2.5	ND				
4-Aminobiphenyl	12.5	ND				
Pentachlorophenol	12.5	ND	110	6	61	110
Pentachloronitrobenzene	12.5	ND				
Pronamide	2.5	ND				
Phenanthrene	2.5	ND				
Anthracene	2.5	ND				
Di-n-butylphthalate	2.5	ND				
Fluoranthene	2.5	ND	107			107
Benzidine	25.0	ND				
ene	2.5	ND				
p-Dimethylaminoazobenzene	2.5	ND				
Butylbenzylphthalate	2.5	ND				
Benzo[a]anthracene	2.5	ND				
3,3-Dichlorobenzidine	2.5	ND				
Chrysene	2.5	ND				
bis(2-Ethylhexyl)phthalate	2.5	ND				
Di-n-octlphthalate	2.5	ND				
Benzo[b]fluoranthene	2.5	ND				
7,12-Dimethylbenz(a)anthracene	2.5	ND				
Benzo[k]fluoranthene	2.5	ND				
Benzo[a]pyrene	2.5	ND	102			102
3-Methylcholanthrene	2.5	ND				
Dibenzo(a,j)acridine	2.5	ND				
Indeno[1,2,3-cd]pyrene	2.5	ND				
Dibenz[a,h]anthracene	2.5	ND				
Benzo[g,h,i]perylene	2.5	ND				

HIGHLANDER SERVICES CORP.
Project Location: N. Eunice Gas Plant, NM
Project Name: Texaco

Field Code: BH-8 (5-7'), SOA

TA#: T56288

8080 Compounds	Reportin Limit	Concentration (mg/kg)	QC	RPD	%EA	%IA
a-BHC	0.0125	ND	---	6	70	96
b-BHC	0.0125	ND	---	6	66	112
g-BHC	0.0125	ND	---	1	61	100
d-BHC	0.0125	ND	---	4	90	108
Heptachlor	0.0125	ND	---	12	132	100
Aldrin	0.0125	ND	---	5	74	108
Heptachlor epoxide	0.0125	ND	---	5	82	112
Endosulfan-1	0.0125	ND	---	0	76	100
Endosulfan-2	0.025	ND	---	0	84	118
P,P'-DDE	0.025	ND	---	3	67	104
Dieldrin	0.025	ND	---	2	88	106
Endrin	0.025	ND	---	1	41	104
P,P'-DDD	0.025	ND	---	5	66	106
Endrin Aldehyde	0.025	ND	---	---	---	112
Endosulfan Sulfate/P,P'-DDT	0.025	ND	---	14	107	115
Endrin Ketone	0.025	ND	---	1	118	118
Methoxychlor	0.125	ND	---	1	67	111
a-Chlordane	0.0125	ND	---	1	67	112
g-Chlordane	0.0125	ND	---	6	68	104
Toxaphene	1.25	ND	---	4	136	102
PCB's	2.5	ND	0.525	2	86	105

TENTATIVELY IDENTIFIED COMPOUNDS AND ESTIMATED CONCENTRATIONS (mg/kg)

		RT.	CONC.			RT	CONC.
(1)	Decane	5.41	10.9	(14)	eicosane	14.13	19
(2)	Dodecane	6.95	14.6	(15)	heneicosane	14.96	17.2
(3)	Tridecane	7.78	25.4	(16)	Pentatriacontane	17.92	17.0
(4)	Tetradecane	8.66	30.7	(17)	Docosane	15.74	18.4
(5)	4-methylpentadecane	9.24	18.9	(18)	Tricosane	16.49	16.9
(6)	pentadecane	9.59	32.5	(19)	Tetracosane	17.23	15.9
(7)	hexadecane	10.54	27.4				
(8)	heptadecane	11.47	24.9				
(9)	2,6,10,4-tetramethyl-pentadecane	11.53	13.8				
(10)	Octadecane	12.39	22.3				
(11)	2,6-dimethyloctadecane	12.48	14.9				
(12)	Nonadecane	13.28	22.3				
(13)	hexacosane	18.60	13.8				

ND = NOT DETECTED

	RECOVERY
2-Fluorophenol SURR	48
Phenol-d6 SURR	54
Nitrobenzene-d5 SURR	62
2-Fluorobiphenyl SURR	66
2,4,6-Tribromophenol SURR	50
Terphenyl-d14 SURR	80

METHOD: EPA SW 846-8270, 3550, 8080.
CHEMIST: RD/CC/MB

Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonell

8-18-96
Date

6701 Aberdeen Avenue
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ANALYTICAL RESULTS FOR
HIGHLANDER SERVICES CORP.
Attention: Ike Tavarez
306 W. Wall, Suite 320
Midland, TX 79701

August 26, 1996
Receiving Date: 08/15/96
Sample Type: Soil
Sampling Date: 08/09/96
Sample Condition: I & C
Sample Received by: SH
Project Name: Texaco
Project Location: Texaco North Eunice
Project No: 787 Gas Plant, NM
Extraction Date: 08/15/96
Analysis Date: 08/19/96

TA #T57221
FIELD CODE: #1 N. Sump./E.R. 8.2-8.4'

EPA 8270	Reporting Limit	Concentration (mg/kg)	QC	RPD	%EA	%IA
N-Nitrosodimethylamine	0.25	ND				
2-Picoline	0.25	ND				
Methyl methanesulfonate	0.25	ND				
Ethyl methanesulfonate	0.25	ND				
Phenol	0.25	ND	108	23	42	108
Aniline	1.25	ND				
bis(2-Chloroethyl)ether	1.25	ND				
2-Chlorophenol	1.25	ND		22	40	
1,3-Dichlorobenzene	0.25	ND				
1,4-Dichlorobenzene	0.25	ND	112	24	39	112
Benzyl alcohol	1.25	ND				
1,2-Dichlorobenzene	0.25	ND				
2-Methylphenol	0.25	ND				
bis(2-chloroisopropyl)ether	1.25	ND				
4-Methylphenol/3-Methylphenol	0.25	ND				
Acetophenone	1.25	ND				
n-Nitrosodi-n-propylamine	0.25	ND		19	56	
Hexachloroethane	0.25	ND				
Nitrobenzene	0.25	ND				
N-Nitrosopiperidine	1.25	ND				
Isophorone	1.25	ND				
2-Nitrophenol	1.25	ND	100			100
2,4-Dimethylphenol	1.25	ND				
bis(2-Chloroethoxy)methane	0.25	ND				
Benzoic acid	2.5	ND				
2,4-Dichlorophenol	1.25	ND	99			99
1,2,4-Trichlorobenzene	0.25	ND		18	47	
a,a-Dimethylphenethylamine	0.25	ND				
Naphthalene	0.25	ND				

HIGHLANDER SERVICES CORP.
Project Name: Texaco

TA #T57221
Field Code: #1 N. Sump./E.R. 8.2-8.4'

EPA 8270	Reporting Limit	Concentration (mg/kg)	QC	RPD	%EA	%IA
4-Chloroaniline	1.25	ND				
2,6-Dichlorophenol	1.25	ND				
Hexachlorobutadiene	0.25	ND	117			117
N-Nitroso-di-n-butylamine	1.25	ND				
4-Chloro-3-methylphenol	1.25	ND	105	5	47	105
2-Methylnaphthalene	0.25	ND				
1,2,4,5-Tetrachlorobenzene	0.25	ND				
Hexachlorocyclopentadiene	0.25	ND				
2,4,6-Trichlorophenol	1.25	ND	112			112
2,4,5-Trichlorophenol	1.25	ND				
2-Chloronaphthalene	0.25	ND				
1-Chloronaphthalene	0.25	ND				
2-Nitroaniline	1.25	ND				
Dimethylphthalate	0.25	ND				
Acenaphthylene	0.25	ND				
,6-Dinitrotoluene	0.25	ND				
3-Nitroaniline	1.25	ND				
Acenaphthene	0.25	ND	112	6	46	112
2,4-Dinitrophenol	1.25	ND				
Dibenzofuran	1.25	ND				
Pentachlorobenzene	0.25	ND				
4-Nitrophenol	1.25	ND		19	61	
1-Napthylamine	1.25	ND				
2,4-Dinitrotoluene	0.25	ND		10	57	
2-Napthylamine	1.25	ND				
2,3,4,6-Tetrachlorophenol	1.25	ND				
Fluorene	0.25	ND				
Diethylphthalate	0.25	ND				
4-Chlorophenyl-phenylether	0.25	ND				
4-Nitroaniline	1.25	ND				
4,6-Dinitro-2-methylphenol	0.25	ND				
N-Nitrosodiphenylamine & Diphenylamine	0.25	ND	116			116
Diphenylhydrazine	1.25	ND				

A #57221
ield Code: #1 N. Sump./E.R. 8.2-8.4'

EPA 8270	Reporting Limit	Concentration (mg/kg)	QC	RPD	%EA	%IA
4-Bromophenyl-phenylether	0.25	ND				
Phenacetin	1.25	ND				
Hexachlorobenzene	0.25	ND				
4-Aminobiphenyl	1.25	ND				
Pentachlorophenol	1.25	ND	108	1	18	108
Pentachloronitrobenzene	1.25	ND				
Pronamide	0.25	ND				
Phenanthrene	0.25	ND				
Anthracene	0.25	ND				
Di-n-butylphthalate	0.25	ND				
Fluoranthene	0.25	ND	115			115
Benzidine	2.5	ND				
Pyrene	0.25	ND		7	107	
p-Dimethylaminoazobenzene	0.25	ND				
Butylbenzylphthalate	0.25	ND				
Benzo[a]anthracene	0.25	ND				
3,3-Dichlorobenzidine	0.25	ND				
Chrysene	0.25	ND				
bis(2-Ethylhexyl)phthalate	0.25	ND				
Di-n-octlphthalate	0.25	ND				
Benzo[b]fluoranthene	0.25	ND				
7,12-Dimethylbenz(a)anthracene	0.25	ND				
Benzo[k]fluoranthene	0.25	ND				
Benzo[a]pyrene	0.25	ND	117			117
3-Methylcholanthrene	0.25	ND				
Dibenzo(a,j)acridine	0.25	ND				
Indeno[1,2,3-cd]pyrene	0.25	ND				
Dibenz[a,h]anthracene	0.25	ND				
Benzo[g,h,i]perylene	0.25	ND				

Tentatively Identified Compounds and Estimated concentration (mg/kg)

	RT	CONC
Unknown Compound	17.03	3.08

HIGHLANDER SERVICES CORP.
Project Name: Texaco

TA #57221
Field Code: #1 N. Sump./E.R. 8.2-8.4'

EPA 8270	Reporting Limit	Concentration (mg/kg)	QC	RPD	%EA	%IA
a-BHC	0.00125	ND		4	90	100
b-BHC	0.00125	ND		9	92	108
g-BHC	0.00125	ND		4	90	100
d-BHC	0.0125	ND		7	112	102
Heptachlor	0.00125	ND		17	118	108
Aldrin	0.00125	ND		2	101	112
Heptachlor epoxide	0.00125	ND		6	132	118
Endosulfan-1	0.00125	ND		4	98	112
Endosulfan-2	0.0025	ND		3	101	124
P,P'-DDE	0.0025	ND		4	98	116
Dieldrin	0.0025	ND		2	103	122
Endrin	0.0025	ND		4	93	128
P,P'-DDD	0.0025	ND		2	111	121
Endrin Aldehyde	0.0025	ND		---	---	118
Endosulfan Sulfate/P,P'-DDT	0.0025	ND		17	105	126
Endrin Ketone	0.0025	ND		2	117	130
Methoxychlor	0.0125	ND		5	88	140
a-Chlordane	0.00125	ND		0	96	116
g-Chlordane	0.00125	ND		0	96	112
Toxaphene	0.125	ND		20	88	110
PCB's	0.25	ND	0.48	2	84	96

	% RECOVERY
2-Fluorophenol SURR	27
Phenol-d6 SURR	33
Nitrobenzene-d5 SURR	32
2-Fluorobiphenyl SURR	35
2,4,6-Tribromophenol SURR	48
Terphenyl-d14 SURR	82

METHOD: EPA SW 846-8270, 3550, 8080.

CHEMIST: RD/CC/MB

8-26-96

Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonell

Date

6701 Aberdeen Avenue
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ANALYTICAL RESULTS FOR
HIGHLANDER SERVICES CORP.
Attention: Ike Tavarez
306 W. Wall, Suite 320
Midland, TX 79701

August 26, 1996
Receiving Date: 08/15/96
Sample Type: Soil
Sampling Date: 08/09/96
Sample Condition: I & C
Sample Received by: SH
Project Name: Texaco
Project Location: Texaco North Eunice
Project No: 787 Gas Plant, NM
Extraction Date: 08/15/96
Analysis Date: 08/21/96

TA #T57222
FIELD CODE: #2 S. Sump./E.R. 6-4-6.8'

EPA 8270	Reporting Limit	Concentration (mg/kg)	QC	RPD	%EA	%IA
N-Nitrosodimethylamine	2.5	ND				
2-Picoline	2.5	ND				
Methyl methanesulfonate	2.5	ND				
Ethyl methanesulfonate	2.5	ND				
Phenol	2.5	ND	95	17	39	95
Aniline	12.5	ND				
bis(2-Chloroethyl)ether	12.5	ND				
2-Chlorophenol	12.5	ND		18	34	
1,3-Dichlorobenzene	2.5	ND				
1,4-Dichlorobenzene	2.5	ND	113	17	37	113
Benzyl alcohol	12.5	ND				
1,2-Dichlorobenzene	2.5	ND				
2-Methylphenol	2.5	ND				
bis(2-chloroisopropyl)ether	12.5	ND				
4-Methylphenol/3-Methylphenol	2.5	ND				
Acetophenone	12.5	ND				
n-Nitrosodi-n-propylamine	2.5	ND		13	47	
Hexachloroethane	2.5	ND				
Nitrobenzene	2.5	ND				
N-Nitrosopiperidine	12.5	ND				
Isophorone	12.5	ND				
2-Nitrophenol	12.5	ND	96			96
2,4-Dimethylphenol	12.5	ND				
bis(2-Chloroethoxy)methane	2.5	ND				
Benzoic acid	25.0	ND				
2,4-Dichlorophenol	12.5	ND	95			95
1,2,4-Trichlorobenzene	2.5	ND		19	46	
a,a-Dimethylphenethylamine	25.0	ND				
Naphthalene	2.5	ND				

HIGHLANDER SERVICES CORP.
Project Name: Texaco

TA #T57222
Field Code: #2 S. Sump./E.R. 6.4-6.8'

EPA 8270	Reporting Limit	Concentration (mg/kg)	QC	RPD	%EA	%IA
4-Chloroaniline	12.5	ND				
2,6-Dichlorophenol	12.5	ND				
Hexachlorobutadiene	2.5	ND	113			113
N-Nitroso-di-n-butylamine	12.5	ND				
4-Chloro-3-methylphenol	12.5	ND	102	12	54	102
2-Methylnaphthalene	2.5	ND				
1,2,4,5-Tetrachlorobenzene	2.5	ND				
Hexachlorocyclopentadiene	2.5	ND				
2,4,6-Trichlorophenol	12.5	ND	105			105
2,4,5-Trichlorophenol	12.5	ND				
2-Chloronaphthalene	2.5	ND				
1-Chloronaphthalene	2.5	ND				
2-Nitroaniline	12.5	ND				
Dimethylphthalate	2.5	ND				
Acenaphthylene	2.5	ND				
2,6-Dinitrotoluene	2.5	ND				
3-Nitroaniline	12.5	ND				
Acenaphthene	2.5	ND	111	8	48	111
2,4-Dinitrophenol	12.5	ND				
Dibenzofuran	12.5	ND				
Pentachlorobenzene	2.5	ND				
4-Nitrophenol	12.5	ND		12	75	
1-Napthylamine	12.5	ND				
2,4-Dinitrotoluene	2.5	ND		6	57	
2-Napthylamine	12.5	ND				
2,3,4,6-Tetrachlorophenol	12.5	ND				
Fluorene	2.5	ND				
Diethylphthalate	2.5	ND				
4-Chlorophenyl-phenylether	2.5	ND				
4-Nitroaniline	12.5	ND				
4,6-Dinitro-2-methylphenol	2.5	ND				
N-Nitrosodiphenylamine & Diphenylamine	2.5	ND	118			118
Diphenylhydrazine	12.5	ND				

TA #57222
eld Code: #2 S. Sump./E.R. 6.4-6.8'

EPA 8270	Reporting Limit	Concentration (mg/kg)	QC	RPD	%EA	%IA
4-Bromophenyl-phenylether	2.5	ND				
Phenacetin	12.5	ND				
Hexachlorobenzene	2.5	ND				
4-Aminobiphenyl	12.5	ND				
Pentachlorophenol	12.5	ND	102	3	11	102
Pentachloronitrobenzene	12.5	ND				
Pronamide	2.5	ND				
Phenanthrene	2.5	ND				
Anthracene	2.5	ND				
Di-n-butylphthalate	2.5	ND				
Fluoranthene	2.5	ND	116			116
Benzidine	25.0	ND				
Pyrene	2.5	ND		9	114	
p-Dimethylaminoazobenzene	2.5	ND				
Butylbenzylphthalate	2.5	ND				
Benzo[a]anthracene	2.5	ND				
-Dichlorobenzidine	2.5	ND				
Chrysene	2.5	ND				
bis(2-Ethylhexyl)phthalate	2.5	ND				
Di-n-octlphthalate	2.5	ND				
Benzo[b]fluoranthene	2.5	ND				
7,12-Dimethylbenz(a)anthracene	2.5	ND				
Benzo[k]fluoranthene	2.5	ND				
Benzo[a]pyrene	2.5	ND	118			118
3-Methylcholanthrene	2.5	ND				
Dibenzo(a,j)acridine	2.5	ND				
Indeno[1,2,3-cd]pyrene	2.5	ND				
Dibenz[a,h]anthracene	2.5	ND				
Benzo[g,h,i]perylene	2.5	ND				

HIGHLANDER SERVICES CORP.
Project Name: Texaco

TA #57222
Field Code: #2 S. Sump./E.R. 6.4-6.8'

EPA 8270	Reporting Limit	Concentration (mg/kg)	QC	RPD	%EA	%IA
a-BHC	0.00125	ND		4	90	100
b-BHC	0.00125	ND		9	92	108
g-BHC	0.00125	ND		4	90	100
d-BHC	0.0125	ND		7	112	102
Heptachlor	0.00125	ND		17	118	108
Aldrin	0.00125	ND		2	101	112
Heptachlor epoxide	0.00125	ND		6	132	118
Endosulfan-1	0.00125	ND		4	98	112
Endosulfan-2	0.0025	ND		3	101	124
P,P'-DDE	0.0025	ND		4	98	116
Dieldrin	0.0025	ND		2	103	122
Endrin	0.0025	ND		4	93	128
P,P'-DDD	0.0025	ND		2	111	121
Endrin Aldehyde	0.0025	ND		---	---	118
Endosulfan Sulfate/P,P'-DDT	0.0025	ND		17	105	126
Endrin Ketone	0.0025	ND		2	117	130
Methoxychlor	0.0125	ND		5	88	140
a-Chlordane	0.00125	ND		0	96	116
g-Chlordane	0.00125	ND		0	96	112
Toxaphene	0.125	ND		20	88	110
PCB's	0.25	ND	0.48	2	84	96

	% RECOVERY
2-Fluorophenol SURR	72
Phenol-d6 SURR	76
Nitrobenzene-d5 SURR	118
2-Fluorobiphenyl SURR	102
2,4,6-Tribromophenol SURR	64
Terphenyl-d14 SURR	136

METHOD: EPA SW 846-8270, 3550, 8080.

CHEMIST: RD/CC/MB

8-28-96

Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonell

Date

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ANALYTICAL RESULTS FOR
HIGHLANDER SERVICES CORP.
Attention: Ike Tavarez
306 W. Wall, Suite 320
Midland, TX 79701

August 26, 1996
Receiving Date: 08/15/96
Sample Type: Soil
Sampling Date: 08/09/96
Sample Condition: I & C
Sample Received by: SH
Project Name: Texaco
Project Location: Texaco North Eunice
Project No: 787 Gas Plant, NM
Extraction Date: 08/15/96
Analysis Date: 08/19/96

TA #T57223
FIELD CODE: Trash Pit Area 4.5-4.7'

EPA 8270	Reporting Limit	Concentration (mg/kg)	QC	RPD	%EA	%IA
N-Nitrosodimethylamine	0.25	ND				
2-Picoline	0.25	ND				
Methyl methanesulfonate	0.25	ND				
Ethyl methanesulfonate	0.25	ND				
Phenol	0.25	ND	108	23	42	108
Aniline	1.25	ND				
bis(2-Chloroethyl)ether	1.25	ND				
2-Chlorophenol	1.25	ND		22	40	
1,3-Dichlorobenzene	0.25	ND				
1,4-Dichlorobenzene	0.25	ND	112	24	39	112
Benzyl alcohol	1.25	ND				
1,2-Dichlorobenzene	0.25	ND				
2-Methylphenol	0.25	ND				
bis(2-chloroisopropyl)ether	1.25	ND				
4-Methylphenol/3-Methylphenol	0.25	ND				
Acetophenone	1.25	ND				
n-Nitrosodi-n-propylamine	0.25	ND		19	56	
Hexachloroethane	0.25	ND				
Nitrobenzene	0.25	ND				
N-Nitrosopiperidine	1.25	ND				
Isophorone	1.25	ND				
2-Nitrophenol	1.25	ND	100			100
2,4-Dimethylphenol	1.25	ND				
bis(2-Chloroethoxy)methane	0.25	ND				
Benzoic acid	2.5	ND				
2,4-Dichlorophenol	1.25	ND	99			99
1,2,4-Trichlorobenzene	0.25	ND		18	47	
a,a-Dimethylphenethylamine	0.25	ND				
Naphthalene	0.25	ND				

HIGHLANDER SERVICES CORP.
Project Name: Texaco

TA #T57223
Field Code: Trash Pit Area 4.5-4.7'

EPA 8270	Reporting Limit	Concentration (mg/kg)	QC	RPD	%EA	%IA
4-Chloroaniline	1.25	ND				
2,6-Dichlorophenol	1.25	ND				
Hexachlorobutadiene	0.25	ND	117			117
N-Nitroso-di-n-butylamine	1.25	ND				
4-Chloro-3-methylphenol	1.25	ND	105	5	47	105
2-Methylnaphthalene	0.25	ND				
1,2,4,5-Tetrachlorobenzene	0.25	ND				
Hexachlorocyclopentadiene	0.25	ND				
2,4,6-Trichlorophenol	1.25	ND	112			112
2,4,5-Trichlorophenol	1.25	ND				
2-Chloronaphthalene	0.25	ND				
1-Chloronaphthalene	0.25	ND				
2-Nitroaniline	1.25	ND				
Dimethylphthalate	0.25	ND				
Acenaphthylene	0.25	ND				
2,6-Dinitrotoluene	0.25	ND				
3-Nitroaniline	1.25	ND				
Acenaphthene	0.25	ND	112	6	46	112
2,4-Dinitrophenol	1.25	ND				
Dibenzofuran	1.25	ND				
Pentachlorobenzene	0.25	ND				
4-Nitrophenol	1.25	ND		19	61	
1-Napthylamine	1.25	ND				
2,4-Dinitrotoluene	0.25	ND		10	57	
2-Napthylamine	1.25	ND				
2,3,4,6-Tetrachlorophenol	1.25	ND				
Fluorene	0.25	ND				
Diethylphthalate	0.25	ND				
4-Chlorophenyl-phenylether	0.25	ND				
4-Nitroaniline	1.25	ND				
4,6-Dinitro-2-methylphenol	0.25	ND				
N-Nitrosodiphenylamine & Diphenylamine	0.25	ND	116			116
Diphenylhydrazine	1.25	ND				

TA #57223
eld Code: Trash Pit Area 4.5-4.7'

EPA 8270	Reporting Limit	Concentration (mg/kg)	QC	RPD	%EA	%IA
4-Bromophenyl-phenylether	0.25	ND				
Phenacetin	1.25	ND				
Hexachlorobenzene	0.25	ND				
4-Aminobiphenyl	1.25	ND				
Pentachlorophenol	1.25	ND	108	1	18	108
Pentachloronitrobenzene	1.25	ND				
Pronamide	0.25	ND				
Phenanthrene	0.25	ND				
Anthracene	0.25	ND				
Di-n-butylphthalate	0.25	ND				
Fluoranthene	0.25	ND	115			115
Benzidine	2.5	ND				
Pyrene	0.25	ND		7	107	
p-Dimethylaminoazobenzene	0.25	ND				
Butylbenzylphthalate	0.25	ND				
Benzo[a]anthracene	0.25	ND				
-Dichlorobenzidine	0.25	ND				
Chrysene	0.25	ND				
bis(2-Ethylhexyl)phthalate	0.25	ND				
Di-n-octlphthalate	0.25	ND				
Benzo[b]fluoranthene	0.25	ND				
7,12-Dimethylbenz(a)anthracene	0.25	ND				
Benzo[k]fluoranthene	0.25	ND				
Benzo[a]pyrene	0.25	ND	117			117
3-Methylcholanthrene	0.25	ND				
Dibenzo(a,j)acridine	0.25	ND				
Indeno[1,2,3-cd]pyrene	0.25	ND				
Dibenz[a,h]anthracene	0.25	ND				
Benzo[g,h,i]perylene	0.25	ND				

Tentatively Identified Compounds and Estimated concentration (mg/kg)

	RT	CONC
(2)-9-octadecenamide	17.02	3.06

HIGHLANDER SERVICES CORP.
Project Name: Texaco

TA #57223
Field Code: Trash Pit Area 4.5-4.7'

EPA 8270	Reporting Limit	Concentration (mg/kg)	QC	RPD	%EA	%IA
a-BHC	0.00125	ND		4	90	100
b-BHC	0.00125	ND		9	92	108
g-BHC	0.00125	ND		4	90	100
d-BHC	0.0125	ND		7	112	102
Heptachlor	0.00125	ND		17	118	108
Aldrin	0.00125	ND		2	101	112
Heptachlor epoxide	0.00125	ND		6	132	118
Endosulfan-1	0.00125	ND		4	98	112
Endosulfan-2	0.0025	ND		3	101	124
P,P'-DDE	0.0025	ND		4	98	116
Dieldrin	0.0025	ND		2	103	122
Endrin	0.0025	ND		4	93	128
P,P'-DDD	0.0025	ND		2	111	121
Endrin Aldehyde	0.0025	ND		---	---	118
Endosulfan Sulfate/P,P'-DDT	0.0025	ND		17	105	126
ndrin Ketone	0.0025	ND		2	117	130
Methoxychlor	0.0125	ND		5	88	140
a-Chlordane	0.00125	ND		0	96	116
g-Chlordane	0.00125	ND		0	96	112
Toxaphene	0.125	ND		20	88	110
PCB's	0.25	ND	0.48	2	84	96

	% RECOVERY
2-Fluorophenol SURR	28
Phenol-d6 SURR	34
Nitrobenzene-d5 SURR	36
2-Fluorobiphenyl SURR	32
2,4,6-Tribromophenol SURR	71
Terphenyl-d14 SURR	109

METHOD: EPA SW 846-8270, 3550, 8080.

CHEMIST: RD/CC/MB

Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonell

8-26-96
Date

TRACE ANALYSIS, INC.
6701 Aberdeen Avenue Lubbock, Texas 79424 806•794•1296 FAX 806•794•1298

ANALYTICAL RESULTS FOR
HIGHLANDER SERVICES CORP.
Attention: Ike Tavarez
306 W. Wall, Suite 320
Midland,.TX 79701

August 12, 1996
Receiving Date: 08/02/96
Sample Type: Soil
Project No: 787
Project Location: N. Eunice Gas Plant, NM

Extraction Date: 08/05/96
Analysis Date: 08/05/96
Sampling Date: 07/29/96
Sample Condition: Intact & Cool
Sample Received by: ML
Project Name: Texaco

TOTAL METALS (mg/kg)

TA#	Field Code	As	Se	Cd	Cr	Pb	Ag	Ba	Hg
T56559	BH-1 10-12', (NS)	<10.0	<10.0	<2.0	5.4	<10.0	<0.5	91.5	<0.25
T56567	BH-1 50-52', (NS)	<10.0	<10.0	<2.0	<5.0	<10.0	<0.5	<20.0	<0.25
QC	Quality Control	5.36	4.95	0.12	0.49	1.18	0.13	4.76	2.42
Reporting Limit		10.0	10.0	2.0	5.0	10.0	0.5	20.0	0.25
RPD		1	0	0	4	9	4	2	2
% Extraction Accuracy		98	81	77	81	125	77	90	96
% Instrument Accuracy		107	99	100	97	95	95	95	97

METHODS: EPA SW 846-3051, 6010, 7471.
TOTAL METALS SPIKE: 800.0 mg/kg As, Se, Ba; 20.0 mg/kg Cd, Ag; 80.0 mg/kg Cr; 200.0 mg/kg Pb; 2.50 mg/kg Hg.
TOTAL METALS QC: 5.0 mg/L As, Se, Ba; 0.13 mg/L Cd; 0.5 mg/L Cr; 1.25 mg/L Pb; 0.13 mg/L Ag; 2.50 mg/L Hg.

Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonell

8-12-96
Date

TRACE ANALYSIS, INC.
6701 Aberdeen Avenue Lubbock, Texas 79424 806•794•1296 FAX 806•794•1298

ANALYTICAL RESULTS FOR
HIGHLANDER SERVICES CORP.
Attention: Ike Tavarez
306 W. Wall, Suite 320
Midland, TX 79701

August 12, 1996
Receiving Date: 08/02/96
Sample Type: Soil
Project No: 787
Project Location: N. Eunice Gas Plant, NM

Extraction Date: 08/03/96
Analysis Date: 08/05/96
Sampling Date: 07/29/96
Sample Condition: Intact & Cool
Sample Received by: ML
Project Name: Texaco

TOTAL METALS (mg/kg)

TA#	Field Code	As	Se	Cd	Cr	Pb	Ag	Ba	Hg
T56569	BH-2 10-12', (NS)	<10.0	<10.0	<2.0	<5.0	<10.0	<0.50	121.0	<0.25
T56577	BH-2 50-52', (NS)	<20.0	<10.0	<2.0	<5.0	<10.0	<0.50	<20.0	<0.25
QC	Quality Control	4.86	5.09	0.13	0.51	1.39	0.13	5.13	2.42
Reporting Limit		10.0	10.0	2.0	5.0	10.0	0.50	20.0	0.25
RPD		3	6	3	9	7	6	5	2
% Extraction Accuracy		76	78	82	82	91	86	86	96
% Instrument Accuracy		97	102	104	103	111	104	103	97

METHODS: EPA SW 846-3051, 6010, 7471.
TOTAL METALS SPIKE: 800.0 mg/kg As, Se, Ba; 20.0 mg/kg Cd, Ag; 80.0 mg/kg Cr; 200.0 mg/kg Pb; 2.50 mg/kg Hg.
TOTAL METALS QC: 5.0 mg/L As, Se, Ba; 0.13 mg/L Cd; 0.5 mg/L Cr; 1.25 mg/L Pb; 0.13 mg/L Ag; 2.50 mg/L Hg.

Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonell

8-12-96
Date

TRACE ANALYSIS, INC.
6701 Aberdeen Avenue Lubbock, Texas 79424 806•794•1296 FAX 806•794•1298

ANALYTICAL RESULTS FOR
HIGHLANDER SERVICES CORP.
Attention: Ike Tavarez
306 W. Wall, Suite 320
Midland, TX 79701

August 26, 1996
Receiving Date: 08/15/96
Sample Type: Soil
Project No: 787
Project Location: Texaco
North Eunice Gas Plant, NM

Extraction Date: 08/15/96
Analysis Date: 08/15/96
Sampling Date: 08/09/96
Sample Condition: Intact & Cool
Sample Received by: SH
Project Name: Texaco

TOTAL METALS (mg/kg)

TA#	Field Code	Ag	As	Ba	Cd	Cr	Pb	Se	Hg
T57221	#1 N. Sump./E.R. 8.2-8.4'	<0.50	17.4	*93.1	<2.0	12.2	<10.0	<10.0	<0.25
T57222	#2 S. Sump./E.R. 6.4-6.8'	<0.50	<10.0	*213.0	<2.0	20.3	<10.0	<10.0	<0.25
T57223	Trash Pit Area 4.5-4.7'	<0.50	10.4	*163.0	<2.0	<5.0	<10.0	<10.0	<0.25
QC	Quality Control	0.12	5.32	5.64	0.12	0.49	1.38	4.94	2.53
Reporting Limit		0.50	10.0	20.0	2.0	5.0	10.0	10.0	0.25
RPD		1	5	1	3	1	2	3	4
**% Extraction Accuracy		95	93	97	73	79	94	82	104
% Instrument Accuracy		95	107	113	94	98	111	99	101

***NOTE:** **Estimated concentration; calibration check out of control limits.**
****NOTE:** **Matrix effects.**
METHODS: EPA SW 846-3051, 6010, 7471.
CHEMIST: As, Se, Cr, Cd, Pb, Ag, Ba: RR Hg: RC
TOTAL METALS SPIKE: 800.0 mg/kg As, Se, Ba; 20.0 mg/kg Cd; 15 mg/kg Ag; 80.0 mg/kg Cr; 200 mg/kg Pb; 2.50 mg/kg Hg.
TOTAL METALS QC: 5.0 mg/L As, Se, Ba; 0.13 mg/L Cd, Ag; 0.5 mg/L Cr; 1.25 mg/L Pb; 2.50 mg/L Hg.

Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonell

8-26-96
Date

TRACE ANALYSIS, INC.
6701 Aberdeen Avenue Lubbock, Texas 79424 806•794•1296 FAX 806•794•1298

ANALYTICAL RESULTS FOR
HIGHLANDER SERVICES CORP.
Attention: Ike Tavarez
306 W. Wall, Suite 320
Midland, TX 79701

August 16, 1996
Receiving Date: 07/29/96
Sample Type: Soil
Project No: 787
Project Location: N. Eunice Gas Plant, NM

Extraction Date: 07/26/96
Analysis Date: 07/31/96
Sampling Date: 07/24-25/96
Sample Condition: Intact & Cool
Sample Received by: SH
Project Name: Texaco

TOTAL METALS (mg/kg)

TA#	Field Code	As	Se	Cd	Cr	Pb	Ag	Ba	Hg
T56268	BH-5 (5-7'), SOA	<20.0	<10.0	<2.0	<5.0	<10.0	<0.50	170.0	<0.25
T56275	BH-6 (5-7'), SOA	<10.0	<10.0	<2.0	<5.0	<10.0	<0.50	170.0	<0.25
T56288	BH-8 (5-7'), SOA	<20.0	<10.0	<2.0	11.0	<10.0	<0.50	210.0	<0.25
QC	Quality Control	4.86	5.12	0.13	0.5	1.33	0.12	5.09	2.54
Reporting Limit		10.0	10.0	2.0	5.0	10.0	0.50	20.0	0.25
RPD		3	0	2	3	4	2	1	4
% Extraction Accuracy		76	81	91	84	85	77	85	97
% Instrument Accuracy		97	102	106	100	106	98	102	101

METHODS: EPA SW 846-3051, 6010, 7471.
TOTAL METALS SPIKE: 800.0 mg/kg As, Se, Ba; 20.0 mg/kg Cd, Ag; 80.0 mg/kg Cr; 200.0 mg/kg Pb; 2.50 mg/kg Hg.
TOTAL METALS QC: 5.0 mg/L As, Se, Ba; 0.13 mg/L Cd; 0.5 mg/L Cr; 1.25 mg/L Pb; 0.13 mg/L Ag; 2.50 mg/L Hg.

Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonell

8-18-96
Date

Highlander Services Corp.

306 W. Wall • Suite 320 • Midland, TX 79701 • (915)682-4559

Analysis Request and Chain of Custody Record

Project No. 787 | Client/Project: Texaco / Texaco North Eunice Gas Plant, NM

Field Sample No./ Identification	North Plant Sump 1 (NS)	Date and Time	Grab	Comp	Sample Type(Liquid Sludge,Ect.)	Preservative	ANALYSIS REQUESTED
BH-1	5-7' (NS) 56558	7/29/96	X		Soil	Ice	(Hold) volatiles, semi volatiles, Total (RCRA) metals
BH-1	10-12' (NS)	59					Hold
BH-1	15-17' (NS)	60					
BH-1	20-22' (NS)	61					
BH-1	25-27' (NS)	62					
BH-1	30-32' (NS)	63					
BH-1	35-37' (NS)	64					
BH-1	40-42' (NS)	65					
BH-1	45-47' (NS)	66					
BH-1	50'-52' (NS)	67					volatiles, semi volatiles, total (RCRA) metals

Samplers: (Print): TIM REED

Results by: _____

Rush Charges Authorized: Yes ___ No ___

Relinquished by: (Signature)		Date: Time:
Relinquished by: (Signature)	Lynn C Ward	Date: 8/1/96 Time: 5:00 PM
Relinquished by: (Signature)	Helen Shelton	Date: 8/1/96 Time: 8:45PM
Delivered To:	TRACE LAB	
REMARKS:		

Recieved by: (Signature)	Helen Shelton	Date: 8/1/96 Time: 5:00 PM
Recieved by: (Signature)	M Lopez	Date: 8-2-96 Time: 11:00
Data Results To: 1.	IKE TAVAREZ	
2.		

Please Fill out all copies – Deliverer retains White copy for file – Lab retains Yellow copy & Return Pink copy to Highlander Services Corp. at above address

Shipped Greyhound 215AL 10 samples - HS

Highlander Services Corp.

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Analysis Request and Chain of Custody Record

Project No. 781

Client/Project: Texaco / Texaco North Eunice Gas Plant, NM

Field Sample No./ Identification			Date and Time	Grab	Comp	Sample Type (Liquid Sludge, Ect.)	Preservative	ANALYSIS REQUESTED
BH-2	5-7' (NS)	56568	7/29/96	X		Soil	ice	(Hold) ~~TCLP~~ volatiles, semi volatiles, total (RCRA) metals ~~Hg 7470~~
BH-2	10-12' (NS)	69						
BH-2	15-17' (NS)	70						Hold
BH-2	20-22' (NS)	71						
BH-2	25-27' (NS)	72						
BH-2	30-32' (NS)	73						
BH-2	35-37' (NS)	74						
BH-2	40-42' (NS)	75						
BH-2	45-47' (NS)	76						
BH-2	50-52' (NS)	77						~~TCLP Hg 7470~~ volatiles, semi volatiles, total (RCRA) metals, Chromatographic fingerprint

Samplers: (Print)

TIM REED

Results by: _____

Rush Charges Authorized

Yes ___ No ___

Relinquished by: (Signature) Lynn C. Ward — Date: 8/1/96 Time: 5:00 PM

Relinquished by: (Signature) Helen Shelton — Date: 8/1/96 Time: 8:45PM

Relinquished by: (Signature) — Date: Time:

Delivered To: TRACE LAB

REMARKS:

Recieved by: (Signature) Helen Shelton — Date: 8/1/96 Time: 5:00 PM

Recieved by: (Signature) M Lopez — Date: 8-2-96 Time: 11:00

Data Results To:

1. IKE TAVAREZ

2.

FDH

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Shipped Greyhound

10 samples - HS

Highlander Services Corp.

306 W. Wall • Suite 320 • Midland, TX 79701 • (915)682-4559

Analysis Request and Chain of Custody Record

Project No. 787 | Client/Project Texaco / Texaco North Eunice Gas Plant, NM.

Field Sample No./ Identification	Date and Time	Grab	Comp	Sample Type (Liquid Sludge, Ect.)	Preservative	ANALYSIS REQUESTED
BH-1 (5-7'), SOA Waste water/ Skip Oil Area (SOA)	7/23/96	Y		Soil	Ice	(Hold) 56251
BH-1 (10-12'), SOA	7/23/96	Y				52
BH-1 (15-17'), SOA	7/23/96	Y				53
BH-1 (20-22'), SOA	7/23/96	Y				54
BH-1 (25-27'), SOA	7/23/96	Y				55
BH-1 (30-32'), SOA	7/23/96	Y				56
BH-2 (5-7'), SOA	7/24/96	Y				57
BH-2 (15-17'), SOA	7/24/96	Y				58
BH-2 (25-27'), SOA	7/24/96	Y				59
BH-3 (5-7'), SOA	7/24/96	Y				60

Samplers: (Print) IKE Tavarez

Relinquished by: (Signature) Jim Reed — Date: 7/26/96 Time: 4:50 PM

Relinquished by: (Signature) Helen Shelton — Date: 7/27/96 Time: 2:20 PM

Relinquished by: (Signature) — Date: Time:

Delivered To: Trace Lab.

REMARKS:

Recieved by: (Signature) — Date: 7/26/96 Time: 4:50 PM

Recieved by: (Signature) — Date: 7-27-96 Time: 10:00A

Data Results To:
1. IKE Tavarez
2.

Results by:

Rush Charges Authorized

Yes ___ No ___

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211AC

Highlander Services Corp.

306 W. Wall • Suite 320 • Midland, TX 79701 • (915)682-4559

Analysis Request and Chain of Custody Record

Project No. 787 | Client/Project Texaco / Texaco North Eunice Gas Plant, NM

Field Sample No./ Identification	Date and Time	Grab	Comp	Sample Type (Liquid Sludge, Ect.)	Preservative	ANALYSIS REQUESTED
BH-3 (15-17'), SOA (waste water + slop oil area)	7/24/96	X		Soil	Ice	(Hold) 56261
BH-3 (25-27'), SOA		X				62
BH-4 (10-12'), SOA		X				63
BH-4 (15-17'), SOA		X				64
BH-4 (25-27'), SOA		X				65
BH-4 (35-37'), SOA		X				66
BH-5 (0.5-1.0'), SOA		X				67
BH-5 (5-7'), SOA		X				Volatile organics, Semi Volatile organics, Total (RCRA) metals 8 TCLP 68
BH-5 (10-12'), SOA		X				(Hold) 69
BH-5 15'-17', SOA		X				(Hold) 70

Samplers: (Print)

IKE Tavarez

Relinquished by: (Signature) Jim Reed — Date: 7/26/96 Time: 4:50 PM

Relinquished by: (Signature) Helen Shelton — Date: 7/27/96 Time: 2:20 PM

Relinquished by: (Signature) — Date: Time:

Delivered To: Trace Lab.

Recieved by: (Signature) — Date: 7/26/96 Time: 4:50 PM

Recieved by: (Signature) — Date: 7/29/96 Time: 10:00A CT

Data Results To:
1. IKE Tavarez
2.

Results by: _____

Rush Charges Authorized

Yes ___ No ___

REMARKS:

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Highlander Services Corp.

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Analysis Request and Chain of Custody Record

Project No. 787 | Client/Project Texaco / Texaco North Eunice Gas Plant, NM.

Field Sample No./ Identification	Date and Time	Grab	Comp	Sample Type (Liquid Sludge, Ect.)	Preservative	ANALYSIS REQUESTED
BH-5 25-27', SOA	7/24/96	X		Soil	Ice	(Hold) 56271
BH-5 30-32', SOA		X				72
BH-5 35-37', SOA		X				BTEX 73
BH-6 0.5-1.0' SOA		X				74
BH-6 5-7, SOA		X				Volatile organics, Semi volatile organics, Total (RCRA) metals 75
BH-6 10-12, SOA		X				(Hold) 76
BH-6 20-22', SOA		X				77
BH-6 25-27', SOA		X				78
BH-6 30-32', SOA		X				79
BH-6 35-37' SOA		X				80

Samplers: (Print) IKE Tavarez	Relinquished by: (Signature) Tim Reed	Date: 7/26/96 Time: 4:30 PM	Recieved by: (Signature)
	Relinquished by: (Signature) Helen Shelton	Date: 7/27/96 Time: 2:20 PM	Recieved by: (Signature)
	Relinquished by: (Signature)	Date: Time:	Data Results To: 1. IKE Tavarez
Results by:	Delivered To: Trace Lab		2.
Rush Charges Authorized Yes ___ No ___	REMARKS:		

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Highlander Services Corp.

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Analysis Request and Chain of Custody Record

Project No. 787 | Client/Project: Texaco / Texaco North Eunice Cogs Plant, NM.

Field Sample No./ Identification	Date and Time	Grab	Comp	Sample Type (Liquid Sludge, Ect.)	Preservative	ANALYSIS REQUESTED
BH-6 (40-42'), SOA				soil	ice	BTEX (Hold) 56281
BH-7 (0.5-1.0'), SOA	7/25/96	X				82
BH-7 (5-7'), SOA		X				83
BH-7 (10-12'), SOA		X				84
BH-7 (15-17), SOA		X				85
BH-7 (20-22'), SOA		X				86
BH-7 (35'-37'), SOA		X				BTEX 87
BH-8 (5-7'), SOA		X				Volatile organics, Semi volatile organics Total (RCRA) metals 88
BH-8 (10-12'), SOA		X				(Hold) 89
BH-8 (25-27'), SOA		X				(Hold) BTEX 90

Samplers: (Print): IKE Tavarez

Relinquished by: (Signature) Jim Reed — Date: 7/26/96 — Time: 4:50 PM

Relinquished by: (Signature) Allen Shelton — Date: 7/27/96 — Time: 2:20 PM

Relinquished by: (Signature) — Date: — Time:

Delivered To: Trace Lab

Recieved by: (Signature) — Date: 7/26/96 — Time: 4:50 PM

Recieved by: (Signature) — Date: 7-29-96 — Time: 10:00 A CT

Data Results To: 1. IKE Tavarez 2.

Results by: _____

Rush Charges Authorized: Yes ___ No ___

REMARKS:

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Highlander Services Corp.

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Analysis Request and Chain of Custody Record

Page 1 of 1

Project No. 787 | Client/Project Texaco / Texaco North Eunice Gas Plant, NM.

Field Sample No./ Identification	Date and Time	Grab	Comp	Sample Type(Liquid Sludge,Ect.)	Preservative	ANALYSIS REQUESTED	
#1 N Sump / E.R. 8.2-8.4'	8/9/96	X		Soil	Ice	VOA, ~~Semi~~ Semi-VOA ~~total~~ HS metals	57221
#2 S. Sump / E.R. 6.4-6.8	8/9/96	X		Soil	Ice	VOA, ~~Semi~~ Semi-VOA ~~total~~ HS metals.	22
Trash Pit Area 4.5-4.7'	8/9/96	X		Soil	Ice	VOA, ~~Semi~~ Semi-VOA ~~total~~ HS metals.	23

Samplers: (Print)	Relinquished by: (Signature)	Date: 8/13/96 Time: 11:47 AM	Recieved by: (Signature) Helen Shelton
Ike Tavarez	Relinquished by: (Signature) Helen Shelton	Date: 8/13/96 Time: 9:30 PM	Recieved by: (Signature)
Kit Parten	Relinquished by: (Signature)	Date: Time:	Data Results ~~To:~~ 1. Ike Tavarez
Results by:	Delivered To: Trace Lab.		2.
Rush Charges Authorized Yes ___ No ___	REMARKS:		F 8-22-96

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3 samples - HS 227AD

TRACE ANALYSIS, INC.
6701 Aberdeen Avenue Lubbock, Texas 79424 806•794•1296 FAX 806•794•1298

ANALYTICAL RESULTS FOR
HIGHLANDER SERVICES CORP.
Attention: Ike Tavarez
306 W. Wall, Suite 320
Midland, TX 79701

August 7, 1996
Receiving Date: 08/02/96
Sample Type: Water
Project No: 707
Project Location: N. Eunice Gas Plant, NM

Prep Date: 08/05/96
Analysis Date: 08/05/96
Sampling Date: 08/01/96
Sample Condition: Intact & Cool
Sample Received by: ML
Project Name: Texaco

TA#	Field Code	TRPHC (ug/L)	MTBE (ug/L)	BENZENE (ug/L)	TOLUENE (ug/L)	ETHYL-BENZENE (ug/L)	M,P,O XYLENE (ug/L)	TOTAL BTEX (ug/L)
T56579	MW - 1	582	<1	9	69	82	169	329
QC	Quality Control	104,000	95	89	90	92	304	
Reporting Limit		200	1	1	1	1	1	
RPD		3	1	3	4	3	1	
% Extraction Accuracy		107	95	91	95	97	99	
% Instrument Accuracy		105	96	90	90	92	101	

CHEMIST: TRPHC: AG MTBE/BTEX: RW
METHODS: EPA SW 846-8020, 5030; EPA 418.1.
MTBE/BTEX SPIKE AND QC: 100 ug/L MTBE/BTEX.
TRPHC SPIKE: 8,500 ug/L TRPHC.
TRPHC QC: 100,000 ug/L TRPHC.

Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonell

8-7-96
Date

6701 Aberdeen Avenue
Lubbock, Texas 79424
806•794•1296
FAX 806•794•1298

ANALYTICAL RESULTS FOR
HIGHLANDER SERVICES CORP.
Attention: Ike Tavarez
306 W. Wall, Suite 320
Midland, TX 79701

August 14, 1996
Receiving Date: 08/02/96
Sample Type: Water
Project No: 707
Project Location: N. Eunice Gas Plant, NM

Extraction Date: 08/03/96
Analysis Date: 08/13/96
Sampling Date: 08/01/96
Sample Condition: Intact & Cool
Sample Received by: ML
Project Name: Texaco

TA#	FIELD CODE	TOTAL Cr (mg/L)
T56580	Water Well #1	0.82
QC	Quality Control	0.46
Reporting Limit		0.05
RPD		1
% Extraction Accuracy		101
% Instrument Accuracy		93

METHODS: EPA SW 846-3015, 6010.
CHEMIST: RR
TOTAL Cr SPIKE: 0.8 mg/L TOTAL Cr.
TOTAL Cr QC: 0.5 mg/L TOTAL Cr.

8-14-96

Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonell

DATE

Highlander Services Corp.

306 W. Wall • Suite 320 • Midland, TX 79701 • (915)682-4559

Analysis Request and Chain of Custody Record

Page ___ of ___

Project No. 707 | Client/Project: Texaco / Texaco North Eunice Gas Plant, NM

Field Sample No./ Identification	Date and Time	Grab	Comp	Sample Type(Liquid Sludge,Ect.)	Preservative	ANALYSIS REQUESTED
MW-1 56579	8/1/96			Water	ice	TPH, BTEX
Water Well #1 80	8/1/96			Water	ice	Total Chromium

Samplers: (Print) LYNN WARD

Results by: ____

Rush Charges Authorized

Yes ___ No ___

Relinquished by: (Signature) Lynn C Ward — Date: 8/1/96 Time: 5:00 PM

Relinquished by: (Signature) Helen Shelton — Date: 8/1/96 Time: 8:45 PM

Relinquished by: (Signature) — Date: Time:

Delivered To:

REMARKS:

Recieved by: (Signature) Helen Shelton — Date: 8/1/96 Time: 5:00 PM

Recieved by: (Signature) M Lopez — Date: 8-2-96 Time: 11:00

Data Results To:

1. Ike TAVAREZ

2.

Fed Ex 9.15 215AM

Please Fill out all copies – Deliverer retains White copy for file – Lab retains Yellow copy & Return Pink copy to Highlander Services Corp. at above address

Shipped Greyhound

5 samples - HS

TRACE ANALYSIS, INC.
6701 Aberdeen Avenue Lubbock, Texas 79424 806•794•1296 FAX 806•794•1298

ANALYTICAL RESULTS FOR
HIGHLANDER SERVICES CORP.
Attention: Ike Tavarez
306 W. Wall, Suite 320
Midland, TX 79701

July 5, 1996
Receiving Date: 06/15/96
Sample Type: Water
Project No: 786
Project Location: Texaco North Eunice Plant

Extraction Date: 06/18/96
Analysis Date: 06/18/96
Sampling Date: 06/14/96
Sample Condition: I & C
Sample Received by: McD
Project Name: Texaco E & P, Inc.

TOTAL METALS

TA#	Field Code	As	Se	Cr	Cd	Pb	Ba	Ag	Hg
T54146	Water Well #1	<0.1	<0.1	0.66	<0.02	<0.1	<0.2	<0.01	<0.001
QC	Quality Control	4.82	4.85	0.05	0.12	1.25	4.36	1.05	0.00505
Reporting Limit		0.1	0.1	0.05	0.02	0.1	0.2	0.01	0.001
RPD		2	0	0	2	0	0	0	4
% Extraction Accuracy		93	93	87	74	100	89	99	102
% Instrument Accuracy		96	97	100	96	100	87	105	101

METHODS: EPA SW 846-3015, 6010, 7470.
TOTAL METALS SPIKE: 8.0 mg/L As, Se, Ba; 0.8 mg/L Cr; 0.2 mg/L Cd, Ag; 2.0 mg/L Pb; 0.005 mg/L Hg.
TOTAL METALS QC: 5.0 mg/L As, Se, Ba; 0.5 mg/L Cr; 0.125 mg/L Cd; 1.25 mg/L Pb; 1.0 mg/L Ag; 0.005 mg/L Hg.
CHEMIST: RR/RC/CB

Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonell

7-8-96
Date

TRACEANALYSIS, INC.
6701 Aberdeen Avenue Lubbock, Texas 79424 806•794•1296 FAX 806•794•1298

ANALYTICAL RESULTS FOR
HIGHLANDER SERVICES CORP.
Attention: Ike Tavarez
306 W. Wall, Suite 320
Midland, TX 79701

July 5, 1996
Receiving Date: 06/15/96
Sample Type: Water
Project No: 786
Project Location: Texaco North Eunice Plant

Prep Date: 06/16/96
Analysis Date: 06/18/96
Sampling Date: 06/14/96
Sample Condition: Intact & Cool
Sample Received by: McD
Project Name: Texaco E & P, Inc.

TA#	Field Code	POTASSIUM (mg/L)	MAGNESIUM (mg/L)	CALCIUM (mg/L)	SODIUM (mg/L)
T54146	Water Well #1	12.4	142	268	393
QC	Quality Control	4.92	5.1	5.09	5.06
Reporting Limit		0.3	0.01	0.01	0.4
RPD		3	1	0	2
% Extraction Accuracy		104	81	102	89
% Instrument Accuracy		98	102	102	101

METHODS: EPA 200.7.
QC: 5.0 mg/L POTASSIUM, MAGNESIUM, CALCIUM, SODIUM.
SPIKE: 100.0 mg/L POTASSIUM, SODIUM, MAGNESIUM, CALCIUM.
CHEMIST: RR

Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonell

7-8-96
Date

TRACE ANALYSIS, INC.
6701 Aberdeen Avenue Lubbock, Texas 79424 806•794•1296 FAX 806•794•1298

ANALYTICAL RESULTS FOR
HIGHLANDER SERVICES CORP.
Attention: Ike Tavarez
306 W. Wall, Suite 320
Midland, TX 79701

July 5, 1996
Receiving Date: 06/15/96
Sample Type: Water
Project No: 786
Project Location: Texaco North Eunice Plant

Prep Date: 06/20/96
Analysis Date: 06/20/96
Sampling Date: 06/14/96
Sample Condition: Intact & Cool
Sample Received by: McD
Project Name: Texaco E & P, Inc

TA#	FIELD CODE	CHLORIDE (mg/L)	FLUORIDE (mg/L)	SULFATE (mg/L)	ALKALINITY (mg/L as CaCo3) HCO3	ALKALINITY (mg/L as CaCo3) CO3	NO3-N (mg/L)
T54146	Water Well #1	782	2.6	913	340	0	10.4
QC	Quality Control	490	0.94	11.8	---	---	1.45
RPD		1	4	5	5	5	1
% Extraction Accuracy		95	75	106	---	---	115
% Instrument Accuracy		98	94	104	---	---	106
REPORTING LIMIT		0.5	0.1	1	10	10	0.1

METHODS: EPA 375.4, 310.1, 340.2, 353.3; 4500 Cl-B.
CHEMIST: Chloride: JT Fluoride: MB/MS Sulfate: MS Alkalinity: RCD NO3-N: MS
SPIKE: 500 mg/L CHLORIDE; 1.0 mg/L FLUORIDE; 5,000 mg/L SULFATE; 19.995 mg/L as N (Nitrate).
QC: 500 mg/L CHLORIDE; 1.0 mg/L FLUORIDE; 10 mg/L SULFATE; 1.333 mg/L as N (Nitrate).

BS

Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonell

7-9-96
Date

6701 Aberdeen Avenue
Lubbock, Texas 79424
806•794•1296
FAX 806•794•1298

ANALYTICAL RESULTS FOR
HIGHLANDER SERVICES CORP.
Attention: Ike Tavarez
306 W. Wall, Suite 320
Midland, TX 79701

July 5, 1996
Receiving Date: 06/15/96
Sample Type: Water
Project No: 786
Project Location: Texaco North Eunice Plant

Prep Date: 06/19/96
Analysis Date: 06/19/96
Sampling Date: 06/14/96
Sample Condition: Intact & Cool
Sample Received by: cD
Project Name: Texaco E & P, Inc.

TA #: T54146
FIELD CODE: Water Well #1

8240 Compounds (ug/L)	Concentration	Reporting Limit
Dichlorodifluoromethane	113	1
Chloromethane	ND	1
Vinyl chloride	ND	1
Bromomethane	ND	5
Chloroethane	ND	1
Trichlorofluoromethane	ND	1
1,1-Dichloroethene	ND	1
Iodomethane	ND	5
Carbon disulfide	ND	1
Methylene chloride	ND	5
trans-1,2-Dichloroethene	ND	1
1,1-Dichloroethane	ND	1
Vinyl acetate	ND	1
2-Butanone	ND	50
Chloroform	ND	1
1,1,1-Trichloroethane	ND	1
1,2-Dichloroethane	ND	1
Benzene	ND	1
Carbon Tetrachloride	ND	1
1,2-Dichloropropane	ND	1
Trichloroethene	ND	1
Bromodichloromethane	ND	1
cis-1,3-Dichloropropene	ND	1
4-Methyl-2-pentanone	ND	50
trans-1,3-Dichloropropene	ND	1
Toluene	ND	1
1,1,2-Trichloroethane	ND	1
2-Hexanone	ND	50

Project No: 786
Project Name/Location: Texaco North Eunice Plant

FIELD CODE: Water Well #1
TA #: T54146

8240 Compounds	Concentration (ug/L)	Reporting Limit
Dibromochloromethane	ND	1
Tetrachloroethene	ND	1
Chlorobenzene	ND	1
Ethylbenzene	ND	1
m & p-Xylene	ND	1
Bromoform	ND	1
Styrene	ND	1
o-Xylene	ND	1
1,1,2,2-Tetrachloroethane	ND	1
trans 1,4-Dichloro-2-butene	ND	5
cis 1,4-Dichloro-2-butene	ND	5
1,4-Dichlorobenzene	ND	2
1,3-Dichlorobenzene	ND	2
1,2-Dichlorobenzene	ND	2

Tentatively Identified Compounds	RT	CONC
Methyl-cyclopentane	8.94	1
Cyclohexane	9.89	4
Methyl-cyclohexane	11.51	2
tetrahydro-2,5-dimethylthiophene	16.00	3
tetrahydro-2-methyl-2H-thiopyran	16.10	4
tetrahydro-3-methyl-2H-thiopyran	17.17	3
2-ethyltetrahydro-thiophene	17.65	2
	Unidentified Hydrocarbons	
	12.49	1
	18.22	3
	18.31	3

SURROGATES	% RECOVERY
Dibromofluoromethane	101
Toluene-d8	102
4-Bromofluorobenzene	90

ND = Not Detected
METHODS: EPA SW 846-5030; EPA 8260.
CHEMIST: RP

Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonell

7-8-96
Date

6701 Aberdeen Avenue
Lubbock, Texas 79424
806•794•1296
FAX 806•794•1298

ANALYTICAL RESULTS FOR
HIGHLANDER SERVICES CORP.
Attention: Ike Tavarez
306 W. Wall, Suite 320
Midland, TX 79701

July 5, 1996
Receiving Date: 06/15/96
Sample Type: Water
Proj. Locat.: Texaco North Eunice Plant
Sampling Date: 06/14/96
Sample Condition: I & C
Sample Received by: McD
Project No: 786
Project Name: Texaco E & P Inc.
Extraction Date: 06/17/96
Analysis Date: 06/18/96

PAH **Reporting** **T54146**

8700 Compounds (mg/L)	Limit	WW #1	QC	RPD	%EA	%IA
Naphthalene	0.001	ND	102	10	87	102
Acenaphthylene	0.001	ND	99	9	85	99
Acenaphthene	0.001	ND	97	9	87	97
Fluorene	0.001	ND	97	11	81	97
Phenanthrene	0.001	ND	94	8	85	94
Anthracene	0.001	ND	99	11	80	99
Fluoranthene	0.001	ND	95	9	82	95
Pyrene*	0.001	ND	103	5	100	103
Benzo[a]anthracene*	0.001	ND	104	7	92	104
Chrysene*	0.001	ND	109	7	100	109
Benzo[b]fluoranthene*	0.001	ND	109	12	121	109
Benzo[k]fluoranthene*	0.001	ND	94	0	145	94
Benzo[a]pyrene*	0.001	ND	109	7	140	109
Indeno[1,2,3-cd]pyrene*	0.001	ND	100	8	128	100
Dibenz[a,h]anthracene*	0.001	ND	97	11	110	97
Benzo[g,h,i]perylene*	0.001	ND	97	7	128	97

*ND = Not Detected

	% RECOVERY
Nitrobenzene-d5 SURR	77
2-Fluorobiphenyl SURR	70
Terphenyl-d14 SURR	88

CHEMIST: RD/CC

METHODS: EPA SW 846-8270, 3510.

7-8-96

Director, Dr. Blair Leftwich **DATE**

Director, Dr. Bruce McDonell

SAMPLE LOG

Boring/Well: BH-1
Site Location: Texaco E & P Eunice #1 (North) Gas Plant
Sample Location: Sump (NS), east of facility
Total Depth: 52'
Date Installed: 7/29/96

Depth (Ft)	OVM	SAMPLE DESCRIPTION
5-7	206	Gray-tan, caliche, some clay, staining and odor
10-12	233	*Tan, fine grain sand and caliche
15-17	28	Tan, fine grain sand and caliche
20-22	239	Tan, fine grain sand, odor
25-27	207	Tan, fine grain sand, odor
20-32	122	Brown, fine grain sand
35-37	159	Brown, fine grain sand
40-42	69	Brown, fine grain sand, some pink sand
45-47	255	Brown, fine grain sand
50-52	421	*Tan/pink fine grain sand, ground water
		TD- 52'

NOTE:
* Selected for analysis
BH - Borehole (rig-splitspoon sampling)

SAMPLE LOG

Boring/Well: BH-2
Site Location: Texaco E & P Eunice #1 (North) Gas Plant
Sample Location: Sump (NS), east of facility
Total Depth: 52'
Date Installed: 7/29/96

Depth (Ft)	OVM	SAMPLE DESCRIPTION
5-7	415	Black and gray, clay and caliche, stained soil
10-12	448	*Tan-gray, caliche, soft
15-17	177	Tan, fine grain sandstone and caliche
20-22	497	Tan, fine grain sandstone and caliche
25-27	384	Brown, fine grain sand and caliche
30-32	440	Brown, fine grain sand
35-37	127	Brown, fine grain sand
40-42	29	Brown, fine grain sand
45-47	372	Brown, fine grain sand
50-52	-	*Tan, fine grain sand, ground water
		TD- 52'

NOTE:
* Selected for analysis
BH - Borehole (rig-splitspoon sampling)

SAMPLE LOG

Boring/Well: MW-1 (BH-1)
Site Location: Texaco E & P Eunice #1 (North) Gas Plant
Sample Location: Monitor Well (south of compressor)
Total Depth: 57'
Date Installed: 7/22/96

Depth (Ft)	OVM	SAMPLE DESCRIPTION
0-5	6	Reddish fine grain sand and clay, no odor or staining
6-10	-	White and tan caliche layer, friable layer, trace fine grain sand
10-12	2	Brown, fine grain sand, clean, loose, well sorted
15-17	3	Brown, fine grain sand, clean, loose, encountered layers of dense caliche and sandstone
20-22	2	White, caliche, dense layer, some sandstone (lost 95% of splitspoon sample)
25-27	4	*Tan, fine grain sand, trace of white caliche
30-32	7	Tan, fine grain sand, trace of white caliche, no staining
35-37	1	Tan, fine grain sand, trace of white caliche, no staining, damp
40-42	2	Tan, fine grain sand, trace of white caliche, no staining, damp
45-47	2	Tan, fine grain sand, trace of white caliche, no staining, damp
50-52	2	Tan, fine grain sand, trace of white caliche, no staining, damp
55-57	414	*Tan, fine grain sand, loose, trace grayish staining, encountered ground water
		TD- 57'

NOTE:
* Selected for analysis
BH - Borehole (rig-splitspoon sampling)

SAMPLE LOG

Boring/Well: AH-1
Site Location: Texaco E & P Eunice #1 (North) Gas Plant
Sample Location: South Sump of Engine Room
Total Depth: 6.8'
Date Installed: 8/9/96

Depth (Ft)	OVM	SAMPLE DESCRIPTION
0-2	-	Surfacial staining, oily soil on surface, tan, fine grain sand
2-2.5	0	Tan, fine grain sand, loose, some caliche rock
4-4.5	0	White caliche and fine grain sand, no staining or odor
6-6.3	0	White caliche and fine grain sand, no staining or odor, 6.3 feet dense layer of tan caliche
6.3-6.8	1	*Tan and white caliche, some cemented sandstone, no staining or odor
		TD- 6.8'

NOTE:
* Selected for analysis
AH - Auger Hole (hand auger sampling)

SAMPLE LOG

Boring/Well: AH-1
Site Location: Texaco E & P Eunice #1 (North) Gas Plant
Sample Location: North Sump of Engine Room
Total Depth: 8.4'
Date Installed: 8/9/96

Depth (Ft)	OVM	SAMPLE DESCRIPTION
0-2	-	Tan, fine grain sand, no staining or odor
2-2.5	0	Reddish clay and fine grain sand, no staining
4-4.5	0	Tan, fine grain sand and white caliche, friable caliche
6-6.5	0	White, caliche, friable, clean, no staining, some caliche rock, trace fine grain sand
8.2-8.4	0	*White, caliche, clean, no staining or odor, auger refusal @ 8.4 feet
		TD- 8.4'

NOTE:
* Selected for analysis
AH - Auger Hole (hand auger sampling)

SAMPLE LOG

Boring/Well: BH-1
Site Location: Texaco E & P Eunice #1 (North) Gas Plant
Sample Location: Waste Oil and Water Storage Area (SOA)
Total Depth: 32'
Date Installed: 7/23/96

Depth (Ft)	OVM	SAMPLE DESCRIPTION
0-2	-	Reddish clay, some fine grain sand, clean
5-7	1	Reddish clay, some fine grain sand, clean
10-12	2	Brown, fine grain sand, some reddish clay, clean
15-17	2	Tan, fine grain sand, some white caliche, dense, noted 6" grayish staining, no odor
20-22	3	Tan, fine grain sand, trace of caliche, white dense layers
25-27	2	Tan, fine grain sand, loose, well sorted, clean
30-32	2	Tan, fine grain sand, loose, well sorted, clean
		TD- 32'

NOTE:

BH - Borehole (rig-splitspoon sampling)

SAMPLE LOG

Boring/Well: BH-2
Site Location: Texaco E & P Eunice #1 (North) Gas Plant
Sample Location: Waste Oil and Water Storage Area (SOA)
Total Depth: 27'
Date Installed: 7/24/96

Depth (Ft)	OVM	SAMPLE DESCRIPTION
0-3	-	Reddish clay, some fine grain sand, clean
5-7	1	Tan, fine grain sand and white caliche, no odor or staining
10-12	2	Tan, fine grain sand and white caliche, no odor or staining
15-17	2	Tan, fine grain sand and white caliche, no odor or staining
20-22	4	White caliche layer, dense, trace odor, some layers loose
25-27	2	White caliche layer, dense, trace odor, some layers loose
		TD- 27'

NOTE:

BH - Borehole (rig-splitspoon sampling)

SAMPLE LOG

Boring/Well: BH-3
Site Location: Texaco E & P Eunice #1 (North) Gas Plant
Sample Location: Waste Oil and Water Storage Area (SOA)
Total Depth: 27'
Date Installed: 7/24/96

Depth (Ft)	OVM	SAMPLE DESCRIPTION
0-3	-	Reddish clay, some fine grain sand, clean
5-7	1	White, caliche, some reddish clay, clear
10-12	2	Brown, fine grain sand and white caliche, clean, no staining
15-17	2	White caliche, dense layer, lost 90% of splitspoon sample
20-22	1	Tan, fine grain sand, some caliche layers
25-27	1	Tan, fine grain sand, loose, well sorted, some sandstone
		TD- 27'

NOTE:

BH - Borehole (rig-splitspoon sampling)

SAMPLE LOG

Boring/Well: BH-4
Site Location: Texaco E & P Eunice #1 (North) Gas Plant
Sample Location: Waste Oil and Water Storage Area (SOA)
Total Depth: 37'
Date Installed: 7/24/96

Depth (Ft)	OVM	SAMPLE DESCRIPTION
0-2	-	Reddish clay, some fine grain sand, no staining
5-7	5	White caliche and reddish clay, caliche layers, no staining
10-12	28	Brown, fine grain sand, trace of white caliche, some trace of odor, no staining
15-17	58	Tan, fine grain sand and some friable white caliche, trace odor, no staining
20-22	69	Tan, fine grain sand and some friable white caliche, trace odor, no staining
25-27	154	Tan, fine grain sand, loose, some layers of dense sandstone, trace odor
30-32	39	Tan, fine grain sand, loose, clean, trace odor
35-37	8	Tan, fine grain sand, loose, clean, trace odor
		TD- 37'

NOTE:

BH - Borehole (rig-splitspoon sampling)

SAMPLE LOG

Boring/Well: BH-5
Site Location: Texaco E & P Eunice #1 (North) Gas Plant
Sample Location: Waste Oil and Water Storage Area (SOA)
Total Depth: 37'
Date Installed: 7/24/96

Depth (Ft)	OVM	SAMPLE DESCRIPTION
0.5-1	588	Black staining, clay and fine grain sand, some grayish staining
5-7	500	*White, caliche, trace fine grain sand, strong odor, trace gray staining
10-12	353	White, caliche, trace fine grain sand, strong odor, trace gray staining
15-17	232	Tan, fine grain sand, well sorted, some trace grayish staining, some caliche, dense
19-20	143	Tan, fine grain sand, and white caliche, some dense, trace of black staining
25-27	7	Tan, fine grain sand, loose, clean, well sorted, some caliche, no staining
30-32	12	Tan, fine grain sand, loose, clean, well sorted, some caliche, no staining
35-37	3	*Tan, fine grain sand, loose, clean, well sorted, some caliche, no staining
		TD- 37'

NOTE:
* Selected for analysis
BH - Borehole (rig-splitspoon sampling)

SAMPLE LOG

Boring/Well: BH-6
Site Location: Texaco E & P Eunice #1 (North) Gas Plant
Sample Location: Waste Oil and Water Storage Area (SOA)
Total Depth: 42'
Date Installed: 7/24/96

Depth (Ft)	OVM	SAMPLE DESCRIPTION
0.5-1	478	Black staining, fine grain sand, some clay matrix, odor strong
5-7	496	*Grayish staining, fine grain sand and caliche
10-12	418	Tan, fine grain sand and white caliche, some black staining
15-17	327	White and tan, caliche and sandstone, layer dense, lost sample
20-22	487	White caliche, dense layer, some fine grain sand and sandstone layers
25-27	35	Tan, fine grain sand, loose, well sorted, clean
30-32	33	Tan, fine grain sand, loose, well sorted, clean, damp
35-37	13	Tan, fine grain sand, loose, well sorted, clean, damp
40-42	6	Tan, fine grain sand, loose, well sorted, clean, damp
		TD- 42'

NOTE:
* Selected for analysis
BH - Borehole (rig-splitspoon sampling)

SAMPLE LOG

Boring/Well: BH-7
Site Location: Texaco E & P Eunice #1 (North) Gas Plant
Sample Location: Waste Oil and Water Storage Area (SOA)
Total Depth: 37'
Date Installed: 7/25/96

Depth (Ft)	OVM	SAMPLE DESCRIPTION
0.5-1	489	Black and gray staining, fine grain sand, strong odor
1-3	-	Black and gray staining, fine grain sand, strong odor
5-7	415	Caliche layer, grayish staining, trace fine grain sand
10-12	450	Tan, fine grain sand, trace caliche, trace gray staining
15-17	153	Tan, fine grain sand, layer dense white caliche, no staining
19	-	Dense caliche layer
20-22	26	White caliche layer, some layers of fine grain sand, trace odor
25-27	19	Tan, fine grain sand, well sorted, clean, loose
30-32	7	Tan, fine grain sand, well sorted, clean, loose, some layers of sandstone, damp
35-37	6	Tan, fine grain sand, well sorted, clean, loose, some layers of sandstone, damp
		TD- 37'

NOTE:

BH - Borehole (rig-splitspoon sampling)

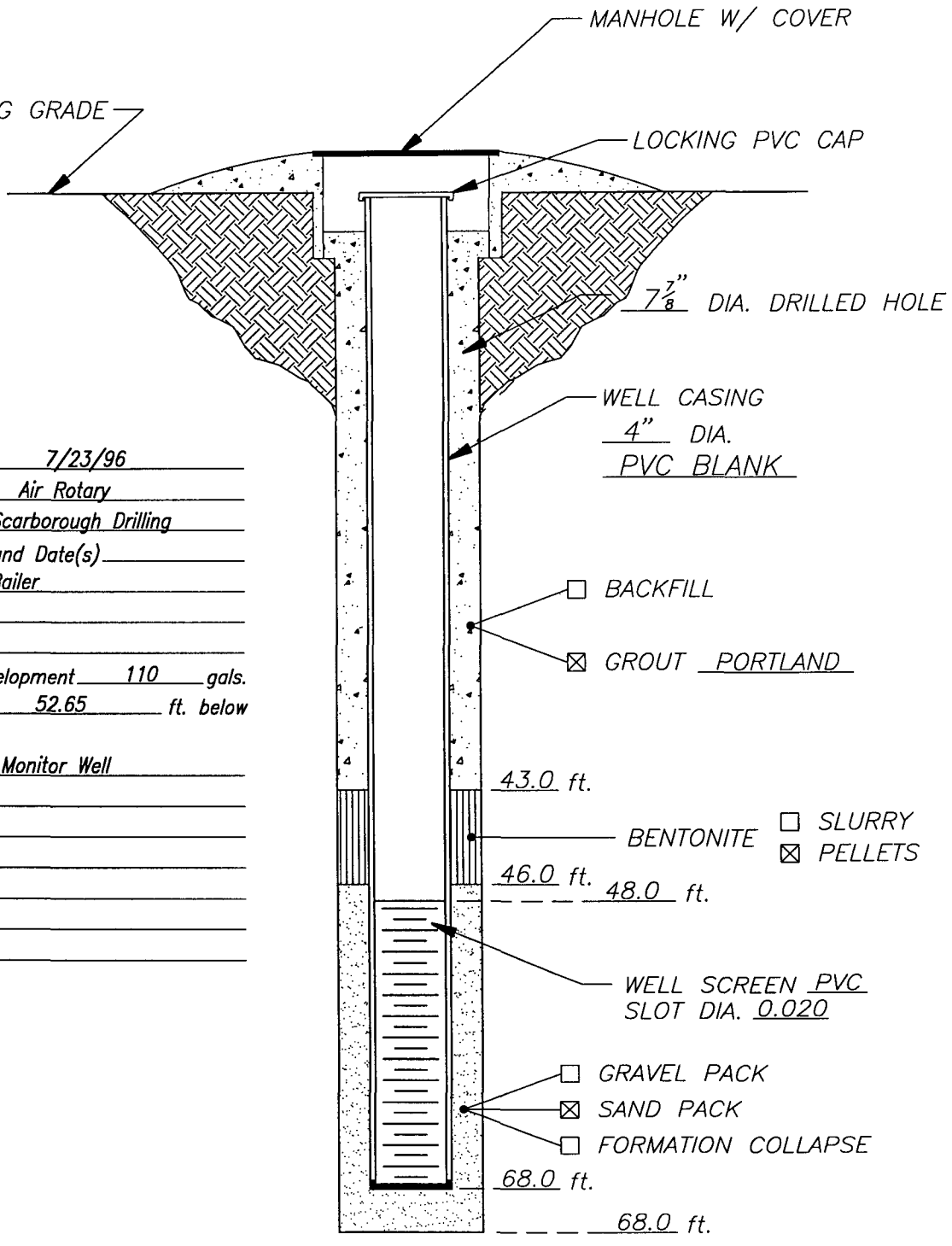
SAMPLE LOG

Boring/Well: BH-8
Site Location: Texaco E & P Eunice #1 (North) Gas Plant
Sample Location: Waste Oil and Water Storage Area (SOA)
Total Depth: 27'
Date Installed: 7/25/96

Depth (Ft)	OVM	SAMPLE DESCRIPTION
0.5-1	99	Black and gray staining, fine grain sand, some clay matrix
5-7	435	*White, caliche, trace fine grain sand, no staining
10-12	5	Tan, fine grain sand, trace caliche, no staining or odor
15-17	18	Lost sample (cuttings), white caliche dense layer
20-22	43	Tan, fine grain sand, trace black staining, trace odor, some caliche
25-27	8	*Tan, fine grain sand, some dense sandstone layers, no staining or order
		TD- 27'

NOTE:
* Selected for analysis
BH - Borehole (rig-splitspoon sampling)

WELL CONSTRUCTION LOG



Installation Date(s) 7/23/96
Drilling Method Air Rotary
Drilling Contractor Scarborough Drilling
Development Technique(s) and Date(s)
Rig Bailer

Water Removed During Development 110 gals.
Static Depth to Water 52.65 ft. below Ground Level
Well Purpose Monitor Well

Remarks

DATE: 7/23/96

Highlander Environmental

CLIENT: Texaco Exploration & Production, Inc.
PROJECT: Eunice #1 (North) Plant
LOCATION: Lea County, New Mexico

WELL NO. MW-1

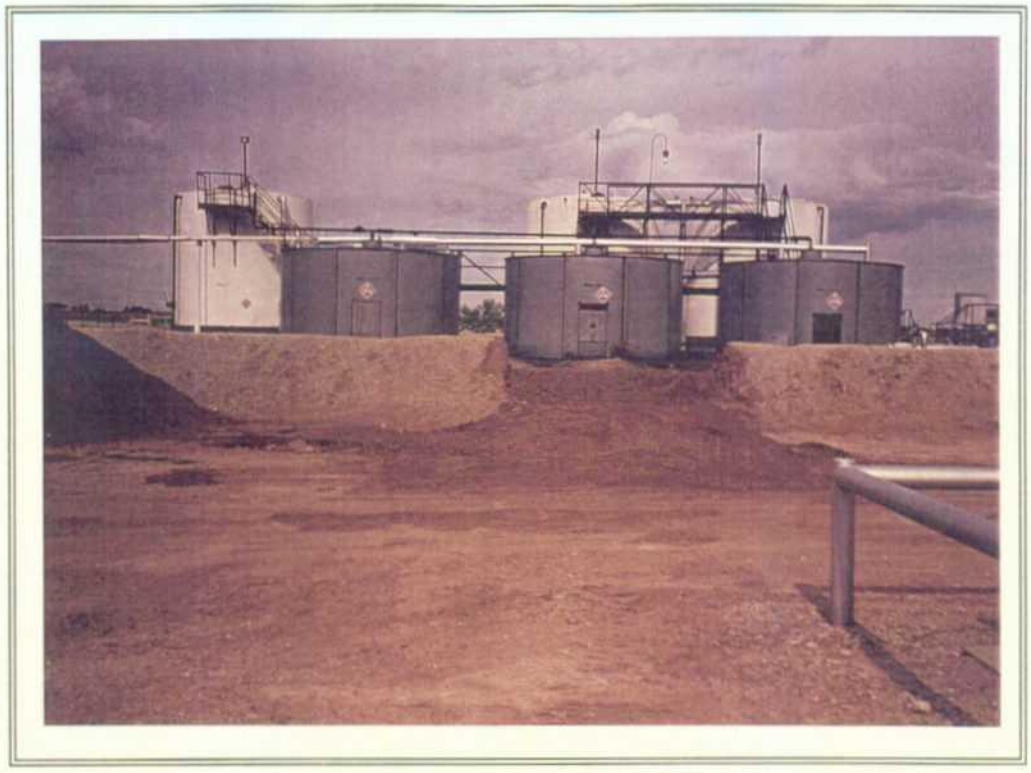
PHOTOGRAPHIC DOCUMENTATION
TEXACO EXPLORATION & PRODUCTION, INC., EUNICE #2 (NORTH) GAS PLANT

1. Monitor well (MW-1) installation.

2. Monitor well (MW-1) installation.

3. Monitor well (MW-1) installation.

4. Monitor well (MW-1) surface completion.



5. Waste oil and water storage area

6. Borehole (BH-5) installation at the waste oil and water storage area.

7. Borehole (BH-6) location at the waste oil and water storage area.

8. Boreholes (BH-5 and BH-6) locations east of waste oil and water storage area.

9. Area of boreholes BH-7 and BH-8 located west of waste oil and water storage area.

10. Area of boreholes BH-3 and BH-4 located on the west of waste oil and water storage area.

11. North sump located northeast of facility.

12. North view of north sump.

13. Southeast view of north sump.

14. South view, north sump,
borehole locations BH-1 and BH-2.

15. Sump, north of engine room.

16. Sump, north of engine room,
augerhole (AH-1) installation.

17. Sump, south of engine room, augerhole (AH-1) location.

18. Trash pit area.

19. Plant water well (WW-1)