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FINAL REMOVAL UPGRADE OF UNDERGROUND STORAGE TANKS TECHNICAL REPORT
VOLUME 1 OF 3 NAS FORT WORTH TX
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**NAVAL AIR STATION
FORT WORTH JRB
CARSWELL FIELD
TEXAS**

**ADMINISTRATIVE RECORD
COVER SHEET**

AR File Number 324



United States Air Force Air Force Base Conversion Agency

FINAL

NAS Fort Worth JRB, Texas
(Formerly Carswell AFB, Texas)

REMOVAL/UPGRADE OF
UNDERGROUND STORAGE TANKS

TECHNICAL REPORT

VOLUME I OF III

MARCH 1997

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- Appendix A Waste Disposal Manifests for Contaminated Soil
- Appendix B Chain-of-Custody Forms
- Appendix C Photographs
- Appendix D Analytical Laboratory Results

Attachments

- Attachment 1 Unified Services of Texas Inc. UST Removal Report
- Attachment 2 Unified Services of Texas Inc. UST Upgrade Report

Plate

- Underground Storage Tank Upgraded and Removed, Spring 1996

LIST OF ACRONYMS AND ABBREVIATIONS

AFBCA	Air Force Base Conversion Agency
AFCEE	Air Force Center for Environmental Excellence
bgs	below ground surface
BTEX	benzene, toluene, ethylbenzene, and xylene
EPA	U.S. Environmental Protection Agency
eV	electron volt
FRP	fiberglass-reinforced plastic
Jacobs	Jacobs Engineering Group Inc.
JRB	Joint Reserve Base
kg	kilogram
L	liter
LEL	lower explosive limit
MDL	method detection limit
mg	milligram
MSC	medium-specific concentration
MTBE	methyl tertbutyl ether
NAS	Naval Air Station
PCE	tetrachloroethene
PID	photoionization detector
PQL	practical quantitation limit
psi	pounds per square inch
QAPP	Quality Assurance Project Plan
SSL	soil screening level
SVOC	semivolatile organic compound
TNRCC	Texas Natural Resource Conservation Commission
TPH	total petroleum hydrocarbon
UST	underground storage tank
UTL	upper tolerance limit
UTL _{95,95}	upper tolerance limit (95 percent confidence, 95 percent coverage)
UTL _{95,99}	upper tolerance limit (95 percent confidence, 99 percent coverage)
VOC	volatile organic compound
%	percent
µg	microgram

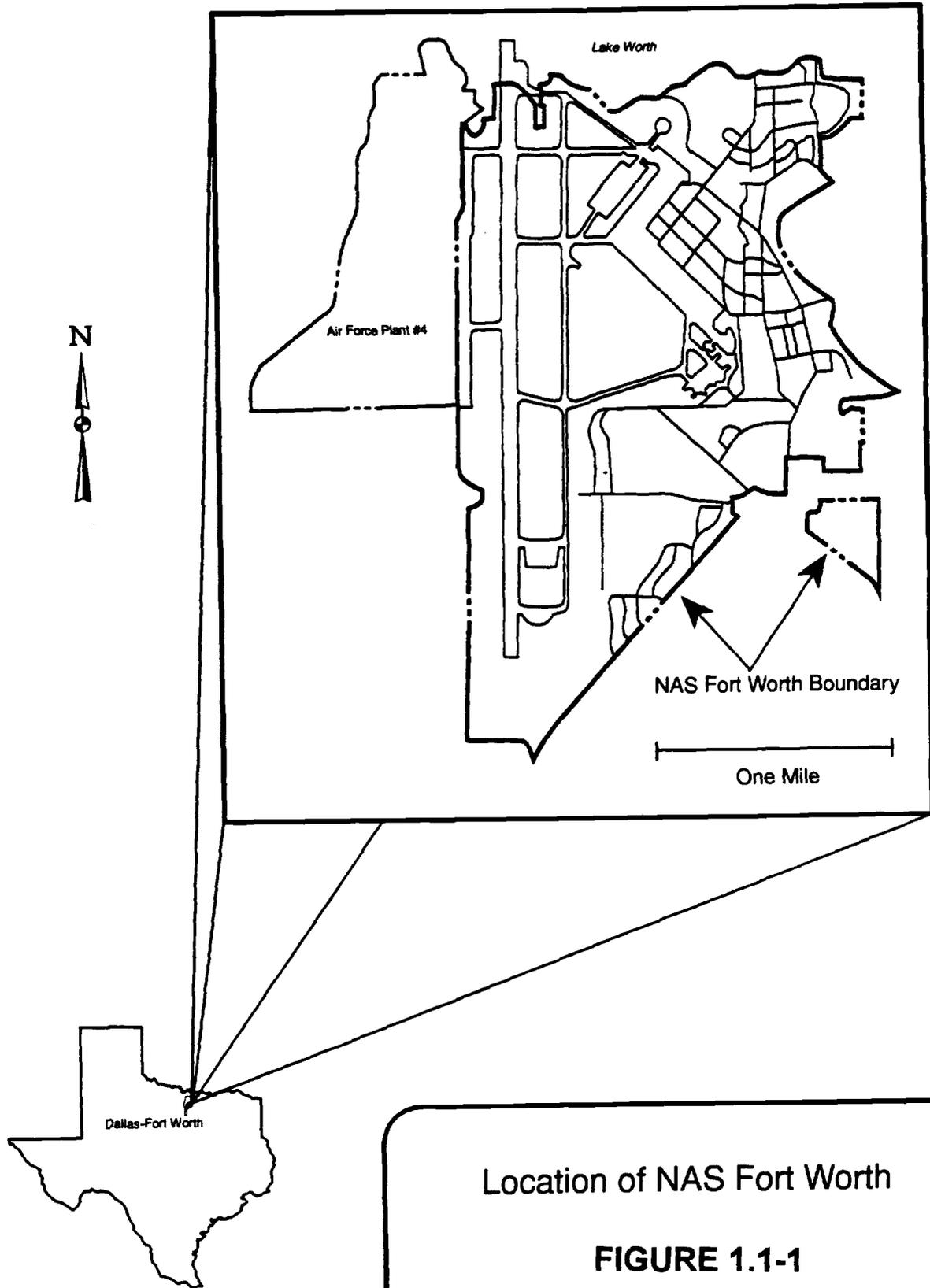
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This report describes field activities conducted in support of contract F41624-94-D-8116, Delivery Order 0003, issued by the Air Force Center for Environmental Excellence (AFCEE) to Jacobs Engineering Group Inc. (Jacobs) for the removal and upgrade of underground storage tanks (USTs) at Naval Air Station (NAS) Fort Worth Joint Reserve Base (JRB), Carswell Field, Fort Worth, Texas (referred to as NAS Fort Worth). This project consisted of removing 11 USTs and upgrading 11 more.

This report is organized into eight sections describing the site location and history, project approach and methodology, and results of the activities. Section 1.0 of the report provides a brief introduction and description of the location and geologic setting of NAS Fort Worth. Section 2.0 provides the project approach, project schedule, and a description of subcontractors and Air Force support. Sections 3.0, 4.0, and 5.0 present the methodology used to accomplish the tasks of UST removals and upgrades. The results from the visual observations and sampling during the tank removals and upgrades are presented in Sections 6.0 and 7.0. Section 8.0 presents the references that were used to prepare this report. There are four appendices to this report: Appendix A includes the waste disposal manifests for contaminated soil; Appendix B contains the chain-of-custody forms for the tank removal and upgrade sampling; Appendix C contains photographs of field activities; and Appendix D contains the analytical results from soil and groundwater sampling. There are also two attachments to this report, both prepared by Unified Services of Texas, Inc. Attachment 1 is the UST removal report and Attachment 2 is the UST upgrade report.

1.1 LOCATION AND GEOLOGIC SETTING OF NAS FORT WORTH

NAS Fort Worth is located in north-central Texas in Tarrant County, approximately 8 miles west of downtown Fort Worth (Figure 1.1-1). The area surrounding the station is mostly suburban, including residential areas of the city of Fort Worth, White Settlement, and Westworth Village. The main station totals 2,264 acres and is



Location of NAS Fort Worth
FIGURE 1.1-1

bordered on the north by Lake Worth, on the east by the Trinity River and Westworth Village, on the northeast and southeast by Fort Worth, on the west and southwest by White Settlement, and on the west by Air Force Plant 4 (Lockheed-Martin).

1.2 LOCAL GEOLOGY AND HYDROGEOLOGY

NAS Fort Worth is built primarily on unconsolidated alluvium, referred to locally as the Terrace Alluvium, which lies unconformably on top of a sequence of lithified Cretaceous formations. These Cretaceous rock units are, from youngest to oldest, (1) the Goodland Formation, composed of limestone with a few thin shale beds; (2) the Walnut Formation, a shelly limestone interbedded with thin shale and sandy clay beds; (3) the Paluxy Formation, a poorly to moderately cemented sandstone with shale interbeds; (4) and the Glen Rose Formation, composed of mostly limestone. The USTs at NAS Fort Worth were installed in the Terrace Alluvium, although at least one tank excavation reached the top of the Goodland Formation.

Groundwater is present in the Terrace Alluvium and the Paluxy Formation, which are separated by the less-permeable Goodland and/or Walnut Formations. Because of this separation, the Terrace Alluvium is the only water-bearing unit of interest in this report.

The Terrace Alluvium consists of Quaternary (recent) floodplain and fluvial terrace sediments deposited by an abandoned meander of the Trinity River, primarily sand, gravel, clay, and silt. Locally, it has been observed that the Trinity paleochannel and other smaller paleochannels have eroded the Goodland Formation to the extent that Terrace Alluvium sediments were deposited directly on the Walnut Formation (Hargis and Associates 1989). The local thickness of the Terrace Alluvium ranges from 0 to greater than 45 feet (Radian 1991).

Groundwater recharge to the Terrace Alluvium is primarily from rainfall and infiltration from streams and ditches. The direction of groundwater flow is generally

bedrock controlled. Generally, groundwater flow is toward the east and the Trinity River.

1.3 PROJECT SCOPE AND OBJECTIVES

The statement of work consisted of removing 11 USTs and upgrading 11 other USTs with spill and overfill protection. The objective of the UST removal task was to (1) properly remove and dispose of each UST and (2) collect information to either support the closure of each site or to supplement additional investigations or remediation. The objective of the UST upgrade task was to bring USTs that are intended for continued use into compliance with current regulations.

2.0 PROJECT STRATEGY

The following section presents the project strategy, including selection of methodology to meet the project objectives, the schedule of events, selection and responsibility of various subcontractors, and support provided by the Air Force.

2.1 TECHNOLOGY SELECTION

Common, proven technologies were used to accomplish the project objectives. The UST removals and upgrades were performed using backhoes and excavators to remove the soil cover from each tank or tank group. Each tank was cleaned, loaded onto a flat bed trailer, and hauled offsite. A crane was used to complete all lifting with the exception of small waste oil tanks, where a backhoe and chain was used. Samples were collected, the excavations were backfilled and compacted, and the site was restored to original condition using conventional construction equipment and techniques.

2.2 PROJECT SCHEDULE

The following paragraphs present a chronology of UST removal and UST upgrade activities.

February 23, 1996. Unified Services of Texas, Inc. submitted the required 30-day construction notification to Texas Natural Resource Conservation Commission (TNRCC) in Austin and to the TNRCC Region 4 Field Office in Duncanville, Texas for the removal, transport, and disposal of 11 USTs. A waiver of the 30-day notification was granted by Mr. Lonnie Gilley, Region 4, Duncanville.

March 11, 1996. Unified Services of Texas, Inc. submitted the required 30-day construction notification to TNRCC's Central Office, Austin, Texas and to the TNRCC Region 4 Field Office, Duncanville, Texas for the upgrade of 11 USTs. A

waiver of the 30-day notification was granted by Mr. Ron Scharber, Region 4, Duncanville.

March 14, 1996. Digging permit applications were submitted for the six sites where USTs were to be removed and 11 sites where USTs were to be upgraded.

March 19, 1996. Safety equipment and barricades were placed at Building Nos. 1411, 1450, 1518, and 1750. Piping was disassembled at Building 1450.

March 20, 1996. Approved digging permits were received from Public Works Engineering Department. The breaking of concrete began at Building 1411. Tanks were excavated at Buildings 1518 and 1750.

March 21, 1996. One 8,000-gallon fiberglass-reinforced plastic (FRP) tank (Tank 1750-1) and one 600-gallon FRP tank (Tank 1518-5) were excavated and removed. Concrete was removed from Building 1411. Captain W. L. Pierce, Inspector, Fort Worth Fire Prevention Bureau, was onsite for removal at Buildings 1518 and 1750. During excavation of 1750-1, Unified Services of Texas, Inc. discovered one 20,000-gallon steel tank that had been properly abandoned in place.

March 22, 1996. Permit No. M11-0100-96 was obtained from the City of Fort Worth Bureau of Fire Prevention for removal of tanks at six locations and for upgrade and repair of 11 USTs at 11 locations at NAS Fort Worth.

March 25, 1996. All barricades were checked and repaired at Buildings 1518, 1750, and 1411. Mobley Company removed contents from three tanks at Building 1411. Excavation and inerting of tanks began at Building 1411.

March 26, 1996. Three 2,000-gallon steel tanks (Tanks 1411-1, 1411-2, and 1411-3) were excavated, removed, and disposed of. Soil was stockpiled and covered with plastic. All piping, islands, and electric wiring were removed. The site was secured. One 315-gallon steel tank (Tank 4102-1) was excavated, removed, and disposed of.

Two pumps at Building 4210 were removed and the wiring was disconnected. The site was secured. The final inspection was performed by Captain Pierce, Fort Worth Fire Prevention Bureau, for Buildings 1411, 1518, and 4102.

March 27, 1996. A safety meeting was held and site 4210 was checked for barricades, safety tape, and polyethylene coverings. Work was suspended because of inclement weather. All sites were checked and secured.

March 28, 1996. The confined space permit was in place for piping vault at Building 4210. Piping was cut and the valve removed. The stainless piping was removed in the building. All sites were secured.

March 29, 1996. All barricades and safety equipment were checked.

April 1, 1996. Three 8,000-gallon FRP tanks and one 2,000-gallon FRP tank at Building 4210 were excavated. Mobley removed tank contents and inerted tanks before removal. Captain Hines, Fort Worth Fire Prevention Bureau, was onsite. Tanks were removed, loaded, and transported for disposal. All sites were secured.

April 2, 1996. The remaining piping was removed at Building 4210. The tank holes were over-excavated. The anchor pad was removed at Building 4210. The remaining piping was removed at Building 4210. Mobley removed water from tank holes at Buildings 1411, 1518, and 4210. The stockpiled dirt was relocated at Building 4210. All barricades and lights were secured.

April 3, 1996. The anchor pads were excavated at Buildings 4210 and 1411. Mobley removed water from excavation at Building 1518.

April 4, 1996. Water was removed from tank excavations at Buildings 1411 and 1518. The breaking and removal of the concrete anchor pads at Building 1411 was completed. Sampling was conducted at Building 1411. Building 1750 could not be sampled because of water incursion from heavy rains.

April 5, 1996. The concrete pad was removed at Building 4210. The barricades, safety tape and polyethylene were secured at all sites. Sampling was completed at Building 1750. Sampling was completed at Building 1411.

April 8, 1996. Equipment was mobilized to Building 1518. The excavation at Building 1518 was backfilled. Backfilling began at Building 1750. Building 4102 was over-excavated.

April 9, 1996. Backfilling and compacting the select fill at Building 1750 began. The area was cleaned of construction, and all sites were secured.

April 10, 1996. The backfilling and compaction of select fill at Building 1750 was completed. Building 4210 was backfilled and compacted. Over-excavation was performed at Building 4102, and samples were collected. Texas Tank Destroyal loaded and transported pipe for disposal.

April 11, 1996. The excavation at Building 4210 was backfilled and compacted. The concrete was loaded and removed.

Excavation occurred to the top of Tank 1015-1. An OPW 1C-2100 spill containment manhole and OPW 233/53 extractor valve and ball float assembly overflow device were installed. The vent had to be relocated because the vent was butt-welded and could not be reinstalled in its original location.

April 15, 1996. Backfilling and compaction of the excavation at Building 4210 continued. Barricades, safety tape, and equipment were checked at all sites.

Excavation occurred to the top of Tank 4127-1. An OPW 1C-2100 spill containment manhole and Sonalert overflow alarm were installed. New galvanized suction product and vent lines were installed from tank to building following observation of numerous holes due to advanced corrosion. The tank area was backfilled and the system was tested.

April 16, 1996. Continued backfill and compaction at Building 4210. Additional sand was stockpiled at Building 1411.

The backfill was replaced at Building 1015 using native soil excavated previously and compacted to grade. Clean brick sand was used to bed and backfill all piping. The remainder of the previously excavated native soil was disposed of. Excavation occurred to the top of Tank 4111-1. A Universal 76CD-1608 aboveground spill containment manhole was installed on remote fill riser. A Sonalert overfill alarm was installed on the tank and the excavation was backfilled. An OPW 61SO drop tube overfill device was installed in Tank 4136-1. A Universal 76CD-1608 aboveground spill containment manhole and Sonalert overfill alarm was installed on Tank 4143-1 .

April 17, 1996. Barricades were relocated from Buildings 4210 and 1750 to Building 1411. Over-excavation began at Building 1411. Existing stockpiles of contaminated dirt at Building 1411 were moved. All sites were secured.

An OPW IC-2100 spill containment and Sonalert overfill alarm were installed on Tank 4141-1. Excavation began to the top of Tank 4145-1.

April 18, 1996. Over-excavations continued at Building 1411. All soil was stockpiled and covered with polyethylene.

The upgrade was completed at Tank 4145-1 with an OPW IC-2100 spill containment manhole and OPW 233/53 extractor valve and ball float assembly overfill device. The existing vent line was replaced with a new FRP 2-inch vent line from the tank to the building. The existing vent was too small and did not meet minimum standards. The excavation was backfilled and the area was cleaned of construction. New tank testing probes were installed at Tanks 4141-1, 4111-1, and 4127-1.

April 22, 1996. After mobilizing to the site, a site safety meeting was conducted and all barricades were checked. The work was canceled because of inclement weather.

April 23, 1996. Excavation occurred to the top of Tanks 4155-1, 4171-1, and 4216-1. OPW IC-2100 spill containment manholes on each tank were installed. Also installed were OPW 61SO 3-inch drop tube overflow protection devices on Tanks 4171-1 and 4215-1. An OPW 61SO 4-inch drop tube overflow protection device was installed on Tank 4216-1. The vent piping was extended to required height on Tanks 4155-1 and 4171-1. Fiberglass repairs were made to FRP piping on Tank 4216-1. The area of construction was cleared of debris.

April 24, 1996. Building 1411 was over-excavated. Additional concrete finish grade was removed and the area was excavated to a 12-foot depth. The conduits were removed.

April 25, 1996. Excavations were completed at Building 1411. The excavations were lined with polyethylene sheeting and backfilling of the excavations began.

Nine sites were inoculated for Tracer Tight[®] testing of tanks.

April 26, 1996. Two loads of clean select backfill were received.

April 29, 1996. Additional clean select fill was received. Backfilling and compaction at Buildings 1411 and 4102 continued. Backfill was completed at Building 4102. All sites were checked and secured.

April 30, 1996. Stockpiled soil was transported from Buildings 1750 and 4201 to Building 1411. Guard rails were removed at Building 4210. The construction areas were cleaned.

May 1, 1996. Personnel mobilized to Building 3001. Natural gas and water lines were located. All piping was excavated and traced. Tank 3001-3 was excavated, inerted and removed. Captain Pierce, Inspector, Fort Worth Fire Prevention Bureau was onsite. A natural gas line, which was damaged as a result of cave-ins caused by unstable soils in the excavation zone, was repaired.

May 2, 1996. The associated piping at Tank 3001-3 was removed. Backfilling and compaction activities began with clean select fill.

An OPW 233/53 extractor valve and ball float assembly overflow protection devices were installed at Tank 3001-1. Also installed were 2-inch by 12-inch flex connector and vent piping to the required height. An OPW 1C-2105 slip-on spill containment manhole was installed.

May 3, 1996. Twenty tons of quick lime were received to stabilize moisture in the excavation. Lime was added to the moist backfill and the desired stabilization and compaction percentage of greater than 95 percent was obtained. Backfilling and compaction activities continued of select fill materials in addition to 20 cubic yards of crushed rock. The construction area was cleaned. The site was secured.

May 5, 1996. Thirty-six-inch and 8-inch manhole covers were installed.

May 6, 1996. Backfilling and compacting activities were completed at the Building 3001 excavation. Crushed rock was spread and compacted. Soil was moved from Building 3001 to Building 1411.

May 7, 1996. The subgrade was set at Building 1411. The area was doweled, expansion joints were installed, and the area was prepared for the concrete pour. The concrete was doweled and rebar was set at Buildings 3001 and 1518.

Concrete forms were fabricated and set for the installation of 3,000 pounds per square inch (psi) concrete pads.

May 8, 1996. Concrete was poured at tank removal sites, Buildings 1411 and 1518. All areas of construction were cleaned.

Concrete was poured and finished at sites 4216 and 3001. Concrete was poured at Buildings 4143, 4171, 4145, 4141, 4127, 4155, and 1015.

May 9, 1996. Concrete forms were removed at upgrade sites. Bollards were installed at Building 4143. Sand was removed, and the area at Building 1015 was cleaned up. A new vent plug was installed at Building 4127. Rebar was cut at Tank 3000-1. The vent piping was extended at Building 4216.

May 15, 1996. Barricades were removed from Building 1518. The remaining rock was removed from Building 4102.

May 28, 1996. The bollard rail was welded and a defective module in the Sonalert device was repaired at Building 4111. The vent piping was secured at Buildings 4216 and 4171. A ball float assembly was installed in Tank 3000-1. The remaining sites were checked and no unsatisfactory conditions were noted.

June 4, 1996. Grass seed was spread at Buildings 4210 and 1750.

June 17, 1996. All sites were checked, photographs were taken, and concrete pads were measured. The job was considered completed.

2.3 SUBCONTRACTORS

Jacobs' subcontractor, Unified Services of Texas, Inc. was primarily responsible for performance of all field activities required for the removal and upgrade of the USTs, except soil and groundwater sampling. Soil and groundwater sampling was conducted by Jacobs personnel. Jacobs personnel also provided management and site health and safety support. Analytical laboratory services were provided by Certes Environmental Laboratories, LC. Additional field oversight and support were provided as necessary by Jacobs' team subcontractor Smith Environmental (formerly known as Riedel). Numerous vendors and suppliers were used for purchase and rental of equipment required for the field effort. These were not subcontractors and are not listed in this report.

2.4 AIR FORCE SUPPORT

Support from Air Force Base Conversion Agency (AFBCA) personnel included the following:

- arranging for personnel identification badges and vehicle passes;
- arranging access to the Federal Bureau of Prison hospital grounds;
- providing engineering plans and drawings as well as reports to facilitate Jacobs efforts on the project;
- providing a field office at 6560 White Settlement Road, and a storage area in Building 4102;
- obtaining excavation permits and utility clearances; and
- supplying sources of electricity and water.

AFCEE personnel provided field oversight and overall project supervision and direction.

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3.0 UNDERGROUND STORAGE TANK REMOVAL METHODOLOGY

Notification was provided to the TNRCC of the tank removals start date on 23 February 1996. The following section describes the methodology for tank removal for all of the USTs and UST clusters. Eleven USTs were removed as part of this project. Attachment 1 is the UST removal report prepared by Unified Services of Texas, Inc. This report includes the TNRCC construction notification form, permits and inspection forms, waste disposal manifests, revised UST registration forms, and photographs of site activities.

3.1 TANK REMOVAL

The tank removals were initiated with the removal of any contents remaining in the tanks by the AFBCA. All tanks were successfully tightness-tested in February or March 1996, with the exception of Tank 3001-3 (see Section 6.6). Asphalt or concrete paving material was removed if present, and the soil over the tanks was then removed using a backhoe or excavator. As the soil was removed, it was screened using an HNu PI-101 photoionization detector (PID) with an 11.7 electron volt (eV) lamp and segregated into separate stockpiles based on the relative readings of the HNu screening.

The 11.7 eV lamp was selected instead of a 10.2 eV lamp so the HNu could serve two purposes. The primary purpose was field screening as described above. The volatile organic compounds (VOCs) associated with the contents of the USTs (i.e., benzene, toluene, ethylbenzene, etc.) have ionization potentials less than 11.7 eV. However, the HNu was also used to screen sites for health and safety purposes. Trichloroethene and its degradation products from the plume originating at Air Force Plant 4 are a concern in groundwater at NAS Fort Worth. The 11.7 eV lamp provides better detection of chlorinated solvents; therefore, it provides better worker protection.

When the top of a tank was exposed, along with its ancillary piping, the tank interior was triple-rinsed to remove any residual product. The atmosphere in each tank was evaluated with a GasTech Model 1314 combustible gas indicator, and the tank removal work was continued when the combustible vapors in the tank reached a level equal to 10 percent of the lower explosive limit (LEL) for methane. Any remaining piping was then removed and the soil surrounding each tank was excavated to ease the lift. For tanks with a capacity greater than 600 gallons, a crane was used to lift each tank from the excavations. For smaller tanks, a backhoe was used for the lift.

Once the tanks were lifted from the excavations, all soil adhering to the sides of the tanks was scraped off. The tanks were then loaded onto a flatbed trailer for transport by Unified Services of Texas to the Texas Tank Scrap Yard in Venus, Texas where the tanks were destroyed.

Following removal of the tanks, any concrete cradles or other foundation/support structures were removed, if present.

3.2 WASTE HANDLING

Triple rinse water generated during the cleaning of the tank interiors was collected using a vacuum truck, and was hauled by Mobley Company to be disposed of or recycled at their state-licensed facility at Corsicana, Texas. Potentially contaminated rainwater from several excavations and groundwater from 1518 and 1750 were also handled in this fashion. Decontamination water for cleaning sampling equipment was contained in plastic wash tubs until the end of each day, when it was transferred to a 55-gallon drum at the storage yard on White Settlement Road to be held for later disposal. Disposal manifests for contaminated water may be found in the Unified Services of Texas, Inc. report in Attachment 1.

Excavated soils were returned to the excavations when concentrations of benzene, toluene, ethylbenzene, and xylene (BTEX) and total petroleum hydrocarbons (TPH)

fell below the TNRCC guidelines for the applicable soil type. A total of approximately 826 cubic yards of excavated soils exceeded the TNRCC guidelines, and were transported by Chaney Trucking Company to the C.S.C. Disposal and Landfill site at Avalon, Texas. Appendix A contains manifests for disposal of contaminated soil.

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4.0 UNDERGROUND STORAGE TANK UPGRADE METHODOLOGY

Notification was given to the TNRCC on 11 March 1996 that the upgrade activities were planned to begin on 11 March 1996 (the 30-day requirement was waived). A tank upgrade began with the removal of the soil cover to expose the top of the tank, piping, and remote fill station, if present. The cathodic protection was inspected and one or more of the following upgrades were added to bring the tank into compliance with current regulations: (1) a tight fill adapter, (2) a spill protection manhole and/or, (3) an overfill protection mechanism, either a shut-off valve or overfill alarm. At several locations, Unified Services of Texas also added fill material, replaced tank vents, or made other repairs to bring tanks up to industry standards. A single soil sample was collected from the soil surrounding the fill pipe near the top of the tank and was analyzed for TPH by U.S. Environmental Protection Agency (EPA) Method 418.1. The area was then returned to original condition. Attachment 2 contains the UST upgrade report prepared by Unified Services of Texas, Inc.

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324 27

5.0 MONITORING AND SAMPLING METHODOLOGY

The following sections describe the methods and procedures used to monitor and sample UST excavations, soil stockpiles, and upgrade locations.

5.1 SEGREGATION OF SOILS

The excavated soils from the tank pits were segregated into contaminated and noncontaminated soil stockpiles where appropriate. Soil was screened as it was excavated and segregated into separate stockpiles when HNu PID measurements, soil staining, or petroleum odors indicated possible fuel contamination. Over-excavation of the tank walls in 2-foot increments continued until uncontaminated soil was encountered based on visual, olfactory, and HNu readings. By using this procedure, the commingling of potentially contaminated soil with uncontaminated soil was minimized, thereby expediting backfilling operations and minimizing the volume of contaminated soil to be disposed of. Note that the final disposition of all stockpiled soils was determined by the analytical results of representative stockpile samples, as described in Section 5.2.

5.1.1 Soil Sampling

Soil samples were collected from the UST excavations after the tanks were removed. Five samples were collected from each tank excavation: one from each sidewall, and one from the bottom of the excavation with the exception of Tank 1750-1 (see Section 6.2). Samples were also collected from under piping and dispensers. In most cases, the piping and dispenser samples were coincident with the tank excavation samples. These details will be discussed for each excavation in Section 6.0.

Soil samples from the tank excavations were collected using a backhoe. The backhoe operator was directed by Jacobs sampling personnel where to collect soil from the excavation for sampling. After the soil was collected from the excavation in the backhoe bucket, the soil was inspected to determine representativeness of natural soil.

Once a satisfactory bucket of soil was obtained, the soil sample was collected. Each sample was collected by removing slough from the area of interest in the backhoe bucket. A decontaminated stainless-steel spoon was used to place the sample into glass sample jars. An appropriate label was affixed to the sample jar, a proper chain of custody was developed, and the sample was placed into an iced cooler. The chain-of-custody paperwork for all tank excavations is presented in Appendix B.

One soil sample was also collected at each of two 90-degree angles along the pipe trench between Building 4210 and the 4210 excavation. Each sample was acquired using a hand-auger equipped with a 3.25-inch diameter bucket auger. The hand-auger boring was advanced through fill material to the bottom of the trench, after the pipes had been removed and the trench refilled. The two soil samples were containerized, labeled, and documented as described in the previous paragraph. Because the HNu PID did not indicate any contamination in the auger cuttings, they were returned to their respective borings.

All excavation and trench soil samples were submitted to Certes Environmental Laboratories LC, Dallas, Texas for analysis. The analyses requested for each excavation or trench sample depended on the tank's previous contents, and are detailed in Sections 6.1 through 6.6.

5.1.2 Groundwater Sampling

Groundwater sampling was conducted in UST excavations 1518, 1750, and 3001. Groundwater was present in these excavations to the extent that a meaningful soil sample from the excavation bottom could not be retrieved. Groundwater samples were collected by lowering a polypropylene pond sampler to the water level, and slowly rotating the collection cup to allow the water to gently flow into the sampler. The sample was then poured into sample bottles for laboratory analysis. Each sample bottle was labeled, documented on a chain-of-custody form, and placed into an iced cooler for shipment to the laboratory.

5.2 SOIL STOCKPILE SAMPLING

Soil stockpiles generated from the excavations at each UST site were sampled according to TNRCC requirements for characterization. Each stockpile was measured and divided into estimated 50-cubic yard sections. Each 50-yard section in the stockpiles was inspected by digging five holes 1 to 2 feet into the stockpile, and screening the holes and soil with an HNu. To be conservative, the location exhibiting the highest HNu reading was selected for sampling. Samples were collected using a decontaminated stainless-steel spoon and the procedures described in Section 5.1.1.

Soil samples collected from the stockpiles were submitted to Certes Environmental Laboratories LC to be analyzed for TPH (Method E418.1) and BTEX (Method SW8020).

5.3 TANK UPGRADE SAMPLING

A single soil sample was collected at each tank upgrade. UST upgrades at Tanks 4136A and 3001-1 were sampled using the hand auger technique discussed in the Work Plan. All other UST upgrades were sampled during or immediately following excavation of soil around the fill pipe so that the use of the hand auger was not required. Soil samples were contained and labeled as described in Section 5.1.1 and submitted to Certes Environmental Laboratories, LC for analysis of TPH by EPA Method E418.1.

5.4 QUALITY ASSURANCE/QUALITY CONTROL SAMPLES

All sampling equipment was decontaminated by scrubbing clean with a Liquinox/potable water solution, and rinsing with American Society for Testing and Materials (ASTM) Type II reagent-grade water. A final solvent rinse was performed using methanol and hexane, in accordance with the Quality Assurance Project Plan (QAPP) (Jacobs 1996). Equipment blanks were collected daily to evaluate the effectiveness of decontamination procedures using the following procedure. Reagent-

grade water was run over all sampling equipment used each day, and collected in appropriate sample bottles. Equipment blanks were then submitted to the laboratory as "blind" samples and were analyzed by the same methods used for the soil samples collected on that day.

Trip blanks were provided to Jacobs field personnel by the laboratory, and one was returned to the laboratory with each shipment containing samples to be analyzed for VOCs. The purpose of the trip blanks was to detect sample contamination by VOCs during sample storage or shipment. Trip blanks were analyzed for VOCs only (SW8240).

One ambient blank was collected during the effort at Tank 1750-2 on 27 March 1996 to determine if ambient volatile compounds from equipment exhaust or other sources were contaminating the field samples. Therefore, it was analyzed for VOCs only (SW8240).

Duplicate or replicate samples were collected for 10 percent of all excavation soil samples collected.

Matrix spike/matrix spike duplicate samples were collected and submitted for analyses for every 20 samples collected for each matrix. In addition, the laboratory maintained internal quality assurance and quality control by analyzing laboratory control samples, including laboratory blanks, blank spikes, and blank spike duplicates. Results for all laboratory quality control samples are found in Appendix D.

5.5 SITE MAPPING

Upon removal of each UST or UST cluster, a field site map was produced using a 300-foot tape and a Brunton[®] compass. Each site map was tied into a permanent or semipermanent feature such as a building corner to facilitate future location of excavations and pipe trenches if necessary. The maps are referenced extensively in the discussion of results in Section 6.0.

6.0 UNDERGROUND STORAGE TANK REMOVAL RESULTS

This section presents the results of the UST removals. Generally, this section is organized chronologically, in the order that the tanks were removed. Specific activities, observations, and laboratory results are included. Analytical results for BTEX (SW8020) and TPH (E418.1) analyses at each tank were compared to the following TNRCC action levels:

TNRCC Action Levels for UST Removals

Constituent	Fine-Grained Soil Action Level* (ppm)
Benzene	0.500
Ethylbenzene	70
Toluene	100
Xylenes	560
Total petroleum hydrocarbons for middle distillate releases**	500

* The standard for fine-grained soil was used for sites dominated with clays and silts.

** The middle distillate TPH standard was used for diesel, kerosene, jet fuel, fuel oil, hydraulic oil, and waste oil releases.

6.1 UNDERGROUND STORAGE TANK 1518-5

Tank 1518-5, a spherical 600-gallon fiberglass tank, was removed at this location. It was formerly used to store waste oil.

6.1.1 Site 1518-5 Description

UST 1518-5 was located at the base service station (Building 1518), at the intersection of Military Parkway and Davison Drive, as illustrated on Plate 1 and in Figure 6.1-1. The service station is currently inactive. The tank was located on the

southeast side of Building 1518, beneath asphaltic concrete pavement. A small 25-foot by 25-foot concrete-paved carport lies south of and adjacent to the UST location. To the west are multilevel quarters buildings and associated parking lots.

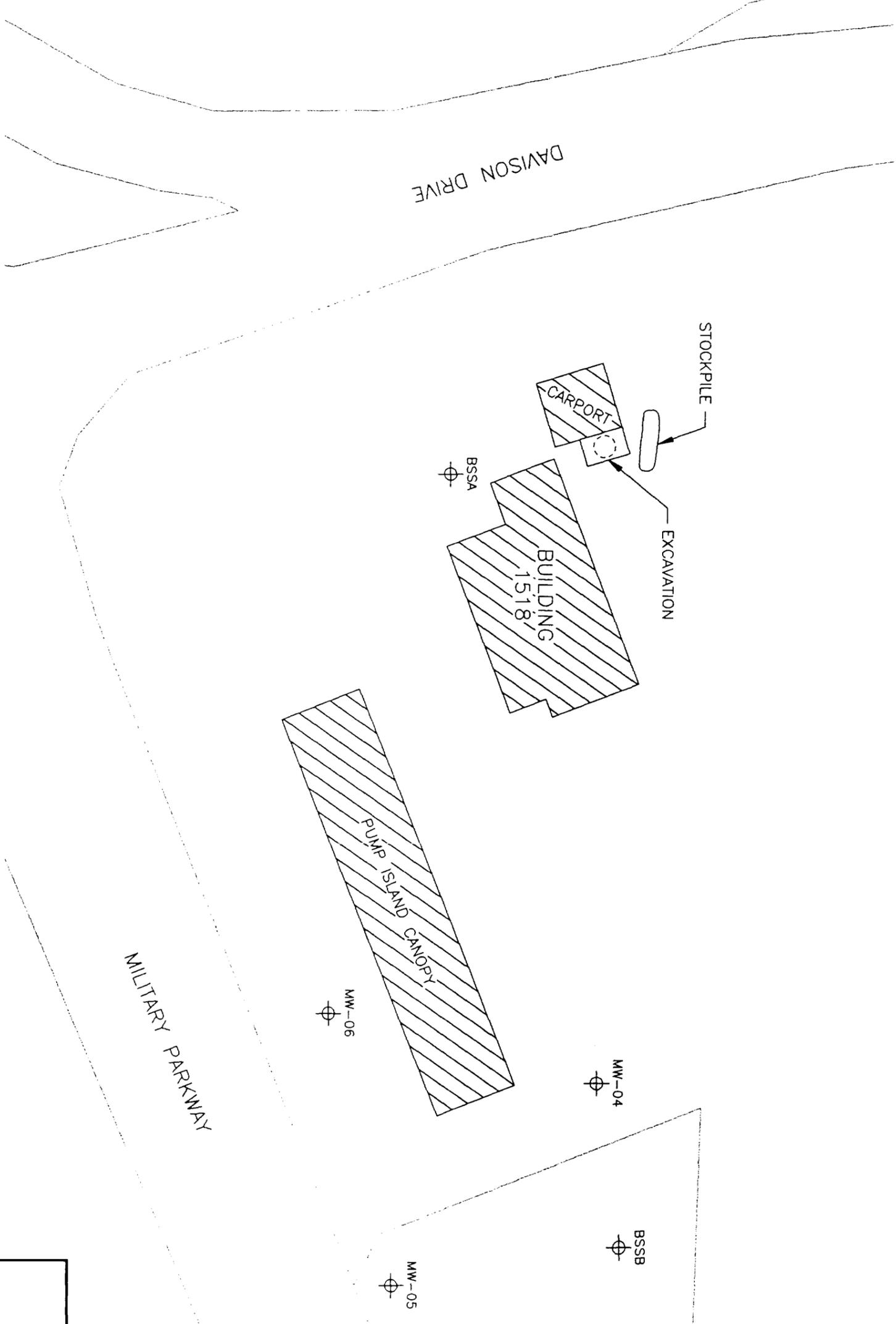
6.1.2 Tank 1518-5 Removal Activities

The tank excavation began with the removal of the asphaltic concrete surfacing and the soil over the tank. Soil was then removed from around the tank, and the tank was removed using a backhoe. The resulting excavation measured 8 feet wide by 14 feet long. Approximately 21 cubic yards of soil were removed and stockpiled onsite.

6.1.3 Sampling at Tank 1518-5

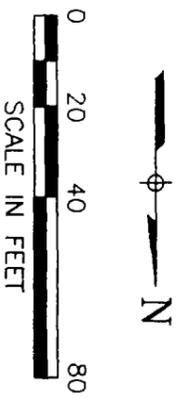
Five soil samples and one groundwater sample were collected from the interior of the excavation. The groundwater-saturated soil sample from the bottom of the excavation (TE-1518-5BOT, Figure 6.1-2) was collected after the tank cradle and underlying pea gravel were removed. HNu readings did not indicate the presence of organic compounds in any of the excavated soils. The groundwater in the excavation was measured at approximately 6.17 feet below ground surface (bgs), and did not exhibit a sheen or odors indicative of petroleum hydrocarbons.

Because the tank was believed to have held waste oil, SW8240 (VOCs) and metals analyses were added to the analytical suite for the soil samples from this location, in accordance with TNRCC requirements. Samples from the 1518-5 excavation were submitted to the offsite laboratory for analyses. Soils were analyzed for BTEX (SW8020), VOCs (SW8240), semivolatile organic compounds (SVOCs) (SW8270), TPH (E418.1), and metals (SW6010). Groundwater was analyzed for VOCs (SW8240), SVOCs (SW8270), and TPH (E418.1).



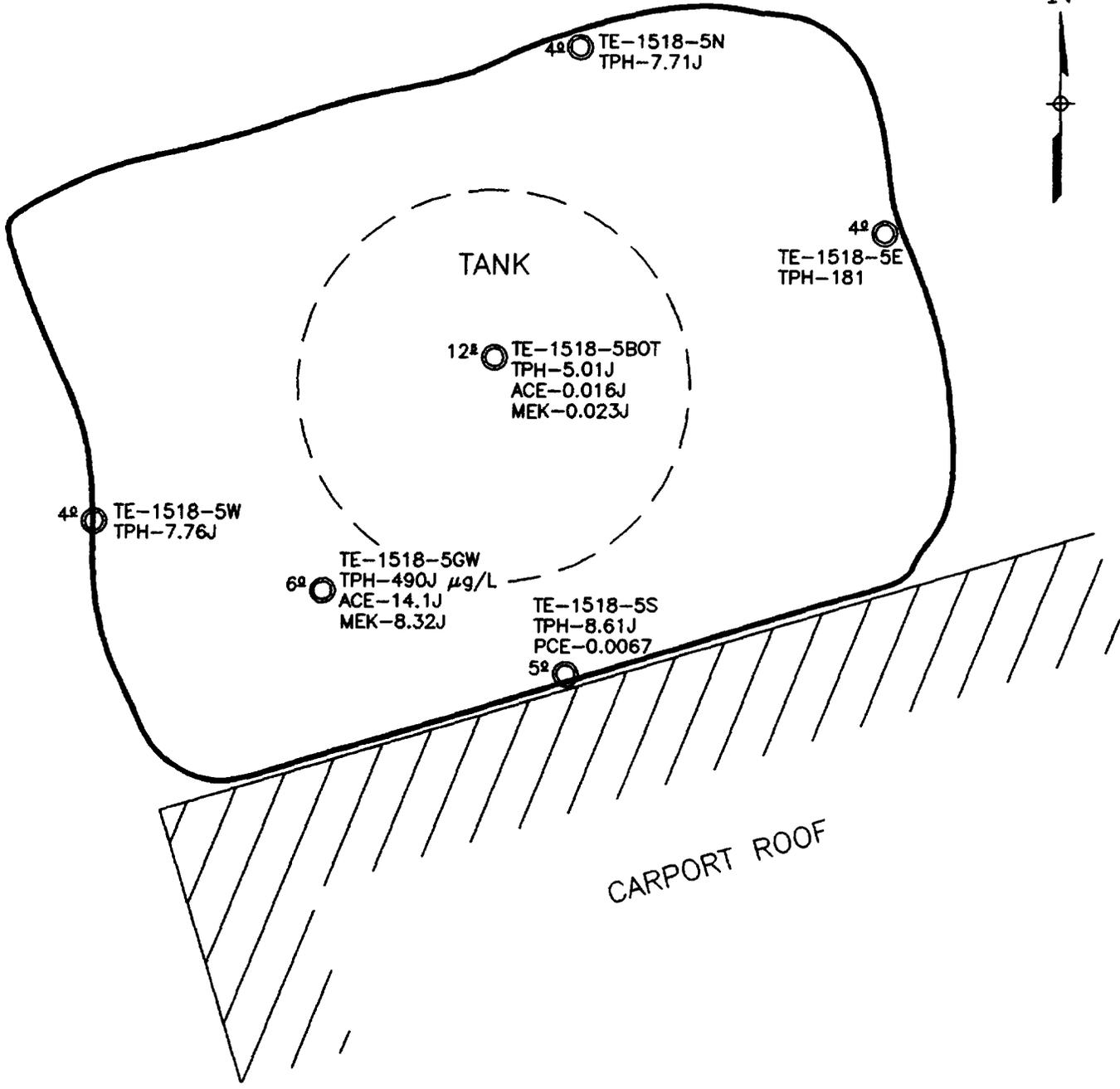
LEGEND:
 BSSB
 ○ ⊕ MONITORING WELL LOCATION

1518-5 TANK LOCATION
 NAVAL AIR STATION
 FORT WORTH, TEXAS



PROJ. MGR. L. SCHUETTER	ACAD FILE NO. FIG61-1	FIGURE NO. 6.1-1
DRAWN BY J. HUNTER	PROJ. NO. 10-K-70200	DATE 3/14/97

324 35N



LEGEND:

TE-1518-5N

4' SAMPLE LOCATION WITH DEPTH

TPH - TOTAL PETROLEUM HYDROCARBONS

PCE - TETRACHLOROETHYLENE

ACE - ACETONE

MEK - 2-BUTANONE

J - ESTIMATED CONCENTRATION



SCALE IN FEET

NAVAL AIR STATION FORT WORTH, TEXAS		
1518-5 EXCAVATION SAMPLE RESULTS		
PROJ. MGR. L. SCHUETTER	ACAD FILE NO. FIG61-2	FIGURE NO. 6.1-2
DRAWN BY J. HUNTER	PROJ. NO. 10-K-70200	DATE 3/14/97

NOTES:

1. ALL CONCENTRATIONS ARE IN mg/kg, EXCEPT AS NOTED.
2. NON-DETECTED COMPOUNDS ARE NOT SHOWN.
3. METALS RESULTS NOT SHOWN, (SEE TABLE 6.1-1).

A single sample was collected to characterize the stockpiled soil for disposal. This sample was submitted to the laboratory for analyses by EPA Method SW8020 for BTEX, and EPA Method E418.1 for TPH.

6.1.4 Results - Tank 1518-5

The results of the analyses of soil and groundwater samples collected from the tank excavation and stockpile are given in Table 6.1-1 and Appendix D, which contains all laboratory results cross-referenced to location and sample number. Excavation sample results are also shown in Figure 6.1-2.

Tank 1518-5 Excavation Results. Stained soils or petroleum hydrocarbon odors were not detected during or after the excavation of Tank 1518-5. The soils at the site were clayey sands and sandy clays to a depth of approximately 6.0 feet bgs. At this depth a fine to medium, poorly graded quartz sand was encountered. Groundwater was encountered in this sand unit at an approximate depth of 6 feet bgs.

The TPH results ranged between an estimated low concentration of 5.01 milligrams per kilogram (mg/kg) and a high concentration of 181 mg/kg. The low concentration was found in the sample collected from the bottom of the excavation, and the high concentration was found in the east sidewall sample. No benzene, toluene, ethylbenzene, xylenes, or SVOCs were detected in any of the samples collected. Acetone and 2-butanone were reported by Method SW8240, but both were also found in field quality control (QC) samples and are probable laboratory contaminants. Tetrachloroethene (PCE) was reported in the sample collected from the south sidewall at a concentration of 0.0067 mg/kg, but PCE was also reported in a laboratory matrix spike associated with this sample at a similar concentration (0.0061 mg/kg), even though it is not a spiked compound

**TABLE 6.1-1
Analytical Results for Tank 1518 Excavation**

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Sample Number	Date Sampled	Depth (feet)	Sample Type	VOCs Method SW8240	SVOCs Method SW8270	BTEX Method SW8020	TPH Method E418.1	Metals Method SW6010	Units
TE-1518-5S	3/21/96	5.0	Soil	PCE-0.0067	nd	nd	8.61J	AL-1320 BA-11 BE-0.157J CA-17900 CO-1.46J CR,TOT-2.09J CU-2.41J FE-3860 K-275J MG-327 MN-49.5 NA-34 NI-2.77J V-8.17J ZN-7.22	mg/kg
TE-1518-5E	3/21/96	4.0	Soil	nd	nd	nd	181	AL-1140 BA-0.442J BE-0.11J CA-103000 CO-1.1J CR,TOT-2.49J CU-1.82J FE-3160 K-250J MG-858 MN-65.6 NA-68.5 NI-2.6J V-8.95 ZN-5.74	mg/kg
TE-1518-5N	3/21/96	4.0	Soil	nd	nd	nd	7.71J	AL-3740 BA-124 BE-0.312J CA-406000 CO-2.75J CR,TOT-4.31J CU-3.5J FE-4750 K-680 MG-1030 MN-419 NA-49.1 NI-6.62J V-32.8 ZN-8.75	mg/kg

**TABLE 6.1-1
Analytical Results for Tank 1518 Excavation**

324 38

Sample Number	Date Sampled	Depth (feet)	Sample Type	VOCs Method SW8240	SVOCs Method SW8270	BTEX Method SW8020	TPH Method E418.1	Metals Method SW6010	Units
TE-1518-5W	3/21/96	4.0	Soil	nd	nd	nd	7.76J	AL-2970 BA-146 BE-0.226J CA-409000 CO-1.64J CR,TOT-2.77J CU-1.82J FE-3570 K-345J MG-890 MN-200 NA-151 NI-2.96J V-20.4 ZN-11.2	mg/kg
TE-1518-5STK1	3/22/96	na	Soil	-	-	nd	54.4	-	mg/kg
TE-1518-5BOT	4/3/96	12.5	Soil	ACE-0.016J MEK-0.023J	nd	nd	5.01J	AL-1260 AS-10.3J BA-14.8 BE-0.364 CA-5300 CO-4.98J CR,TOT-4.49J CU-3.76J FE-6260 K-233J MG-290 MN-38.5 NA-40.4 NI-7.52J V-28.4 ZN-27.8	mg/kg
TE-1518-5GW	3/25/96	na	GW	ACE-14.1J MEK-8.32J	nd	nd	490J	-	µg/L

NOTES:

GW	Groundwater	ACE	Acetone	FE	Iron
J	Estimated	AL	Aluminum	K	Potassium
nd	Not detected	AS	Arsenic	MEK	2-Butanone
na	Not applicable	BA	Barium	MG	Magnesium
-	Not analyzed	BE	Beryllium	MN	Manganese
mg/kg	milligrams/kilogram	BZME	Toluene	MTLNCL	Methylene Chloride
µg/L	micrograms/liter	CA	Calcium	NA	Sodium
		CD	Cadmium	NI	Nickel
		CLBZ	Chlorobenzene	PB	Lead
		CO	Cobalt	PCE	Tetrachloroethene
		CR,TOT	Total Chromium	SE	Selenium
		CU	Copper	V	Vanadium
		EBZ	Ethylbenzene	ZN	Zinc

Metals were also detected as shown in Table 6.1-1, and were compared to background values (Jacobs 1997). Table 6.1-2 shows the Tank 1518 metals results exceeding the upper tolerance limit, with 95 percent confidence and 95 percent coverage ($UTL_{95,95}$) background screening value, or the value that we can say, with 95 percent confidence, will exceed 95 percent of the background data. Any site value greater than the $UTL_{95,95}$ has only a small probability of being drawn from the background data population, and thus may indicate the presence of site-related contamination. On the other hand, 5 percent of the background data would be expected to exceed the $UTL_{95,95}$. The $UTL_{95,95}$ is established as a screening criterion to identify results that may require additional evaluation.

As Table 6.1-2 indicates, some concentrations of arsenic, barium, calcium, and manganese were detected that exceeded their respective $UTL_{95,95}$ screening criteria. To further evaluate whether these concentrations indeed represent site-related contamination, the results were compared to a $UTL_{95,99}$, or the value that we can say, with 95 percent confidence, will exceed 99 percent of the background data. For barium and manganese, the detected concentrations were less than the $UTL_{95,99}$. Thus it is probable that the maximum concentrations for barium and manganese lie within the upper 5 percent of their respective background distributions and are unlikely to represent site-related contamination. Furthermore, the barium concentration of 146 mg/kg is less than the established medium-specific concentration (MSC) for barium of 200 mg/kg.

The arsenic detected in sample TE-1518-5BOT is unlikely to represent site-related contamination because the result (10.3 J mg/kg) only slightly exceeds the $UTL_{95,99}$. Arsenic was only detected in one of five samples at Tank 1518, and the result is an estimated concentration below the practical quantitation limit (PQL).

Calcium was detected twice at concentrations exceeding the $UTL_{95,95}$. Calculation of a $UTL_{95,99}$ was not possible because the UTL was established as the highest value in

TABLE 6.1-2
Metals Results at Tank 1518 Exceeding Background UTL_{95,95}

324 40

Sample Number	Analyte	Result	UTL _{95,95}	UTL _{95,99}	Exceeds UTL _{95,99} ?	MSC
TE-1518-5BOT	Arsenic	10.3 J	6.58	9.06	Yes	5.0
TE-1518-5W	Barium	146	128.1	151.7	No	200
TE-1518-5W	Calcium	409,000	272,000	UTL is highest value	-----	ne
TE-1518-5N	Calcium	406,000	272,000	UTL is highest value	-----	ne
TE-1518-5N	Manganese	419	351.7	421.0	No	ne

Notes:

All units are in milligrams per kilogram (mg/kg)

UTL_{95,95} = Upper Tolerance Level (95% confidence and 95% coverage)

UTL_{95,99} = Upper Tolerance Level (95% confidence and 99% coverage)

MSC = medium-specific concentration

ne = not established

J = estimated

----- = comparison not applied

the background data set. Calcium is an essential nutrient and probably does not represent a human health risk.

Groundwater encountered in the excavation at Tank 1518-5 did not exhibit a sheen or petroleum hydrocarbon odors. Laboratory results for the single groundwater sample collected indicated the presence of TPH at a concentration of 0.49 milligrams per liter (mg/L). Common laboratory contaminants, acetone and 2-butanone, were also detected in this sample (Table 6.1-1). No other compounds were detected.

6.1.5 Stockpile Sampling Results

The results for the single stockpile sample collected indicated the presence of TPH at a concentration of 54.4 mg/kg. BTEX compounds were not detected.

6.1.6 Waste Handling and Disposal

The soil stockpile was found to have concentration of TPH and BTEX below the TNRCC's action levels and was used as backfill in the tank excavation.

6.1.7 Conclusions

Before closing the 1518-5 excavation, the groundwater was removed with a vacuum truck, and crushed rock was added to the bottom of the excavation to a depth of approximately 6 feet bgs. The remaining excavation volume was then backfilled with excavated soil, compacted, and finished with a concrete pad. All analyses of soil and groundwater samples indicated that concentrations of TPH and BTEX were below TNRCC action levels. The relatively high concentration of 181 mg/kg in the sample collected from the south wall was collected from a depth of 4 feet bgs and is below the TNRCC action level for fine-grained soils.

6.2 UST TANK GROUP 1750

UST 1750-2, an 8,000-gallon fiberglass tank, was removed at this location. It had formerly been used to store diesel fuel.

6.2.1 Site 1750 Description

The UST group 1750 lies on the north west side of Building 1750 and south of Building 1749. Two low-profile cooling towers stand on a concrete pad directly adjacent to two USTs at this location, limiting the size of the excavation to the northeast. Tank 1750-1 had been previously abandoned in place and is located adjacent to and southeast of Tank 1750-2 (Figure 6.2-1). The original surfacing was grass.

6.2.2 Tank Removal Activities

The soil covering the top of and surrounding Tank 1750 was excavated and approximately 50 yards of soil was stockpiled onsite. While disconnecting some of the piping from the tank, some fuel spilled into the excavation. Approximately 1 cubic yard of contaminated soil was quickly excavated and segregated as a separate stockpile. When all the piping was disconnected and secured, the tank was prepared for removal. When the hold-down straps were cut to release the tank from its concrete cradle, the tank floated, indicating the presence of groundwater above the bottom of the tank. The tank was successfully removed using a crane and was transported offsite.

6.2.3 Sampling

After the tank was removed, soil samples were collected from the northeast, northwest, and southwest sidewalls of the tank excavation. A soil sample was not collected from the southeast side wall because Tank 1750-1 was exposed on this side of excavation and there was no soil left on this sidewall to sample. Excavation

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DRIVEWAY

DRIVEWAY

TE-1750-2STK2
 TPH-3,620
 BZ-0.0196
 BZME-0.284
 EBZ-0.458
 XYLENES-2.26

TE-1750-2P
 TPH-75.7
 SVOC-9.751

EXPOSED PIPE

TE-1750-2N
 TPH-6.82J

TE-1750-2E
 TPH-8.65J

TE-1750-2GW
 TPH-310J $\mu\text{g/L}$

TE-1750-2W
 TPH-8.79J

EXPOSED PIPE

TE-1750-2STK1
 TPH-35.3

REMOVED UNDERGROUND TANK OUTLINE

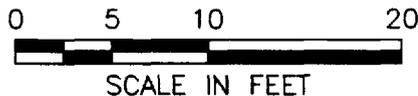
COOLING TOWER

COOLING TOWER

BUILDING 1750

LEGEND:

- TE-1750-2N
- 6² SAMPLE LOCATION WITH DEPTH
- TE-1750-2STK2
- STOCKPILE SAMPLE LOCATION
- APPROXIMATE LOCATION OF MONITORING WELL IDENTIFICATION UNKNOWN
- TPH - TOTAL PETROLEUM HYDROCARBONS
- BZ - BENZENE
- BZME - TOLUENE
- EBZ - ETHYLBENZENE
- XYLENES - TOTAL XYLENES
- SVOC - TOTAL SEMIVOLATILE COMPOUNDS (SEE TABLE 6.2-1)
- J - ESTIMATED CONCENTRATION



NAVAL AIR STATION FORT WORTH, TEXAS		
1750 EXCAVATION AND STOCKPILE SAMPLE RESULTS		
PROJ. MGR. L. SCHUETTER	ACAD FILE NO. FIG62-1	FIGURE NO. 6.2-1
DRAWN BY J. HUNTER	PROJ. NO. 10-K-70200	DATE 3/14/97

- NOTES:**
1. ALL CONCENTRATIONS ARE IN mg/kg, EXCEPT AS NOTED.
 2. NON-DETECTED COMPOUNDS ARE NOT SHOWN.

sampling was further complicated by the instability of the groundwater-saturated sidewalls, which tended to cave in as attempts were made to deepen the excavation. Given this instability and the proximity of the cooling towers and Tank 1750-1, efforts to deepen the hole were discontinued.

A single soil sample was collected along the pipe run from the tank to the building. The location is shown in Figure 6.2-1 as TE-1750-2P.

In addition to the soil samples collected, a single groundwater sample was collected. Because access to the excavation was limited due to the instability of the sidewalls, groundwater elevation could only be estimated at approximately 9 feet.

Samples from the 1750-2 excavation were submitted to the offsite laboratory for analysis. Both soil and groundwater were analyzed for BTEX (SW8020), SVOCs (SW8270), and TPH (E418.1).

One sample was collected from each of the two soil stockpiles onsite. These samples were submitted to the laboratory for analysis by Methods SW8020 (BTEX) and E418.1 (TPH).

6.2.4 Results

The results of the analyses of soil and groundwater samples collected from the tank excavation and stockpile are shown in Table 6.2-1, Figure 6.2-1, and Appendix D.

Tank Excavation Results. Visual observations made during the tank excavation and removal did not indicate that petroleum hydrocarbons were present in the soil or groundwater. The UST did not appear to be cracked, have holes, or have any other leaks. HNu readings taken during the excavation and removal activities indicated that potential contamination existed only in the stockpiled soil contaminated by the pipe leak described in Section 6.2.2.

TABLE 6.2-1
Analytical Results for Tank 1750-2 Excavation

Sample Number	Date Sampled	Depth (feet)	Sample Type	VOCs Method SW8240	SVOCs Method SW8270	BTEX Method SW8020	TPH Method E418.1	Units
TE-1750-2N	3/21/96	6.0	Soil	-	nd	nd	6.82J	mg/kg
TE-1750-2W	3/21/96	6.0	Soil	-	nd	nd	8.79J	mg/kg
TE-1750-2E	3/21/96	6.0	Soil	-	nd	nd	8.65J	mg/kg
TE-1750-2P	3/21/96	3.0	Soil	-	BZZA-0.851 BZAP-0.696 BZBF-0.735 BZGHIP-0.394 BZKF-0.641 CHRYSENE-0.824 FLA - 2.330 INP123 - 0.410 PHAN - 1.300 PYR - 1.570	nd	75.7	mg/kg
TE-1750-2STK1	3/22/96	na	Soil	-	-	nd	35.3	mg/kg
TE-1750-2STK2	3/22/96	na	Soil	BZME-0.070 EBZ-0.439 XYLENES-1.090	-	BZ - 0.0196 BZME - 0.284 EBZ - 0.458 XYLENES - 2.26	3,620	mg/kg
TE-1750-2GW	3/27/96	na	GW	-	nd	nd	310J	µg/L

NOTES:

GW Groundwater
J Estimated
nd Not detected
na Not applicable
- Not analyzed
mg/kg milligrams/kilogram
µg/L micrograms per liter

BZ Benzene
BZAP Benzo(a)pyrene
BZBF Benzo(b)fluoranthene
BZGHIP Benzo(g,h,i,)perylene
BZKF Benzo(k)fluoranthene
BZME Toluene
BZZA Benzo(a)anthracene
EBZ Ethylbenzene
FLA Fluoranthene
INP123 Indeno(1,2,3-cd)pyrene
PHAN Phenanthrene
PYR Pyrene
TPH Total Petroleum Hydrocarbons

Soils encountered in the excavation were clayey sands/sandy clays with fine to medium subrounded gravel to a depth of approximately 7 feet where a fine to medium poorly graded quartz sand was found. The groundwater encountered at approximately 9 feet bgs did not exhibit a sheen or an odor.

The results from soil samples collected in sidewalls of the excavation indicated that estimated TPH concentrations ranged between 6.82 and 8.79 mg/kg (Table 6.2-1). The soil sample TE-1750-2P collected from underneath the pipe run in the east corner of the excavation exhibited the highest TPH concentration, at 75.7 mg/kg. The following SVOCs were also detected in sample TE-1750-2P:

benzo(a)anthracene	fluoranthene
benzo(a)pyrene	indeno(1,2,3-cd)pyrene
benzo(b)fluoranthene	phenanthrene
benzo(g,h,i)perylene	pyrene
benzo(k)fluoranthene	chrysene

The concentration of total SVOCs detected is 9.751 mg/kg. Concentrations for individual compounds are given in Table 6.2-1. BTEX compounds were not detected in any of the soil samples taken within the excavation.

Laboratory results for the groundwater sample collected from the excavation indicate the presence of TPH at an estimated concentration of 0.31 mg/L. No SW8020 (BTEX) or SW8270 (SVOC) compounds were detected in the groundwater sample.

Stockpile Sampling Results. A single sample was collected for each stockpile onsite. The soils in stockpile 1 were anticipated to be below the action levels for TPH and BTEX. The soils in stockpile 2 were contaminated by fuel leaked from the pipe described in Section 6.2.2, and were anticipated to be above TNRCC action levels. The analytical results for the sample collected from stockpile 1, TE-1750-2STK1, indicated TPH at a concentration of 35.3 mg/kg. No BTEX compounds were

detected. The results for the sample collected from stockpile 2, TE-1750-2STK2, indicated 3,620 mg/kg TPH and BTEX at the following concentrations:

benzene	0.0196 mg/kg
toluene	0.284 mg/kg
ethylbenzene	0.458 mg/kg
total xylenes	2.260 mg/kg

Sample TE-1750-2STK2 was also subjected to analysis by EPA Method 8240 because of a laboratory error. Concentrations of ethylbenzene (0.439 mg/kg), toluene (0.070 mg/kg), and total xylenes (1.090 mg/kg) were detected in sample TE-1750-2STK2 by Method SW8240.

6.2.5 Waste Handling and Disposal

Water used to triple rinse the UST was collected directly from the tank with a vacuum truck while the tank was being cleaned. This water was transported offsite in the same vacuum truck used to extract the fluid from the UST. Soil concentrations of TPH and BTEX in stockpile 1 were well below the TNRCC action levels. These soils, supplemented by imported soil, were used to backfill the excavation. Stockpile 2 contained concentrations of TPH and BTEX above the TNRCC action levels and was disposed of offsite as described in Section 3.2.

6.2.6 Conclusions

Samples of soil and groundwater collected from Tank 1750-2 excavation did not indicate that concentrations of TPH and BTEX were above the TNRCC action levels for these constituents. The sample TE-1750-2P collected from beneath the pipe run in the east corner of the excavation exhibited detectable concentrations of SVOCs. Risk Reduction Standards have been defined by the TNRCC for two of the nine SVOCs detected in the soil sample from beneath the tank piping, fluoranthene and pyrene.

The more conservative “Soil/Air Risk Reduction Standards for Residential Use” compared to the TE-1750-2P results, are as follows:

	<u>Sample TE-1750-2P</u>	<u>TNRCC SAI-res</u>
Fluoranthene	2.33 mg/kg	11,000 mg/kg
Pyrene	1.57 mg/kg	8,200 mg/kg

The excavation was backfilled to the original grade and reseeded with grass.

6.3 UNDERGROUND STORAGE TANK 4102

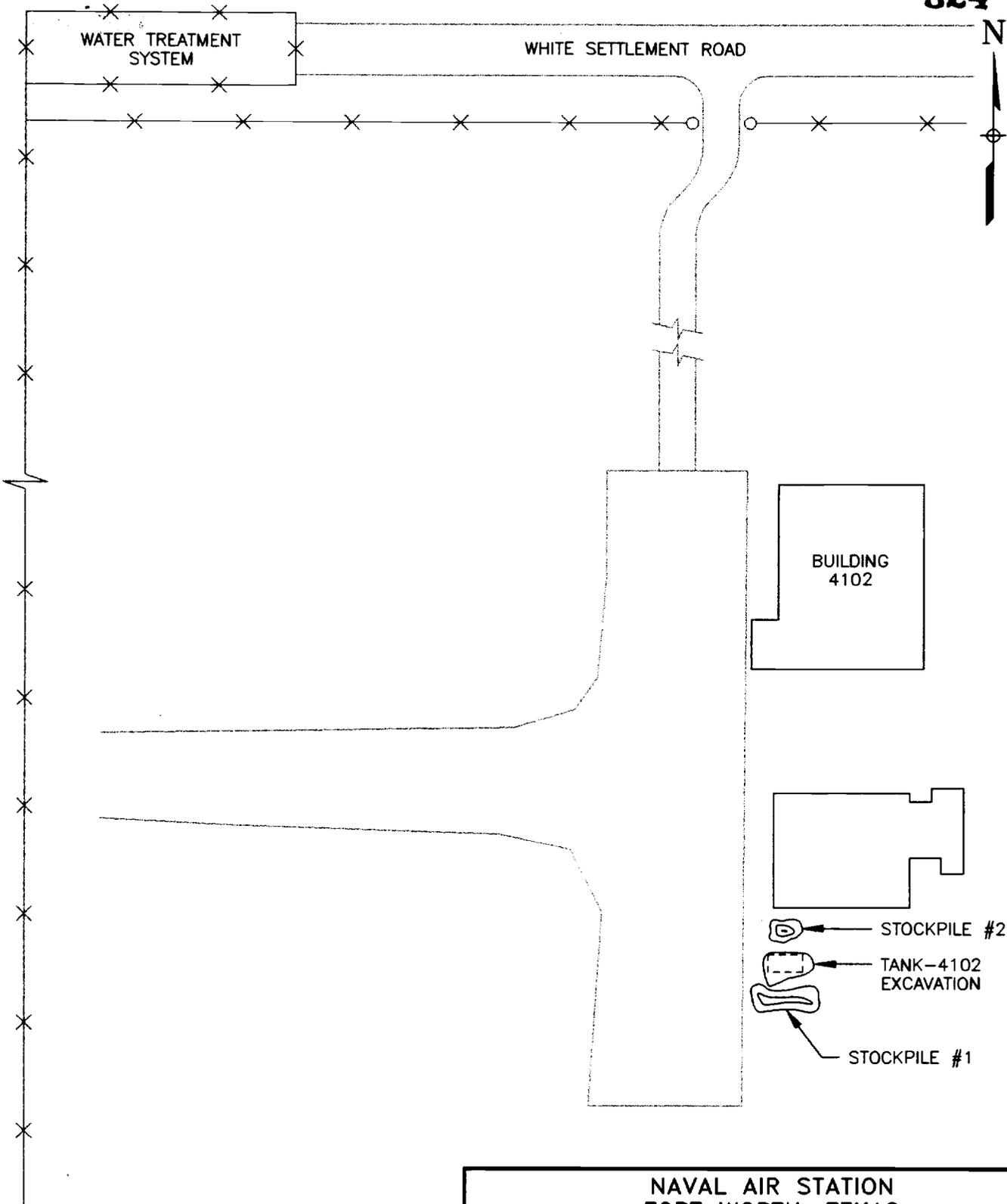
UST 4102, a cylindrical 315-gallon steel tank, was removed at this location. It was formerly used for the storage of diesel fuel to operate an emergency generator.

6.3.1 Site 4102 Description

UST 4102 was a 315-gallon tank formerly used to store diesel fuel for an emergency generator. Tank 4102 was located adjacent to a concrete foundation, approximately 50 feet south of Building 4102 (Figure 6.3-1). This location is between the secured NAS Fort Worth flightline area and the Carswell Golf Course, approximately 200 feet south of White Settlement Road. The structures currently at the 4102 location, and some that have been demolished, had formerly been used as a radar control center when Carswell was a Strategic Air Command Base. The fenced area is now used for temporary storage by various contractors. The size and shape of the excavation at this location were constrained by the presence of two monitoring wells adjacent to the tank. The surface over the tank was unpaved and vegetated.

6.3.2 Tank 4102 Removal Activities

The tank excavation began with the removal of the soil over the tank. After cleaning the tank interior, soil was removed from around the tank, and the tank was



NAVAL AIR STATION
FORT WORTH, TEXAS

4102 TANK LOCATION



PROJ. MGR. L. SCHUETTER	ACAD FILE NO. FIG63-1	FIGURE NO. 6.3-1
DRAWN BY J. HUNTER	PROJ. NO. 10-K-70200	DATE 7/26/96

removed using a backhoe. At a depth of approximately 4 feet, it was observed that landfill debris was being removed along with the backfill material. The resulting excavation measured 5 feet deep by 5 feet wide by 8 feet long. Approximately 10 cubic yards of soil were removed and stockpiled onsite.

Because of staining observed in the bottom of the excavation, and confirmation by laboratory analysis, the excavation was dug an additional 2 feet, to a total of 7 feet. Approximately 3 cubic yards of soil were stockpiled separately.

6.3.3 Sampling at Tank 4102

Four sidewall soil samples and two bottom soil samples were collected from the excavation. Soil samples from the 4102 excavation were submitted to the offsite laboratory and analysis for BTEX (SW8020), SVOCs (SW8270), and TPH (E418.1).

A single sample was collected from each of two soil stockpiles to characterize the soil for disposal. The samples were submitted to the laboratory for analyses by EPA Methods SW8020 for BTEX and E418.1 for TPH. The laboratory mistakenly analyzed one sidewall sample and one stockpile sample for volatiles by SW8240.

6.3.4 Results - Tank 4102

The results of the analysis of soil and groundwater samples collected from the tank excavation and stockpile are given in Table 6.3-1 and Appendix D, which contains all laboratory results cross-referenced to location and sample number. Excavation sample results are also shown in Figure 6.3-2.

Tank 4102 Excavation Results. The soils at the site were clayey sands and sandy clays to a depth of approximately 4.0 feet bgs. Stained soils and petroleum hydrocarbon odors were observed in the bottom of the initial 4102 excavation, at a

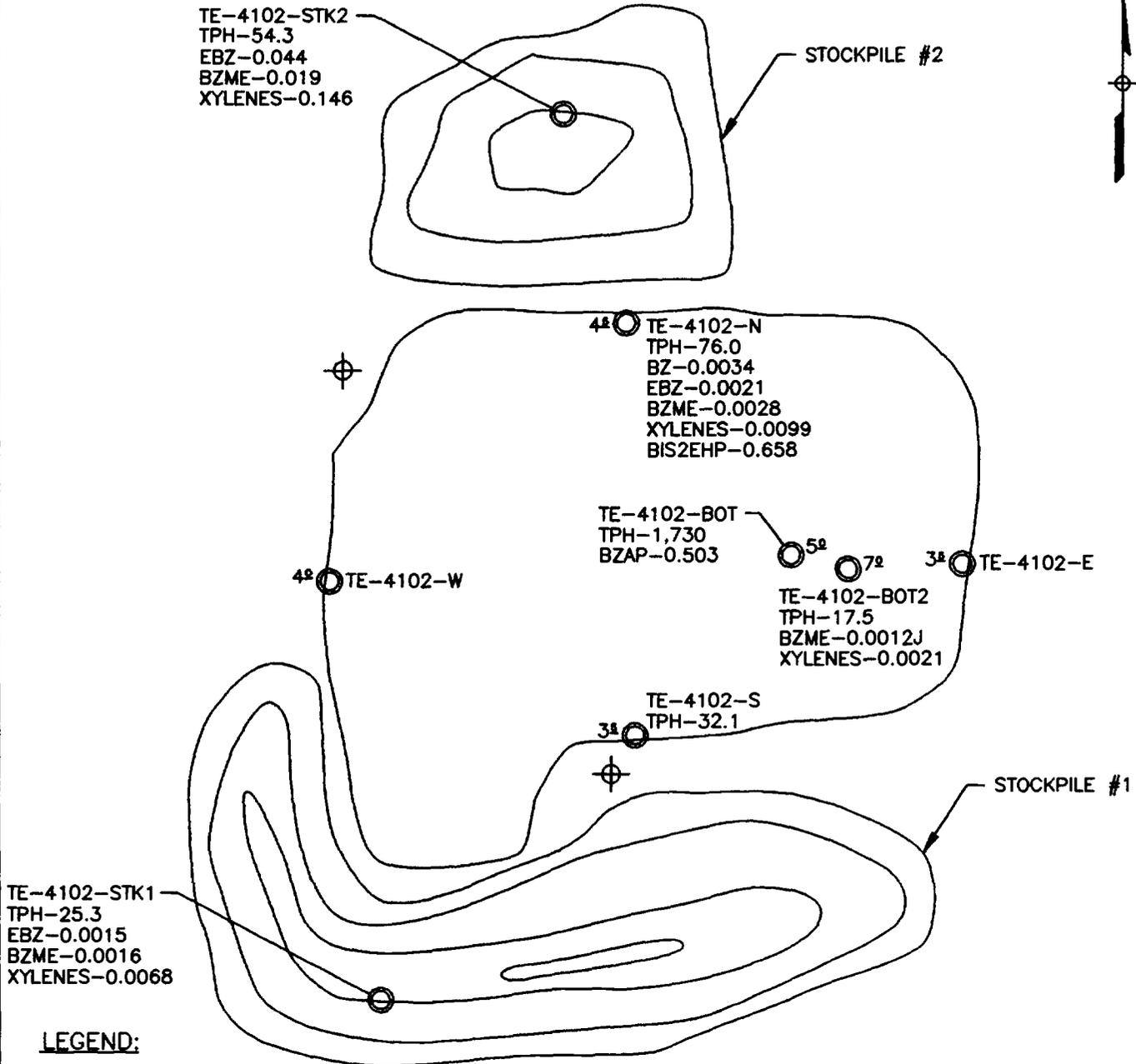
**TABLE 6.3-1
Analytical Results for Tank 4102 Excavation**

324 51

Sample Number	Date Sampled	Depth (feet)	Sample Type	VOCs Method SW8240	SVOCs Method SW8270	BTEX Method SW8020	TPH Method E418.1	Units
TE-4102-N	3/26/96	4.5	Soil	BZ-0.0034 BZME-0.0028 EBZ-0.0021 XYLENES-0.0074	BIS2EHP-0.658	XYLENES-0.0099	76	mg/kg
TE-4102-S	3/26/96	3.5	Soil	-	nd	nd	32.1	mg/kg
TE-4102-E	3/26/96	3.5	Soil	-	nd	nd	nd	mg/kg
TE-4102-W	3/26/96	4.0	Soil	-	nd	nd	nd	mg/kg
TE-4102-BOT	3/26/96	5.0	Soil	-	BZAP-0.503	nd	1,730	mg/kg
TE-4102-STK1	3/26/96	na	Soil	BZME-0.0016J EBZ-0.0015J XYLENES-0.0031J		XYLENES-0.0068	25.3	mg/kg
TE-4102-BOT2	4/10/96	7.0	Soil	-	nd	BZME-0.0012J XYLENES-0.0021	17.5	mg/kg
TE-4102-STK2	4/10/96	na	Soil	-	-	BZME-0.019 EBZ-0.044 XYLENES-0.146	54.3	mg/kg

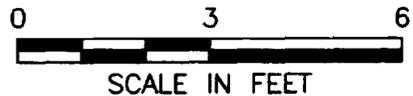
NOTES:

J	Estimated	BIS2EHP	Bis(2-Ethylhexyl)phthalate
na	Not applicable	BZ	Benzene
nd	Not detected	BZAP	Benzo(a)pyrene
-	Not analyzed	BZME	Toluene
mg/kg	milligrams/kilogram	EBZ	Ethylbenzene



LEGEND:

- TE-4102-N
- 4⁸ ○ SAMPLE LOCATION WITH DEPTH
- TE-4102-STK1
- STOCKPILE SAMPLE LOCATION
- ⊕ MONITORING WELL LOCATION IDENTIFICATION UNKNOWN
- BZ - BENZENE
- EBZ - ETHYLBENZENE
- BZME - TOLUENE
- XYLENES - TOTAL XYLENES
- BIS2EHP - bis(2 ETHYLHEXYL)PHTHALATE
- BZAP - BENZO(a)PYRENE
- J - ESTIMATED CONCENTRATION



- NOTES:**
1. ALL CONCENTRATIONS ARE IN mg/kg.
 2. NON-DETECTED COMPOUNDS ARE NOT SHOWN.

NAVAL AIR STATION FORT WORTH, TEXAS		
4102 EXCAVATION AND STOCKPILE SAMPLE RESULTS		
PROJ. MGR. L. SCHUETTER	ACAD FILE NO. FIG63-2	FIGURE NO. 6.3-2
DRAWN BY J. HUNTER	PROJ. NO. 10-K-70200	DATE 3/14/97

depth of 5 feet. Because of high TPH results in the sample at this depth (1,763 mg/kg), the excavation was overdug an additional 2 feet in depth and resampled.

The TPH results ranged from nondetect to a low concentration of 17.5 mg/kg to a high concentration of 1,730 mg/kg. The low concentration was found in the sample collected from the bottom of the excavation after overdigging, and the high concentration was found in the bottom sample from the interval just above it. Benzene (0.0034 mg/kg), toluene (0.0028 mg/kg), ethylbenzene (0.0021 mg/kg), and total xylenes (0.0074 mg/kg) were each reported in the north sidewall sample (TE-4102-N). Ethylbenzene (0.0012J mg/kg) and total xylenes (0.0021 mg/kg) were reported in bottom sample TE-4102-BOT2 (Table 6.3-1, Figure 6.3-2). Benzo(a)pyrene was also reported in bottom sample TE-4102-BOT from the 5-foot interval (0.503 mg/kg).

6.3.5 Stockpile Sampling Results

The sample from soil stockpile 1 was found to have low concentrations of TPH (25.3 mg/kg) and total xylenes (0.0068 mg/kg), and estimated concentrations below the laboratory PQLs for benzene, ethylbenzene, and toluene. The sample from stockpile 2 contained 54.3 mg/kg TPH, 0.044 mg/kg ethylbenzene, 0.146 mg/kg total xylenes, and 0.019 mg/kg toluene.

6.3.6 Waste Handling and Disposal

The soil from stockpile 1 was below the TNRCC's action levels and was used as backfill in the tank excavation. At stockpile 2, although TPH concentrations were also below the TNRCC's action levels, the soil was disposed of offsite because staining had been observed previously and high concentrations of TPH were measured before the soil was excavated.

6.3.7 Conclusions

Before closing the 4102 excavation, a polyethylene plastic liner was placed in the excavation to separate the clean fill from the potentially contaminated native soils. The excavation volume was then backfilled with the excavated soil from stockpile 1 and supplemented with imported fill. The backfill was compacted and seeded. All soil sample results except the TE-4102-BOT bottom sample indicated concentrations of TPH and BTEX that were below TNRCC action levels. The soil stockpile associated with TE-4102-BOT was disposed of according to the procedures described in Section 3.2.

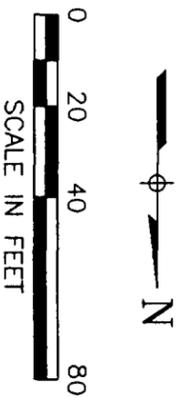
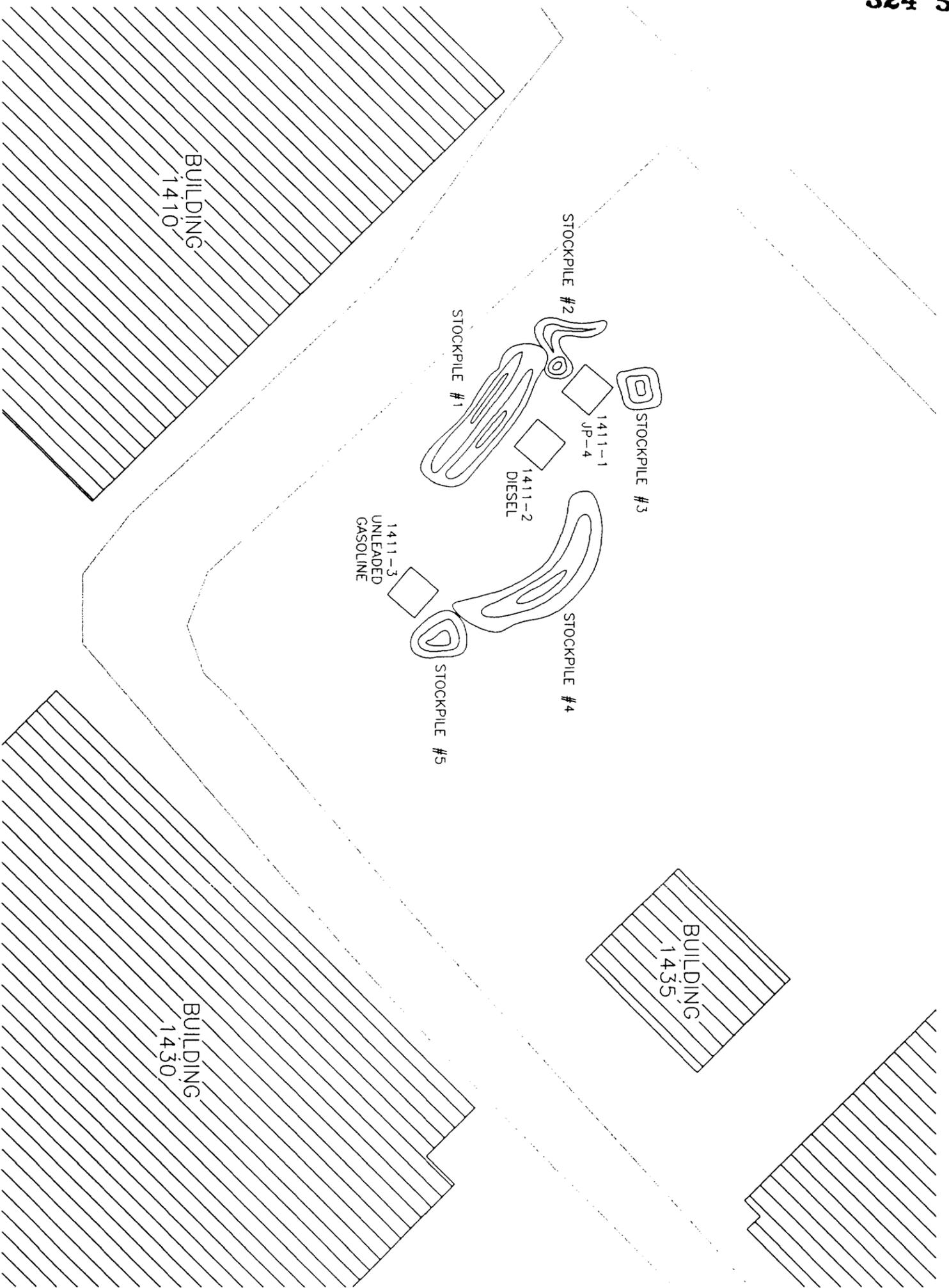
6.4 1411 UNDERGROUND STORAGE TANK CLUSTER

Three 2,000-gallon tanks were removed at this location. The former contents were reported to be as follows:

UST 1411-1	JP-4
UST 1411-2	Diesel
UST 1411-3	Unleaded gasoline

6.4.1 Site 1411 Description

The 1411 tanks were located adjacent to the flightline, approximately 100 feet northwest of Building 1410 (Figure 6.4-1). Two pump islands had formerly been located over the tanks and used for fueling flightline vehicles. Presumably the JP-4 pump was used as an auxiliary source of aviation fuel for nearby aircraft. The area was paved with approximately 12 inches of unreinforced concrete. At the time of removal the area was unused, and most of the surrounding buildings were being renovated by NAS Fort Worth contractors. Currently, the tank site is being used to store NAS Fort Worth equipment and vehicles.



NAVAL AIR STATION
FORT WORTH, TEXAS
1411 TANK LOCATIONS

PROJ. MGR. L. SCHUETTER	ACAD FILE NO. FIG64-1	FIGURE NO. 6.4-1	DATE 7/29/96
DRAWN BY J. HUNTER	PROJ. NO. 10-K-70200		

6.4.2 Tank 1411 Removal Activities

The tank excavation began with removal of the concrete pavement and the soil over the tanks. After cleaning the interiors of the tanks, soil was excavated from around the tanks, and all three tanks were removed using a crane on 26 March 1996. The resulting three excavations were similarly sized, measuring approximately 11 feet deep by 13 feet wide by 15 feet long. Approximately 10 cubic yards of soil were removed and stockpiled onsite.

Distinct fuel odors and stained soil were observed in all three excavations, and free product was observed in the 1411-2 and 1411-3 excavations. Although Tank 1411-2 was used for diesel fuel storage, gasoline odors were recognized in the excavation. Approximately 5 to 6 feet of rainwater runoff from the surrounding, extensively paved area had collected in each excavation by the morning of 28 March 1996, due to heavy rains the previous day. Free product was observed on the water at 1411-3, and an apparent fuel sheen was reported on the water in the 1411-2 excavation.

6.4.3 Sampling at Tank Cluster 1411

Four sidewall soil samples and one bottom soil sample (two from 1411-3) were collected from each excavation. Based on observations of contamination in each excavation, a field decision was made to overdig approximately 2 feet of soil without sampling the initial excavations. To expedite the return of analytical results from the anticipated final depths, the bottom and sidewall samples were recovered from 2 feet beyond the initial excavation depth, and 2 feet into the original sidewalls, before the overdig had been performed. An exception was TE-1411-3SE, which was collected approximately 3 feet into the southeast sidewall of excavation 1411-3. Soil samples from the 1411 excavations were submitted to the offsite laboratory for analysis for BTEX and methyl tertbutyl ether (MTBE) (SW8020), SVOCs (SW8270), and TPH (E418.1).

The five soil stockpiles were sampled at a frequency of approximately one sample per 50 cubic yards of soil to characterize the soil for disposal. These samples were submitted to the laboratory for analyses by methods SW8020 (BTEX) and E418.1 (TPH).

6.4.4 Results - Tank Cluster 1411

The results of the analysis of soil and groundwater samples collected from the tank excavation and stockpile are given in Table 6.4-1 and Appendix D, which contains all laboratory results cross referenced to location and sample number. Sample results are also shown on Figures 6.4-2 and 6.4-3.

1411 Tank Excavation Results. The soils at the site ranged from silty clays to clayey sands, but were primarily fine-grained. Because of the stained soils, free product, and petroleum hydrocarbon odors that were observed in the initial 1411 excavations, the sidewalls in all three excavations were overdug approximately 2 feet, and each was extended to final depths of between 10 and 13.2 feet. In addition, the concrete surface was removed between the 1411-1 and 1411-2 excavations, and all of the soil between the two excavations was removed to a depth of 12 feet.

Because gasoline odors were identified in two of the three excavations, the TNRCC action levels for gasoline releases in coarse-grained soil were used for decisions regarding overdigging all three excavations. The TPH results ranged from below detection limits in the northwest sidewall of 1411-1, to a high of 2,450 mg/kg in the southwest sidewall of 1411-2. Benzene was not detected in any of the excavations. Toluene, ethylbenzene, and total xylenes were each reported (Table 6.4-1), but none were above TNRCC action levels. Several SVOCs were detected, primarily fuel-related compounds such as naphthalene, as shown on Table 6.4-1.

TABLE 6.4-1
Analytical Results for Tanks 1411-1, -2, and -3 Excavations

324 58

Sample Number	Date Sampled	Depth (feet)	Sample Type	VOCs Method SW8240	SVOCs Method SW8270	BTEX Method SW8020	TPH Method E418.1	Units
TE-1411-1NW	4/4/96	6.0	Soil	-	-	XYLENES-0.0014J	10.4	mg/kg
TE-1411-1SW	4/4/96	6.0	Soil	EBZ-0.179	MTNPH2-4.6 NAPH-3.68	BZME-0.157 EBZ-0.149 XYLENES-0.179	670	mg/kg
TE-1411-1SE	4/4/96	6.0	Soil	BZME-0.207	MTNPH2-3.23 NAPH-1.6	EBZ-0.638 XYLENES-0.835	231	mg/kg
TE2-1411-1NE	4/4/96	6.0	FD	BZME-0.184 EBZ-1.29 XYLENES-4.19	MTNPH2-0.591 NAPH-0.422	EBZ-0.459 XYLENES-0.706	1,640	mg/kg
TE-1411-1NE	4/4/96	6.0	Soil	BZME-0.172 EBZ-0.203 XYLENES-0.808	MTNPH2-2.3 DBF-0.088J FLA-0.107J NAPH-1.44 PHAN-0.120J	EBZ-0.670 XYLENES-0.941	2,340	mg/kg
TE-1411-1BOT	4/4/96	6.0	Soil	EBZ-0.0420 XYLENES-0.154	nd	BZME-0.0025J EBZ-0.0025J XYLENES-0.0037J	46	mg/kg
TE-1411-2NE	4/4/96	6.0	Soil	-	nd	XYLENES-0.0014J	20.2	mg/kg
TE-1411-2NW	4/4/96	6.0	Soil	-	nd	nd	9.93J	mg/kg
TE-1411-2SE	4/4/96	6.0	Soil	-	nd	nd	17.4	mg/kg
TE-1411-2SW	4/4/96	6.0	Soil	BZME-0.223 EBZ-1.68 XYLENES-5.55	MTNPH2-4.11 DNBP-0.100J NAPH-3.15	BZME-0.158 EBZ-2.73 XYLENES-7.94	2,450	mg/kg
TE2-1411-2SW	4/4/96	6.0	FD	EBZ-1.18 BZME-0.2 XYLENES-3.26	MTNPH2-4.96 DNBP-0.127J NAPH-4.1	EBZ-3.1 XYLENES-8.48	2,140	mg/kg
TE-1411-2BOT	4/4/96	6.0	Soil	EBZ-2.18 BZME-1.04 XYLENES-14.6	MTNPH2-5.34 DBF-0.201J FLA-0.175J FL-0.144J NAPH-4.27 PHAN-0.256J PYR-0.145J	EBZ-4.15 MTBE-0.061 BZME-2.85 XYLENES-20.3	1,070	mg/kg
TE-1411-3NW	4/4/96	6.0	Soil	EBZ-0.452 BZME-0.485 XYLENES-0.999	MTNPH2-3.29 NAPH-1.82	EBZ-1.03 XYLENES-2.55	556	mg/kg
TE-1411-3NE	4/4/96	6.0	Soil	-	nd	XYLENES-0.889	7.58J	mg/kg
TE-1411-3SW	4/4/96	6.0	Soil	-	nd	MTBE-0.003J XYLENES-0.0011J	10	mg/kg
TE-1411-3SE	4/4/96	6.0	Soil	-	nd	XYLENES-0.001J	15.5	mg/kg
TE-1411-3BOT	4/4/96	6.0	Soil	-	MTNPH2-0.338 FLA-0.206J PHAN-0.184J PYR-0.17J	nd	190	mg/kg
TE-1411-3NWA	4/25/96	6.0-7.0	Soil	-	-	EBZ-0.118 XYLENES-0.289	170	mg/kg

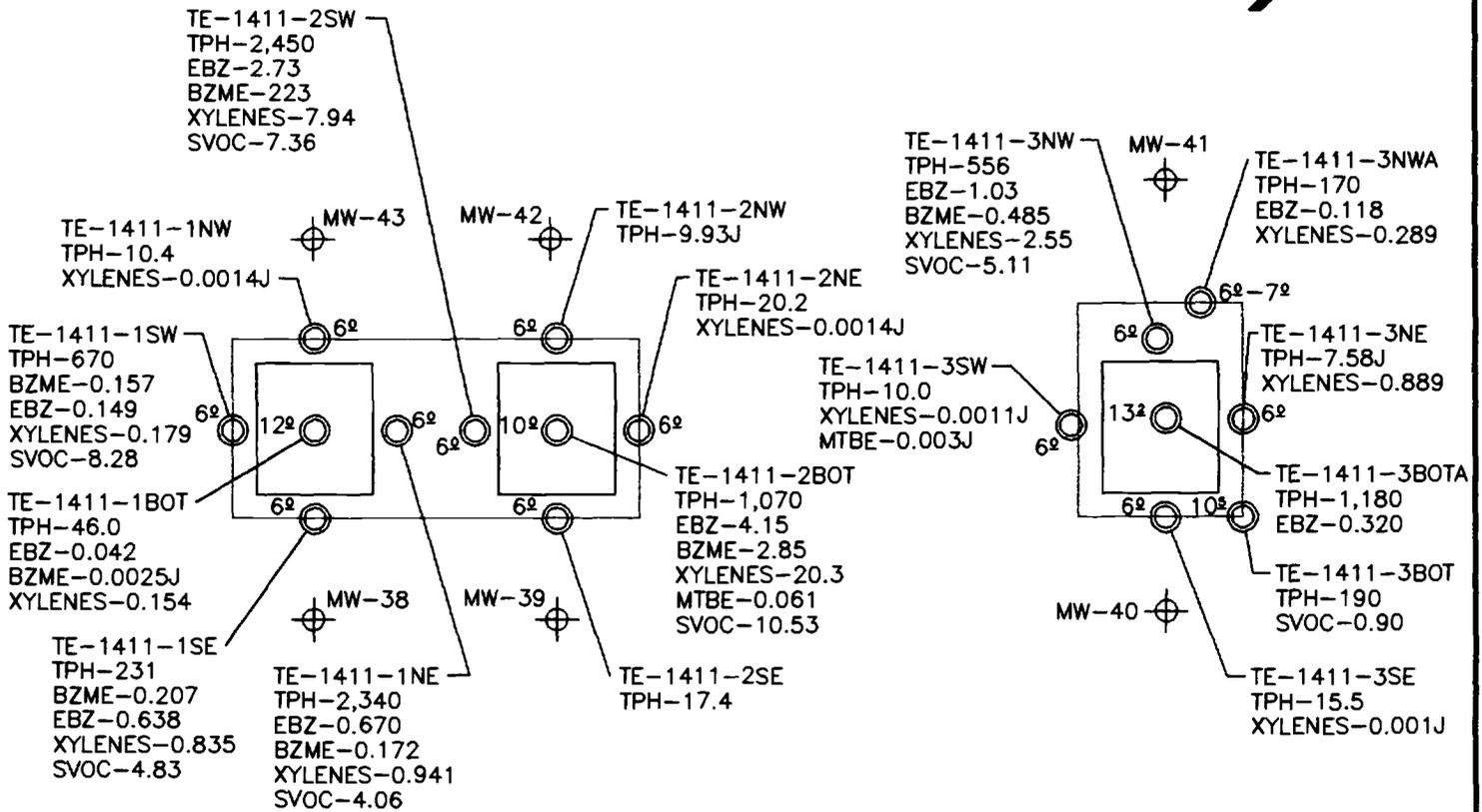
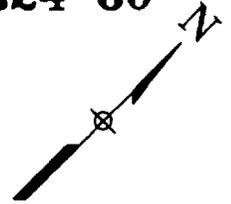
TABLE 6.4-1
Analytical Results for Tanks 1411-1, -2, and -3 Excavations

324 59

Sample Number	Date Sampled	Depth (feet)	Sample Type	VOCs Method SW8240	SVOCs Method SW8270	BTEX Method SW8020	TPH Method E418.1	Units
TE-1411-3BOTA	4/25/96	2.0-12.	Soil	-	-	EBZ-0.320	1,180	mg/kg
TE-1411-STK1A	4/25/96	na	Soil	-	-	EBZ-0.142 XYLENES-0.145	294	mg/kg
TE-1411STK1B	4/25/96	na	Soil	-	-	EBZ-0.018 XYLENES-0.032	135	mg/kg
TE-1411-STK1C	4/25/96	na	Soil	-	-	EBZ-1.60 XYLENES-11.4	904	mg/kg
TE-1411-STK1D	4/25/96	na	Soil	-	-	EBZ-0.014	265	mg/kg
TE-1411-STK1E	4/25/96	na	Soil	-	-	nd	44.7	mg/kg
TE-1411-STK1F	4/25/96	na	Soil	-	-	XYLENES-0.0031	162	mg/kg
TE-1411-STK2	4/25/96	na	Soil	-	-	XYLENES-0.031	142	mg/kg
TE-1411-STK4A	4/25/96	na	Soil	-	-	EBZ-6.30 XYLENES-25.6	1,410	mg/kg
TE-1411-STK4B	4/25/96	na	Soil	-	-	EBZ-0.158 XYLENES-0.387	867	mg/kg
TE2-1411-STK4	4/25/96	na	FD	-	-	EBZ-0.011	493	mg/kg
TE-1411-STK5	4/25/96	na	Soil	-	-	EBZ-2.31 XYLENES-10.7	2,670	mg/kg

NOTES:

FD	Field Duplicate	BZME	Toluene
nd	Not detected	DBF	Dibenzofuran
na	Not applicable	DNBP	Di-n-butyl phthalate
-	Not analyzed	EBZ	Ethylbenzene
mg/kg	milligrams/kilogram	FL	Fluorene
		FLA	Fluoranthene
		MTBE	Methyl tertbutyl ether
		MTNPH2	2-Methylnaphthalene
		NAPH	Naphthalene
		PHAN	Phenanthrene
		PYR	Pyrene
		XYLENES	Total xylenes



LEGEND:

TE-1411-1NW

6" SAMPLE LOCATION WITH DEPTH

MW-42

MONITORING WELL LOCATION

TPH - TOTAL PETROLEUM HYDROCARBONS

EBZ - ETHYLBENZENE

BZME - TOLUENE

XYLENES - TOTAL XYLENES

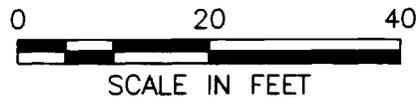
MTBE - METHYL TERTBUTYLETHER

SVOC - TOTAL SEMIVOLATILE COMPOUNDS
(SEE TABLE 6.4-1)

J - ESTIMATED CONCENTRATION

NOTES:

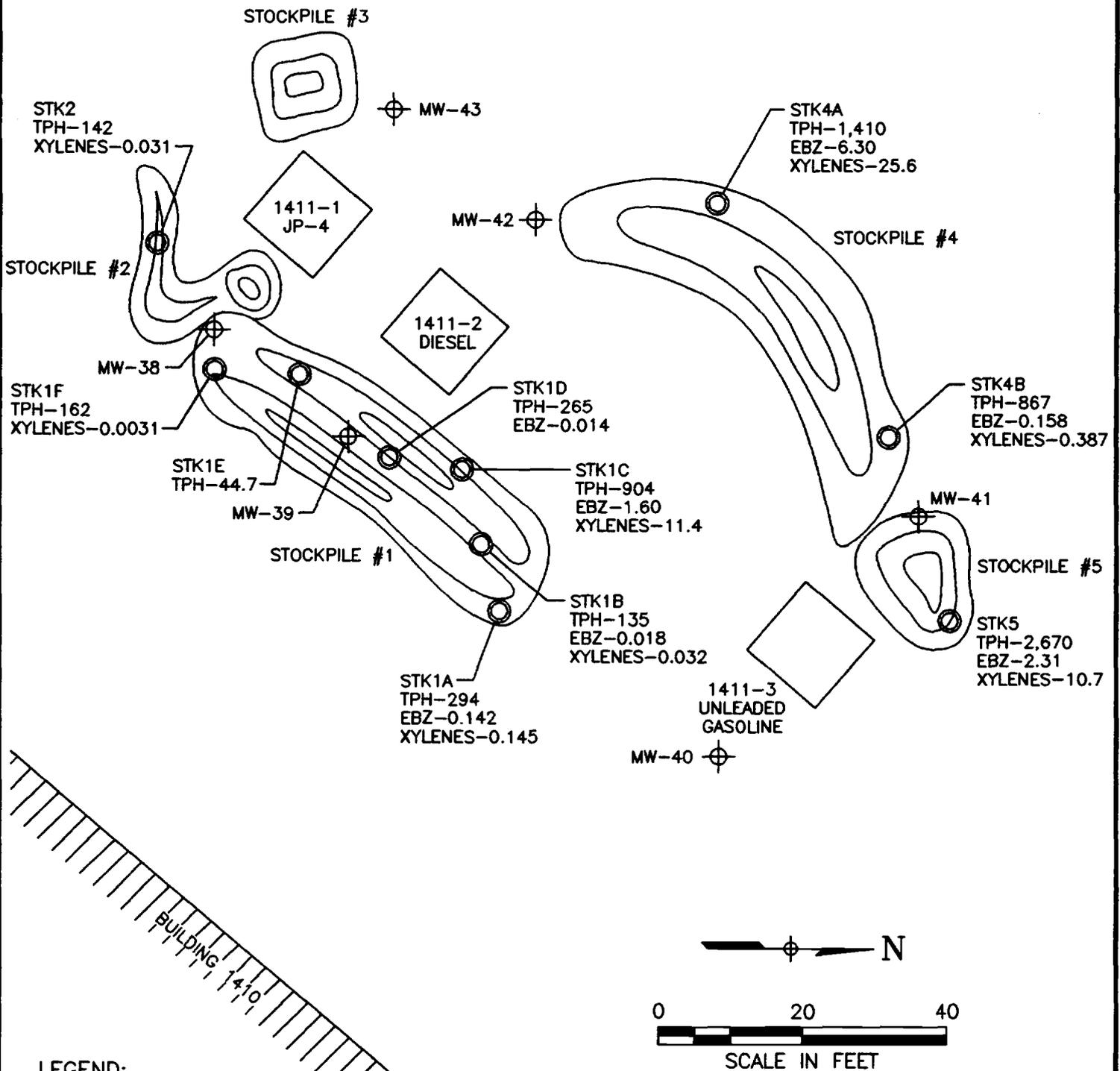
1. ALL CONCENTRATIONS ARE IN mg/kg.
2. NON-DETECTED COMPOUNDS ARE NOT SHOWN.



**NAVAL AIR STATION
FORT WORTH, TEXAS**

1411 EXCAVATION SAMPLE RESULTS

PROJ. MGR. L. SCHUETTER	ACAD FILE NO. FIG64-2	FIGURE NO. 6.4-2
DRAWN BY J. HUNTER	PROJ. NO. 10-K-70200	DATE 3/14/97



LEGEND:

- STK1E
- STOCKPILE SAMPLE LOCATION (MINUS "TE-1411-" PREFIX)
- MW-42
- ⊕ MONITORING WELL LOCATION
- TPH - TOTAL PETROLEUM HYDROCARBONS
- EBZ - ETHYLBENZENE
- XYLENES - TOTAL XYLENES

NOTES:

1. ALL CONCENTRATIONS ARE IN mg/kg.
2. NON-DETECTED COMPOUNDS ARE NOT SHOWN.

**NAVAL AIR STATION
FORT WORTH, TEXAS**

1411 STOCKPILE SAMPLE RESULTS

PROJ. MGR. L. SCHUETTER	ACAD FILE NO. FIG64-3	FIGURE NO. 6.4-3
DRAWN BY J. HUNTER	PROJ. NO. 10-K-70200	DATE 3/14/97

6.4.5 Stockpile Sampling Results

Nine of 10 TPH sample results from the 1411 soil stockpiles were above the TNRCC action levels for soil contaminated by gasoline releases (100 mg/kg). BTEX action levels for coarse-grained soils were not exceeded in any of the sample results. All of the excavated soil was disposed of offsite.

Note that stockpile 3 is actually a portion of stockpile 2. Stockpile 2 was sampled at the appropriate frequency of one sample per 50 cubic yards of soil before the soil was separated. High winds frequently blew down barricades, and the soil was moved to a separate stockpile to block NAS Fort Worth vehicular traffic from driving through the excavated areas.

6.4.6 Waste Handling and Disposal

Because of the relatively high TPH results and the visual observations of staining and free product in several of the excavations, all of the excavated soil was sent for offsite disposal (Section 3.2). Clean fill was hauled onto the site to replace the excavated soils. Tank fluids and rainwater from the excavations were disposed of as described in Section 3.2.

6.4.7 Conclusions

Before closing the 1411 excavation, polyethylene plastic liners were placed in the excavations to separate the clean fill from the potentially contaminated native soils. The excavation volume was then backfilled with clean, imported fill. The backfill was compacted and the excavations were finished to the original grade with an 8-inch concrete surface.

Several TPH results from each excavation remained above TNRCC action levels, although the two highest results (Figure 6.4-2, samples TE-1411-1NE and TE-1411-2SW)

represent soil between the two excavations that has already been removed. All soil sample results indicated concentrations of BTEX that were below TNRCC action levels.

6.5 4210 UNDERGROUND STORAGE TANK CLUSTER

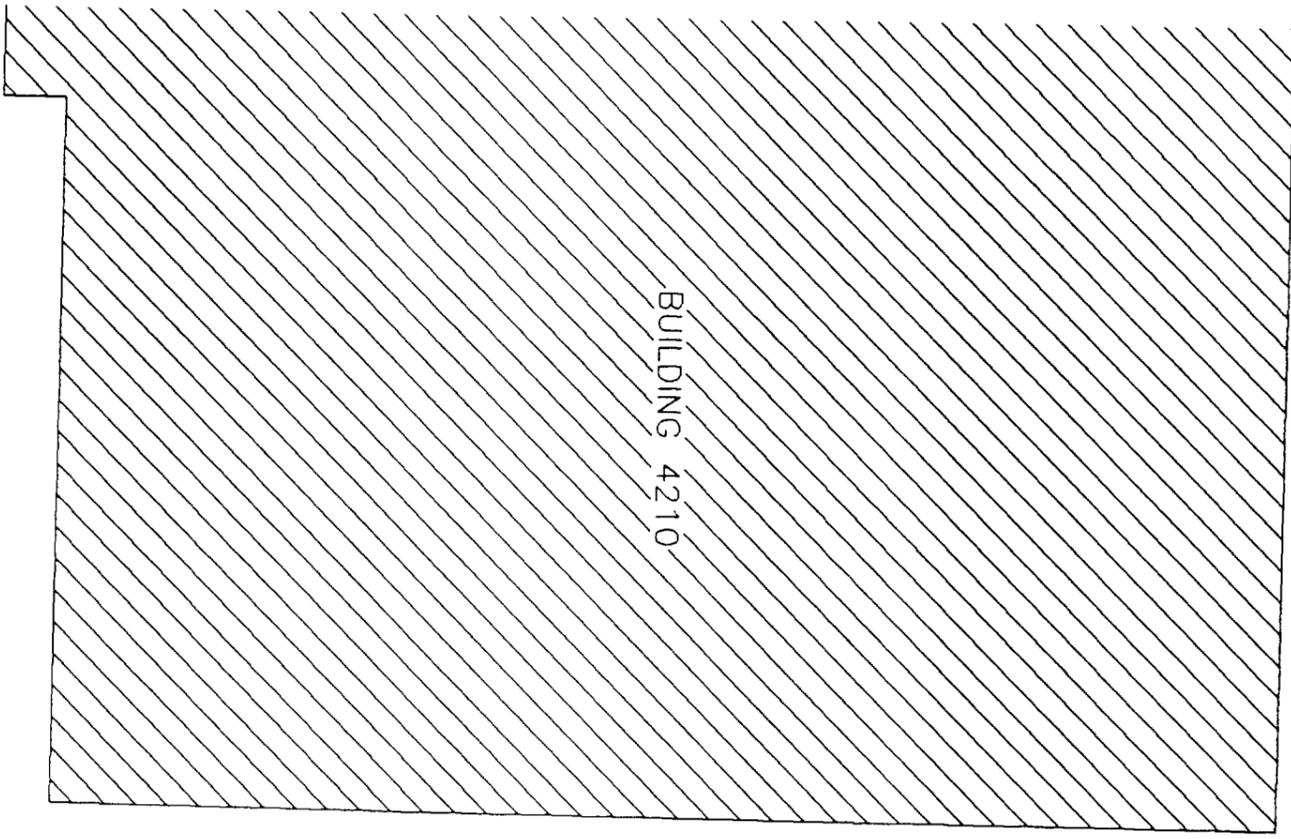
Four JP-10 tanks were removed at this location. Tank 4210-5 is described as a "fuel spillage" tank, and held water-contaminated JP-10. The tank volumes and former contents were reported to be as follows:

<u>Tank</u>	<u>Volume</u>	<u>Contents</u>
UST 4210-1	8,000 gallon	JP-10
UST 4210-2	8,000 gallon	JP-10
UST 4210-3	8,000 gallon	JP-10
UST 4210-5	2,000 gallon	JP-10 and water

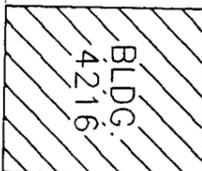
6.5.1 Site 4210 Description

The 4210 tanks were located north of Building 4210, where air-launched cruise missiles were maintained and, presumably, fueled, and defueled (Figure 6.5-1). The area was formerly under the highest security when Carswell Air Force Base was a Strategic Air Command base. A pipeline ran from the 8,000-gallon tanks to Building 4210, and a second line returned water-contaminated fuel to Tank 4210-5.

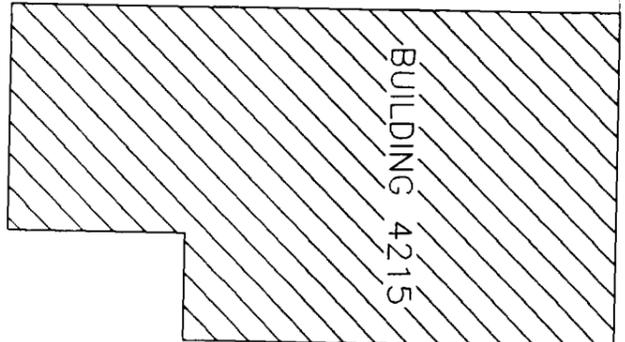
The area over the tanks was mostly unpaved and vegetated. At the time of removal the area was unused, although several nearby buildings were being renovated for use by NAS Fort Worth. The tops of the tanks were reached at a depth of approximately 8 feet bgs. All four tanks were mounted on a single concrete slab that was up to 29 inches thick. Approximately 6 inches of backfill sand was found below the slab, with Goodland bedrock (clayey limestone marl) found below that.



BUILDING 4210



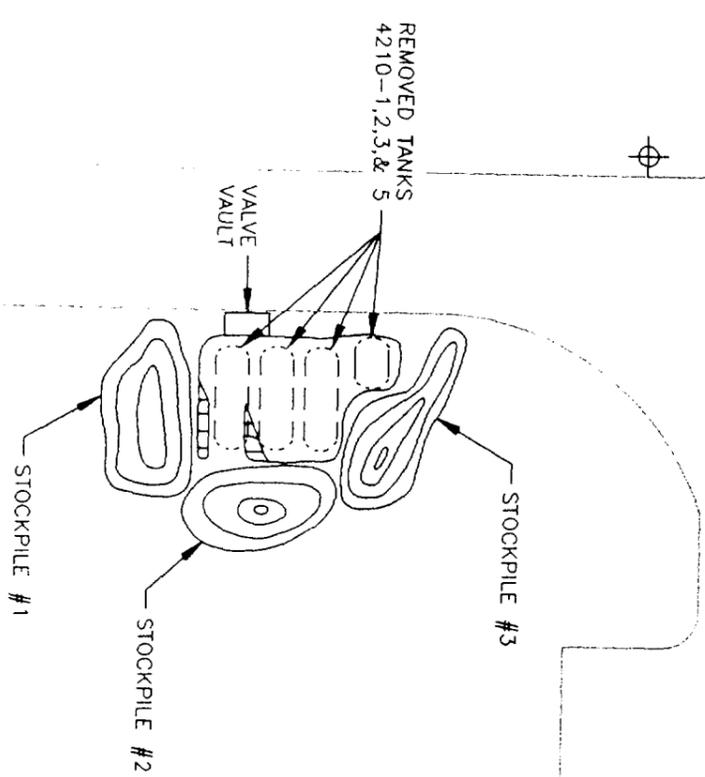
BLDG.
4216



BUILDING 4215

MW-52

 MW-53

REMOVED TANKS
4210-1, 2, 3, & 5

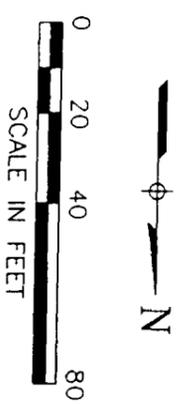
VALVE
VAULT

STOCKPILE #1

STOCKPILE #2

STOCKPILE #3

LEGEND:
 MONITORING WELL AND IDENTIFICATION
 UNIDENTIFIED MONITORING WELL



NAVAL AIR STATION
 FORT WORTH, TEXAS
 4210 TANK LOCATIONS

PROJ. MGR. L. SCHUETTER	ACAD FILE NO. FIG65-1	FIGURE NO. 6.5-1	DATE 3/14/97
DRAWN BY J. HUNTER	PROJ. NO. 10-K-70200		

6.5.2 Tank 4210 Removal Activities

The tank excavation began with removal of the soil over the tanks. After exposing the tank tops and cleaning the interiors, soil was excavated from around the tanks, and all four were removed using a crane on 1 April 1996. Because of the depth at which the tanks had been buried, it was necessary to widen the excavation to the east, where a ramp was constructed so that equipment could enter the excavation. The resulting excavation measured approximately 40 feet wide by 45 feet long and a maximum of 21 feet deep. Soils were placed in three undifferentiated stockpiles, with several yards of potentially contaminated soil placed at a corner of Stockpile 3.

Water was initially observed in the excavation as the porous fill materials were removed, but drained over several days time. Approximately 1 foot of water remained in the deepest corner of the excavation, and may have been groundwater. Groundwater in a nearby monitoring well was measured at a similar elevation. The native soils were observed to be sandy clays and clayey sands of low permeability, lying unconformably on Goodland limestone bedrock.

Fuel odors were noted while excavating some of the backfill materials immediately above and below the concrete slab. This material was segregated and later sampled as TE-4210-STK3A. Other than this sample, no readings above background were noted while screening the soil stockpiles with the HNu.

6.5.3 Sampling at Tank Cluster 4210

Four sidewall soil samples and one bottom soil sample were collected from the Tank 4210 excavation. Two samples were also collected from the pipeline trench between the excavation and Building 4210. Soil samples from the 4210 excavation were submitted to the offsite laboratory for analysis for BTEX (SW8020), VOCs (SW8240), SVOCs (SW8270), metals (SW6010), and TPH (E418.1). The samples were analyzed for these compounds because previous information indicated that one of the 4210 tanks may have held waste oil.

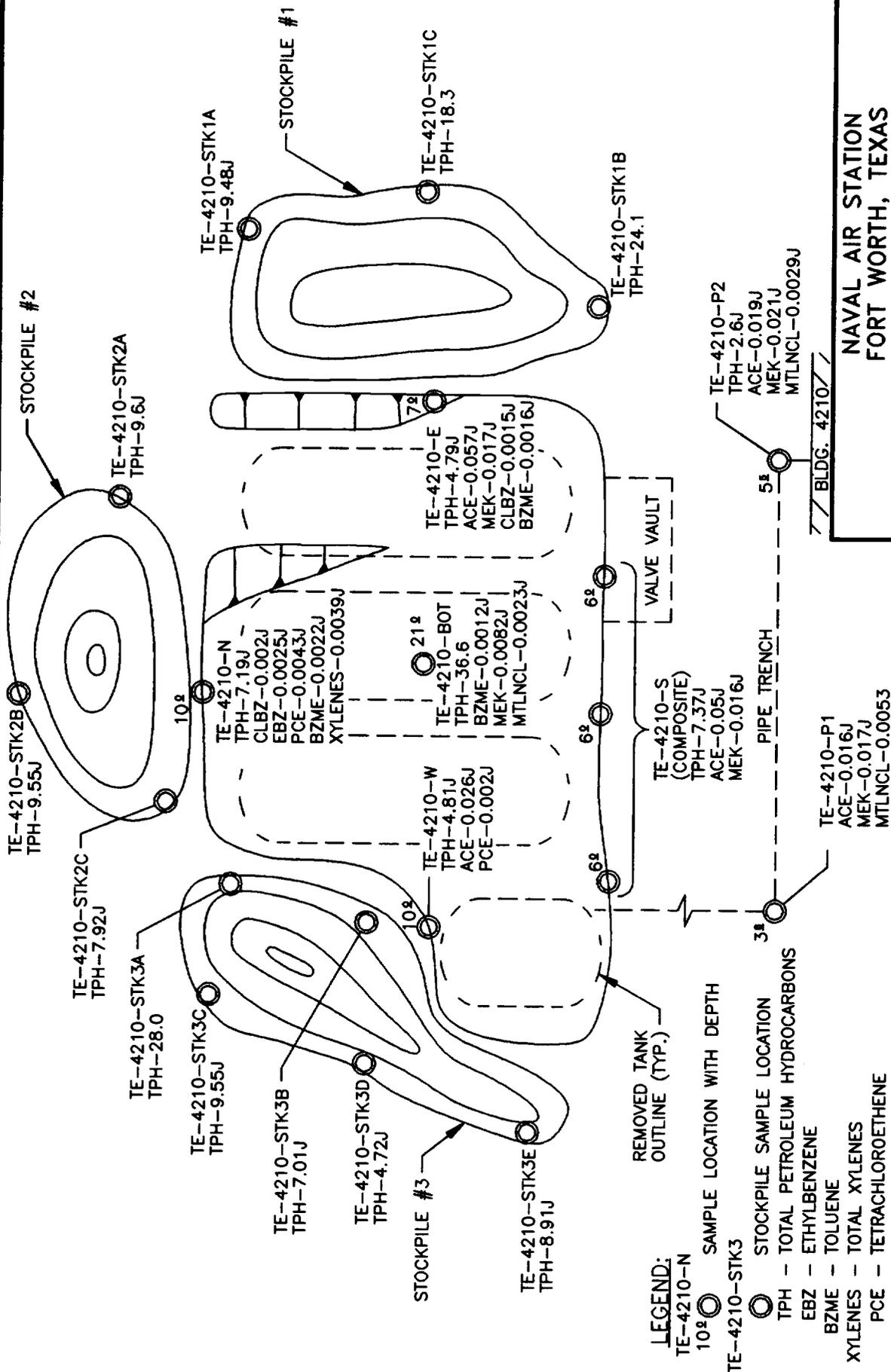
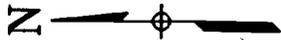
The three soil stockpiles were sampled at a frequency of approximately one sample per 50 cubic yards of soil to characterize the soil for disposal (Figure 6.5-2). Eleven soil stockpile samples were collected. These samples were submitted to the laboratory for analyses by methods SW8020 (BTEX) and E418.1 (TPH).

6.5.4 Results - Tank Cluster 4210

The results of the analysis of soil samples collected from the tank excavation, pipeline trench, and stockpiles are given in Table 6.5-1 and Appendix D, which contains all laboratory results cross referenced to location and sample number. Sample results are also shown in Figure 6.5-2.

4210 Tank Excavation Results. The soils at the site were primarily sandy clays over weathered marl (Goodland Formation). A poorly sorted, angular, bluish-gray sand occurred as a thin zone between the bedrock and the bottom of the concrete slab, and appeared to be backfill. The unusual color may have resulted from dewatering of the concrete when the slab was poured. It may also have been related to old fuel degradation, although high concentrations were not reported in the stockpile sample of this material (Section 6.5.5).

The TPH results from the excavation ranged from a low estimated concentration of 4.79 mg/kg to a high of 36.6 mg/kg (Figure 6.5-2). The low concentration was found in the sample from the east sidewall, and the high concentration was found in the sample from the excavation bottom. All of the sidewall samples had estimated TPH concentrations of less than 7.4 mg/kg. Acetone, chlorobenzene, toluene, methyl ethyl ketone, total xylenes, and PCE were all detected at estimated concentrations below the PQLs in various sidewall samples. None were above TNRCC action levels. No VOCs or BTEX compounds were detected in the bottom sample. Benzene and SVOCs were not detected in any of the samples.



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NAVAL AIR STATION
FORT WORTH, TEXAS

4210 EXCAVATION AND STOCKPILE
SAMPLE RESULTS

PROJ. MGR. L. SCHUETTER	ACAD FILE NO. FIG65-2	FIGURE NO. 6.5-2
DRAWN BY J. HUNTER	PROJ. NO. 10-K-70200	DATE 3/14/97



**TABLE 6.5-1
Analytical Results for Tank 4210 Excavation**

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Sample Number	Date Sampled	Depth (feet)	Sample Type	VOCs Method SW8240	SVOCs Method SW8270	BTEX Method SW8020	TPH Method E418.1	Metals Method SW6010	Units
TE-4210-N	4/1/96	10.0	Soil	BZME-0.0022J CLBZ-0.002J EBZ-0.0025J PCE-0.0043J XYLENES-0.0039J	nd	nd	7.19J	AL-5390 AS-4.76J BA-52.4 BE-0.58 CA-237000 CO-3.6J CR,TOT-6.5J CU-2.9J FE-9140 K-849 MG-2420 MN-458 NA-107 NI-9.28J V-54.2 ZN-16.9	mg/kg
TE-4210-S	4/1/96	6.0	Soil	ACE-0.05J MEK-0.016J	nd	nd	7.37J	AL-5480 AS-3.8J BA-160 BE-0.69 CA-113000 CO-8.68 CR,TOT-7.73J CU-3.21J FE-9350 K-735 MG-1930 MN-744 NA-84.2 NI-10.1J PB-6.18J SB-1.43J V-64.9 ZN-13.3	mg/kg
TE-4210-E	4/1/96	7.0	Soil	ACE-0.057J BZME-0.0017J CLBZ-0.0015J MEK-0.017J	nd	nd	4.79J	AL-7610 BA-69.6 BE-0.742 CA-79600 CO-4.29J CR,TOT-8.82 CU-4.41J FE-10200 K-1140 MG-2110 MN-284 NA-55 NI-7.89J PB-5.34J V-62.2 ZN-19.2	mg/kg

**TABLE 6.5-1
Analytical Results for Tank 4210 Excavation**

324 69

Sample Number	Date Sampled	Depth (feet)	Sample Type	VOCs Method SW8240	SVOCs Method SW8270	BTEX Method SW8020	TPH Method E418.1	Metals Method SW6010	Units
TE-4210-W	4/1/96	10.0	Soil	ACE-0.026J PCE-0.002J	nd	nd	4.81J	AL-8450 BA-99.1 BE-0.885 CA-46900 CO-4.54J CR,TOT-9.43 CU-3.61J FE-10900 K-912 MG-1510 MN-182 NA-40.7 NI-9.08J V-68.2 ZN-15.6	mg/kg
TE-4210-STK1A	4/2/96	na	Soil	-	-	nd	9.48J	-	mg/kg
TE-4210-STK1B	4/2/96	na	Soil	-	-	nd	24.1	-	mg/kg
TE-4210-STK1C	4/2/96	na	Soil	-	-	nd	18.3	-	mg/kg
TE-4210-STK2A	4/2/96	na	Soil	-	-	nd	9.6J	-	mg/kg
TE-4210-STK2B	4/2/96	na	Soil	-	-	nd	9.55J	-	mg/kg
TE-4210-STK2C	4/2/96	na	Soil	-	-	nd	7.92J	-	mg/kg
TE-4210-STK3A	4/2/96	na	Soil	-	-	nd	28.0	-	mg/kg
TE-4210-STK3B	4/2/96	na	Soil	-	-	nd	7.01J	-	mg/kg
TE-4210-STK3C	4/2/96	na	Soil	-	-	nd	9.55J	-	mg/kg
TE-4210-STK3D	4/2/96	na	Soil	-	-	nd	4.72J	-	mg/kg
TE-4210-STK3E	4/2/96	na	Soil	-	-	nd	8.91J	-	mg/kg
TE-4210-P1	4/3/96	3.3-3.8	Soil	ACE-0.016J MEK-0.017J MTLNCL-0.0053	nd	nd	nd	AL-11800 BA-126 BE-0.985 CA-69100 CO-5.84J CR,TOT-13 CU-4.01J FE-12400 K-1130 MG-1690 MN-299 NA-39.2 NI-10.7J V-119 ZN-18.6	mg/kg
TE2-4210-P1	4/3/96	3.3-3.8	FD	ACE-0.016J BZME-0.002J CLBZ-0.0019J EBZ-0.002J MEK-0.018J MTLNCL-0.0036J PCE-0.0013J XYLENES-0.0018J	nd	nd	5.08J	AL-15100 AS-5.04J BA-125 BE-1.08 CA-58500 CO-5.41J CR,TOT-15.1 CU-3.81J FE-14000 K-1450 MG-2040 MN-226 NA-49 NI-11.6J V-102 ZN-23.5	mg/kg

**TABLE 6.5-1
Analytical Results for Tank 4210 Excavation**

324 70

Sample Number	Date Sampled	Depth (feet)	Sample Type	VOCs Method SW8240	SVOCs Method SW8270	BTEX Method SW8020	TPH Method E418.1	Metals Method SW6010	Units
TE-4210-P2	4/3/96	5.0-5.5	Soil	ACE-0.019J MEK-0.021J MTLNCL-0.0029J	nd	nd	2.60J	AL-11400 BA-77.5 BE-0.758 CA-28200 CO-4.19J CR,TOT-11.7 CU-4.92J FE-10700 K-1500 MG-1970 MN-201 NA-40.5 NI-9.22J V-90.9 ZN-21.7	mg/kg
TE-4210-BOT	4/3/96	20.5-21.0	Soil	BZME-0.0012J MEK-0.0082J MTLNCL-0.0023J	nd	nd	36.6	AL-10400 AS-3.68J BA-22.8 BE-0.783 CA-232000 CO-1.42J CR,TOT-14.9 CU-3.32J FE-10900 K-2160 MG-3120 MN-119 NA-151 NI-6.88J V-88.2 ZN-22.5	mg/kg

NOTES:

FD	Field Duplicate	ACE	Acetone	K	Potassium
nd	Not detected	AL	Aluminum	MEK	2-Butanone
na	Not applicable	AS	Arsenic	MG	Magnesium
-	Not analyzed	BA	Barium	MN	Manganese
mg/kg	milligrams/kilogram	BE	Beryllium	MTLNCL	Methylene Chloride
		BZME	Toluene	NA	Sodium
		CA	Calcium	NI	Nickel
		CD	Cadmium	PB	Lead
		CLBZ	Chlorobenzene	PCE	Tetrachloroethene
		CO	Cobalt	SE	Selenium
		CR,TOT	Total Chromium	TPH	Total Petroleum Hydrocarbons
		CU	Copper	V	Vanadium
		EBZ	Ethylbenzene	ZN	Zinc
		FE	Iron		

Metals were also detected as shown in Table 6.5-1 and, as explained in Section 6.1.4, were compared to background values (Jacobs 1997) to identify those that exceeded the UTL_{95,95}. Table 6.5-2 shows the Tank 4210 concentrations of antimony, barium, cobalt, magnesium, manganese, potassium, and vanadium that exceeded their respective UTL_{95,95} screening criteria. To further evaluate whether these concentrations indeed represent site-related contamination, the results were compared to a UTL_{95,99}. Each analyte, except antimony and magnesium, was also above its respective UTL_{95,99}. For antimony and magnesium, calculation of a UTL_{95,99} was not possible because the UTL was established as the highest value in the background data set.

The antimony detected in sample TE-4210-S is not likely to represent site-related contamination because the result (1.43 J mg/kg) is an estimated concentration below the PQL, and only slightly above the method detection limit (MDL) of 1.0 mg/kg.

For barium, both the UTL_{95,95} and the UTL_{95,99} are below the established MSC of 200 mg/kg.

Cobalt was detected in only one of eight samples at a concentration above the PQL of 7.0 mg/kg. The one result above the PQL (8.68 mg/kg) was only slightly above the UTL_{95,99} of 7.34 mg/kg. Cobalt has no established MSC.

Potassium was detected once at a concentration exceeding both the UTL_{95,95} and UTL_{95,99}. No MSC has been established for potassium and because it is an essential nutrient, it probably does not represent a human health risk.

Vanadium was detected seven times at concentrations exceeding both the UTL_{95,95} and UTL_{95,99}. No MSC has been established for vanadium; however, all results are below the EPA soil screening level (SSL) of 300 mg/kg (EPA 1996).

TABLE 6.5-2
Metals Results at Tank 4210 Exceeding Background UTL_{95,95}

Sample Number	Analyte	Result	UTL _{95,95}	UTL _{95,99}	Exceeds UTL _{95,99} ?	MSC
TE-4210-S	Antimony	1.43 J	0.712	UTL is highest value	-----	0.6
TE-4210-S	Barium	160.0	128.1	151.7	Yes	200
TE-4210-S	Cobalt	8.68	6.191	7.34	Yes	ne
TE-4210-BOT	Magnesium	3120	2420	UTL is highest value	-----	ne
TE-4210-S	Manganese	744.0	351.7	421.0	Yes	ne
TE-4210-N	Manganese	458.0	351.7	421.0	Yes	ne
TE-4210-BOT	Potassium	2160	1717	1989.20	Yes	ne
TE-4210-P1	Vanadium	119.0	37.39	47.91	Yes	ne
TE-4210-P2	Vanadium	90.90	37.39	47.91	Yes	ne
TE-4210-BOT	Vanadium	88.20	37.39	47.91	Yes	ne
TE-4210-W	Vanadium	68.20	37.39	47.91	Yes	ne
TE-4210-S	Vanadium	64.90	37.39	47.91	Yes	ne
TE-4210-E	Vanadium	62.20	37.39	47.91	Yes	ne
TE-4210-N	Vanadium	54.20	37.39	47.91	Yes	ne

Notes:

All units are in milligrams per kilogram (mg/kg)

UTL_{95,95} = Upper Tolerance Level (95% confidence and 95% coverage)

UTL_{95,99} = Upper Tolerance Level (95% confidence and 99% coverage)

J = estimated

MSC = medium-specific concentration

ne = not established

----- = comparison not applied

6.5.5 Stockpile Sampling Results

Approximately 3 cubic yards of the bluish-gray sand (Section 6.5.4) and the pea gravel on which the tanks rested exhibited relatively strong fuel odors as it was being removed. This material was placed at a corner of stockpile 3 and sampled separately as TE-4210-STK3A (28.0 mg/kg TPH). This was the highest reported TPH concentration among the stockpile samples, and was well below the TNRCC action levels for TPH.

Eleven samples were collected from the three soil stockpiles. TPH was detected in all 11 samples at concentrations ranging from 4.72 (estimated) to 28 mg/kg. Eight of the detects were at estimated concentrations below the laboratory PQL. The highest concentration (28 mg/kg) was from segregated coarse fill material. No BTEX compounds were detected from any of the soil stockpile samples.

6.5.6 Waste Handling and Disposal

Water used to triple rinse the UST was collected directly from the tank with a vacuum truck while the tank was being cleaned. This water was transported offsite in the same vacuum truck used to extract the fluid from the UST. Rainwater pumped from the excavation was disposed of in a similar manner. The soil from the stockpiles was below the TNRCC's action levels and was used as backfill in the tank excavation.

6.5.7 Conclusions

All soil sample results indicated concentrations of TPH and BTEX that were below TNRCC action levels. The 4210 excavation was backfilled with the excavated soil from the stockpiles. It was necessary to replace a sanitary sewer line section that was removed to lay back the north wall of the excavation. The backfill was compacted and the area was graded and reseeded.

6.6 3001 UNDERGROUND STORAGE TANK

One 20,000-gallon fuel oil tank (3001-3) and associated piping was removed at this location. Because of the presence of shallow groundwater and porous native soils at this location, extensive caving occurred during tank removal, and a natural gas pipeline was damaged and subsequently relocated.

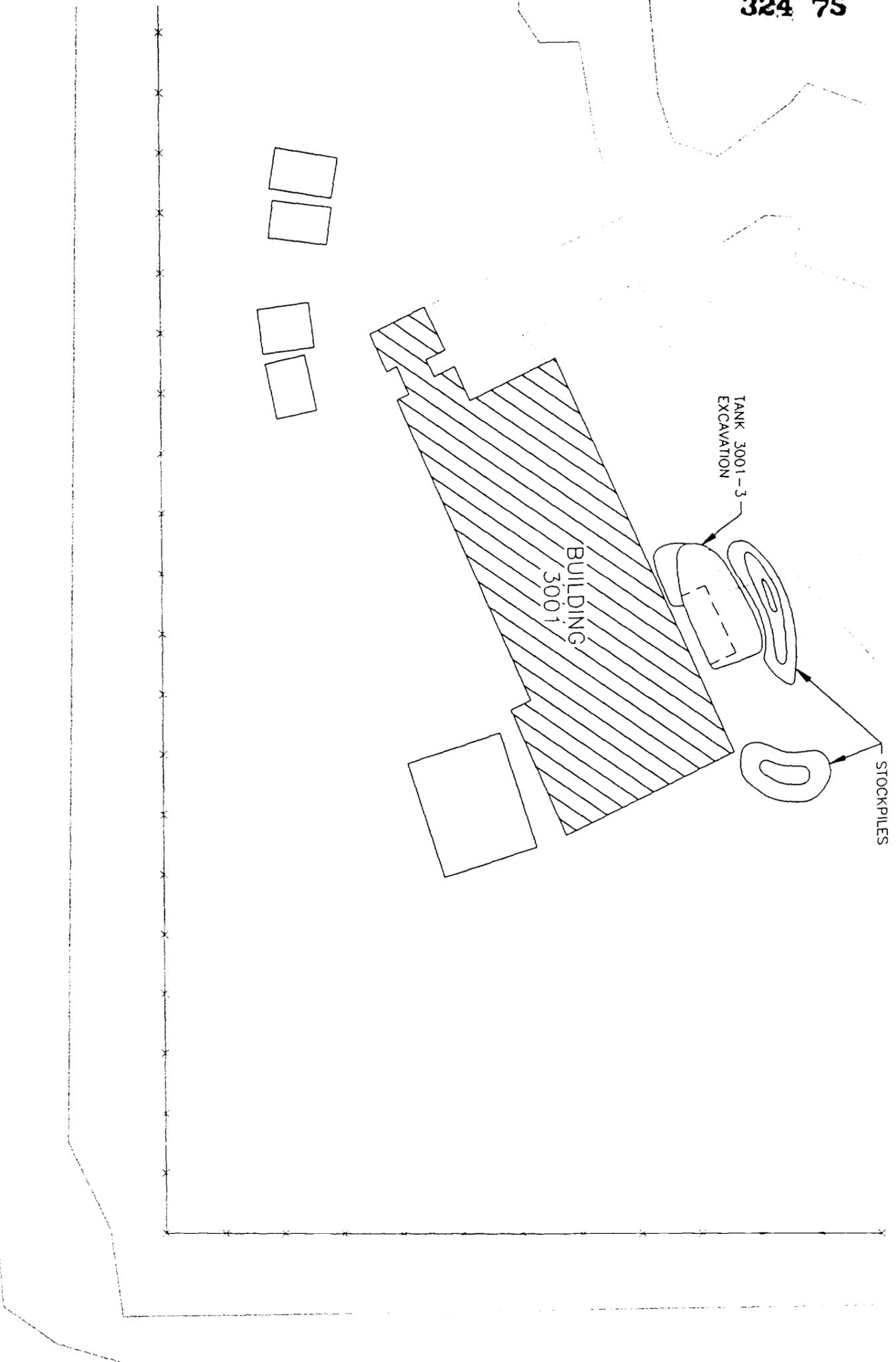
6.6.1 Site 3001 Description

Tank 3001-3 was located approximately 15 feet west-southwest of Building 3001, and was used to store heating oil to run the boilers serving the Federal Medical Center (Figure 6.6-1). Note that the Unified Services of Texas report (Attachment 1) incorrectly states that this tank contained diesel. The tank was buried beneath a small grassy area between the building and the street, and adjacent to a small paved parking lot. Tank 3001-3 had previously failed its tightness test, and a small hole was noted in an upper surface (page F-10 of Attachment 1). The tank may never have been filled to this level, since no stained soil or fuel odors were noted in the excavation or any of the stockpiles.

The soils observed in the sidewalls and the stockpiles were fine- or medium-grained sands with very low clay content, with a sandy gravel unit beginning at a depth of approximately 7 feet. Groundwater began flowing into the excavation at a depth of approximately 7.5 feet, and the sidewalls began to cave as soon as the UST was removed.

6.6.2 Tank 3001 Removal Activities

The tank excavation began with removal of soil covering the tank. After cleaning the interior of the tanks and disconnecting piping, soil was removed from around the tank and the tank was removed with a crane on 1 May 1996. The east sidewall collapsed back to the foundation of Building 3001 at that time, and groundwater and saturated materials from the south and west sidewalls continued to enter the excavation over the next several hours. Although the bottom of the UST was at a depth of approximately 13 feet, the effective depth of the excavation was never more than 8 or 9 feet deep.



NAVAL AIR STATION
 FORT WORTH, TEXAS
 3001-3 TANK LOCATION

PROJ. MGR. L. SCHUETTER	ACAD FILE NO. FIG66-1	FIGURE NO. 6.6-1	DATE 7/29/96
DRAWN BY J. HUNTER	PROJ. NO. 10-K-70200		

Initially, the excavation measured approximately 20 feet by 35 feet, but it eventually resembled an oval-shaped crater approximately 45 feet in its longest dimension. Two soil stockpiles were established, totaling approximately 140 cubic yards of soil.

No fuel odors or stained soil were observed during excavation and sampling activities.

6.6.3 Sampling at Tank 3001

Four sidewall soil samples were collected from the Tank 3001-3 excavation, and one groundwater sample was collected from the water that had seeped into the excavation. Soil and groundwater samples were submitted to the offsite laboratory for analysis for BTEX (SW8020), SVOCs (SW8270), and TPH (E418.1).

The two soil stockpiles were sampled at a frequency of approximately one sample per 50 cubic yards of soil to characterize the soil for disposal (Figure 6.6-2). These samples were submitted to the laboratory for analyses by Methods SW8020 (BTEX) and E418.1 (TPH).

6.6.4 Results - Tank 3001

The results of the analysis of soil and groundwater samples collected from the tank excavation and stockpiles are given in Table 6.6-1 and Appendix D, which contains all laboratory results cross-referenced to location and sample number. Sample results are also shown in Figure 6.6-2. All sample results were below the TNRCC action levels for coarse-grained soils.

3001 Tank Excavation Results. TPH was detected in all four sidewall samples at estimated concentrations below the laboratory PQL and ranged from 4.29 mg/kg to 9.02 mg/kg. SVOCs were detected in the north and south sidewall samples at total SVOC concentrations of 0.169 mg/kg and 1.260 mg/kg, respectively. These

TABLE 6.6-1
Analytical Results for Tank 3001-3 Excavation

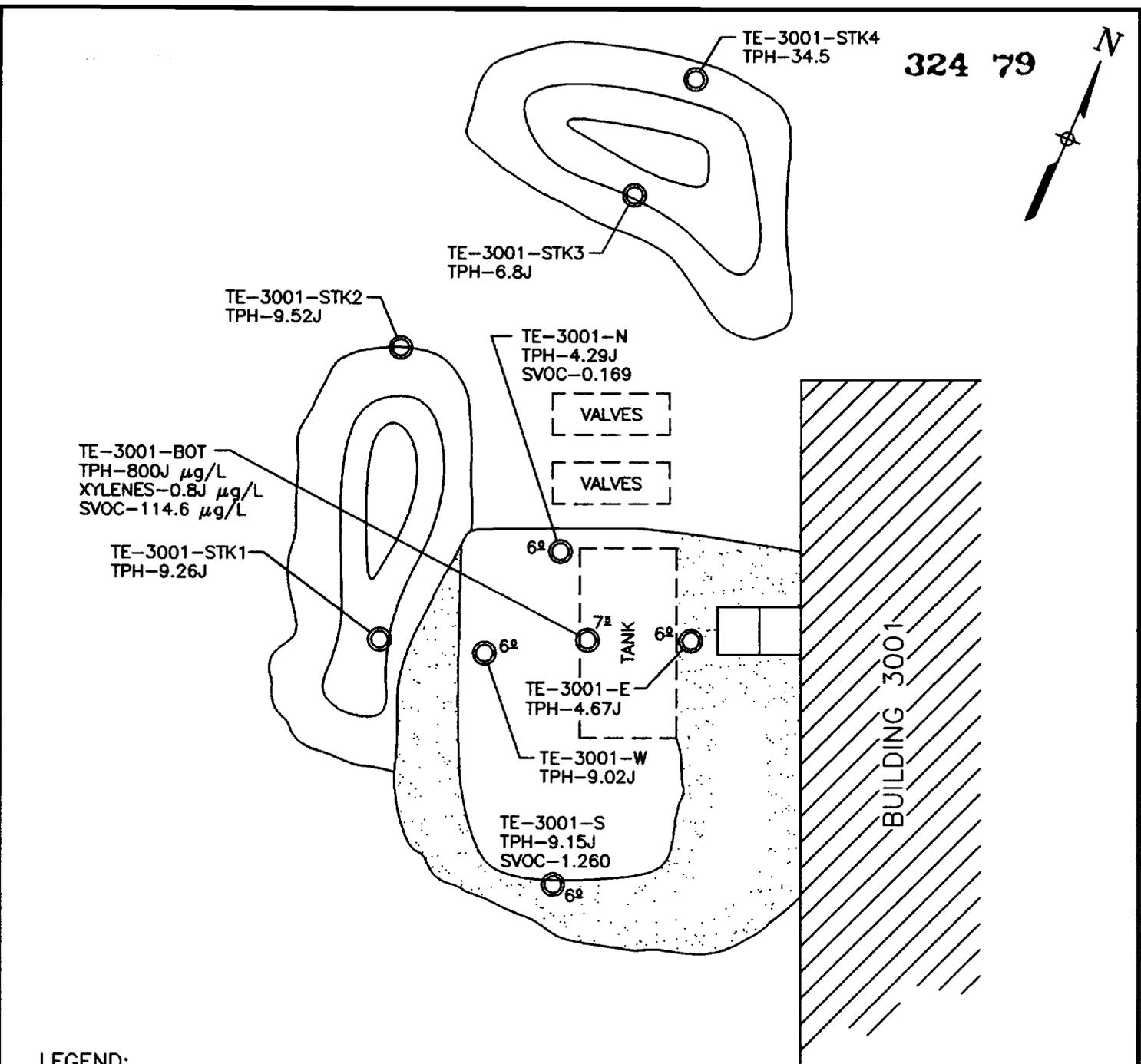
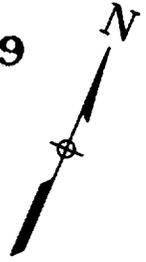
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Sample Number	Date Sampled	Depth (feet)	Sample Type	SVOCs Method SW8270	BTEX Method SW8020	TPH Method E418.1	Units
TE-3001-N	5/1/96	6.0	Soil	BIS2EHP-0.0958J BZAA-0.0264J BZBF-0.0446J	nd	4.29J	mg/kg
TE-3001-S	5/1/96	6.0	Soil	BZAA-0.187J BZAP-0.106J BZBF-0.226J CHRYSENE-0.235J FLA-0.205J PYR-0.3J	nd	9.15J	mg/kg
TE-3001-E	5/1/96	6.0	Soil	nd	nd	4.67J	mg/kg
TE-3001-W	5/1/96	6.0	Soil	nd	nd	9.02J	mg/kg
TE-3001-STK1	5/1/96	na	Soil	-	nd	9.26J	mg/kg
TE-3001-STK2	5/1/96	na	Soil	-	nd	9.52J	mg/kg
TE-3001-STK3	5/1/96	na	Soil	-	nd	6.8J	mg/kg
TE-3001-STK4	5/1/96	na	Soil	-	nd	34.5	mg/kg
TE-3001-BOT	5/2/96	7.5	GW	ACNP-23.6 DBF-12.7 FL-14 NAPH-36.1 PHAN-28.2	XYLENES - 0.8J	800J	µg/L

NOTES:

GW	Groundwater	ACNP	Acenaphthene
J	Estimated	BTEX	Benzene, toluene, ethylbenzene, xylenes
nd	Not detected	BZAA	Benzo(a)anthracene
na	Not applicable	BZAP	Benzo(a)pyrene
-	Not analyzed	BZBF	Benzo(b)fluoranthene
mg/kg	milligrams/kilogram	BIS2EHP	Bis(2-Ethylhexyl) phthalate
µg/L	micrograms/liter	DBF	Dibenzofuran
		FL	Fluorene
		FLA	Fluoranthene
		NAPH	Naphthalene
		PHAN	Phenanthrene
		PYR	Pyrene
		SVOC	Semi-volatile Organic Compounds
		TPH	Total Petroleum Hydrocarbons
		VOC	Volatile Organic Compounds

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LEGEND:

AREA OF EXCAVATION COLLAPSE



- TE-3001-N
6² SAMPLE LOCATION WITH DEPTH
- TE-3001-STK2
 STOCKPILE SAMPLE LOCATION
- TPH - TOTAL PETROLEUM HYDROCARBONS
- XYLENES - TOTAL XYLENES
- SVOC - TOTAL SEMIVOLATILE COMPOUNDS
(SEE TABLE 6.6-1)
- J - ESTIMATED CONCENTRATION

NOTES:
 1. ALL CONCENTRATIONS ARE IN mg/kg, EXCEPT AS NOTED.
 2. NON-DETECTED COMPOUNDS ARE NOT SHOWN.

**NAVAL AIR STATION
FORT WORTH, TEXAS**

TANK 3001-3 EXCAVATION AND STOCKPILE SAMPLE RESULTS

PROJ. MGR. L. SCHUETTER	ACAD FILE NO. FIG66-2	FIGURE NO. 6.6-2
DRAWN BY J. HUNTER	PROJ. NO. 10-K-70200	DATE 3/14/97

anomalous SVOC results cannot be explained, given the low TPH and BTEX results, and the total lack of any observed contamination in the field.

6.6.5 Stockpile Sampling Results

Four samples were collected from the two soil stockpiles. TPH was detected in all four samples at concentrations ranging from 6.8J to 34.5 mg/kg. Three of the detections were at estimated concentrations below the laboratory PQL. No BTEX compounds were detected from any of the soil stockpile samples.

6.6.6 Waste Handling and Disposal

Water used to triple rinse the UST was collected directly from the tank with a vacuum truck while the tank was being cleaned. This water was transported offsite in the same vacuum truck used to extract the fluid from the UST. The soil from the stockpiles was below the TNRCC's action levels and was used as backfill in the tank excavation.

6.6.7 Conclusions

All soil sample results indicated concentrations of TPH and BTEX that were below TNRCC action levels. The 3001 excavation was backfilled with the excavated soil from the stockpiles. Because water had seeped into the excavation, it was necessary to add lime to the backfill soils to achieve the desired compaction and soil stability. The backfill was compacted, and the area was graded and covered with a crushed gravel finish.

7.0 UNDERGROUND STORAGE TANK UPGRADE RESULTS

Spill and overfill protection upgrades were installed on 11 USTs at various locations at NAS Fort Worth, as shown on Plate 1. The upgrades were completed to ensure compliance with federal and state UST regulations.

7.1 UNDERGROUND STORAGE TANK UPGRADE ACTIVITIES

A tank upgrade began with the removal of the soil cover to expose the top of the tank, piping, and remote fill station, if present. The cathodic protection was inspected and one or more of the following upgrades were added to bring the tank into compliance: (1) a tight fill adapter, (2) a spill protection manhole and/or, (3) an overfill protection mechanism (either a shut-off valve or overfill alarm). At several locations, Unified Services of Texas also added fill material, replaced tank vents, or made other repairs to bring tanks up to industry standards. A single soil sample was collected from the soil surrounding the fill pipe near the top of the tank and was analyzed for TPH by EPA Method 418.1. The area was then returned to original condition.

Unified Services of Texas report (Attachment 2) contains more detailed information regarding the tank upgrade activities including site specific maps, regulatory notifications, upgrade equipment information, photographic evidence, a chronology of events, copies of revised registrations, and tank tightness test results. The report also includes descriptions of a variety of other repairs made to the tanks that were necessary to meet regulatory criteria.

Samples at Tanks 4136A and 3001-1 were collected after backfilling using a hand auger. All other samples were collected during or immediately after excavation of soil around the fill pipe so samples could be collected without the use of a hand auger. Section 4.0 contains a more detailed description of the tank upgrade methodology.

7.2 UST UPGRADE ANALYTICAL RESULTS

The analytical results for soil samples collected at UST upgrade locations are listed in Table 7.2-1. TPH was detected in all samples collected, in concentrations ranging from 16 to 530 mg/kg. The highest concentration was in a sample from the fill pipe base at Tank 1015. The soil sample from the fill pipe at Tank 4171 contained a TPH concentration of 59.6 mg/kg, and 101 mg/kg TPH in the field duplicate sample from the same location. All other soil samples had TPH concentrations of less than 38 mg/kg.

7.3 UST UPGRADE CONCLUSIONS

After all upgrade and repair activities were completed on 28 May 1996 each tank was tested and observed to be operating as designed. Each tank was tested by Unified Services of Texas using Tracer Tight[®] technology. All tanks received passing results as documented in Unified Services of Texas report (Attachment 2).

**TABLE 7.2-1
Analytical Results for Tank Upgrades**

Sample Number	Date Sampled	Depth (feet)	Sample Type	TPH Method E418.1	Units
TE-1015-FPB	4/11/96	3.0	Soil	530	mg/kg
TE-UPG-3001-1	5/2/96	1.0	Soil	16	mg/kg
TE-4111-FP	4/16/96	1.0	Soil	22.3	mg/kg
TE-4127-FPB	4/15/96	2.5	Soil	17.9	mg/kg
TK-UPG4136-A	5/1/96	1.5	Soil	19.2	mg/kg
TE-4141-FP	4/17/96	2.5	Soil	19.6	mg/kg
TE-4143-FPB	4/16/96	2.5	Soil	31.6	mg/kg
TE-4145-FP	4/17/96	2.5	Soil	20.4	mg/kg
TE-4155-FP	4/23/96	2.5	Soil	37.7	mg/kg
TE-4171-FP	4/23/96	3.0	Soil	59.6	mg/kg
TE2-4171-FP	4/23/96	3.0	FD	101	mg/kg
TE-4216-FP	4/23/96	1.0	Soil	29.2	mg/kg

Notes:

FD field duplicate
mg/kg milligrams/kilogram
TPH total petroleum hydrocarbon

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8.0 REFERENCES

- Hargis and Associates, Inc. 1989 (July). *Summary of Interim Remedial Investigation, January 1987 to April 1989, U.S. Air Force Plant No. 4, Fort Worth, Texas.*
- Jacobs Engineering Group Inc. 1997 (January). *Draft Basewide Background Study, Volume I, NAS Fort Worth JRB, Texas (Formerly Carswell AFB, Texas).* Prepared for the U.S. Air Force Base Conversion Agency.
- Radian Corporation. 1991 (October). *Installation Restoration Program (IRP), Stage 2, Carswell AFB, Texas, Final Report, Remedial Investigation for the Flightline Area.* Prepared for Headquarters Strategic Air Command (HQ SAC/DE) Offutt Air Force Base, Nebraska, 68113-5001.
- U.S. Environmental Protection Agency. 1996 (July). *Soil Screening Guidance: User's Guide.* Washington, DC 20460: Office of Solid Waste and Emergency Response. Publication 9355.4-23.

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APPENDIX A

WASTE DISPOSAL MANIFESTS FOR CONTAMINATED SOIL

GENERATOR/MAILING ADDRESS FOR ORIGINAL

NAS F+ Worth		JRB	
Name			
Address			
F+ Worth	Tx	76127	
City	State	Zip	
Alan Flolo	817 731-8973 EXT 18		
Contact	Phone		

324 88
No 56564



1-800-256-9278

NON-HAZARDOUS WASTE MANIFEST

Landfill Permit # H1209
Location Avalon Tx

GENERATOR CERTIFICATE: I, as a representative of NAS F+ Worth JRB
certify that this shipment consists of 10 cubic yards/tons of
non-hazardous HydroCarbon contaminated soil (name of waste material) and
is classified as follows:

- Non-hazardous petroleum contaminated soils, Waste Code Number 3011
- Non-hazardous Municipal Special Waste
- Non-hazardous industrial waste. If generated in Texas, it is a Class II waste assigned Waste Code Number _____
- Non-hazardous Railroad Commission Regulated waste from _____ facility or pit,
- Wastewater treatment plant, septic tank, grease trap, or grit trap waste from _____ facility or location, or
- Other, explain: _____

GENERATOR		
Printed/Typed Name <u>NAS F+ Worth JRB</u>	Signature <u>Alan W. Flolo</u>	Date Shipped Month Day Year <u>05 21 96</u>
TRANSPORTER		
Printed/Typed Name <u>Chaney Trucking Roanoke Tx</u>	Signature <u>Jandy Dunavin #43</u>	Date Shipped Month Day Year <u>5-21-96</u>
LANDFILL OPERATOR CERTIFICATE OF RECEIPT OF WASTE		
Printed/Typed Name <u>RePublic Waste Industries Avalon Tx</u>	Signature <u>RM' Drew</u>	Date Shipped Month Day Year <u>5 21 96</u>

DO NOT SEPARATE FORM UNTIL ALL SIGNATURES ARE COMPLETED AND WASTE HAS BEEN RECEIVED BY LANDFILL AND SIGNED BY LANDFILL OPERATOR.

~~55~~ 228

NAS Ft Worth JRB			
Name			
Ft Worth Tx 76127			
Address			
City	State	Zip	
Alan Flolo	817	731 8973 Ext 18	
Contact	Phone		



1-800-256-9278

Landfill Permit # H 1209
Location Avalon Tx

NON-HAZARDOUS WASTE MANIFEST

GENERATOR CERTIFICATE: I, as a representative of NAS Ft Worth JRB
 certify that this shipment consists of 18 cubic yards/tons of
 non-hazardous Hydrocarbon contaminated soil (name of waste material) and
 is classified as follows:

- Non-hazardous petroleum contaminated soils, Waste Code Number 3011
- Non-hazardous Municipal Special Waste
- Non-hazardous industrial waste. If generated in Texas, it is a Class II waste assigned Waste Code Number _____
- Non-hazardous Railroad Commission Regulated waste from _____ facility or pit,
- Wastewater treatment plant, septic tank, grease trap, or grit trap waste from _____ facility or location, or
- Other, explain: _____

GENERATOR		
Printed/Typed Name NAS Ft Worth JRB	Signature <i>Alan W. Flolo</i>	Date Shipped Month Day Year 05 21 96
TRANSPORTER		
Printed/Typed Name Chaney Trucking Roanoke Tx	Signature <i>Larry D. Chaney</i>	Date Shipped Month Day Year 5 21 96
LANDFILL OPERATOR CERTIFICATE OF RECEIPT OF WASTE		
Printed/Typed Name Republic Waste Industries Inc Avalon Tx	Signature <i>M. Draw</i>	Date Shipped Month Day Year 5 21 96

DO NOT SEPARATE FORM UNTIL ALL SIGNATURES ARE COMPLETED AND
 WASTE HAS BEEN RECEIVED BY LANDFILL AND SIGNED BY LANDFILL OPERATOR.

LL8

NAS Ft Worth JRB		
<small>Name</small>		
Ft Worth Tx 76127		
<small>City</small>	<small>State</small>	<small>Zip</small>
Alan Flolo		(817) 731-8973 Ext 18
<small>Contact</small>		<small>Phone</small>



REPUBLIC
WASTE INDUSTRIES, INC.

1-800-256-9278

Landfill Permit # H1209

Location Avalon

NON-HAZARDOUS WASTE MANIFEST

GENERATOR CERTIFICATE: I, as a representative of NAS Ft Worth JRB
 certify that this shipment consists of 18 18 cubic yards/tons of
 non-hazardous Hydrocarbon Contaminated soil (name of waste material) and
 is classified as follows:

- Non-hazardous petroleum contaminated soils, Waste Code Number 3011
- Non-hazardous Municipal Special Waste
- Non-hazardous industrial waste. If generated in Texas, it is a Class II waste assigned Waste Code Number _____
- Non-hazardous Railroad Commission Regulated waste from _____ facility or pit,
- Wastewater treatment plant, septic tank, grease trap, or grit trap waste from _____ facility or location, or
- Other, explain: _____

GENERATOR		
Printed/Typed Name <u>NAS Ft Worth JRB</u>	Signature <u>Alan W. Flolo</u>	Date Shipped Month Day Year <u>05 21 96</u>
TRANSPORTER		
Printed/Typed Name <u>Chaney Trucking</u> <u>Roanoke Tx</u>	Signature <u>Robert G. Carter #100</u>	Date Shipped Month Day Year <u>5 - 21 - 96</u>
LANDFILL OPERATOR CERTIFICATE OF RECEIPT OF WASTE		
Printed/Typed Name <u>Republic Waste Industries</u> <u>Ine., Avalon Tx</u>	Signature <u>M. Shaw</u>	Date Shipped Month Day Year <u>5 21 96</u>

DO NOT SEPARATE FORM UNTIL ALL SIGNATURES ARE COMPLETED AND WASTE HAS BEEN RECEIVED BY LANDFILL AND SIGNED BY LANDFILL OPERATOR.

OLL8

NAS Ft. Worth JRB		
<small>Name</small>		
<small>Address</small>		
Ft. Worth	TX	76127
<small>City</small>	<small>State</small>	<small>Zip</small>
Alan Flolo	(817) 731-8973	Ext. 18
<small>Contact</small>	<small>Phone</small>	



NON-HAZARDOUS WASTE MANIFEST

Landfill Permit # H1209

Location Avalon, TX

NAS Ft. Worth JRB

GENERATOR CERTIFICATE: I, as a representative of _____
 certify that this shipment consists of 20 cubic yards/tons of
 non-hazardous Hydrocarbon Contaminated Soil (name of waste material) and
 is classified as follows:

- Non-hazardous petroleum contaminated soils, Waste Code Number 3012
- Non-hazardous Municipal Special Waste
- Non-hazardous industrial waste. If generated in Texas, it is a Class II waste assigned Waste Code Number _____
- Non-hazardous Railroad Commission Regulated waste from _____ facility or pit,
- Wastewater treatment plant, septic tank, grease trap, or grit trap waste from _____ facility or location, or
- Other, explain: _____

GENERATOR		
Printed/Typed Name NAS Ft. Worth JRB	Signature <i>Alan W. Flolo</i>	Date Shipped Month Day Year <u>05 21 96</u>
TRANSPORTER		
Printed/Typed Name Chaney Trucking Roanoke, TX	Signature <i>Way Bell 49</i>	Date Shipped Month Day Year <u>5 21 96</u>
LANDFILL OPERATOR CERTIFICATE OF RECEIPT OF WASTE		
Printed/Typed Name Republic Waste Industries, Inc. Avalon, TX	Signature <i>M. Swan</i>	Date Shipped Month Day Year <u>5 21 96</u>

DO NOT SEPARATE FORM UNTIL ALL SIGNATURES ARE COMPLETED AND WASTE HAS BEEN RECEIVED BY LANDFILL AND SIGNED BY LANDFILL OPERATOR.

TT3

NAS Ft. Worth JRB		
<small>Name</small>		
<small>Address</small>		
Ft. Worth	TX	76127
<small>City State Zip</small>		
Alan Flolo	(817) 731-8973	Ext. 18
<small>Contact</small>		<small>Phone</small>

No 57502

324 92



REPUBLIC
INDUSTRIES, INC.

1-800-256-9278

NON-HAZARDOUS WASTE MANIFEST

Landfill Permit # H1209
Location Avalon, TX

GENERATOR CERTIFICATE: I, as a representative of NAS Ft. Worth JRB certify that this shipment consists of 20 cubic yards/tons of non-hazardous Hydrocarbon Contaminated Soil (name of waste material) and is classified as follows:

- Non-hazardous petroleum contaminated soils, Waste Code Number 3012
- Non-hazardous Municipal Special Waste
- Non-hazardous industrial waste. If generated in Texas, it is a Class II waste assigned Waste Code Number _____
- Non-hazardous Railroad Commission Regulated waste from _____ facility or pit,
- Wastewater treatment plant, septic tank, grease trap, or grit trap waste from _____ facility or location, or
- Other, explain: _____

GENERATOR		
Printed/Typed Name NAS Ft. Worth JRB	Signature <i>Alan W. Flolo</i>	Date Shipped Month Day Year 05 21 96
TRANSPORTER		
Printed/Typed Name Chaney Trucking Roanoke, TX	Signature <i>Devin Langley</i> 131	Date Shipped Month Day Year 05 21 96
LANDFILL OPERATOR CERTIFICATE OF RECEIPT OF WASTE		
Printed/Typed Name Republic Waste Industries, Inc. Avalon, TX	Signature <i>M. Shaw</i>	Date Shipped Month Day Year 5 21 96

DO NOT SEPARATE FORM UNTIL ALL SIGNATURES ARE COMPLETED AND WASTE HAS BEEN RECEIVED BY LANDFILL AND SIGNED BY LANDFILL OPERATOR.

TT3

NAS Ft. Worth JRB		
<small>Name</small>		
Ft. Worth TX 76127		
<small>Address</small>		
Alan Flolo	(817) 731-8973	Ext. 18
<small>City</small>	<small>State</small>	<small>Zip</small>
<small>Contact</small>		<small>Phone</small>

No 57503
324 93



REPUBLIC
INDUSTRIES, INC.

1-800-256-9278

NON-HAZARDOUS WASTE MANIFEST

Landfill Permit # H 1209
Location Avalon, TX

GENERATOR CERTIFICATE: I, as a representative of NAS Ft. Worth JRB certify that this shipment consists of 20 cubic yards/tons of non-hazardous Hydrocarbon Contaminated Soil (name of waste material) and is classified as follows:

- Non-hazardous petroleum contaminated soils, Waste Code Number 3012
- Non-hazardous Municipal Special Waste
- Non-hazardous industrial waste. If generated in Texas, it is a Class II waste assigned Waste Code Number _____
- Non-hazardous Railroad Commission Regulated waste from _____ facility or pit,
- Wastewater treatment plant, septic tank, grease trap, or grit trap waste from _____ facility or location, or
- Other, explain: _____

GENERATOR		
Printed/Typed Name NAS Ft. Worth JRB	Signature <i>Alan W. Flolo</i>	Date Shipped Month Day Year <i>05 21 96</i>
TRANSPORTER		
Printed/Typed Name Chaney Trucking Roanoke, TX	Signature <i>Terry P. Chaney #149</i>	Date Shipped Month Day Year <i>5 21 96</i>
LANDFILL OPERATOR CERTIFICATE OF RECEIPT OF WASTE		
Printed/Typed Name Republic Waste Industries, Inc. Avalon, TX	Signature <i>M. Draw</i>	Date Shipped Month Day Year <i>5 21 96</i>

DO NOT SEPARATE FORM UNTIL ALL SIGNATURES ARE COMPLETED AND WASTE HAS BEEN RECEIVED BY LANDFILL AND SIGNED BY LANDFILL OPERATOR.

TT3

NAS Ft. Worth JRB		
<small>Name</small>		
Ft. Worth TX 76127		
<small>Address</small>		
Alan Flolo	(817) 731-8973	Ext. 18
<small>City</small>	<small>State</small>	<small>Zip</small>
<small>Contact</small>		<small>Phone</small>

No 57505

324 94



REPUBLIC
INDUSTRIES, INC.

1-800-256-9278

NON-HAZARDOUS WASTE MANIFEST

Landfill Permit # H1209
Location Avalon, TX

GENERATOR CERTIFICATE: I, as a representative of NAS Ft. Worth JRB certify that this shipment consists of 20 cubic yards/tons of non-hazardous Hydrocarbon Contaminated Soil (name of waste material) and is classified as follows:

- Non-hazardous petroleum contaminated soils, Waste Code Number 3012
- Non-hazardous Municipal Special Waste
- Non-hazardous industrial waste. If generated in Texas, it is a Class II waste assigned Waste Code Number _____
- Non-hazardous Railroad Commission Regulated waste from _____ facility or pit,
- Wastewater treatment plant, septic tank, grease trap, or grit trap waste from _____ facility or location, or
- Other, explain: _____

GENERATOR		
Printed/Typed Name NAS Ft. Worth JRB Fort Worth, Texas	Signature <i>Alan W. Flolo</i>	Date Shipped Month Day Year <u>05 21 96</u>
TRANSPORTER		
Printed/Typed Name Chaney Trucking Roanoke, TX	Signature <i>Phil Hale #70</i>	Date Shipped Month Day Year <u>MAY 21 1996</u>
LANDFILL OPERATOR CERTIFICATE OF RECEIPT OF WASTE		
Printed/Typed Name Republic Waste Industries, Inc. Avalon, TX	Signature <i>M. S. ...</i>	Date Shipped Month Day Year <u>5 21 96</u>

DO NOT SEPARATE FORM UNTIL ALL SIGNATURES ARE COMPLETED AND WASTE HAS BEEN RECEIVED BY LANDFILL AND SIGNED BY LANDFILL OPERATOR.

TTJ

No 57507

324 95



REPUBLIC
INDUSTRIES, INC.

1-800-256-9278

NAS Ft. Worth JRB		
<small>Name</small>		
<small>Address</small>		
Ft. Worth	TX	76127
<small>City State Zip</small>		
Alan Flolo	(817) 731-8973	Ext. 18
<small>Contact</small>		<small>Phone</small>

Landfill Permit # 41209
Location Avalon, TX

NON-HAZARDOUS WASTE MANIFEST

GENERATOR CERTIFICATE: I, as a representative of NAS Ft. Worth JRB
certify that this shipment consists of 20 20 cubic yards/tons of
non-hazardous Hydrocarbon Contaminated Soil (name of waste material) and
is classified as follows:

- Non-hazardous petroleum contaminated soils, Waste Code Number 3012
- Non-hazardous Municipal Special Waste
- Non-hazardous industrial waste. If generated in Texas, it is a Class II waste assigned Waste Code Number _____
- Non-hazardous Railroad Commission Regulated waste from _____ facility or pit,
- Wastewater treatment plant, septic tank, grease trap, or grit trap waste from _____ facility or location, or
- Other, explain: _____

GENERATOR

Printed/Typed Name NAS Ft. Worth JRB Fort Worth, Texas	Signature <i>Alan W. Flolo</i>	Date Shipped Month Day Year <i>05 21 96</i>
--	-----------------------------------	---

TRANSPORTER

Printed/Typed Name Chaney Trucking Roanoke, TX	Signature <i>Santo Luevano #29</i>	Date Shipped Month Day Year <i>05 21 96</i>
--	---------------------------------------	---

LANDFILL OPERATOR CERTIFICATE OF RECEIPT OF WASTE

Printed/Typed Name Republic Waste Industries, Inc. Avalon, TX	Signature <i>M. Shaw</i>	Date Shipped Month Day Year <i>5 21 96</i>
---	-----------------------------	--

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TT3

GENERATOR/MAILING ADDRESS FOR ORIGINAL

NAS Ft. Worth JRB <small>Name</small>		
Address		
Ft. Worth	TX	76127
<small>City</small>	<small>State</small>	<small>Zip</small>
Alan Flolo	(817) 731-8973	Ext. 18
<small>Contact</small>	<small>Phone</small>	

No 57508

324 96



REPUBLIC
INDUSTRIES, INC.

1-800-256-9278

NON-HAZARDOUS WASTE MANIFEST

Landfill Permit # H1209

Location Avalon, TX

GENERATOR CERTIFICATE: I, as a representative of NAS Ft. Worth JRB certify that this shipment consists of 20 cubic yards tons of non-hazardous Hydrocarbon Contaminated Soil (name of waste material) and is classified as follows:

- Non-hazardous petroleum contaminated soils, Waste Code Number 3012
- Non-hazardous Municipal Special Waste
- Non-hazardous industrial waste. If generated in Texas, it is a Class II waste assigned Waste Code Number _____
- Non-hazardous Railroad Commission Regulated waste from _____ facility or pit,
- Wastewater treatment plant, septic tank, grease trap, or grit trap waste from _____ facility or location, or
- Other, explain: _____

GENERATOR

Printed/Typed Name NAS Ft. Worth JRB Fort Worth, Texas	Signature <i>Alan W Flolo</i>	Date Shipped Month Day Year 05 21 96
--	----------------------------------	--

TRANSPORTER

Printed/Typed Name Chaney Trucking Roanoke, TX	Signature <i>Bobbie A. Cruse</i>	Date Shipped Month Day Year 5-21-96
--	-------------------------------------	---

LANDFILL OPERATOR CERTIFICATE OF RECEIPT OF WASTE

Printed/Typed Name Republic Waste Industries, Inc. Avalon, TX	Signature <i>M. D. ...</i>	Date Shipped Month Day Year 5 21 96
---	-------------------------------	---

DO NOT SEPARATE FORM UNTIL ALL SIGNATURES ARE COMPLETED AND WASTE HAS BEEN RECEIVED BY LANDFILL AND SIGNED BY LANDFILL OPERATOR.

TT3

NAS Ft. Worth JRB		
<small>Name</small>		
<small>Address</small>		
Ft. Worth	TX	76127
<small>City State Zip</small>		
Alan Flolo	(817) 731-8973	Ext. 18
<small>Contact</small>		<small>Phone</small>

No 57509

324 97



REPUBLIC
INDUSTRIES, INC.

1-800-256-9278

Landfill Permit # H1209

Location Avalon, TX

NON-HAZARDOUS WASTE MANIFEST

GENERATOR CERTIFICATE: I, as a representative of NAS Ft. Worth JRB certify that this shipment consists of 20 cubic yards/tons of non-hazardous Hydrocarbon Contaminated Soil (name of waste material) and is classified as follows:

- Non-hazardous petroleum contaminated soils, Waste Code Number 3012
- Non-hazardous Municipal Special Waste
- Non-hazardous industrial waste. If generated in Texas, it is a Class II waste assigned Waste Code Number _____
- Non-hazardous Railroad Commission Regulated waste from _____ facility or pit,
- Wastewater treatment plant, septic tank, grease trap, or grit trap waste from _____ facility or location, or
- Other, explain: _____

GENERATOR		
Printed/Typed Name NAS Ft. Worth JRB Fort Worth, Texas	Signature <i>Alan W. Flolo</i>	Date Shipped Month Day Year <u>05 21 96</u>
TRANSPORTER		
Printed/Typed Name Chaney Trucking Roanoke, TX	Signature <i>David [unclear]</i>	Date Shipped Month Day Year <u>5/21/96</u>
LANDFILL OPERATOR CERTIFICATE OF RECEIPT OF WASTE		
Printed/Typed Name Republic Waste Industries, Inc. Avalon, TX	Signature <i>M. [unclear]</i>	Date Shipped Month Day Year <u>5 21 96</u>

DO NOT SEPARATE FORM UNTIL ALL SIGNATURES ARE COMPLETED AND WASTE HAS BEEN RECEIVED BY LANDFILL AND SIGNED BY LANDFILL OPERATOR.

TTJ

No 57510

324 98



REPUBLIC
INDUSTRIES, INC.

1-800-256-9278

Name NAS Ft. Worth JRB		
Address Ft. Worth TX 76127		
City	State	Zip
Alan Flolo	(817) 731-8973	Ext. 18
Contact	Phone	

Landfill Permit # 41209
Location Avalon, TX

NON-HAZARDOUS WASTE MANIFEST

GENERATOR CERTIFICATE: I, as a representative of NAS Ft. Worth JRB certify that this shipment consists of 20 cubic yards/tons of non-hazardous Hydrocarbon Contaminated Soil (name of waste material) and is classified as follows:

- Non-hazardous petroleum contaminated soils, Waste Code Number 3012
- Non-hazardous Municipal Special Waste
- Non-hazardous industrial waste. If generated in Texas, it is a Class II waste assigned Waste Code Number _____
- Non-hazardous Railroad Commission Regulated waste from _____ facility or pit,
- Wastewater treatment plant, septic tank, grease trap, or grit trap waste from _____ facility or location, or
- Other, explain: _____

GENERATOR

Printed/Typed Name NAS Ft. Worth JRB Fort Worth, Texas	Signature <i>Alan Flolo</i>	Date Shipped Month Day Year <u>05 21 96</u>
--	--------------------------------	---

TRANSPORTER

Printed/Typed Name Chaney Trucking Roanoke, TX	Signature <u>TRK #471</u> <i>Dale Arnold #1</i>	Date Shipped Month Day Year <u>5 21 96</u>
--	--	--

LANDFILL OPERATOR CERTIFICATE OF RECEIPT OF WASTE

Printed/Typed Name Republic Waste Industries, Inc. Avalon, TX	Signature <i>M. Dean</i>	Date Shipped Month Day Year <u>5 21 96</u>
---	-----------------------------	--

DO NOT SEPARATE FORM UNTIL ALL SIGNATURES ARE COMPLETED AND WASTE HAS BEEN RECEIVED BY LANDFILL AND SIGNED BY LANDFILL OPERATOR.

TT 3

NAS Ft. Worth JRB		
<small>Name</small>		
<small>Address</small>		
Ft. Worth	TX	76127
<small>City State</small>		
Alan Flolo	(817) 731-8973	Ext. 218
<small>Contact</small>		<small>Phone</small>

No 57511

324 99



REPUBLIC
INDUSTRIES, INC.

1-800-256-9278

Landfill Permit # H/209
Avalon, TX

Location _____

NON-HAZARDOUS WASTE MANIFEST

GENERATOR CERTIFICATE: I, as a representative of NAS Ft. Worth JRB
certify that this shipment consists of 20 cubic yards tons of
non-hazardous Hydrocarbon Contaminated Soil (name of waste material) and
is classified as follows:

- Non-hazardous petroleum contaminated soils, Waste Code Number 3012
- Non-hazardous Municipal Special Waste
- Non-hazardous industrial waste. If generated in Texas, it is a Class II waste assigned Waste Code Number _____
- Non-hazardous Railroad Commission Regulated waste from _____ facility or pit,
- Wastewater treatment plant, septic tank, grease trap, or grit trap waste from _____ facility or location, or
- Other, explain: _____

GENERATOR		
Printed/Typed Name NAS Ft. Worth JRB Fort Worth, Texas	Signature <i>Alan W Flolo</i>	Date Shipped Month Day Year <u>05 21 96</u>
TRANSPORTER		
Printed/Typed Name Chaney Trucking Roanoke, TX <u>#472</u>	Signature <i>Donald A. Hedley</i>	Date Shipped Month Day Year <u>5 21 96</u>
LANDFILL OPERATOR CERTIFICATE OF RECEIPT OF WASTE		
Printed/Typed Name Republic Waste Industries, Inc. Avalon, TX	Signature <i>M. Deaw</i>	Date Shipped Month Day Year <u>5 21 96</u>

DO NOT SEPARATE FORM UNTIL ALL SIGNATURES ARE COMPLETED AND WASTE HAS BEEN RECEIVED BY LANDFILL AND SIGNED BY LANDFILL OPERATOR.

TTJ

GENERATOR/MAILING ADDRESS FOR ORIGINAL

NAS Ft. Worth JRB		
<small>Name</small>		
Ft. Worth TX 76127		
<small>Address</small>		
Alan Flolo	(817) 731-8973	Ext. 18
<small>City</small>	<small>State</small>	<small>Zip</small>
<small>Contact</small>		<small>Phone</small>

No 57512

324100



REPUBLIC
INDUSTRIES, INC.

1-800-256-9278

NON-HAZARDOUS WASTE MANIFEST

Landfill Permit # H1209

Location Avalon, TX

GENERATOR CERTIFICATE: I, as a representative of NAS Ft. Worth JRB certify that this shipment consists of 20 cubic yards/tons of non-hazardous Hydrocarbon Contaminated Soil (name of waste material) and is classified as follows:

- Non-hazardous petroleum contaminated soils, Waste Code Number 3012
- Non-hazardous Municipal Special Waste
- Non-hazardous industrial waste. If generated in Texas, it is a Class II waste assigned Waste Code Number _____
- Non-hazardous Railroad Commission Regulated waste from _____ facility or pit,
- Wastewater treatment plant, septic tank, grease trap, or grit trap waste from _____ facility or location, or
- Other, explain: _____

GENERATOR		
Printed/Typed Name NAS Ft. Worth JRB Fort Worth, Texas	Signature <i>Alan Flolo</i>	Date Shipped Month Day Year 05 21 96
TRANSPORTER		
Printed/Typed Name Chaney Trucking Roanoke, TX	Signature <u>(469)</u> <i>Herald Jones # 9</i>	Date Shipped Month Day Year 5 - 21 - 96
LANDFILL OPERATOR CERTIFICATE OF RECEIPT OF WASTE		
Printed/Typed Name Republic Waste Industries, Inc. Avalon, TX	Signature <i>McDean</i>	Date Shipped Month Day Year 5 21 96

DO NOT SEPARATE FORM UNTIL ALL SIGNATURES ARE COMPLETED AND WASTE HAS BEEN RECEIVED BY LANDFILL AND SIGNED BY LANDFILL OPERATOR.

TT3

NAS Ft. Worth JRB		
<small>Name</small>		
Ft. Worth TX 76127		
<small>Address</small>		
Alan Flolo	(817) 731-8973	Ext. 18
<small>City</small>	<small>State</small>	<small>Zip</small>
<small>Contact</small>	<small>Phone</small>	

No 57513

324101



REPUBLIC
INDUSTRIES, INC.

1-800-256-9278

NON-HAZARDOUS WASTE MANIFEST

Landfill Permit # H1209
Location Avalon, TX

GENERATOR CERTIFICATE: I, as a representative of NAS Ft. Worth JRB certify that this shipment consists of 20 cubic yards tons of non-hazardous Hydrocarbon Contaminated Soil (name of waste material) and is classified as follows:

- Non-hazardous petroleum contaminated soils, Waste Code Number 3012
- Non-hazardous Municipal Special Waste
- Non-hazardous industrial waste. If generated in Texas, it is a Class II waste assigned Waste Code Number _____
- Non-hazardous Railroad Commission Regulated waste from _____ facility or pit,
- Wastewater treatment plant, septic tank, grease trap, or grit trap waste from _____ facility or location, or
- Other, explain: _____

GENERATOR		
Printed/Typed Name NAS Ft. Worth JRB Fort Worth, Texas	Signature <i>Alan W. Flolo</i>	Date Shipped Month Day Year 05 21 96
TRANSPORTER		
Printed/Typed Name Chaney Trucking Roanoke, TX	Signature <i>Jan E. Chaney</i> (271)	Date Shipped Month Day Year 5 21 96
LANDFILL OPERATOR CERTIFICATE OF RECEIPT OF WASTE		
Printed/Typed Name Republic Waste Industries, Inc. Avalon, TX	Signature <i>M. D. ...</i>	Date Shipped Month Day Year 5 21 96

DO NOT SEPARATE FORM UNTIL ALL SIGNATURES ARE COMPLETED AND WASTE HAS BEEN RECEIVED BY LANDFILL AND SIGNED BY LANDFILL OPERATOR.

TT3

No 57514
324102

NAS Ft. Worth JRB		
<small>Name</small>		
<small>Address</small>		
Ft. Worth	TX	76127
<small>City State Zip</small>		
Alan Flolo	(817) 731-8973	Ext. 18
<small>Contact</small>		<small>Phone</small>



Landfill Permit # H1209
Location Avalon, TX

NON-HAZARDOUS WASTE MANIFEST

GENERATOR CERTIFICATE: I, as a representative of NAS Ft. Worth JRB certify that this shipment consists of 20 cubic yards tons of non-hazardous Hydrocarbon Contaminated Soil (name of waste material) and is classified as follows:

- Non-hazardous petroleum contaminated soils, Waste Code Number 3012
- Non-hazardous Municipal Special Waste
- Non-hazardous industrial waste. If generated in Texas, it is a Class II waste assigned Waste Code Number _____
- Non-hazardous Railroad Commission Regulated waste from _____ facility or pit,
- Wastewater treatment plant, septic tank, grease trap, or grit trap waste from _____ facility or location, or
- Other, explain: _____

GENERATOR		
Printed/Typed Name NAS Ft. Worth JRB Fort Worth, Texas	Signature <i>Alan W. Flolo</i>	Date Shipped Month Day Year 05 21 96
TRANSPORTER		
Printed/Typed Name Chaney Trucking Roanoke, TX	Signature <i>Paul Stevens</i> 480 71	Date Shipped Month Day Year 5 21-96
LANDFILL OPERATOR CERTIFICATE OF RECEIPT OF WASTE		
Printed/Typed Name Republic Waste Industries, Inc. Avalon, TX	Signature <i>M. Draw</i>	Date Shipped Month Day Year 5 21 96

DO NOT SEPARATE FORM UNTIL ALL SIGNATURES ARE COMPLETED AND WASTE HAS BEEN RECEIVED BY LANDFILL AND SIGNED BY LANDFILL OPERATOR.

TT3

NAS Ft. Worth JRB		
Name		
Job # 0301960586		
Address		
Ft. Worth	TX	76127
State		
Alan Flo th	(817) 731-8973	Ext. ^{Zip} 18
Contact		Phone

No 57515

324103



REPUBLIC
INDUSTRIES, INC.

1-800-256-9278

NON-HAZARDOUS WASTE MANIFEST

Landfill Permit # H1209

Location Avalon, TX

GENERATOR CERTIFICATE: I, as a representative of NAS Ft. Worth JRB certify that this shipment consists of 20 (cubic yards) tons of non-hazardous Hydrocarbon Contaminated Soil (name of waste material) and is classified as follows:

- Non-hazardous petroleum contaminated soils, Waste Code Number 3012
- Non-hazardous Municipal Special Waste
- Non-hazardous industrial waste. If generated in Texas, it is a Class II waste assigned Waste Code Number _____
- Non-hazardous Railroad Commission Regulated waste from _____ facility or pit,
- Wastewater treatment plant, septic tank, grease trap, or grit trap waste from _____ facility or location, or
- Other, explain: _____

GENERATOR		
Printed/Typed Name NAS Ft. Worth JRB Fort Worth, Texas	Signature <i>Alan W Flow</i>	Date Shipped Month Day Year <u>05 21 96</u>
TRANSPORTER		
Printed/Typed Name Chaney Trucking Roanoke, TX	Signature <i>Jandy Dunaway #43</i>	Date Shipped Month Day Year <u>5 21 96</u>
LANDFILL OPERATOR CERTIFICATE OF RECEIPT OF WASTE		
Printed/Typed Name Republic Waste Industries, Inc. Avalon, TX	Signature <i>M Shaw</i>	Date Shipped Month Day Year <u>5 21 96</u>

DO NOT SEPARATE FORM UNTIL ALL SIGNATURES ARE COMPLETED AND WASTE HAS BEEN RECEIVED BY LANDFILL AND SIGNED BY LANDFILL OPERATOR.

TT3

GENERATOR/MAILING ADDRESS FOR ORIGINAL

NAS Ft. Worth JRB		
Name		
Job # 0301960586		
Ft. Worth	Address TX	76127
Alan Flores	(817) 731-8973	Ext. 2p18
Contact	Phone	

No 57516
324104



NON-HAZARDOUS WASTE MANIFEST

Landfill Permit # H1209
Avalon, TX
Location _____

GENERATOR CERTIFICATE: I, as a representative of NAS Ft. Worth JRB
certify that this shipment consists of 20 cubic yards tons of
non-hazardous Hydrocarbon Contaminated Soil (name of waste material) and
is classified as follows:

- Non-hazardous petroleum contaminated soils, Waste Code Number 3012
- Non-hazardous Municipal Special Waste
- Non-hazardous industrial waste. If generated in Texas, it is a Class II waste assigned Waste Code Number _____
- Non-hazardous Railroad Commission Regulated waste from _____ facility or pit,
- Wastewater treatment plant, septic tank, grease trap, or grit trap waste from _____ facility or location, or
- Other, explain: _____

GENERATOR		
Printed/Typed Name NAS Ft. Worth JRB Fort Worth, Texas	Signature <i>Alan W. Flores</i>	Date Shipped Month Day Year 05 21 96
TRANSPORTER		
Printed/Typed Name Chaney Trucking Roanoke, TX	Signature <i>Robert G. Carter #100</i>	Date Shipped Month Day Year 05 21 96
LANDFILL OPERATOR CERTIFICATE OF RECEIPT OF WASTE		
Printed/Typed Name Republic Waste Industries, Inc. Avalon, TX	Signature <i>McDraw</i>	Date Shipped Month Day Year 5 21 96

DO NOT SEPARATE FORM UNTIL ALL SIGNATURES ARE COMPLETED AND WASTE HAS BEEN RECEIVED BY LANDFILL AND SIGNED BY LANDFILL OPERATOR. TT3

No 57517

324105



REPUBLIC
INDUSTRIES, INC.

1-800-256-9278

Landfill Permit # H1209

Location Avalon, TX

NAS Ft. Worth JRB <small>Name</small>		
Job # 0301960586 <small>Address</small>		
Ft. Worth	TX	76127
<small>City</small>	<small>State</small>	<small>Zip</small>
Alan Flolo	(817) 731-8973	Ext. 18
<small>Contact</small>	<small>Phone</small>	

NON-HAZARDOUS WASTE MANIFEST

GENERATOR CERTIFICATE: I, as a representative of NAS Ft. Worth JRB certify that this shipment consists of 20 cubic yards of non-hazardous Hydrocarbon Contaminated Soil (name of waste material) and is classified as follows:

- Non-hazardous petroleum contaminated soils, Waste Code Number 3012
- Non-hazardous Municipal Special Waste
- Non-hazardous industrial waste. If generated in Texas, it is a Class II waste assigned Waste Code Number _____
- Non-hazardous Railroad Commission Regulated waste from _____ facility or pit,
- Wastewater treatment plant, septic tank, grease trap, or grit trap waste from _____ facility or location, or
- Other, explain: _____

GENERATOR

Printed/Typed Name NAS Ft. Worth JRB Fort Worth, Texas	Signature <i>Alan W. Flolo</i>	Date Shipped Month Day Year 05 21 96
--	-----------------------------------	--

TRANSPORTER

Printed/Typed Name Chaney Trucking Roanoke, TX	Signature <i>Terry P. Cochran #149</i>	Date Shipped Month Day Year 5 21 96
--	---	---

LANDFILL OPERATOR CERTIFICATE OF RECEIPT OF WASTE

Printed/Typed Name Republic Waste Industries, Inc. Avalon, TX	Signature <i>M. C. D... ..</i>	Date Shipped Month Day Year 5 21 96
---	-----------------------------------	---

DO NOT SEPARATE FORM UNTIL ALL SIGNATURES ARE COMPLETED AND WASTE HAS BEEN RECEIVED BY LANDFILL AND SIGNED BY LANDFILL OPERATOR.

TT3

No 57518
324106

NAS Ft. Worth JRB <small>Name</small>		
Job # 0301960586 <small>Address</small>		
Ft. Worth	TX	76127
<small>City</small>	<small>State</small>	<small>Zip</small>
Alan Flolo	(817) 731-8973	Ext. 18
<small>Contact</small>	<small>Phone</small>	



NON-HAZARDOUS WASTE MANIFEST

Landfill Permit # H/209
Location Avalon, TX

GENERATOR CERTIFICATE: I, as a representative of NAS Ft. Worth JRB certify that this shipment consists of 20 cubic yards tons of non-hazardous Hydrocarbon Contaminated Soil (name of waste material) and is classified as follows:

- Non-hazardous petroleum contaminated soils, Waste Code Number 3012
- Non-hazardous Municipal Special Waste
- Non-hazardous industrial waste. If generated in Texas, it is a Class II waste assigned Waste Code Number _____
- Non-hazardous Railroad Commission Regulated waste from _____ facility or pit,
- Wastewater treatment plant, septic tank, grease trap, or grit trap waste from _____ facility or location, or
- Other, explain: _____

GENERATOR		
Printed/Typed Name NAS Ft. Worth JRB Fort Worth, Texas	Signature <i>Alan W Flolo</i>	Date Shipped Month Day Year <i>05 21 96</i>
TRANSPORTER		
Printed/Typed Name Chaney Trucking Roanoke, TX	Signature <i>Larry Langley</i>	Date Shipped Month Day Year <i>5 21 96</i>
LANDFILL OPERATOR CERTIFICATE OF RECEIPT OF WASTE		
Printed/Typed Name Republic Waste Industries, Inc. Avalon, TX	Signature <i>M. Grant</i>	Date Shipped Month Day Year <i>5 12 96</i>

DO NOT SEPARATE FORM UNTIL ALL SIGNATURES ARE COMPLETED AND WASTE HAS BEEN RECEIVED BY LANDFILL AND SIGNED BY LANDFILL OPERATOR.

TF3

GENERATOR/MAILING ADDRESS FOR ORIGINAL

NAS Ft. Worth JRB		
<small>Name</small>		
Job # 0301960586		
<small>Address</small>		
Ft. Worth	TX	76127
<small>City State Zip</small>		
Alan Flolo	(817) 731-8973	Ext. 18
<small>Contact</small>		<small>Phone</small>

No 57519

324107



REPUBLIC
INDUSTRIES, INC.

1-800-256-9278

Landfill Permit # H1209
Location Avalon, TX

NON-HAZARDOUS WASTE MANIFEST

GENERATOR CERTIFICATE: I, as a representative of NAS Ft. Worth JRB certify that this shipment consists of 20 cubic yards/tons of non-hazardous Hydrocarbon Contaminated Soil (name of waste material) and is classified as follows:

- Non-hazardous petroleum contaminated soils, Waste Code Number 3012
- Non-hazardous Municipal Special Waste
- Non-hazardous industrial waste. If generated in Texas, it is a Class II waste assigned Waste Code Number _____
- Non-hazardous Railroad Commission Regulated waste from _____ facility or pit,
- Wastewater treatment plant, septic tank, grease trap, or grit trap waste from _____ facility or location, or
- Other, explain: _____

GENERATOR		
Printed/Typed Name NAS Ft. Worth JRB Fort Worth, Texas	Signature <i>Alan W Flolo</i>	Date Shipped Month Day Year 05 21 96
TRANSPORTER		
Printed/Typed Name Chaney Trucking Roanoke, TX	Signature <i>Dennis Langley</i> 131	Date Shipped Month Day Year 05 21 96
LANDFILL OPERATOR CERTIFICATE OF RECEIPT OF WASTE		
Printed/Typed Name Republic Waste Industries, Inc. Avalon, TX	Signature <i>M. Dean</i>	Date Shipped Month Day Year 5 21 96

DO NOT SEPARATE FORM UNTIL ALL SIGNATURES ARE COMPLETED AND WASTE HAS BEEN RECEIVED BY LANDFILL AND SIGNED BY LANDFILL OPERATOR.

TT3

NAS Ft. Worth JRB		
Name		
Job # 0301960586		
Address		
Ft. Worth	TX	76127
City State Zip		
Alan Flolo	(817) 731-8973	Ext. 18
Contact	Phone	

No 57520
324108



REPUBLIC
INDUSTRIES, INC.

1-800-256-9278

NON-HAZARDOUS WASTE MANIFEST

Landfill Permit # H1209
Location Avalon, TX

GENERATOR CERTIFICATE: I, as a representative of NAS Ft. Worth JRB certify that this shipment consists of 20 (cubic yards) tons of non-hazardous Hydrocarbon Contaminated Soil (name of waste material) and is classified as follows:

- Non-hazardous petroleum contaminated soils, Waste Code Number 3012
- Non-hazardous Municipal Special Waste
- Non-hazardous industrial waste. If generated in Texas, it is a Class II waste assigned Waste Code Number _____
- Non-hazardous Railroad Commission Regulated waste from _____ facility or pit,
- Wastewater treatment plant, septic tank, grease trap, or grit trap waste from _____ facility or location, or
- Other, explain: _____

GENERATOR		
Printed/Typed Name NAS Ft. Worth JRB Fort Worth, Texas	Signature <i>Alan W Flolo</i>	Date Shipped Month Day Year <u>05 21 96</u>
TRANSPORTER		
Printed/Typed Name Chaney Trucking Roanoke, TX <u>464</u>	Signature <i>May Bell</i> <u>49</u>	Date Shipped Month Day Year <u>5 21-96</u>
LANDFILL OPERATOR CERTIFICATE OF RECEIPT OF WASTE		
Printed/Typed Name Republic Waste Industries, Inc. Avalon, TX	Signature <i>M. Draw</i>	Date Shipped Month Day Year <u>5 21 96</u>

DO NOT SEPARATE FORM UNTIL ALL SIGNATURES ARE COMPLETED AND WASTE HAS BEEN RECEIVED BY LANDFILL AND SIGNED BY LANDFILL OPERATOR.

TT3

GENERATOR/MAILING ADDRESS FOR ORIGINAL

NAS Ft. Worth JRB		
<small>Name</small>		
Job # 0301960586		
<small>Address</small>		
Ft. Worth	TX	76127
<small>City State Zip</small>		
Alan Flolo	(817) 731-8973	Ext. 18
<small>Contact</small>		<small>Phone</small>

No 57521
324109



REPUBLIC
INDUSTRIES, INC.

1-800-256-9278

Landfill Permit # H1209
Location Avalon, TX

NON-HAZARDOUS WASTE MANIFEST

GENERATOR CERTIFICATE: I, as a representative of NAS Ft. Worth JRB
certify that this shipment consists of 20 cubic yards tons of
non-hazardous Hydrocarbon Contaminated Soil (name of waste material) and
is classified as follows:

- Non-hazardous petroleum contaminated soils, Waste Code Number 3012
- Non-hazardous Municipal Special Waste
- Non-hazardous industrial waste. If generated in Texas, it is a Class II waste assigned Waste Code Number _____
- Non-hazardous Railroad Commission Regulated waste from _____ facility or pit,
- Wastewater treatment plant, septic tank, grease trap, or grit trap waste from _____ facility or location, or
- Other, explain: _____

GENERATOR		
Printed/Typed Name NAS Ft. Worth JRB Fort Worth, Texas	Signature <i>Alan W Flolo</i>	Date Shipped Month Day Year <u>05 21 96</u>
TRANSPORTER		
Printed/Typed Name Chaney Trucking Roanoke, TX	Signature <i>Phil Hale</i> #70	Date Shipped Month Day Year <u>MAY 21, 1996</u>
LANDFILL OPERATOR CERTIFICATE OF RECEIPT OF WASTE		
Printed/Typed Name Republic Waste Industries, Inc. Avalon, TX	Signature <i>M. Deau</i>	Date Shipped Month Day Year <u>5 21 96</u>

DO NOT SEPARATE FORM UNTIL ALL SIGNATURES ARE COMPLETED AND WASTE HAS BEEN RECEIVED BY LANDFILL AND SIGNED BY LANDFILL OPERATOR.

TT3

NAS Ft. Worth JRB		
<small>Name</small>		
Job # 0301960586		
<small>Address</small>		
Ft. Worth	TX	76127
<small>City State Zip</small>		
Alan Flolo	(817) 731-8973	Ext. 18
<small>Contact</small>		<small>Phone</small>

No 57522
324110



1-800-256-9278

Landfill Permit # H1209
Location Avalon, TX

NON-HAZARDOUS WASTE MANIFEST

GENERATOR CERTIFICATE: I, as a representative of NAS Ft. Worth JRB certify that this shipment consists of 20 cubic yards tons of non-hazardous Hydrocarbon Contaminated Soil (name of waste material) and is classified as follows:

- Non-hazardous petroleum contaminated soils, Waste Code Number 3012
- Non-hazardous Municipal Special Waste
- Non-hazardous industrial waste. If generated in Texas, it is a Class II waste assigned Waste Code Number _____
- Non-hazardous Railroad Commission Regulated waste from _____ facility or pit,
- Wastewater treatment plant, septic tank, grease trap, or grit trap waste from _____ facility or location, or
- Other, explain: _____

GENERATOR		
Printed/Typed Name NAS Ft. Worth JRB Fort Worth, Texas	Signature <i>Alan Flolo</i>	Date Shipped Month Day Year 05 21 96
TRANSPORTER		
Printed/Typed Name Chaney Trucking Roanoke, TX	Signature <i>Robert Chaney #52</i>	Date Shipped Month Day Year 05-21-96
LANDFILL OPERATOR CERTIFICATE OF RECEIPT OF WASTE		
Printed/Typed Name Republic Waste Industries, Inc. Avalon, TX	Signature <i>M. Dean</i>	Date Shipped Month Day Year 5 21 96

DO NOT SEPARATE FORM UNTIL ALL SIGNATURES ARE COMPLETED AND WASTE HAS BEEN RECEIVED BY LANDFILL AND SIGNED BY LANDFILL OPERATOR.

TT3

NAS Ft. Worth JRB <small>Name</small>		
Job # 0301960586 <small>Address</small>		
Ft. Worth	TX	76127
<small>City</small>	<small>State</small>	<small>Zip</small>
Alan Flolo	(817) 731-8973 Ext. 18	
<small>Contact</small>	<small>Phone</small>	

No 57523
324111



NON-HAZARDOUS WASTE MANIFEST

Landfill Permit # H1209
Location Avalon, TX

GENERATOR CERTIFICATE: I, as a representative of NAS Ft. Worth JRB certify that this shipment consists of 20 cubic yards tons of non-hazardous Hydrocarbon Contaminated Soil (name of waste material) and is classified as follows:

- Non-hazardous petroleum contaminated soils, Waste Code Number 3012
- Non-hazardous Municipal Special Waste
- Non-hazardous industrial waste. If generated in Texas, it is a Class II waste assigned Waste Code Number _____
- Non-hazardous Railroad Commission Regulated waste from _____ facility or pit,
- Wastewater treatment plant, septic tank, grease trap, or grit trap waste from _____ facility or location, or
- Other, explain: _____

GENERATOR		
Printed/Typed Name NAS Ft. Worth JRB Fort Worth, Texas	Signature <i>Alan W Flolo</i>	Date Shipped Month Day Year 05 21 96
TRANSPORTER		
Printed/Typed Name Chaney Trucking Roanoke, TX	Signature TK#466 <i>Santos Luevano #29</i>	Date Shipped Month Day Year 05 21 96
LANDFILL OPERATOR CERTIFICATE OF RECEIPT OF WASTE		
Printed/Typed Name Republic Waste Industries, Inc. Avalon, TX	Signature <i>M. Snow</i>	Date Shipped Month Day Year 5 21 96

DO NOT SEPARATE FORM UNTIL ALL SIGNATURES ARE COMPLETED AND WASTE HAS BEEN RECEIVED BY LANDFILL AND SIGNED BY LANDFILL OPERATOR.

TT3

NAS Ft. Worth JRB		
Name		
Job # 0301960586		
Address		
Ft. Worth	TX	76127
City State Zip		
Alan Flolo	(817) 731-8973	Ext. 18
Contact		Phone

No 57524

324112



REPUBLIC
INDUSTRIES, INC.

1-800-256-9278

NON-HAZARDOUS WASTE MANIFEST

Landfill Permit # H1209
Location Avalon, TX

GENERATOR CERTIFICATE: I, as a representative of NAS Ft. Worth JRB certify that this shipment consists of 20 cubic yards/tons of non-hazardous Hydrocarbon Contaminated Soil (name of waste material) and is classified as follows:

- Non-hazardous petroleum contaminated soils, Waste Code Number 3012
- Non-hazardous Municipal Special Waste
- Non-hazardous industrial waste. If generated in Texas, it is a Class II waste assigned Waste Code Number _____
- Non-hazardous Railroad Commission Regulated waste from _____ facility or pit,
- Wastewater treatment plant, septic tank, grease trap, or grit trap waste from _____ facility or location, or
- Other, explain: _____

GENERATOR		
Printed/Typed Name NAS Ft. Worth JRB Fort Worth, Texas	Signature <i>Alan W Flolo</i>	Date Shipped Month Day Year <u>05 21 96</u>
TRANSPORTER		
Printed/Typed Name Chaney Trucking Roanoke, TX	Signature <i>David L. ...</i>	Date Shipped Month Day Year <u>5 21 96</u>
LANDFILL OPERATOR CERTIFICATE OF RECEIPT OF WASTE		
Printed/Typed Name Republic Waste Industries, Inc. Avalon, TX	Signature <i>M. ...</i>	Date Shipped Month Day Year <u>5 21 96</u>

DO NOT SEPARATE FORM UNTIL ALL SIGNATURES ARE COMPLETED AND WASTE HAS BEEN RECEIVED BY LANDFILL AND SIGNED BY LANDFILL OPERATOR.

TT3

No 57525

324113



REPUBLIC
INDUSTRIES, INC.

1-800-256-9278

NAS Ft. Worth JRB		
Name Job # 0301960586		
Ft. Worth	Address TX	76127
Alan Flore	(817) 731-8973	Ext. 18
Contact	Phone	

Landfill Permit # H 1209
Location Avalon, TX

NON-HAZARDOUS WASTE MANIFEST

GENERATOR CERTIFICATE: I, as a representative of NAS Ft. Worth JRB certify that this shipment consists of 20 cubic yards tons of non-hazardous Hydrocarbon Contaminated Soil (name of waste material) and is classified as follows:

- Non-hazardous petroleum contaminated soils, Waste Code Number 3012
- Non-hazardous Municipal Special Waste
- Non-hazardous industrial waste. If generated in Texas, it is a Class II waste assigned Waste Code Number _____
- Non-hazardous Railroad Commission Regulated waste from _____ facility or pit,
- Wastewater treatment plant, septic tank, grease trap, or grit trap waste from _____ facility or location, or
- Other, explain: _____

GENERATOR

Printed/Typed Name NAS Ft. Worth JRB Fort Worth, Texas	Signature <i>Alan Flore</i>	Date Shipped Month Day Year 05 21 96
--	--------------------------------	--

TRANSPORTER

Printed/Typed Name Chaney Trucking Roanoke, TX	Signature <u>TRK 471</u> <i>Dob Arnold #1</i>	Date Shipped Month Day Year 5 21 96
--	--	---

LANDFILL OPERATOR CERTIFICATE OF RECEIPT OF WASTE

Printed/Typed Name Republic Waste Industries, Inc. Avalon, TX	Signature <i>M Shaw</i>	Date Shipped Month Day Year 5 21 96
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DO NOT SEPARATE FORM UNTIL ALL SIGNATURES ARE COMPLETED AND WASTE HAS BEEN RECEIVED BY LANDFILL AND SIGNED BY LANDFILL OPERATOR.

TF3

NAS Ft. Worth JRB		
<small>Name</small>		
Job # 0301960586		
<small>Address</small>		
Ft. Worth	TX	76127
<small>City State Zip</small>		
Alan Flolo	(817) 731-8973	Ext. 18
<small>Contact</small>		<small>Phone</small>

No 57526
324114



1-800-256-9278

NON-HAZARDOUS WASTE MANIFEST

Landfill Permit # H1209
Location Avalon, TX

GENERATOR CERTIFICATE: I, as a representative of NAS Ft. Worth JRB certify that this shipment consists of 20 cubic yards tons of non-hazardous Hydrocarbon Contaminated Soil (name of waste material) and is classified as follows:

- Non-hazardous petroleum contaminated soils, Waste Code Number 3012
- Non-hazardous Municipal Special Waste
- Non-hazardous industrial waste. If generated in Texas, it is a Class II waste assigned Waste Code Number _____
- Non-hazardous Railroad Commission Regulated waste from _____ facility or pit,
- Wastewater treatment plant, septic tank, grease trap, or grit trap waste from _____ facility or location, or
- Other, explain: _____

GENERATOR		
Printed/Typed Name NAS Ft. Worth JRB Fort Worth, Texas	Signature <i>Alan W. Flolo</i>	Date Shipped Month Day Year 05 21 96
TRANSPORTER		
Printed/Typed Name Chaney Trucking Roanoke, TX #472	Signature <i>Donald A. Deley</i>	Date Shipped Month Day Year 5 21 96
LANDFILL OPERATOR CERTIFICATE OF RECEIPT OF WASTE		
Printed/Typed Name Republic Waste Industries, Inc. Avalon, TX	Signature <i>McM...</i>	Date Shipped Month Day Year 5 21 96

DO NOT SEPARATE FORM UNTIL ALL SIGNATURES ARE COMPLETED AND WASTE HAS BEEN RECEIVED BY LANDFILL AND SIGNED BY LANDFILL OPERATOR.

TT3

GENERATOR/MAILING ADDRESS FOR ORIGINAL

NAS Ft. Worth JRB		
<small>Name</small>		
Job # 0301960586		
<small>Address</small>		
Ft. Worth	TX	76127
<small>City State Zip</small>		
Alan Flolo	(817) 731-8973	Ext. 18
<small>Contact</small>		<small>Phone</small>

No 57527
324115



REPUBLIC
INDUSTRIES, INC.

1-800-256-9278

NON-HAZARDOUS WASTE MANIFEST

Landfill Permit # _____
Location Avalon, TX

GENERATOR CERTIFICATE: I, as a representative of NAS Ft. Worth JRB
certify that this shipment consists of 20 yds cubic yards/tons of
non-hazardous Hydrocarbon Contaminated Soil (name of waste material) and
is classified as follows:

- Non-hazardous petroleum contaminated soils, Waste Code Number 3012
- Non-hazardous Municipal Special Waste
- Non-hazardous industrial waste. If generated in Texas, it is a Class II waste assigned Waste Code Number _____
- Non-hazardous Railroad Commission Regulated waste from _____ facility or pit,
- Wastewater treatment plant, septic tank, grease trap, or grit trap waste from _____ facility or location, or
- Other, explain: _____

GENERATOR		
Printed/Typed Name NAS Ft. Worth JRB Fort Worth, Texas	Signature <i>Alan W Flolo</i>	Date Shipped Month Day Year <u>05 21 96</u>
TRANSPORTER		
Printed/Typed Name Chaney Trucking Roanoke, TX	Signature <u>Trk # 480</u> <i>Paul Stevens 71</i>	Date Shipped Month Day Year <u>5 - 21 - 96</u>
LANDFILL OPERATOR CERTIFICATE OF RECEIPT OF WASTE		
Printed/Typed Name Republic Waste Industries, Inc. Avalon, TX	Signature <i>M Draw</i>	Date Shipped Month Day Year <u>5 21 96</u>

DO NOT SEPARATE FORM UNTIL ALL SIGNATURES ARE COMPLETED AND WASTE HAS BEEN RECEIVED BY LANDFILL AND SIGNED BY LANDFILL OPERATOR.

TT3

GENERATOR/MAILING ADDRESS FOR ORIGINAL

NAS Ft. Worth JRB		
Job #	Name	
0301960586		
Ft. Worth	Address TX	76127
Alan Flore	(817) 731-8973	State 973 Ext. 18 Zip
Contact	Phone	



NON-HAZARDOUS WASTE MANIFEST

Landfill Permit # H1209
 Location Avalon, TX

GENERATOR CERTIFICATE: I, as a representative of NAS Ft. Worth JRB certify that this shipment consists of 20 cubic yards tons of non-hazardous Hydrocarbon Contaminated Soil (name of waste material) and is classified as follows:

- Non-hazardous petroleum contaminated soils, Waste Code Number 3012
- Non-hazardous Municipal Special Waste
- Non-hazardous industrial waste. If generated in Texas, it is a Class II waste assigned Waste Code Number _____
- Non-hazardous Railroad Commission Regulated waste from _____ facility or pit,
- Wastewater treatment plant, septic tank, grease trap, or grit trap waste from _____ facility or location, or
- Other, explain: _____

GENERATOR		
Printed/Typed Name NAS Ft. Worth JRB Fort Worth, Texas	Signature <i>Alan Flore</i>	Date Shipped Month Day Year 05 21 96
TRANSPORTER		
Printed/Typed Name Chaney Trucking Roanoke, TX	Signature <i>[Signature]</i> <u>271</u>	Date Shipped Month Day Year 5 - 21 - 96
LANDFILL OPERATOR CERTIFICATE OF RECEIPT OF WASTE		
Printed/Typed Name Republic Waste Industries, Inc. Avalon, TX	Signature <i>[Signature]</i>	Date Shipped Month Day Year 5 21 96

DO NOT SEPARATE FORM UNTIL ALL SIGNATURES ARE COMPLETED AND WASTE HAS BEEN RECEIVED BY LANDFILL AND SIGNED BY LANDFILL OPERATOR. TT3

NAS Ft. Worth JRB		
<small>Name</small>		
Job # 0301960586		
<small>Address</small>		
Ft. Worth	TX	76127
<small>City State Zip</small>		
Alan Flolo	(817) 731-8973	Ext. 18
<small>Contact</small>		<small>Phone</small>

No 57529
324117



REPUBLIC
INDUSTRIES, INC.

1-800-256-9278

NON-HAZARDOUS WASTE MANIFEST

Landfill Permit # H1209
Location Avalon, TX

GENERATOR CERTIFICATE: I, as a representative of NAS Ft. Worth JRB certify that this shipment consists of 20 cubic yards tons of non-hazardous Hydrocarbon Contaminated Soil (name of waste material) and is classified as follows:

- Non-hazardous petroleum contaminated soils, Waste Code Number 3012
- Non-hazardous Municipal Special Waste
- Non-hazardous industrial waste. If generated in Texas, it is a Class II waste assigned Waste Code Number _____
- Non-hazardous Railroad Commission Regulated waste from _____ facility or pit,
- Wastewater treatment plant, septic tank, grease trap, or grit trap waste from _____ facility or location, or
- Other, explain: _____

GENERATOR		
Printed/Typed Name NAS Ft. Worth JRB Fort Worth, Texas	Signature <i>Alan W Flolo</i>	Date Shipped Month Day Year <u>05 21 96</u>
TRANSPORTER		
Printed/Typed Name Chaney Trucking Roanoke, TX	Signature <u>(469)</u> <i>Herald Jones #9</i>	Date Shipped Month Day Year <u>5-21-96</u>
LANDFILL OPERATOR CERTIFICATE OF RECEIPT OF WASTE		
Printed/Typed Name Republic Waste Industries, Inc. Avalon, TX	Signature <i>[Signature]</i>	Date Shipped Month Day Year <u>5 21 96</u>

DO NOT SEPARATE FORM UNTIL ALL SIGNATURES ARE COMPLETED AND WASTE HAS BEEN RECEIVED BY LANDFILL AND SIGNED BY LANDFILL OPERATOR.

TT 3

NAS Ft. Worth JRB <small>Name</small>		
Job # 0301960586 <small>Address</small>		
Ft. Worth	TX	76127
<small>City</small>	<small>State</small>	<small>Zip</small>
Alan Flolo (817) 731-8973 Ext. 18		
<small>Contact</small>	<small>Phone</small>	

No 57530
324118



1-800-256-9278

Landfill Permit # H1209
Location Avalon, TX

NON-HAZARDOUS WASTE MANIFEST

GENERATOR CERTIFICATE: I, as a representative of NAS Ft. Worth JRB certify that this shipment consists of 20 cubic yards tons of non-hazardous Hydrocarbon Contaminated Soil (name of waste material) and is classified as follows:

- Non-hazardous petroleum contaminated soils, Waste Code Number 3012
- Non-hazardous Municipal Special Waste
- Non-hazardous industrial waste. If generated in Texas, it is a Class II waste assigned Waste Code Number _____
- Non-hazardous Railroad Commission Regulated waste from _____ facility or pit,
- Wastewater treatment plant, septic tank, grease trap, or grit trap waste from _____ facility or location, or
- Other, explain: _____

GENERATOR		
Printed/Typed Name NAS Ft. Worth JRB Fort Worth, Texas	Signature <i>Alan W Flolo</i>	Date Shipped Month Day Year <i>05 21 96</i>
TRANSPORTER		
Printed/Typed Name Chaney Trucking Roanoke, TX	Signature <i>Jandy Duran #43</i>	Date Shipped Month Day Year <i>5 21 96</i>
LANDFILL OPERATOR CERTIFICATE OF RECEIPT OF WASTE		
Printed/Typed Name Republic Waste Industries, Inc. Avalon, TX	Signature <i>M. Dean</i>	Date Shipped Month Day Year <i>5 22 96</i>

DO NOT SEPARATE FORM UNTIL ALL SIGNATURES ARE COMPLETED AND WASTE HAS BEEN RECEIVED BY LANDFILL AND SIGNED BY LANDFILL OPERATOR. *TTJ*

GENERATOR/MAILING ADDRESS FOR ORIGINAL

NAS Ft. Worth JRB		
Name		
Job # 0301960586		
Address		
Ft. Worth	TX	76127
Alan Flolo	(817) 731-8973	Ext. 18
City	State	Zip
Contact	Phone	

No 57531
324119



REPUBLIC
INDUSTRIES, INC.

1-800-256-9278

NON-HAZARDOUS WASTE MANIFEST

Landfill Permit # H/209
Location Avalon, TX

GENERATOR CERTIFICATE: I, as a representative of NAS Ft. Worth JRB certify that this shipment consists of 20 cubic yards tons of non-hazardous Hydrocarbon Contaminated Soil (name of waste material) and is classified as follows:

- Non-hazardous petroleum contaminated soils, Waste Code Number 3012
- Non-hazardous Municipal Special Waste
- Non-hazardous industrial waste. If generated in Texas, it is a Class II waste assigned Waste Code Number _____
- Non-hazardous Railroad Commission Regulated waste from _____ facility or pit,
- Wastewater treatment plant, septic tank, grease trap, or grit trap waste from _____ facility or location, or
- Other, explain: _____

GENERATOR		
Printed/Typed Name NAS Ft. Worth JRB Fort Worth, Texas	Signature <i>Alan w Flolo</i>	Date Shipped Month Day Year <i>05 21 96</i>
TRANSPORTER		
Printed/Typed Name Chaney Trucking Roanoke, TX	Signature <i>Robert G. Carter #100</i>	Date Shipped Month Day Year <i>05 21 96</i>
LANDFILL OPERATOR CERTIFICATE OF RECEIPT OF WASTE		
Printed/Typed Name Republic Waste Industries, Inc. Avalon, TX	Signature <i>Bill Jones</i>	Date Shipped Month Day Year <i>5 21 96</i>

DO NOT SEPARATE FORM UNTIL ALL SIGNATURES ARE COMPLETED AND WASTE HAS BEEN RECEIVED BY LANDFILL AND SIGNED BY LANDFILL OPERATOR.

773

NAS Ft. Worth JRB		
Name		
Job # 0301960586		
Address		
Ft. Worth	TX	76127
City State Zip		
Alan Flolo	(817) 731-8973	Ext. 18
Contact		Phone

No 57532

324120



REPUBLIC
INDUSTRIES, INC.

1-800-256-9278

NON-HAZARDOUS WASTE MANIFEST

Landfill Permit # H1209

Location Avalon, TX

GENERATOR CERTIFICATE: I, as a representative of NAS Ft. Worth JRB certify that this shipment consists of 20 cubic yards tons of non-hazardous Hydrocarbon Contaminated Soil (name of waste material) and is classified as follows:

- Non-hazardous petroleum contaminated soils, Waste Code Number 3012
- Non-hazardous Municipal Special Waste
- Non-hazardous industrial waste. If generated in Texas, it is a Class II waste assigned Waste Code Number _____
- Non-hazardous Railroad Commission Regulated waste from _____ facility or pit,
- Wastewater treatment plant, septic tank, grease trap, or grit trap waste from _____ facility or location, or
- Other, explain: _____

GENERATOR		
Printed/Typed Name NAS Ft. Worth JRB Fort Worth, Texas	Signature <i>Alan W Flolo</i>	Date Shipped Month Day Year <u>05 21 96</u>
TRANSPORTER		
Printed/Typed Name Chaney Trucking Roanoke, TX	Signature <i>Larry P Chaney #149</i>	Date Shipped Month Day Year <u>5 21 95</u>
LANDFILL OPERATOR CERTIFICATE OF RECEIPT OF WASTE		
Printed/Typed Name Republic Waste Industries, Inc. Avalon, TX	Signature <i>M. D. ...</i>	Date Shipped Month Day Year <u>5 22 96</u>

DO NOT SEPARATE FORM UNTIL ALL SIGNATURES ARE COMPLETED AND WASTE HAS BEEN RECEIVED BY LANDFILL AND SIGNED BY LANDFILL OPERATOR.

TT3

NAS Ft. Worth JRB		
<small>Name</small>		
Job # 0301960586		
<small>Address</small>		
Ft. Worth	TX	76127
<small>City</small>	<small>State</small>	<small>Zip</small>
Alan Flolo	(817) 731-8973 Ext. 18	
<small>Contact</small>	<small>Phone</small>	

No 57533
324121



REPUBLIC
INDUSTRIES, INC.

1-800-256-9278

NON-HAZARDOUS WASTE MANIFEST

Landfill Permit # H1209
Location Avalon, TX

GENERATOR CERTIFICATE: I, as a representative of NAS Ft. Worth JRB certify that this shipment consists of 20 cubic yards tons of non-hazardous Hydrocarbon Contaminated Soil (name of waste material) and is classified as follows:

- Non-hazardous petroleum contaminated soils, Waste Code Number 3012
- Non-hazardous Municipal Special Waste
- Non-hazardous industrial waste. If generated in Texas, it is a Class II waste assigned Waste Code Number _____
- Non-hazardous Railroad Commission Regulated waste from _____ facility or pit,
- Wastewater treatment plant, septic tank, grease trap, or grit trap waste from _____ facility or location, or
- Other, explain: _____

GENERATOR		
Printed/Typed Name NAS Ft. Worth JRB Fort Worth, Texas	Signature <i>Alan W Flolo</i>	Date Shipped Month Day Year <u>05 21 96</u>
TRANSPORTER		
Printed/Typed Name Chaney Trucking Roanoke, TX	Signature <i>Bobby A. Chaney #52</i>	Date Shipped Month Day Year <u>05-21-96</u>
LANDFILL OPERATOR CERTIFICATE OF RECEIPT OF WASTE		
Printed/Typed Name Republic Waste Industries, Inc. Avalon, TX	Signature <i>M. Jean</i>	Date Shipped Month Day Year <u>5 22 96</u>

DO NOT SEPARATE FORM UNTIL ALL SIGNATURES ARE COMPLETED AND WASTE HAS BEEN RECEIVED BY LANDFILL AND SIGNED BY LANDFILL OPERATOR.

TT3

GENERATOR/MAILING ADDRESS FOR ORIGINAL

NAS Ft. Worth JRB		
<small>Name</small>		
Job # 0301960586		
<small>Address</small>		
Ft. Worth	TX	76127
<small>City</small>	<small>State</small>	<small>Zip</small>
Alan Flolo	(817) 731-8973	Ext. 18
<small>Contact</small>	<small>Phone</small>	

No 57534
324122



REPUBLIC
INDUSTRIES, INC.

1-800-256-9278

NON-HAZARDOUS WASTE MANIFEST

Landfill Permit # H1209
Location Avalon, TX

GENERATOR CERTIFICATE: I, as a representative of NAS Ft. Worth JRB certify that this shipment consists of 20 cubic yards tons of non-hazardous Hydrocarbon Contaminated Soil (name of waste material) and is classified as follows:

- Non-hazardous petroleum contaminated soils, Waste Code Number 3012
- Non-hazardous Municipal Special Waste
- Non-hazardous industrial waste. If generated in Texas, it is a Class II waste assigned Waste Code Number _____
- Non-hazardous Railroad Commission Regulated waste from _____ facility or pit,
- Wastewater treatment plant, septic tank, grease trap, or grit trap waste from _____ facility or location, or
- Other, explain: _____

GENERATOR		
Printed/Typed Name NAS Ft. Worth JRB Fort Worth, Texas	Signature <i>Alan W Flolo</i>	Date Shipped Month Day Year 05 21 96
TRANSPORTER		
Printed/Typed Name Chaney Trucking Roanoke, TX	Signature <i>Larry Langley 81</i>	Date Shipped Month Day Year 5 21 96
LANDFILL OPERATOR CERTIFICATE OF RECEIPT OF WASTE		
Printed/Typed Name Republic Waste Industries, Inc. Avalon, TX	Signature <i>M. Dial</i>	Date Shipped Month Day Year 5 22 96

DO NOT SEPARATE FORM UNTIL ALL SIGNATURES ARE COMPLETED AND WASTE HAS BEEN RECEIVED BY LANDFILL AND SIGNED BY LANDFILL OPERATOR.

TT3

GENERATOR/MAILING ADDRESS FOR ORIGINAL

NAS Ft. Worth JRB		
<small>Name</small>		
Job # 0301960586		
<small>Address</small>		
Ft. Worth	TX	76127
<small>City State Zip</small>		
Alan Flolo	(817) 731-8973	Ext. 18
<small>Contact</small>		<small>Phone</small>

No 57535

324123



REPUBLIC
INDUSTRIES, INC.

1-800-256-9278

NON-HAZARDOUS WASTE MANIFEST

Landfill Permit # H1209
Location Avalon, TX

GENERATOR CERTIFICATE: I, as a representative of NAS Ft. Worth JRB certify that this shipment consists of 20 cubic yards tons of non-hazardous Hydrocarbon Contaminated Soil (name of waste material) and is classified as follows:

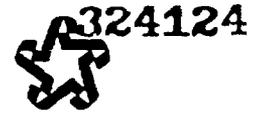
- Non-hazardous petroleum contaminated soils, Waste Code Number 3012
- Non-hazardous Municipal Special Waste
- Non-hazardous industrial waste. If generated in Texas, it is a Class II waste assigned Waste Code Number _____
- Non-hazardous Railroad Commission Regulated waste from _____ facility or pit,
- Wastewater treatment plant, septic tank, grease trap, or grit trap waste from _____ facility or location, or
- Other, explain: _____

GENERATOR		
Printed/Typed Name NAS Ft. Worth JRB Fort Worth, Texas	Signature <i>Alan W Flolo</i>	Date Shipped Month Day Year 05 21 96
TRANSPORTER		
Printed/Typed Name Chaney Trucking Roanoke, TX	Signature <i>Terri Langley</i> 131	Date Shipped Month Day Year 5 21 96
LANDFILL OPERATOR CERTIFICATE OF RECEIPT OF WASTE		
Printed/Typed Name Republic Waste Industries, Inc. Avalon, TX	Signature <i>M. Lee</i>	Date Shipped Month Day Year 5 22 96

DO NOT SEPARATE FORM UNTIL ALL SIGNATURES ARE COMPLETED AND WASTE HAS BEEN RECEIVED BY LANDFILL AND SIGNED BY LANDFILL OPERATOR.

TT3

No 57536



REPUBLIC
INDUSTRIES, INC.

1-800-256-9278

NAS Ft. Worth JRB		
<small>Name</small>		
Job # 0301960586		
<small>Address</small>		
Ft. Worth	TX	76127
<small>City State Zip</small>		
Alan Flolo	(817) 731-8973	Ext. 18
<small>Contact</small>		<small>Phone</small>

NON-HAZARDOUS WASTE MANIFEST

Landfill Permit # H1209
Location Avalon, TX

GENERATOR CERTIFICATE: I, as a representative of NAS Ft. Worth JRB certify that this shipment consists of 20 cubic yards/tons of non-hazardous Hydrocarbon Contaminated Soil (name of waste material) and is classified as follows:

- Non-hazardous petroleum contaminated soils, Waste Code Number 3012
- Non-hazardous Municipal Special Waste
- Non-hazardous industrial waste. If generated in Texas, it is a Class II waste assigned Waste Code Number _____
- Non-hazardous Railroad Commission Regulated waste from _____ facility or pit,
- Wastewater treatment plant, septic tank, grease trap, or grit trap waste from _____ facility or location, or
- Other, explain: _____

GENERATOR		
Printed/Typed Name NAS Ft. Worth JRB Fort Worth, Texas	Signature <i>Alan W Flolo</i>	Date Shipped Month Day Year 05 21 96
TRANSPORTER		
Printed/Typed Name Chaney Trucking Roanoke, TX	Signature <i>David L. Chaney</i>	Date Shipped Month Day Year 5/21/96
LANDFILL OPERATOR CERTIFICATE OF RECEIPT OF WASTE		
Printed/Typed Name Republic Waste Industries, Inc. Avalon, TX	Signature <i>M. J. ...</i>	Date Shipped Month Day Year 5 22 96

DO NOT SEPARATE FORM UNTIL ALL SIGNATURES ARE COMPLETED AND WASTE HAS BEEN RECEIVED BY LANDFILL AND SIGNED BY LANDFILL OPERATOR.

TT3

Name NAS Ft. Worth JRB		
Address Job # 0301960586		
City Ft. Worth	State TX	Zip 76127
Contact Alan Flolo	Phone (817) 731-8973 Ext. 18	

No 57537
324125



REPUBLIC
INDUSTRIES, INC.

1-800-256-9278

NON-HAZARDOUS WASTE MANIFEST

Landfill Permit # H1209

Location Avalon, TX

GENERATOR CERTIFICATE: I, as a representative of NAS Ft. Worth JRB certify that this shipment consists of 20 cubic yards tons of non-hazardous Hydrocarbon Contaminated Soil (name of waste material) and is classified as follows:

- Non-hazardous petroleum contaminated soils, Waste Code Number 3012
- Non-hazardous Municipal Special Waste
- Non-hazardous industrial waste. If generated in Texas, it is a Class II waste assigned Waste Code Number _____
- Non-hazardous Railroad Commission Regulated waste from _____ facility or pit,
- Wastewater treatment plant, septic tank, grease trap, or grit trap waste from _____ facility or location, or
- Other, explain: _____

GENERATOR		
Printed/Typed Name NAS Ft. Worth JRB Fort Worth, Texas	Signature 	Date Shipped Month Day Year 05 21 96
TRANSPORTER		
Printed/Typed Name Chaney Trucking Roanoke, TX	Signature <u>TRK 471</u> 	Date Shipped Month Day Year
LANDFILL OPERATOR CERTIFICATE OF RECEIPT OF WASTE		
Printed/Typed Name Republic Waste Industries, Inc. Avalon, TX	Signature 	Date Shipped Month Day Year 5 22 94

DO NOT SEPARATE FORM UNTIL ALL SIGNATURES ARE COMPLETED AND WASTE HAS BEEN RECEIVED BY LANDFILL AND SIGNED BY LANDFILL OPERATOR. TT3

GENERATOR/MAILING ADDRESS FOR ORIGINAL

NAS Ft. Worth JRB		
<small>Name</small>		
Job # 0301960586		
<small>Address</small>		
Ft. Worth	TX	76127
<small>City State Zip</small>		
Alan Flolo	(817) 731-8973	Ext. 18
<small>Contact</small>		<small>Phone</small>

No 57538
324126



REPUBLIC
INDUSTRIES, INC.

1-800-256-9278

NON-HAZARDOUS WASTE MANIFEST

Landfill Permit # H1209
Location Avalon, TX

GENERATOR CERTIFICATE: I, as a representative of NAS Ft. Worth JRB certify that this shipment consists of 20 cubic yards tons of non-hazardous Hydrocarbon Contaminated Soil (name of waste material) and is classified as follows:

- Non-hazardous petroleum contaminated soils, Waste Code Number 3012
- Non-hazardous Municipal Special Waste
- Non-hazardous industrial waste. If generated in Texas, it is a Class II waste assigned Waste Code Number _____
- Non-hazardous Railroad Commission Regulated waste from _____ facility or pit,
- Wastewater treatment plant, septic tank, grease trap, or grit trap waste from _____ facility or location, or
- Other, explain: _____

GENERATOR		
Printed/Typed Name NAS Ft. Worth JRB Fort Worth, Texas	Signature <i>Alan W Flolo</i>	Date Shipped Month Day Year <u>05 21 96</u>
TRANSPORTER		
Printed/Typed Name Chaney Trucking Roanoke, TX #472	Signature <i>Donald A Reddy 87</i>	Date Shipped Month Day Year <u>5 21 96</u>
LANDFILL OPERATOR CERTIFICATE OF RECEIPT OF WASTE		
Printed/Typed Name Republic Waste Industries, Inc. Avalon, TX	Signature <i>W. Dean</i>	Date Shipped Month Day Year <u>5 22 96</u>

DO NOT SEPARATE FORM UNTIL ALL SIGNATURES ARE COMPLETED AND WASTE HAS BEEN RECEIVED BY LANDFILL AND SIGNED BY LANDFILL OPERATOR.

TT3

NAS Ft. Worth JRB		
<small>Name</small>		
Job # 0301960586		
<small>Address</small>		
Ft. Worth	TX	76127
<small>City</small>	<small>State</small>	<small>Zip</small>
Alan Flolo	(817) 731-8973 Ext. 18	
<small>Contact</small>	<small>Phone</small>	

No 57539
324127



REPUBLIC
INDUSTRIES, INC.

1-800-256-9278

NON-HAZARDOUS WASTE MANIFEST

Landfill Permit # H1209
Location Avalon, TX

GENERATOR CERTIFICATE: I, as a representative of NAS Ft. Worth JRB
certify that this shipment consists of 20 cubic yards tons of
non-hazardous Hydrocarbon Contaminated Soil (name of waste material) and
is classified as follows:

- Non-hazardous petroleum contaminated soils, Waste Code Number 3012
- Non-hazardous Municipal Special Waste
- Non-hazardous industrial waste. If generated in Texas, it is a Class II waste assigned Waste Code Number _____
- Non-hazardous Railroad Commission Regulated waste from _____ facility or pit,
- Wastewater treatment plant, septic tank, grease trap, or grit trap waste from _____ facility or location, or
- Other, explain: _____

GENERATOR		
Printed/Typed Name NAS Ft. Worth JRB Fort Worth, Texas	Signature <i>Alan W Flolo</i>	Date Shipped Month Day Year <i>05 21 96</i>
TRANSPORTER		
Printed/Typed Name Chaney Trucking Roanoke, TX	Signature <i>Phil Hobbs #70</i>	Date Shipped Month Day Year <i>May 21, 1996</i>
LANDFILL OPERATOR CERTIFICATE OF RECEIPT OF WASTE		
Printed/Typed Name Republic Waste Industries, Inc. Avalon, TX	Signature <i>Mike Deal</i>	Date Shipped Month Day Year <i>5-22-96</i>

DO NOT SEPARATE FORM UNTIL ALL SIGNATURES ARE COMPLETED AND WASTE HAS BEEN RECEIVED BY LANDFILL AND SIGNED BY LANDFILL OPERATOR.

JTS

NAS Ft. Worth JRB		
<small>Name</small>		
Job# 0301960586		
<small>Address</small>		
Ft. Worth	TX	76127
<small>City State Zip</small>		
Alan Flolo	(817) 731-8973	Ext. 18
<small>Contact</small>		<small>Phone</small>

No 57540

324128



REPUBLIC
INDUSTRIES, INC.

1-800-256-9278

Landfill Permit # H1209

Location Avalon, TX

NON-HAZARDOUS WASTE MANIFEST

GENERATOR CERTIFICATE: I, as a representative of NAS Ft. Worth JRB certify that this shipment consists of 20 cubic yards tons of non-hazardous Hydrocarbon Contaminated Soil (name of waste material) and is classified as follows:

- Non-hazardous petroleum contaminated soils, Waste Code Number 3012
- Non-hazardous Municipal Special Waste
- Non-hazardous industrial waste. If generated in Texas, it is a Class II waste assigned Waste Code Number _____
- Non-hazardous Railroad Commission Regulated waste from _____ facility or pit,
- Wastewater treatment plant, septic tank, grease trap, or grit trap waste from _____ facility or location, or
- Other, explain: _____

GENERATOR		
Printed/Typed Name NAS Ft. Worth JRB Fort Worth, Texas	Signature <i>Alan W Flolo</i>	Date Shipped Month Day Year 05 21 96
TRANSPORTER		
Printed/Typed Name Chaney Trucking Roanoke, TX	Signature <i>Trk #480</i> <i>Paul Stevens 71</i>	Date Shipped Month Day Year 5 - 22 - 96
LANDFILL OPERATOR CERTIFICATE OF RECEIPT OF WASTE		
Printed/Typed Name Republic Waste Industries, Inc. Avalon, TX	Signature <i>M. Dean</i>	Date Shipped Month Day Year 5 22 96

DO NOT SEPARATE FORM UNTIL ALL SIGNATURES ARE COMPLETED AND WASTE HAS BEEN RECEIVED BY LANDFILL AND SIGNED BY LANDFILL OPERATOR.

TT-3

NAS Ft Worth JRB		
Name		
Job # 0301960586		
Address		
Ft Worth	Tx	76127
City	State	Zip
Alan Flolo		(817)731-8973 Ext 18
Contact	Phone	

No 57541
324129



NON-HAZARDOUS WASTE MANIFEST

Landfill Permit # H1209
Location Avalon Tx

GENERATOR CERTIFICATE: I, as a representative of NAS Ft Worth JRB
certify that this shipment consists of 20 cubic yards tons of
non-hazardous Hydrocarbon contaminated soil (name of waste material) and
is classified as follows:

- Non-hazardous petroleum contaminated soils, Waste Code Number 3012
- Non-hazardous Municipal Special Waste
- Non-hazardous industrial waste. If generated in Texas, it is a Class II waste assigned Waste Code Number _____
- Non-hazardous Railroad Commission Regulated waste from _____ facility or pit,
- Wastewater treatment plant, septic tank, grease trap, or grit trap waste from _____ facility or location, or
- Other, explain: _____

GENERATOR		
Printed/Typed Name <u>Alan W. Flolo</u>	Signature <u>Alan W. Flolo</u>	Date Shipped Month Day Year <u>05 22 96</u>
TRANSPORTER		
Printed/Typed Name <u>Chaney Trucking</u> <u>Roanoke Tx</u>	Signature <u>Ray B. Shouder #97</u>	Date Shipped Month Day Year <u>5 21 96</u>
LANDFILL OPERATOR CERTIFICATE OF RECEIPT OF WASTE		
Printed/Typed Name <u>Republic Industries Inc</u> <u>Avalon Tx</u>	Signature <u>[Signature]</u>	Date Shipped Month Day Year <u>5 22 96</u>

DO NOT SEPARATE FORM UNTIL ALL SIGNATURES ARE COMPLETED AND WASTE HAS BEEN RECEIVED BY LANDFILL AND SIGNED BY LANDFILL OPERATOR. TT3

817-860-0165

boundary mark in surveyors

817-860-0165

For additional site data, see the site map maintained in the C.S.C. DISPOSAL office on site in Avalon, Ellis Co., Texas. Bearing system is grid, North Central Texas zone, 1983 datum. Coordinate Data, NCTX, 1983. Elevations based on U.S.C.B.G.S. (N.G.S.) Bench Mark M-953-1546

For additional site data, see the site map maintained in the C.S.C. DISPOSAL office in Avalon, Ellis County, Texas. Bearing and Coordinate system are grid, North Central Texas Zone, 1983 Datum. Elevations based on N.G.S. (U.S.C.B.G.S.) Bench Mark M-953-1946

1 2 3 4 5 6 7

1	2	3	4	5	6	7
55	56	57	58	59	60	61
62	63	64	65	66	67	68
69	70	71	72	73	74	75
76	77	78	79	80	81	82
83	84	85	86	87	88	89
90	91	92	93	94	95	96
97	98	99	100	101	102	103
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1105	1106	1107	1108	1109	1110	1111
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1294	1295	1296	1297	1298	1299	1300

324130

1st north _____ feet
 2nd east _____ feet
 3rd west _____ feet
 4th north _____ feet
 5th east _____ feet
 6th west _____ feet

773

817-860-0165

For additional information, see site map main-
tained in the C.S.C. Disposal office in Avalon,
Ellis County, Texas.

Coordinates, Bearings & Distances are GRID,
Texas, North Central Zone, 1983 Datum
Bench Mark N.G.S.-M-953-1946 Elev. 450.32

boundary mark inc.
surveyors

P.O. box 120111 arlington texas 76012

y=north=

x=east=

z=elev.=

JJ KK LL MM NN

	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117		
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I 2 3 4 5 6 7 8 9 10 II

SCALE	1"=100'
DATE	May 92
BY	JMK
NO	22-1924
SITE MAP	
INDUSTRIAL CELL	
C.S.C. DISPOSAL INC	
AVALON, ELLIS COUNTY TEXAS	

1-1-8

NON-HAZARDOUS WASTE MANIFEST
GENERATOR

GENERATOR NAME: AFISCA SITE NAME: BLDG 4210
ADDRESS: NAS Fort Worth JRB ADDRESS: BLDG 4210, TEXAS
PHONE NO: (817) 731-8973 x 18 PHONE NO: (817) 731-8973 x 18
WASTE CODE: _____
DESCRIPTION OF WASTE: ASBESTOS CONTAINING MATERIAL

HIGHEST TPH: _____ HIGHEST BTEX: _____ CONTAINS METALS: YES _____ NO _____
QUANTITY: _____ UNIT: _____ NUMBER OF CONTAINERS: _____
TYPE OF CONTAINER: TRUCK _____ CARTON _____ BAG _____ OTHER _____

CERTIFICATION: I HEREBY CERTIFY THAT THE ABOVE NAMED MATERIAL (1) DOES NOT CONTAIN FREE LIQUID AS DEFINED BY 40 CFR 260.10 OR ANY APPLICABLE STATE LAW; (2) IS NOT A HAZARDOUS WASTE AS DEFINED BY 40 CFR 261 OR ANY APPLICABLE STATE LAW; (3) HAS BEEN PROPERLY DESCRIBED, CLASSIFIED AND PACKAGED; AND (4) IS IN PROPER CONDITION FOR TRANSPORTATION ACCORDING TO APPLICABLE FEDERAL, STATE, AND LOCAL REGULATIONS.

ALAN FLOLO Alan W. Flolo 6/13/96
GENERATOR / AGENT NAME (PRINTED) SIGNATURE DATE SHIPPED
TRANSPORTER

TRUCK NO: 1 PHONE NO: (817) 737-7237
TRANSPORTER: Jacobs Engineering DRIVER'S NAME: CARL WILSON
ADDRESS: 6560 White Settlement Rd. VEHICLE LICENSE NO: SL9 230 (TX)

CERTIFICATION: I HEREBY CERTIFY THAT THE ABOVE NAMED MATERIAL WAS PICKED UP AT THE GENERATOR SITE LISTED ABOVE.
Carl Wilson 6/13/96 1400
(DRIVER'S SIGNATURE) (DATE / TIME OF LOADING)

IT IS FURTHER CERTIFIED THAT THE ABOVE NAMED MATERIAL WAS DELIVERED TO THE RECYCLING/DISPOSAL FACILITY LISTED BELOW. NO INCIDENT WAS ENCOUNTERED DURING TRANSIT.
Carl Wilson 6/13/96 1416
(DRIVER'S SIGNATURE) (DATE / TIME OF DELIVERY)

DESTINATION

FACILITY NAME: WESTSIDE R.D.F. PHONE NO: 244-3500
ADDRESS: 3500 Linkcrest Drive Alledo TX 76008

CERTIFICATION: I HEREBY CERTIFY THAT THE ABOVE NAMED MATERIAL WAS ACCEPTED BY THIS FACILITY FOR RECYCLING/DISPOSAL AS APPROPRIATE, AND TO THE BEST OF MY KNOWLEDGE, THE ABOVE INFORMATION IS CORRECT AND ACCURATE.
GAIL BRITAIN Gail Britain 6/13/96
(AUTHORIZED FACILITY REPRESENTATIVE) (SIGNATURE) (DATE OF RECEIPT)

**GENERATOR'S WASTE PROFILE SHEET**
PLEASE PRINT IN INK OR TYPE

324133

Instructions

Information on this form is used to determine if the waste may be transported, treated, stored or disposed in a legal, safe, and environmentally sound manner. This information will be maintained in strict confidence. Answers must be provided for sections A, B, and C and must be printed in ink or typed. A response of "NONE" or "NA" (not applicable) can be made if appropriate. If additional space is needed, indicate on the form that additional information is attached, and attach the information to the Generator's Waste Profile Sheet. If you have questions concerning this form, please contact the Contractor's sales representative.

A. Waste Generator Information

1. **Generator Name** — Enter the name of the facility where the waste is generated.
2. **SIC Code** — Enter the four digit Standard Industrial Classification Code for the facility where the waste is generated.
3. **Facility Street Address** — Enter the street address (not P.O. Box) of the facility where the waste is generated.
4. **Phone** — Enter Generator's Area code and phone number.
5. **Facility City** — Enter the city where the waste is generated.
6. **State/Province** — Enter the state or province where the waste is generated.
7. **Zip/Postal Code** — Enter the generating facility's zip or postal code.
8. **Generator USEPA/Federal ID #** — Enter the identification number issued by the USEPA, Canadian, or Mexican Federal Agency to the facility generating the waste (if applicable).
9. **County** — Enter the county where the waste is generated.
10. **State/Province ID #** — Enter the identification number issued by the state or province to the facility generating the waste (if applicable).
11. **Customer Name** — Entity that the Contractor is directly working with regarding the represented waste stream. If the same as the Generator, mark "Same as Above".
12. **Customer Phone** — Enter technical contact's area code and telephone number.
13. **Customer Contact** — Enter the name of the person who can answer technical questions about the waste.
14. **Customer Fax** — Area code and facsimile number for the customer.

B. Waste Stream Information

1. **Name of Waste** — Enter a name generally descriptive of this waste (e.g., paint sludge, fluorescent bulbs).
2. **State Waste Code** — If applicable, the code assigned to the specific waste stream by the state regulatory agency.
3. **Process Generating Waste** — Describe the process generating the waste in detail. List the specific process/operation or source that generates the waste (e.g., incineration of municipal refuse, asbestos removal, wastewater treatment, building maintenance).

At a minimum, the Generator should answer the following questions in determining the process generating the waste.

- What chemicals are stored and/or used at the facility?
 - Is the waste generated from the production/manufacturing of any of the following industries: wood preservation; inorganic pigments; organic pigments; pesticides; explosives; petroleum refining; iron and steel, copper, lead or zinc production?
 - Is the waste a result from degreasing, solvent parts cleanings, recovery/reclaiming of solvents (bottoms), wastewater treatment (sludges), or electroplating?
4. **Waste Category** — The general description that best describes the waste represented by the Generator's Waste Profile Sheet.
 5. **Estimated Annual Volume** — Approximate volume in tons, yards, or other (e.g., drums, gallons) that will be received by the ultimate management facility. This volume amount is not intended for use in complying with state and/or permit restrictions.
 6. **Personal Protective Equipment Requirements** — All personal protective equipment that is necessary to safely manage the waste stream.
 7. **Transporter/Transfer Station** — Transporter and/or transfer station name.
 8. **Is this a U.S. Department of Transportation (USDOT) hazardous material?** — Choose the appropriate response: yes or no.
 9. **Reportable Quantity (lbs.; kgs.)** — If the answer to 8 is yes, enter the Reportable Quantity (RQ) established by 40 CFR 302.4 or equivalent Canadian or Mexican regulation for this waste. Indicate the appropriate units for the RQ.
 10. **Hazard Class/ID #** — If the answer to 8 is yes, indicate the proper USDOT hazard class and identification number.
 11. **USDOT Shipping Name** — If the answer to 8 is yes, enter the proper USDOT shipping name for the waste.

C. Generator's Certification

Indicate the appropriate response to questions/statements 1, 2, 3, 4, 5, and 6. By signing this Generator's Waste Profile Sheet, the Generator certifies that the responses are true and accurate with respect to the waste stream(s) listed.

Certification Signature — Signature of an authorized employee of the Generator or representative of the generator if authorized in writing by the generator.

Title — Enter Employee's title.

Name — Print or Type Employee's name.

Company Name — Company employing the person certifying the Generator's Waste Profile Sheet.

Date — Enter the date this Generator's Waste Profile Sheet is signed.

D. WMI Management's Decision

To be completed by WMI.

FOR WMI USE ONLY

APPENDIX B

CHAIN-OF-CUSTODY FORMS

324135

CR-A1108

JE JACOBS ENGINEERING GROUP INC.
600 SEVENTEENTH STREET, SUITE 1100N DENVER, COLORADO 80202
TELEPHONE (303) 596 - 8855 FAX (303) 595 - 8857

CHAIN OF CUSTODY RECORD

USE A BALLPOINT PEN, BLACK INK, AND PRESS FIRMLY. INSTRUCTIONS ARE ON THE BACK

PROJECT NAME: NAS F ^W US ^T and Golf Course				LABORATORY NAME & ADDRESS: Certas Environmental Laboratories						
PROJECT NUMBER: 10X70200				2209 Wisconsin Street, Suite 200						
WBS CODE:		SUBCONTRACT / D.O. No.		Dallas, Texas 75229						
SAMPLE NUMBER	COLLECTION		SAMPLER'S INITIALS	NUMBER OF CONTAINERS	CONTAINER SIZE AND TYPE	PRESERVATIVE	MATRIX CODE	ANALYSES REQUESTED	GC	CONDITION ON RECEIPT
	DATE	TIME								
- CR-A 110801	5/2/96	1210	DDS	1	24" Steev 4 oz. Glass	4° C	S	SW8240		-17
- CR-A 110802	5/2/96	1210	DDS	1	24" Steev 4 oz.	4° C	S	SW8080		-18
- CR-A 110803	5/2/96	1210	DDS	1	24" Steev 4 oz.	4° C	S	SW8150 SW8270 3410-1-003		-19
- CR-A 110804	5/2/96	1210	DDS	1	24" Steev 8 oz.	4° C	S	SW6010 SW7040 SW7060 SW7130 SW7420 SW7471 SW7520 SW7740 SW7760 *		-20
- CR-A110805	5/2/96	1210	DDS	1	8 oz.	4° C	S	SW8270		-21
- CR-A110806	5/2/96	1210	DDS	1	4 oz.	4° C	S	E418.1		-22
- CR-A110807	5/1/96	1045	DDS	1	4 oz.	4° C	S	E418.1		-23
COMMENTS: Run abbreviated SW6010: Ba, Be, Cr, Co, Cu, Pb, ^(Sn) V, Zn only 96-908										
COLLECTED & RELEASED BY			DATE	TIME	TURNAROUND TIME					
Dan Schultz			5/2/96	15:20						
RECEIVED BY			DATE	TIME	RELINQUISHED BY			DATE	TIME	
Jon A. Z.			5/2/96	15:20	Jon A. Z.			5/2/96	17:25	
RECORD RETURNED BY			DATE	TIME	SHIPPING NUMBER:					
			1/1							

DISTRIBUTION: WHITE - PROJECT FILE / CANARY - LAB RECEIPT / PINK - DATA MANAGEMENT / GOLDENROD - FIELD

96-00208

324136



CR-A1109

CHAIN OF CUSTODY RECORD

USE A BALLPOINT PEN, BLACK INK, AND PRESS FIRMLY. INSTRUCTIONS ARE ON THE BACK

PROJECT NAME: NAS FW UST and Golf Course				LABORATORY NAME & ADDRESS: Certes Environmental Laboratories						
PROJECT NUMBER: 10X70200				2209 Wisconsin Street, Suite 200						
WBS CODE:		SUBCONTRACT / D.O. No.		Dallas, Texas 75229						
SAMPLE NUMBER	COLLECTION		SAMPLER'S INITIALS	NUMBER OF CONTAINERS	CONTAINER SIZE AND TYPE	PRESERVATIVE	MATRIX CODE	ANALYSES REQUESTED	GC	CONDITION ON RECEIPT
	DATE	TIME								
-21) CR-A 110901	5/3/96	1405	DAS	1	24" Sieve MS 4-oz.	4° C	S	SW8240		
-23) CR-A 110902	5/3/96	1405	DAS	1	24" Sieve MS 4 oz.	4° C	S	SW8080		
-24) CR-A 110903	5/3/96	1405	DAS	1	24" Sieve MS 4 oz.	4° C	S	SW8150 SW8270 SW110.1 - MS		
-25) CR-A 110904	5/3/96	1405	DAS	1	24" Sieve MS B oz.	4° C	S	SW6010 SW7040 SW7060 SW7130 SW7421 SW7471 SW7520 SW7740 SW7760		
-26) CR-A110905	5/3/96	1405	DAS	1	B oz.	4° C	S	SW8270		
-27) CR-A110906	5/3/96	1405	DAS	1	4 oz.	4° C	S	E410.1		
-28) CR-A110907	5/3/96	1628	DAS	1	4 oz.	4° C	S	E418.1		
MS										
COMMENTS: SW6010 for the following: Ba, Be, Cr, Co, Cu, Ti, V, Zn only										
COLLECTED & RELEASED BY: <i>Don Schuy</i>			DATE: 5/3/96	TIME: 16:30	TURNAROUND TIME					
RECEIVED BY: <i>[Signature]</i>			DATE: 1/1	TIME: :	RELINQUISHED BY				DATE: 1/1	TIME: :
			5-3	9:30						
			5/3	5:30						
RECORD RETURNED BY			DATE: 1/1	TIME: :	SHIPPING NUMBER: 96-0918					

DISTRIBUTION: WHITE - PROJECT FILE / CANARY - LAB RECEIPT / PINK - DATA MANAGEMENT / GOLDENROD - FIELD

324137



CR-A1110

CHAIN OF CUSTODY RECORD

USE A BALLPOINT PEN, BLACK INK, AND PRESS FIRMLY. INSTRUCTIONS ARE ON THE BACK

PROJECT NAME: NAS F4 EST and Golf Course				LABORATORY NAME & ADDRESS: Labs 209 Westwood Drive, Dallas, Texas 75209							
PROJECT NUMBER: 19878290				209 Westwood Drive, Suite 209							
WBS CODE:		SUBCONTRACT / D.O. No.		Dallas, Texas 75209							
SAMPLE NUMBER	COLLECTION		SAMPLE INITIALS	NUMBER OF CONTAINERS	CONTAINER SIZE AND TYPE	PRESERVATIVE	MATRIX CODE	ANALYSES REQUESTED	QC	CONDITION ON RECEIPT	
	DATE	TIME									
CR-A 111001	5/2/96	1410	DDS	3	40ml VOA	HCl	W	SW9270		-24	
CR-A 111002	5/2/96	1410	DDS	1	1-L amber	HCl	W	SW9270		-25	
CR-A 111003	5/2/96	1410	DDS	1	1-L amber	HCl	W	SW9270		-26	
CR-A 111004	5/2/96	1410	DDS	2	500ml plastic	HNO3	W	SW9270		-27	
CR-A111005	5/2/96	1410	DDS	1	1-L amber	HCl	W	SW9270		-28	
CR-A111006	5/2/96	1410	DDS	1	1-L amber	HCl	W	E418.1		-29	
CR-A111007	5/4/96	2025	DDS	3	40ml VOA	HCl	W	SW9270 BTEX		-30	
CR-A111008	5/1/96	2025	DDS	1	1-L amber	HCl	W	SW9270		-31	
CR-A111009	5/1/96	2025	DDS	1	1-L amber	HCl	W	E418.1		-32	
COMMENTS: * Run abbreviated SW9270 for the following: Ba, Be, Cr, Co, Cu, Ti, V, Zn only											
COLLECTED & RELEASED BY		DATE	TIME	TURNAROUND TIME							
Dan Schultz		5/2/96	15:20	(5.2)							
RECEIVED BY		DATE	TIME	RELINQUISHED BY		DATE	TIME				
Jon L. Z		5/2/96	15:20	Jon L. Z		5/2/96	17:25				
SK		5/1/96	17:25								
RECORD RETURNED BY		DATE	TIME	SHIPPING NUMBER:							
		1/1		96-908							

DISTRIBUTION: WHITE - PROJECT FILE / CANARY - LAB RECEIPT / PINK - DATA MANAGEMENT / GOLDENROD - FIELD

96-0906

324138

CR-A1143



JACOBS ENGINEERING GROUP INC.
800 SEVENTEENTH STREET, SUITE 1100N DENVER, COLORADO 80202
TELEPHONE (303) 595-8855 FAX (303) 595-8857

CHAIN OF CUSTODY RECORD

USE A BALLPOINT PEN, BLACK INK, AND PRESS FIRMLY. INSTRUCTIONS ARE ON THE BACK

PROJECT NAME: <i>Nws Ft Worth</i>				LABORATORY NAME & ADDRESS: <i>Certes Lab</i>						
PROJECT NUMBER: <i>1DK70200</i>				2209 Wisconsin St # 200						
WBS CODE:		SUBCONTRACT / D.O. No.		Dallas, TX		75229				
SAMPLE NUMBER	COLLECTION		SAMPLER'S INITIALS	NUMBER OF CONTAINERS	CONTAINER SIZE AND TYPE	PRESERVATIVE	MATRIX CODE	ANALYSES REQUESTED	GC	CONDITION ON RECEIPT
	DATE	TIME								
<i>23</i> ✓ <i>CR-A 114301</i>	<i>3/22/96</i>	<i>1046</i>	<i>MJ</i>	<i>1</i>	<i>402 Glass</i>	<i>-</i>	<i>S</i>	<i>SW 8020 BTEX</i>		
<i>24</i> ✓ <i>CR-A 114302</i>	<i>3/22/96</i>	<i>1046</i>	<i>MJ</i>	<i>1</i>	<i>402 Glass</i>	<i>-</i>	<i>S</i>	<i>E 418.1</i>		
<i>25</i> ✓ <i>CR-A 114303</i>	<i>3/22/96</i>	<i>1112</i>	<i>MJ</i>	<i>1</i>	<i>402 Glass</i>	<i>-</i>	<i>S</i>	<i>SW 8020 BTEX</i>		
<i>26</i> ✓ <i>CR-A 114304</i>	<i>3/22/96</i>	<i>1112</i>	<i>MJ</i>	<i>1</i>	<i>402 Glass</i>	<i>-</i>	<i>S</i>	<i>E 418.1</i>		
<i>27</i> ✓ <i>CR-A 114305</i>	<i>3/22/96</i>	<i>1123</i>	<i>MJ</i>	<i>1</i>	<i>402 Glass</i>	<i>-</i>	<i>S</i>	<i>SW 8020 BTEX</i>		
<i>28</i> ✓ <i>CR-A 114306</i>	<i>3/22/96</i>	<i>1123</i>	<i>MJ</i>	<i>1</i>	<i>402 Glass</i>	<i>-</i>	<i>S</i>	<i>E 418.1</i>		
<i>29</i> ✓ <i>CR-A 114307</i>	<i>3/22/96</i>	<i>1300</i>	<i>MJ</i>	<i>3</i>	<i>40ml UOA</i>	<i>HCl W</i>		<i>SW 8020 BTEX</i>		
<i>30</i> ✓ <i>CR-A 114308</i>	<i>3/22/96</i>	<i>1300</i>	<i>MJ</i>	<i>1</i>	<i>1L Glass</i>	<i>HCl W</i>		<i>E 418.1</i>		
<i>31</i> ✓ <i>CR-A 114309</i>	<i>3/22/96</i>	<i>1300</i>	<i>MJ</i>	<i>1</i>	<i>40ml UOA</i>	<i>HCl W</i>		<i>SW 8240</i>		
COMMENTS: <i>96-640</i>										
COLLECTED & RELEASED BY <i>[Signature]</i>			DATE <i>3/22/96</i>	TIME <i>14:00</i>	TURNAROUND TIME <i>7 Days</i>					
RECEIVED BY <i>[Signature]</i>			DATE <i>3/22/96</i>	TIME <i>3:25</i>	RELINQUISHED BY				DATE <i>1/1</i>	TIME <i>:</i>
RECORD RETURNED BY			DATE <i>1/1</i>	TIME <i>:</i>	SHIPPING NUMBER:					

DISTRIBUTION: WHITE - PROJECT FILE / CANARY - LAB RECEIPT / PINK - DATA MANAGEMENT / GOLDENROD - FIELD

324139

JE JACOBS ENGINEERING GROUP INC. *CR-A 1144*
 600 SEVENTEENTH STREET, SUITE 1100N DENVER, COLORADO 80202
 TELEPHONE (303) 595 - 8855 FAX (303) 595 - 8857

CHAIN OF CUSTODY RECORD

USE A BALLPOINT PEN, BLACK INK, AND PRESS FIRMLY. INSTRUCTIONS ARE ON THE BACK

PROJECT NAME: <i>WAB F.W. JST & Golf Course</i>					LABORATORY NAME & ADDRESS: <i>Geotech Env. Labs</i>					
PROJECT NUMBER: <i>10K70200</i>					7209 Wisconsin St. #200					
WBS CODE:			SUBCONTRACT / D.O. No. <i>Dallas, TX 75229</i>							
SAMPLE NUMBER	COLLECTION		SAMPLER'S INITIALS	NUMBER OF CONTAINERS	CONTAINER SIZE AND TYPE	PRESERVATIVE	MATRIX CODE	ANALYSES REQUESTED	OC	CONDITION ON RECEIPT
	DATE	TIME								
<i>✓ CR-A 114401</i>	<i>3/24/96</i>	<i>1715</i>	<i>MJ</i>	<i>1</i>	<i>402 GLASS</i>	<i>-</i>	<i>S</i>	<i>SIN8020</i>		<i>-14</i>
<i>✓ CR-A 114402</i>	<i>3/26/96</i>	<i>1715</i>	<i>MJ</i>	<i>1</i>	<i>402 GLASS</i>	<i>-</i>	<i>S</i>	<i>E 418.1</i>		<i>-15</i>
<i>MJ</i>										
COMMENTS:										
<i>96-0673</i>										
COLLECTED & RELEASED BY <i>[Signature]</i>			DATE <i>3/29/96</i>	TIME <i>14:00</i>	TURNAROUND TIME					
RECEIVED BY <i>[Signature]</i>			DATE <i>3/27/96</i>	TIME <i>18:00</i>	RELINQUISHED BY				DATE <i>1/1</i>	TIME
RECORD RETURNED BY			DATE <i>1/1</i>	TIME	SHIPPING NUMBER:					

DISTRIBUTION: WHITE - PROJECT FILE / CANARY - LAB RECEIPT / PINK - DATA MANAGEMENT / GOLDENROD - FIELD

324140

JE JACOBS ENGINEERING GROUP INC.
600 SEVENTEENTH STREET, SUITE 1100N DENVER, COLORADO 80202
TELEPHONE (303) 595 - 8855 FAX (303) 595 - 8857

CHAIN OF CUSTODY RECORD

USE A BALLPOINT PEN, BLACK INK, AND PRESS FIRMLY. INSTRUCTIONS ARE ON THE BACK

PROJECT NAME: NAS Fw UST and Golf Course				LABORATORY NAME & ADDRESS: Certes Environmental Laboratories						
PROJECT NUMBER: 10X70200				2209 Wisconsin Street, Suite 200						
WBS CODE:		SUBCONTRACT / D.O. No. Dallas, Texas 75229								
SAMPLE NUMBER	COLLECTION		SAMPLER'S INITIALS	NUMBER OF CONTAINERS	CONTAINER SIZE AND TYPE	PRESERVATIVE	MATRIX CODE	ANALYSES REQUESTED	QC	CONDITION ON RECEIPT
	DATE	TIME								
01 ✓ CR-A 150001	3/21/96	1516	mf	1	2oz. Glass	4° C	S	SW8020 BT3I		
02 ✓ CR-A 150002	3/21/96	1518	mf	1	4oz. Glass	4° C	S	SW8270 and E418.1		
03 ✓ CR-A 150003	3/21/96	1528	mf	1	2oz. Glass	4° C	S	SW8020 BT3I		
04 ✓ CR-A 150004	3/21/96	1530	mf	1	4oz. Glass	4° C	S	SW8270 and E418.1		
05 ✓ CR-A 150005	3/21/96	1601	mf	1	2oz. Glass	4° C	S	SW8020 BT3I		
06 ✓ CR-A 150006	3/21/96	1601	mf	1	4oz. Glass	4° C	S	SW8270 and E418.1		
07 ✓ CR-A 150007	3/21/96	1608	mf	1	2oz. Glass	4° C	S	SW8020 BT3I		
08 ✓ CR-A 150008	3/21/96	1608	mf	1	4oz. Glass	4° C	S	SW8270 and E418.1		
COMMENTS: 96-640										
COLLECTED & RELEASED BY <i>[Signature]</i>			DATE 3/22/96	TIME 14:00	TURNAROUND TIME 7 Day					
RECEIVED BY <i>[Signature]</i>			DATE 3/21/96	TIME 3:25	RELINQUISHED BY			DATE / /	TIME	
RECORD RETURNED BY			DATE / /	TIME	SHIPPING NUMBER:					

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324141

JE JACOBS ENGINEERING GROUP INC.
 800 SEVENTEENTH STREET, SUITE 1100N DENVER, COLORADO 80202
 TELEPHONE (303) 595-8855 FAX (303) 595-8857

CHAIN OF CUSTODY RECORD

USE A BALLPOINT PEN, BLACK INK, AND PRESS FIRMLY. INSTRUCTIONS ARE ON THE BACK

PROJECT NAME: NAS PW UST and Golf Course				LABORATORY NAME & ADDRESS: Certes Environmental Laboratories						
PROJECT NUMBER: 10X70200				2209 Wisconsin Street, Suite 200						
WBS CODE:				SUBCONTRACT / D.O. No. Dallas, Texas 75229						
SAMPLE NUMBER	COLLECTION		SAMPLER'S INITIALS	NUMBER OF CONTAINERS	CONTAINER SIZE AND TYPE	PRESERVATIVE	MATRIX CODE	ANALYSES REQUESTED	GC	CONDITION ON RECEIPT
	DATE	TIME								
✓ CR-A 150101	3/24/96	1542 1637 MJ	MJ	1	2oz. Glass	4° C	S	SW8020 BTXI		-01
✓ CR-A 150102	3/24/96	1542 1637 MJ	MJ	1	4oz. Glass	4° C	S	SW8270 and E413.1		-02
✓ CR-A 150103	3/24/96	1551 MJ 1351 MJ	MJ	1	2oz. Glass	4° C	S	SW8020 BTXI		-03
✓ CR-A 150104	3/24/96	1551 MJ 1351 MJ	MJ	1	4oz. Glass	4° C	S	SW8270 and E413.1		-04
✓ CR-A 150105	3/24/96	1602 MJ	MJ	1	2oz. Glass	4° C	S	SW8020 BTXI		-05
✓ CR-A 150106	3/24/96	1602 MJ	MJ	1	4oz. Glass	4° C	S	SW8270 and E413.1		-06
✓ CR-A 150107	3/24/96	1615 MJ	MJ	1	2oz. Glass	4° C	S	SW8020 BTXI		-07
✓ CR-A 150108	3/24/96	1615 MJ	MJ	1	4oz. Glass	4° C	S	SW8270 and E413.1		-08
COMMENTS: 96-067J										
COLLECTED & RELEASED BY <i>[Signature]</i>			DATE 3/27/96	TIME 14:00	TURNAROUND TIME					
RECEIVED BY <i>[Signature]</i>			DATE 3/27/96	TIME 15:00	RELINQUISHED BY			DATE 1/1	TIME :	
RECORD RETURNED BY			DATE 1/1	TIME :	SHIPPING NUMBER:					

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JACOBS ENGINEERING GROUP INC.
 800 SEVENTEENTH STREET, SUITE 1100N DENVER, COLORADO 80202
 TELEPHONE (303) 595 - 8855 FAX (303) 595 - 8857

CHAIN OF CUSTODY RECORD

USE A BALLPOINT PEN, BLACK INK, AND PRESS FIRMLY. INSTRUCTIONS ARE ON THE BACK

PROJECT NAME: <u>NAS FW USF and Golf Course</u>				LABORATORY NAME & ADDRESS: <u>Laboratories</u>						
PROJECT NUMBER: <u>10X70200</u>				2209 Wisconsin Street, Suite 200						
WBS CODE:		SUBCONTRACT / D.O. No.		Dallas, Texas 75229						
SAMPLE NUMBER	COLLECTION		SAMPLER'S INITIALS	NUMBER OF CONTAINERS	CONTAINER SIZE AND TYPE	PRESERVATIVE	MATRIX CODE	ANALYSES REQUESTED	GC	CONDITION ON RECEIPT
	DATE	TIME								
✓ CR-A 150201	<u>3/26/16</u>	<u>1638</u>	<u>MJ</u>	1	<u>2oz. Glass</u>	<u>4° C</u>	<u>S</u>	<u>SW8020 BTX</u>		<u>09</u>
✓ CR-A 150202	<u>3/26/16</u>	<u>1638</u>	<u>MJ</u>	1	<u>4oz. Glass</u>	<u>4° C</u>	<u>S</u>	<u>SW8270 and 8418.1</u>		<u>-10</u>
✓ CR-A 150203	<u>3/26/16</u>	<u>1800</u>	<u>MJ</u>	1	<u>2oz. Glass</u> <u>1 Liter</u>	<u>4° C</u>	<u>S</u> <u>WG SW 8270</u>	<u>SW8020 BTX</u>		<u>-11</u>
✓ CR-A 150204	<u>3/26/16</u>	<u>1800</u>	<u>MJ</u>	1	<u>2oz. Glass</u> <u>1 Liter</u>	<u>4° C</u> <u>HCl</u>	<u>S</u> <u>WG</u>	<u>SW8020 and 8418.1</u>		<u>-12</u>
✓ CR-A 150205	<u>3/26/16</u>	<u>1800</u>	<u>MJ</u>	1	<u>2oz. Glass</u> <u>40 ml</u> <u>VOA</u>	<u>4° C</u> <u>HCl</u>	<u>S</u> <u>W</u>	<u>SW8020 BTX</u>		<u>-13</u>
CR-A 150206				1	4oz. Glass	4° C	S	SW8270 and 8418.1		
CR-A 150207				1	2oz. Glass	4° C	S	SW8020 BTX		
CR-A 150208				1	4oz. Glass	4° C	S	SW8270 and 8418.1		
COMMENTS: <u>VOID Lines CRA-150206 thru CRA 150208</u> <u>YL - 0673</u>										
COLLECTED & RELEASED BY <u>[Signature]</u>				DATE <u>3/27</u>	TIME <u>14:00</u>	TURNAROUND TIME				
RECEIVED BY <u>[Signature]</u>				DATE <u>3/27</u>	TIME <u>18:00</u>	RELINQUISHED BY			DATE <u>1/1</u>	TIME <u>:</u>
RECORD RETURNED BY				DATE <u>1/1</u>	TIME <u>:</u>	SHIPPING NUMBER:				

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JE JACOBS ENGINEERING GROUP INC.
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 TELEPHONE (303) 595 - 8855 FAX (303) 595 - 8857

CHAIN OF CUSTODY RECORD

USE A BALLPOINT PEN, BLACK INK, AND PRESS FIRMLY. INSTRUCTIONS ARE ON THE BACK

PROJECT NAME: NAS FW UST and Golf Course				LABORATORY NAME & ADDRESS: Cerdes Environmental Laboratories						
PROJECT NUMBER: 10X70200				2209 Wisconsin Street, Suite 200						
WBS CODE:		SUBCONTRACT / D.O. No.		Dallas, Texas 75229						
SAMPLE NUMBER	COLLECTION		SAMPLER'S INITIALS	NUMBER OF CONTAINERS	CONTAINER SIZE AND TYPE	PRESER-VATIVE	MATRIX CODE	ANALYSES REQUESTED	GC	CONDITION ON RECEIPT
	DATE	TIME								
CR-A 150301	4/4/96	0950	DDS	1	2oz. Glass 4oz.	4° C	S	SW8020 BTEX + MTBE		-15
CR-A 150302	4/4/96	0950	DDS	1	4oz. Glass	4° C	S	SW8270 and E418.1		-16
CR-A 150303	4/4/96	1010	DDS	1	2oz. Glass 4oz.	4° C	S	SW8020 BTEX + MTBE		-17
CR-A 150304	4/4/96	1010	DDS	1	4oz. Glass	4° C	S	SW8270 and E418.1		-18
CR-A 150305	4/4/96	1028	DDS	1	2oz. Glass 4oz.	4° C	S	SW8020 BTEX + MTBE		-19
CR-A 150306	4/4/96	1028	DDS	1	4oz. Glass	4° C	S	SW8270 and E418.1		-20
CR-A 150307	4/4/96	1040	DDS	1	2oz. Glass 4oz.	4° C	S	SW8020 BTEX + MTBE		-21
CR-A 150308	4/4/96	1040	DDS	1	4oz. Glass	4° C	S	SW8270 and E418.1		-22
CR-A150309	4/4/96	1050	DDS	1	4oz Glass	4° C	S	SW8020 BTEX + MTBE		-23
COMMENTS: 96-C774										
COLLECTED & RELEASED BY: Dan Schultz		DATE	TIME	TURNAROUND TIME						
RECEIVED BY: [Signature]		DATE	TIME	RELINQUISHED BY		DATE	TIME			
		4/4/96	16:30							
		4/5/96	6:30 AM							
RECORD RETURNED BY		DATE	TIME	SHIPPING NUMBER:						
		1/1								

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JE JACOBS ENGINEERING GROUP INC.
 600 SEVENTEENTH STREET, SUITE 1100N DENVER, COLORADO 80202
 TELEPHONE (303) 595 - 8855 FAX (303) 595 - 8857

CHAIN OF CUSTODY RECORD

USE A BALLPOINT PEN, BLACK INK, AND PRESS FIRMLY. INSTRUCTIONS ARE ON THE BACK

PROJECT NAME:				NAS FW USF and Golf Course				LABORATORY NAME & ADDRESS:				Certes Environmental Laboratories			
PROJECT NUMBER:				10K70200				2299 Wisconsin Street, Suite 200				Dallas, Texas 75229			
WBS CODE:				SUBCONTRACT / D.O. No.				Dallas, Texas 75229							
SAMPLE NUMBER	COLLECTION		SAMPLER'S INITIALS	NUMBER OF CONTAINERS	CONTAINER SIZE AND TYPE	PRESERVATIVE	MATRIX CODE	ANALYSES REQUESTED	OC	CONDITION ON RECEIPT					
	DATE	TIME													
CR-A 150401	4/4/96	1107	PDS	1	4oz. Glass 4oz.	4° C	S	SW8020 BTEX + MTBE			-24				
CR-A 150402	4/4/96	1107	PDS	1	4oz. Glass	4° C	S	SW8270 and E418.1			-25				
CR-A 150403	4/4/96	1110	PDS	1	4oz. Glass 4oz.	4° C	S	SW8020 BTEX + MTBE			-26				
CR-A 150404	4/4/96	1110	DDS	1	4oz. Glass	4° C	S	SW8270 and E418.1			-27				
CR-A 150405	4/4/96	1119	DDS	1	4oz. Glass 4oz.	4° C	S	SW8020 BTEX + MTBE			-28				
CR-A 150406	4/4/96	1119	DDS	1	4oz. Glass	4° C	S	SW8270 and E418.1			-29				
CR-A 150407	4/4/96	1134	DDS	1	4oz. Glass 4oz.	4° C	S	SW8020 BTEX + MTBE			-30				
CR-A 150408	4/4/96	1134	DDS	1	4oz. Glass	4° C	S	SW8270 and E418.1			-31				
CR-A150409	4/4/96	1050	PDS	1	4oz. GLASS	4° C	S	SW8270 AND E418.1			-32				
COMMENTS:											96-C724				
COLLECTED & RELEASED BY			DATE		TIME		TURNAROUND TIME								
Dann Schultzy			4/4/96		16:30										
RECEIVED BY			DATE		TIME		RELINQUISHED BY			DATE		TIME			
			4/4/96		16:40					/ /					
			4/5/96		6:30 AM										
RECORD RETURNED BY			DATE		TIME		SHIPPING NUMBER:								
			/ /												

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324145

JE JACOBS ENGINEERING GROUP INC.
 900 SEVENTEENTH STREET, SUITE 1100N DENVER, COLORADO 80202
 TELEPHONE (303) 595 - 8855 FAX (303) 595 - 8857

CHAIN OF CUSTODY RECORD

USE A BALLPOINT PEN, BLACK INK, AND PRESS FIRMLY. INSTRUCTIONS ARE ON THE BACK

PROJECT NAME:				NAS FW USF and Golf Course				LABORATORY NAME & ADDRESS:				Certes Environmental Laboratories																
PROJECT NUMBER:				10X70200				2209 Wisconsin Street, Suite 200																				
WBS CODE:				SUBCONTRACT / D.O. No.				Dallas, Texas 75229																				
SAMPLE NUMBER	COLLECTION		SAMPLER'S INITIALS	NUMBER OF CONTAINERS	CONTAINER SIZE AND TYPE	PRESERVATIVE	MATRIX CODE	ANALYSES REQUESTED	QC	CONDITION ON RECEIPT																		
	DATE	TIME																										
CR-A 150501	4/4/96	1145	DDS	1	4oz. Glass	4° C	S	SW8020 BTEX		-33																		
CR-A 150502	4/4/96	1145	DDS	1	4oz. Glass	4° C	S	SW8270 and 3418.1		-34																		
CR-A 150503	4/4/96	1150	DDS	1	4oz. Glass	4° C	S	SW8020 BTEX		-35																		
CR-A 150504	4/4/96	1150	DDS	1	4oz. Glass	4° C	S	SW8270 and 3418.1		-36																		
CR-A 150505	4/4/96	1155	DDS	1	4oz. Glass	4° C	S	SW8020 BTEX		-37																		
CR-A 150506	4/4/96	1155	DDS	1	4oz. Glass	4° C	S	SW8270 and 3418.1		-38																		
CR-A 150507	4/4/96	1200	DDS	1	4oz. Glass	4° C	S	SW8020 BTEX		-39																		
CR-A 150508	4/4/96	1200	DDS	1	4oz. Glass	4° C	S	SW8270 and 3418.1		-40																		
CR-A150509	4/4/96	1530	DDS	1	40ml VOA	4° C	SW	SW8240		-41																		
COMMENTS:													96-0774															
COLLECTED & RELEASED													DATE				TIME				TURNAROUND TIME							
RECEIVED BY													DATE				TIME				RELINQUISHED BY				DATE		TIME	
[Signature]													4/4/96				16:30								11			
[Signature]													4/4/96				16:40											
[Signature]													4/5/96				6:50A											
RECORD RETURNED BY													DATE				TIME				SHIPPING NUMBER:							
													11															

DISTRIBUTION: WHITE - PROJECT FILE / CANARY - LAB RECEIPT / PINK - DATA MANAGEMENT / GOLDENROD - FIELD

324146

JE JACOBS ENGINEERING GROUP INC.
 600 SEVENTEENTH STREET, SUITE 1100N DENVER, COLORADO 80202
 TELEPHONE (303) 595 - 8855 FAX (303) 595 - 8857

CHAIN OF CUSTODY RECORD

USE A BALLPOINT PEN, BLACK INK, AND PRESS FIRMLY. INSTRUCTIONS ARE ON THE BACK

PROJECT NAME:					LABORATORY NAME & ADDRESS:					
PROJECT NUMBER: N10 24 337 and Golf Course					Certes Environmental Laboratories					
WBS CODE: 10X70200					SUBCONTRACT / D.O. No. 1209 Wisconsin Street, Suite 202					
					Dallas, Texas 75229					
SAMPLE NUMBER	COLLECTION		SAMPLER'S INITIALS	NUMBER OF CONTAINERS	CONTAINER SIZE AND TYPE	PRESERVATIVE	MATRIX CODE	ANALYSES REQUESTED	QC	CONDITION ON RECEIPT
	DATE	TIME								
-8 ✓ CR-A 150601	3/21/96	1637	MJ	1	2oz. Glass	4° C	S	SW8020-BTEX and SW8240		
-10 ✓ CR-A 150602	3/21/96	1637	MJ	2	4oz. Glass	4° C	S	SW8270 SW6010 3418.1		
-11 ✓ CR-A 150603	3/21/96	1800	MJ	3	40ml VOA	HCL	W	SW8240		
-12 ✓ CR-A 150604	3/21/96	1800	MJ	1	1L glass	HCL	W	E 418.1		
-13 ✓ CR-A 150605	3/21/96	1800	MJ	1	1L glass	-	W	SW8270		
-14 ✓ CR-A 150606	3/21/96	1800	MJ	1	500ml Plastic	HNO3	W	SW6010		
COMMENTS: 96-640										
COLLECTED & RELEASED BY			DATE	TIME	TURNAROUND TIME					
			3/21/96	14:00	7 Days					
RECEIVED BY			DATE	TIME	RELINQUISHED BY				DATE	TIME
			3/27/96	3:25					1/1	:
RECORD RETURNED BY			DATE	TIME	SHIPPING NUMBER:					
			1/1	:						

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324149



CHAIN OF CUSTODY RECORD

USE A BALLPOINT PEN, BLACK INK, AND PRESS FIRMLY. INSTRUCTIONS ARE ON THE BACK

PROJECT NAME: NAS FW UST and Golf Course				LABORATORY NAME & ADDRESS: Certas Environmental Laboratories						
PROJECT NUMBER: 10K70200				2209 Wisconsin Street, Suite 200						
WBS CODE:		SUBCONTRACT / D.O. No.				Dallas, Texas 75229				
SAMPLE NUMBER	COLLECTION		SAMPLER'S INITIALS	NUMBER OF CONTAINERS	CONTAINER SIZE AND TYPE	PRESERVATIVE	MATRIX CODE	ANALYSES REQUESTED	CC	CONDITION ON RECEIPT
	DATE	TIME								
196 CR-A 150901	3/21/96	1716	MJ	2	2oz. Glass	4° C	S	SW8020 SW6010 E418.1 SW8020 SW6010 E418.1		
206 CR-A 150902	3/21/96	1716	MJ	2	4oz. Glass	4° C	S	SW8020 SW6010 E418.1 m SW8020 SW6010		
216 CR-A 150903	3/21/96	1716	MJ	1	4oz Glass	4° C	S	SW8020 SW6010 SW8020		
226 CR-A 150904	3/21/96	1716	MJ	2	4oz Glass	4° C	S	SW8020 SW6010 E418.1		
COMMENTS: 96 - 640										
COLLECTED & RELEASED BY: <i>[Signature]</i>			DATE: 3/22/96	TIME: 14:00	TURNAROUND TIME: 7 Days					
RECEIVED BY: <i>[Signature]</i>			DATE: 3/22/96	TIME: 3:25	RELINQUISHED BY:				DATE: 1/1	TIME: :
RECORD RETURNED BY:			DATE: 1/1	TIME: :	SHIPPING NUMBER:					

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324150

JE JACOBS ENGINEERING GROUP INC.
 600 SEVENTEENTH STREET, SUITE 1100N DENVER, COLORADO 80202
 TELEPHONE (303) 595 - 8855 FAX (303) 595 - 8857

CHAIN OF CUSTODY RECORD

USE A BALLPOINT PEN, BLACK INK, AND PRESS FIRMLY. INSTRUCTIONS ARE ON THE BACK

PROJECT NAME: NAS FW UST and Golf Course				LABORATORY NAME & ADDRESS: Certes Environmental Laboratories						
PROJECT NUMBER: 10K70200				2203 Wisconsin Street, Suite 200						
WBS CODE:		SUBCONTRACT / D.O. No.				Dallas, Texas 75229				
SAMPLE NUMBER	COLLECTION		SAMPLER'S INITIALS	NUMBER OF CONTAINERS	CONTAINER SIZE AND TYPE	PRESER-VATIVE	MATRIX CODE	ANALYSES REQUESTED	OC	CONDITION ON RECEIPT
	DATE	TIME								
CR-A 151001	4/1/96	1732	DAS	1	2oz. Glass	4° C	S	SW3020-BT3X and SW3240		-01
CR-A 151002	4/1/96	1732	DAS	2	4oz Glass	4° C	S	SW3270 SW6010 R418.1		-02
DAS										
COMMENTS: 9C-0711										
COLLECTED & RELEASED BY: Dan Schultz			DATE: 4/2/96	TIME: 16:00	TURNAROUND TIME					
RECEIVED BY: [Signature]			DATE: 4/2/96	TIME: 18:00	RELINQUISHED BY: [Signature]			DATE: 4/2/96	TIME: 18:00	
RECORD RETURNED BY:			DATE: 1/1	TIME:	SHIPPING NUMBER:					

DISTRIBUTION: WHITE - PROJECT FILE / CANARY - LAB RECEIPT / PINK - DATA MANAGEMENT / GOLDENROD - FIELD

324151

JE JACOBS ENGINEERING GROUP INC.
 600 SEVENTEENTH STREET, SUITE 1100N DENVER, COLORADO 80202
 TELEPHONE (303) 595 - 8855 FAX (303) 595 - 8857

CHAIN OF CUSTODY RECORD

USE A BALLPOINT PEN, BLACK INK, AND PRESS FIRMLY. INSTRUCTIONS ARE ON THE BACK

PROJECT NAME:				NAS FW USF and Golf Course				LABORATORY NAME & ADDRESS:				Cerces Environmental Laboratories			
PROJECT NUMBER:				10X70200				2209 Wisconsin Street, Suite 200							
WBS CODE:				SUBCONTRACT / D.O. No.				Dallas, Texas 75229							
SAMPLE NUMBER	COLLECTION		SAMPLER'S INITIALS	NUMBER OF CONTAINERS	CONTAINER SIZE AND TYPE	PRESERVATIVE	MATRIX CODE	ANALYSES REQUESTED	OC	CONDITION ON RECEIPT					
	DATE	TIME													
- CR-A 151101	4/1/96	1744	DDS	1	4oz. Glass	4° C	S	SW8020-BTEX and SW8240		-13					
- CR-A 151102	4/1/96	1744	DDS	1	4oz. Glass	4° C	S	SW8270 SW6010 E418.1		-14					
- CR-A151103	4/2/96	0915	DDS	1	4oz GLASS	4° C	S	SW8020 BTEX		-15					
- CR-A151104	4/2/96	0915	DDS	1	8 oz Glass	4° C	S	E418.1		-16					
- CR-A151105	4/2/96	0920	DDS	1	4oz Glass	4° C	S	SW8020 BTEX		-17					
- CR-A151106	4/2/96	0920	DDS	1	8oz Glass	4° C	S	E418.1		-18					
- CR-A151107	4/2/96	0923	DDS	1	4oz Glass	4° C	S	SW8020 BTEX		-19					
- CR-A151108	4/2/96	0923	DDS	1	8oz Glass	4° C	S	E418.1		-20					
CR-A151109	4/2/96	1500	DDS	1	40ml VOA	4° C ^{HCl}	W	SW8240		-21					
COMMENTS:											96-0711				
COLLECTED & RELEASED BY				DATE	TIME	TURNAROUND TIME									
RECEIVED BY				DATE	TIME	RELINQUISHED BY				DATE	TIME				
RECORD RETURNED BY				DATE	TIME	SHIPPING NUMBER:									

DISTRIBUTION: WHITE - PROJECT FILE / CANARY - LAB RECEIPT / PINK - DATA MANAGEMENT / GOLDENROD - FIELD

324152



CHAIN OF CUSTODY RECORD

USE A BALLPOINT PEN, BLACK INK, AND PRESS FIRMLY. INSTRUCTIONS ARE ON THE BACK

PROJECT NAME: WAS FW UST and Golf Course				LABORATORY NAME & ADDRESS: Certes Environmental Laboratories						
PROJECT NUMBER: 10X70200				2209 Wisconsin Street, Suite 200						
WBS CODE:		SUBCONTRACT / D.O. No.		Dallas, Texas 75229						
SAMPLE NUMBER	COLLECTION		SAMPLER'S INITIALS	NUMBER OF CONTAINERS	CONTAINER SIZE AND TYPE	PRESERVATIVE	MATRIX CODE	ANALYSES REQUESTED	GC	CONDITION ON RECEIPT
	DATE	TIME								
- CR-A 151201	4/1/96	1729	DDS	1	12oz. Glass	4° C	S	SW8020-BTEX and SW8240		-05
- CR-A 151202	4/1/96	1729	DDS	1	8oz. Glass	4° C	S	SW8270 SW5010 B418.1		-06
- CR-A151203	4/2/96	0855	DDS	1	4oz. Glass	4° C	S	SW8020 BTEX		-07
- CRA151204	4/2/96	0855	DDS	1	8oz GLASS	4° C	S	E418.1		-08
- CR-A151205	4/2/96	0900	DDS	1	4oz Glass	4° C	S	SW8020 BTEX		-09
- CRA151206	4/2/96	0900	DDS	1	8oz GLASS	4° C	S	E418.1		-10
- CR-A151207	4/2/96	0905	DDS	1	4oz Glass	4° C	S	SW8020 BTEX		-11
- CR-A151208	4/2/96	0905	DDS	1	8oz Glass	4° C	S	E418.1		-12
DDS										
COMMENTS: 96-0711										
COLLECTED & RELEASED BY: Dan Schultz		DATE: 4/2/96	TIME: 16:00	TURNAROUND TIME						
RECEIVED BY: [Signature]		DATE: 4/1/96	TIME: 15:00	RELINQUISHED BY: [Signature]				DATE: 4/2/96	TIME: 18:00	
RECORD RETURNED BY:		DATE:	TIME:	SHIPPING NUMBER:						

DISTRIBUTION: WHITE - PROJECT FILE / CANARY - LAB RECEIPT / PINK - DATA MANAGEMENT / GOLDENROD - FIELD

324153

JE JACOBS ENGINEERING GROUP INC.
 600 SEVENTEENTH STREET, SUITE 1100N DENVER, COLORADO 80202
 TELEPHONE (303) 596 - 8855 FAX (303) 595 - 8857

CHAIN OF CUSTODY RECORD

USE A BALLPOINT PEN, BLACK INK, AND PRESS FIRMLY. INSTRUCTIONS ARE ON THE BACK

PROJECT NAME: NAS FW USF and Golf Course				LABORATORY NAME & ADDRESS: Certes Environmental Laboratories							
PROJECT NUMBER: 10K70200				2209 Wisconsin Street, Suite 200							
WBS CODE:		SUBCONTRACT / D.O. No.				Dallas, Texas 75229					
SAMPLE NUMBER	COLLECTION		SAMPLER'S INITIALS	NUMBER OF CONTAINERS	CONTAINER SIZE AND TYPE	PRESERVATIVE	MATRIX CODE	ANALYSES REQUESTED	GC	CONDITION ON RECEIPT	
	DATE	TIME									
CR-A 151301	4/1/96	1737	DPS	1	4oz. Glass	4° C	S	SW8020-BTEX and SW8240		-03	
CR-A 151302	4/1/96	1737	DPS	1	8oz. Glass	4° C	S	SW8270 SW6010 E418.1		-04	
DPS 96-0711											
COMMENTS:											
COLLECTED & RELEASED BY Daniel D. Schuyt			DATE 4/2/96	TIME 16:00	TURNAROUND TIME						
RECEIVED BY <i>[Signature]</i>			DATE 4/2/96	TIME 15:00	RELINQUISHED BY <i>[Signature]</i>			DATE 4/2/96	TIME 18:00		
RECORD RETURNED BY			DATE 1/1	TIME	SHIPPING NUMBER:						

DISTRIBUTION: WHITE - PROJECT FILE / CANARY - LAB RECEIPT / PINK - DATA MANAGEMENT / GOLDENROD - FIELD

324154



JACOBS ENGINEERING GROUP INC.
 600 SEVENTEENTH STREET, SUITE 1100N DENVER, COLORADO 80202
 TELEPHONE (303) 595 - 8855 FAX (303) 595 - 8857

CHAIN OF CUSTODY RECORD

USE A BALLPOINT PEN, BLACK INK, AND PRESS FIRMLY. INSTRUCTIONS ARE ON THE BACK

PROJECT NAME:			NAS FW UST and Golf Course				LABORATORY NAME & ADDRESS:			Certes Environmental Laboratories		
PROJECT NUMBER:			10K70200				2209 Wisconsin Street, Suite 200			Dallas, Texas 75229		
WBS CODE:			SUBCONTRACT / D.O. No.				Dallas, Texas 75229					
SAMPLE NUMBER	COLLECTION		SAMPLER'S INITIALS	NUMBER OF CONTAINERS	CONTAINER SIZE AND TYPE	PRESERVATIVE	MATRIX CODE	ANALYSES REQUESTED	GC	CONDITION ON RECEIPT		
	DATE	TIME										
CR-A 151401	4/2/96	0940	DPS	1	4oz. Glass	4° C	S	SW8020-BTEX and SW8020 MS		-22		
CR-A 151402	4/2/96	0940	DPS	2	4oz. Glass	4° C	S	SW8020 SW8010 E418.1		-23		
CR-A151403	4/2/96	1120	DPS	1	4oz GLASS	4° C	S	SW8020 - BTEX		-24		
CR-A151404	4/2/96	1120	DPS	1	8oz GLASS	4° C	S	E418.1		-25		
CR-A151405	4/2/96	1125	DPS	1	4oz GLASS	4° C	S	SW8020 - BTEX		-26		
CR-A151406	4/2/96	1125	DPS	1	8oz GLASS	4° C	S	E418.1		-27		
CR-A151407	4/2/96	1130	DPS	1	4oz GLASS	4° C	S	SW8020 - BTEX		-28		
CR-A151408	4/2/96	1130	DPS	1	8oz GLASS	4° C	S	E418.1		-29		
DPS												
COMMENTS:										46-0711		
COLLECTED & RELEASED BY			DATE	TIME	TURNAROUND TIME							
RECEIVED BY			DATE	TIME	RELINQUISHED BY			DATE	TIME			
RECORD RETURNED BY			DATE	TIME	SHIPPING NUMBER:							

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324155

JE JACOBS ENGINEERING GROUP INC.
600 SEVENTEENTH STREET, SUITE 1100N DENVER, COLORADO 80202
TELEPHONE (303) 595 - 8855 FAX (303) 595 - 8857

CHAIN OF CUSTODY RECORD

USE A BALLPOINT PEN, BLACK INK, AND PRESS FIRMLY. INSTRUCTIONS ARE ON THE BACK

PROJECT NAME:			NAS FW UST and Golf Course				LABORATORY NAME & ADDRESS:				Ceres Environmental Laboratories				
PROJECT NUMBER:			10X70200				2209 Wisconsin Street, Suite 200								
WBS CODE:			SUBCONTRACT / D.O. No.				Dallas, Texas 75229								
SAMPLE NUMBER	COLLECTION		SAMPLER'S INITIALS	NUMBER OF CONTAINERS	CONTAINER SIZE AND TYPE	PRESERVATIVE	MATRIX CODE	ANALYSES REQUESTED	CC	CONDITION ON RECEIPT					
	DATE	TIME													
CR-A 151501	4/2/96	1130	DDS	1	2oz. Glass	4° C	S	SW8020-BTEX and SW8240		DDS					
CR-A 151502	4/2/96	1130	DDS	2	4oz. Glass	4° C	S	SW8270 SW8010 E418.1		DDS					
- CR-A151503	4/2/96	1135	DDS	1	4oz Glass	4°C	S	SW820 - BTEX			-30				
- CR-A151504	4/2/96	1135	DDS	1	8oz Glass	4°C	S	SW8020 E418.1			-31				
- CR-A151505	4/2/96	1545	DDS	1	40ml VOA	HCl	W	SW8240			-32				
- CR-A151506	4/2/96	1545	DDS	1	1-L amber glass	4°C	W	SW8270			-33				
- CR-A151507	4/2/96	1545	DDS	1	1-L amber glass	HCl	W	E418.1			-34				
- CR-A151508	4/2/96	1545	DDS	1	8-oz. Plastic	HNO3	W	SWG010			-35				
										DDS					
COMMENTS:											96-0711				
COLLECTED & RELEASED BY			DATE	TIME	TURNAROUND TIME										
RECEIVED BY			DATE	TIME	RELINQUISHED BY				DATE	TIME					
RECORD RETURNED BY			DATE	TIME	SHIPPING NUMBER:										

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324156

JE JACOBS ENGINEERING GROUP INC.
 800 SEVENTEENTH STREET, SUITE 1100N DENVER, COLORADO 80202
 TELEPHONE (303) 595-8855 FAX (303) 595-8857

CHAIN OF CUSTODY RECORD

USE A BALLPOINT PEN, BLACK INK, AND PRESS FIRMLY. INSTRUCTIONS ARE ON THE BACK

PROJECT NAME: NAS FW UST and Golf Course				LABORATORY NAME & ADDRESS: Certes Environmental Laboratories						
PROJECT NUMBER: 10K70200				2209 Wisconsin Street, Suite 200						
WBS CODE:		SUBCONTRACT / D.O. No.		Dallas, Texas 75229						
SAMPLE NUMBER	COLLECTION		SAMPLER'S INITIALS	NUMBER OF CONTAINERS	CONTAINER SIZE AND TYPE	PRESERVATIVE	MATRIX CODE	ANALYSES REQUESTED	CC	CONDITION ON RECEIPT
	DATE	TIME								
CR-A 151601	4/3/96	1010	DDS	1	2oz. Glass 4	4° C	S	SW8020-BTEX and SW8240		01
CR-A 151602	4/3/96	1010	DDS	2 1	1oz. Glass 8oz.	4° C	S	SW8270 SW6010 E418.1		02
CR-A151603	4/3/96	1020	DDS	1	4oz. Glass	4° C	S	SW8020 BTEX, 8240		03
CR-A151604	4/3/96	1020	DDS	1	8oz Glass	4° C	S	SW8270, SW6010, E418.1		04
CR-A151605	4/3/96	1030	DDS	1	4oz GLASS	4° C	S	SW8020 BTEX, 8240		05
CR-A151606	4/3/96	1030	DDS	1	8oz Glass	4° C	S	SW8270, SW6010, E418.1		06
CR-A151607	4/3/96	1555	DDS	1	4oz GLASS	4° C	S	SW8020 BTEX, SW8240		07
CR-A151608	4/3/96	1555	DDS	1	8oz GLASS	4° C	S	SW8270, SW601, E418.1		08
CR-A151609	4/3/96	1700	DDS	1	40 ml VOA	4° C	W	SW8240		09
COMMENTS:										
96-0721										
COLLECTED & RELEASED BY Don Shultz			DATE 4/3/96	TIME 17:00	TURNAROUND TIME					
RECEIVED BY Iney Dite			DATE 4/3/96	TIME 18:00	RELINQUISHED BY Jon L. Z.			DATE 4/3/96	TIME 18:00	
RECORD RETURNED BY			DATE	TIME	SHIPPING NUMBER:					

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324157

JE JACOBS ENGINEERING GROUP INC.
 800 SEVENTEENTH STREET, SUITE 1100N DENVER, COLORADO 80202
 TELEPHONE (303) 595 - 8855 FAX (303) 595 - 8857

CHAIN OF CUSTODY RECORD

USE A BALLPOINT PEN, BLACK INK, AND PRESS FIRMLY. INSTRUCTIONS ARE ON THE BACK

PROJECT NAME: <i>NAS FW VST & Golf Course</i>					LABORATORY NAME & ADDRESS: <i>Charles E. Lab.</i>					
PROJECT NUMBER: <i>10K70200</i>					2209 Wisconsin St. # 200 <i>Dallas, Texas 75229</i>					
WBS CODE:			SUBCONTRACT / D.O. No.							
SAMPLE NUMBER	COLLECTION		SAMPLER'S INITIALS	NUMBER OF CONTAINERS	CONTAINER SIZE AND TYPE	PRESERVATIVE	MATRIX CODE	ANALYSES REQUESTED	GC	CONDITION ON RECEIPT
	DATE	TIME								
✓ CR-A 151701	^{25 ml} 3/27/96	1710	MJ	3	40 ml VOA	HCl	WG	SW 8240		-23
✓ CR-A 151702	^{25 ml} 3/27/96	1710	MJ	1	1L glass	None	WG	SW 8220		-24
✓ CR-A 151703	3/25/96	1710	MJ	1	1L glass	HCl	WG	E418.1		-25
✓ CR-A 151704	3/25/96	1710	MJ	3	40 ml VOA	HCl	WG	SW 8020		-26
✓ CR-A 151705	3/25/96	1815	MJ	3	40 ml VOA	HCl	W	SW 8240		-27
CR-A 151706	3/25/96	1815	MJ	3	40 ml VOA	HCl	W	SW 8240		-28
✓ CR-A 151707	3/25/96	1815	MJ	1	1L Glass	None	W	SW 8220		-29
✓ CR-A 151708	3/25/96	1815	MJ	1	1L Glass	HCl	W	SW ^{MJ} E418.1		-30
✓ CR-A 151709	3/27/96	1345	MJ	1	40 ml VOA	HCl	W	SW 8240		-31
COMMENTS: <i>VOID CR-A 151706 not necessary</i>										
<i>SL-0673</i>										
COLLECTED & RELEASED BY <i>[Signature]</i>			DATE	TIME	TURNAROUND TIME					
RECEIVED BY <i>[Signature]</i>			DATE	TIME	RELINQUISHED BY				DATE	TIME
RECORD RETURNED BY			DATE	TIME	SHIPPING NUMBER:					

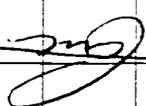
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324158

JE JACOBS ENGINEERING GROUP INC.
 800 SEVENTEENTH STREET, SUITE 1100N DENVER, COLORADO 80202
 TELEPHONE (303) 595 - 8855 FAX (303) 595 - 8857

CHAIN OF CUSTODY RECORD

USE A BALLPOINT PEN, BLACK INK, AND PRESS FIRMLY. INSTRUCTIONS ARE ON THE BACK

PROJECT NAME:				LABORATORY NAME & ADDRESS:						
PROJECT NUMBER:										
WBS CODE:		SUBCONTRACT / D.O. No.								
SAMPLE NUMBER	COLLECTION		SAMPLER'S INITIALS	NUMBER OF CONTAINERS	CONTAINER SIZE AND TYPE	PRESERVATIVE	MATRIX CODE	ANALYSES REQUESTED	OC	CONDITION ON RECEIPT
	DATE	TIME								
✓ CR-A 151801	3/27/96	1230	MJ	3	40ml VOA	HCl	WG	SW 8020		-16
✓ CR-A 151802	3/27/96	1230	MJ	1	1 Liter GLASS	None HCl	WG	SW 8270		-17
✓ CR-A 151803	3/27/96	1230	MJ	1	1 Liter GLASS	HCl	WG	E418.1		-18
✓ CR-A 151804	3/27/96	1240	MJ	3	40ml VOA	HCl	WG	SW 8020		-19
✓ CR-A 151805	3/27/96	1330	MJ	3	40 ml VOA	HCl	WG	SW 8020		-20
✓ CR-A 151806	3/27/96	1330	MJ	1	1 Liter GLASS	None	WG	SW 8270		-21
✓ CR-A 151807	3/27/96	1330	MJ	1	1 Liter GLASS	HCl	WG	E418.1		-22
										
COMMENTS:										
46-6673										
COLLECTED & RELEASED BY			DATE	TIME	TURNAROUND TIME					
RECEIVED BY			DATE	TIME	RELINQUISHED BY			DATE	TIME	
RECORD RETURNED BY			DATE	TIME	SHIPPING NUMBER:					

DISTRIBUTION: WHITE - PROJECT FILE / CANARY - LAB RECEIPT / PINK - DATA MANAGEMENT / GOLDENROD - FIELD

324159

CR-A1550

JE JACOBS ENGINEERING GROUP INC.
 600 SEVENTEENTH STREET, SUITE 1100N DENVER, COLORADO 80202
 TELEPHONE (303) 595 - 8855 FAX (303) 595 - 8857

CHAIN OF CUSTODY RECORD

USE A BALLPOINT PEN, BLACK INK, AND PRESS FIRMLY. INSTRUCTIONS ARE ON THE BACK

PROJECT NAME: <u>MASFU UST/UPGRADES</u>				LABORATORY NAME & ADDRESS: <u>CERTES ENV. LAB</u>						
PROJECT NUMBER: <u>10K70200</u>										
WBS CODE:		SUBCONTRACT / D.O. No. <u>DALLAS, TX</u>								
SAMPLE NUMBER	COLLECTION		SAMPLER'S INITIALS	NUMBER OF CONTAINERS	CONTAINER SIZE AND TYPE	PRESERVATIVE	MATRIX CODE	ANALYSES REQUESTED	CC	CONDITION ON RECEIPT
	DATE	TIME								
CR-A155001	4/3/96	1845	DDS	1	4oz GLASS	NONE	S	SW8020 BTEX, SW8240		-01
CR-A155002	4/3/96	1845	DDS	1	8oz GLASS	NONE	S	SW8270, SW6010, E418.1		-02
CR-A155003	4/3/96	1905	DDS	1	4oz GLASS	NONE	S	SW8020 BTEX		-03
CR-A155004	4/3/96	1905	DDS	1	4oz GLASS	NONE	S	SW8270, E418.1		-04
CR-A155005	4/3/96	1928	DDS	1	4oz GLASS	NONE	S	SW8020 BTEX +MTBE		-05
CR-A155006	4/3/96	1928	DDS	1	4oz GLASS	NONE	S	SW8270, E418.1		-06
CR-A155007	4/3/96	1955	DDS	1	4oz GLASS	NONE	S	SW8020 BTEX +MTBE		-07
CR-A155008	4/3/96	1955	DDS	1	4oz GLASS	NONE	S	SW8270, E418.1		-05
DBS										
COMMENTS: <u>96-0724</u>										
COLLECTED & RELEASED BY <u>Dan Schutt</u>			DATE	TIME	TURNAROUND TIME					
RECEIVED BY <u>[Signature]</u>			DATE	TIME	RELINQUISHED BY			DATE	TIME	
			4/4/96	16:30						
			4/4/96	16:50						
			4/5/96	6:30 AM						
RECORD RETURNED BY			DATE	TIME	SHIPPING NUMBER:					

DISTRIBUTION: WHITE - PROJECT FILE / CANARY - LAB RECEIPT / PINK - DATA MANAGEMENT / GOLDENROD - FIELD

324160

JE JACOBS ENGINEERING GROUP INC.
 800 SEVENTEENTH STREET, SUITE 1100N DENVER, COLORADO 80202
 TELEPHONE (303) 595 - 8855 FAX (303) 595 - 8857

CR-A1551

CHAIN OF CUSTODY RECORD

USE A BALLPOINT PEN, BLACK INK, AND PRESS FIRMLY. INSTRUCTIONS ARE ON THE BACK

PROJECT NAME: NAS FW UST					LABORATORY NAME & ADDRESS: COVES ENV LABS					
PROJECT NUMBER: 10X70200										
WBS CODE:			SUBCONTRACT / D.O. No. DALLAS TX							
SAMPLE NUMBER	COLLECTION		SAMPLER'S INITIALS	NUMBER OF CONTAINERS	CONTAINER SIZE AND TYPE	PRESERVATIVE	MATRIX CODE	ANALYSES REQUESTED	DU	CONDITION ON RECEIPT
	DATE	TIME								
CR-A155101	4/4/96	1213	DPS	1	4 oz	NONE	S	SW8020 BTEX		-09
CR-A155102	4/4/96	1213	DPS	1	4 oz	NONE	S	SW8270 E418.1		-10
CR-A155103	4/4/96	1600	DPS	1	40 ml VOA	HCl	W	SW8240		-11
CR-A155104	4/4/96	1600	DPS	1	1-L Amber	NONE	W	SW8270		-12
CR-A155105	4/4/96	1600	DPS	1	1-L Amber	HCl	W	E418.1		-13
CR-A155106	4/4/96	1600	DPS	1	8oz Plastic	NO ₃	W	SW6010		-14
MDS										
COMMENTS: 96-0774										
COLLECTED & RELEASED BY Don Schuch		DATE	TIME	TURNAROUND TIME						
RECEIVED BY [Signature]		DATE	TIME	RELINQUISHED BY					DATE	TIME
		4/4/96	16:30						11	:
		4/5/96	6:30 AM							
RECORD RETURNED BY		DATE	TIME	SHIPPING NUMBER:						
		11	:							

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324161

JE JACOBS ENGINEERING GROUP INC.
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 TELEPHONE (303) 595 - 8855 FAX (303) 595 - 8857

CR-A1552

CHAIN OF CUSTODY RECORD

USE A BALLPOINT PEN, BLACK INK, AND PRESS FIRMLY. INSTRUCTIONS ARE ON THE BACK

PROJECT NAME: <u>NAS FTW VST and Golf Course</u>					LABORATORY NAME & ADDRESS: <u>CERTES</u>					
PROJECT NUMBER: <u>10K70200</u>										
WBS CODE:					SUBCONTRACT / D.O. No.					
SAMPLE NUMBER	COLLECTION		SAMPLER'S INITIALS	NUMBER OF CONTAINERS	CONTAINER SIZE AND TYPE	PRESERVATIVE	MATRIX CODE	ANALYSES REQUESTED	GC	CONDITION ON RECEIPT
	DATE	TIME								
01 CR-A 155201	4/10/96	8:08	mj	1 402	402 glass	-	S	SW 8020		
02 CR-A 155202	4/10/96	808	mj	1 6	402 glass	-	S	E418.1, SW 8270		
03 CR-A 155203	4/10/96	0816	mj	1	402 glass	-	S	SW 8020		
04 CR-A 155204	4/10/96	0816	mj	1	402 glass	-	S	E418.1		
<i>[Signature]</i> 4/10/96										
COMMENTS: <u>96-0764</u>										
COLLECTED & RELEASED BY: <i>[Signature]</i>			DATE: <u>4/10/96</u>	TIME: <u>5:00</u>	TURNAROUND TIME					
RECEIVED BY: <i>[Signature]</i>			DATE: <u>4/10/96</u>	TIME: <u>5:40p</u>	RELINQUISHED BY: <i>[Signature]</i>			DATE: <u>4/10/96</u>	TIME: <u>5:40 PM</u>	
RECORD RETURNED BY:			DATE: <u>11</u>	TIME: <u>:</u>	SHIPPING NUMBER:					

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CR-A1553

324162



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CHAIN OF CUSTODY RECORD

USE A BALLPOINT PEN, BLACK INK, AND PRESS FIRMLY. INSTRUCTIONS ARE ON THE BACK

PROJECT NAME: NAS FT WORTH VST 1/2 CLAY				LABORATORY NAME & ADDRESS: CERTES							
PROJECT NUMBER: 10K70200				2209 Wisconsin St. #200							
WBS CODE:		SUBCONTRACT / D.O. No. DALLAS TX 75229									
SAMPLE NUMBER	COLLECTION		SAMPLER'S INITIALS	NUMBER OF CONTAINERS	CONTAINER SIZE AND TYPE	PRESERVATIVE	MATRIX CODE	ANALYSES REQUESTED	CC	CONDITION ON RECEIPT	
	DATE	TIME									
01	CR-A	4/14/96	14:34	MJ	1	802 GLASS	-	S	E418.1		
02	CR-A	4/15/96	10:25	MJ	1	802 GLASS	-	S	E418.1		
03	CR-A	4/16/96	1503	MJ	1	802 GLASS	-	S	E418.1		
04	CR-A	4/16/96	1536	MJ	1	802 GLASS	-	S	E418.1		
<i>[Handwritten signature]</i>											
4/16/96											
COMMENTS:											
96-0816											
COLLECTED & RELEASED BY <i>[Signature]</i>			DATE	TIME	TURNAROUND TIME						
RECEIVED BY <i>[Signature]</i>			DATE	TIME	RELINQUISHED BY <i>[Signature]</i>			DATE	TIME		
RECORD RETURNED BY			DATE	TIME							
SHIPPING NUMBER:											

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324163

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 TELEPHONE (303) 596-8855 FAX (303) 595-8857

CR-A1554

CHAIN OF CUSTODY RECORD

USE A BALLPOINT PEN, BLACK INK, AND PRESS FIRMLY. INSTRUCTIONS ARE ON THE BACK

PROJECT NAME: NAS FT WORTH IST & COMB				LABORATORY NAME & ADDRESS: CERTES							
PROJECT NUMBER: 10K70200				2209 Wisconsin St # 200							
WBS CODE:		SUBCONTRACT / D.O. No. Dallas TX									
SAMPLE NUMBER	COLLECTION		SAMPLER'S INITIALS	NUMBER OF CONTAINERS	CONTAINER SIZE AND TYPE	PRESERVATIVE	MATRIX CODE	ANALYSES REQUESTED	GC	CONDITION ON RECEIPT	
	DATE	TIME									
-01 CR-A 155401	4/16/96	1700	MJ	1	Amber	HCL W	W	E418.1			
-02 CR-A 155402	4/17/96	1200	MJ	1	GLASS	-	S	E418.1			
-03 CR-A 155403	4/17/96	1215	MJ	1	GLASS	-	S	E418.1			
-04 CR-A 155404	4/17/96	1338	MJ	1	Amber	HCL W	W	E418.1			
<i>[Signature]</i>											
<i>[Signature]</i>											
4/18/96											
COMMENTS: 96-0829											
COLLECTED & RELEASED BY <i>[Signature]</i>			DATE 4/18/96	TIME 16:00	TURNAROUND TIME 7 Days						
RECEIVED BY <i>[Signature]</i>			DATE 4/18/96	TIME 16:00	RELINQUISHED BY <i>[Signature]</i>			DATE 4/18/96	TIME 17:15		
<i>[Signature]</i>			4/18/96	1715							
RECORD RETURNED BY			DATE	TIME							
			1/1	:	SHIPPING NUMBER:						

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324164

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CR-A1555

CHAIN OF CUSTODY RECORD

USE A BALLPOINT PEN, BLACK INK, AND PRESS FIRMLY. INSTRUCTIONS ARE ON THE BACK

PROJECT NAME: NAS FT WORTH LST # 66MY					LABORATORY NAME & ADDRESS: CERTES						
PROJECT NUMBER: 10K70200					2209 WILSON ST # 200						
WBS CODE:			SUBCONTRACT / D.O. No. DINKS TX								
SAMPLE NUMBER	COLLECTION		SAMPLER'S INITIALS	NUMBER OF CONTAINERS	CONTAINER SIZE AND TYPE	PRESER-VATIVE	MATRIX CODE	ANALYSES REQUESTED	GC	CONDITION ON RECEIPT	
	DATE	TIME									
-01 CR-A 155501	4/23/96	1033	MJ	1	802 GLASS	-	S	E418.1			
-02 CR-A 155502	4/23/96	1045	MJ	1	802 GLASS	-	S	E418.1			
-03 CR-A 155503	4/23/96	1134	MJ	1	802 GLASS	-	S	E418.1			
-04 CR-A 155504	4/23/96	1234	MJ	1	802 GLASS	-	S	E418.1			
<i>[Handwritten signature]</i>											
COMMENTS: 96-0860											
COLLECTED & RELEASED BY <i>[Signature]</i>			DATE 4/24/96	TIME 16:30	TURNAROUND TIME						
RECEIVED BY <i>[Signature]</i>			DATE 4/24/96	TIME 16:30	RELINQUISHED BY <i>[Signature]</i>			DATE 4/24/96	TIME 17:30		
RECORD RETURNED BY			DATE 11	TIME	SHIPPING NUMBER:						

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324165

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CR-A1556

CHAIN OF CUSTODY RECORD

USE A BALLPOINT PEN, BLACK INK, AND PRESS FIRMLY. INSTRUCTIONS ARE ON THE BACK

PROJECT NAME: <i>NAS FT WORTH VST & COM</i>				LABORATORY NAME & ADDRESS: <i>CELTES</i>						
PROJECT NUMBER: <i>10K76200</i>				SUBCONTRACT / D.O. No. <i>2209 Wisconsin St. #200</i>						
WBS CODE:				<i>Dallas TX</i>						
SAMPLE NUMBER	COLLECTION		SAMPLER'S INITIALS	NUMBER OF CONTAINERS	CONTAINER SIZE AND TYPE	PRESERVATIVE	MATRIX CODE	ANALYSES REQUESTED	CO	CONDITION ON RECEIPT
	DATE	TIME								
<i>CR-A 155601</i>	<i>4/25/16</i>	<i>1514</i>	<i>MJ</i>	<i>1</i>	<i>802 GLASS</i>	<i>-</i>	<i>S</i>	<i>E418.1 & SW8020</i>	<i>-01</i>	
<i>CR-A 155602</i>	<i>4/25/16</i>	<i>1531</i>	<i>MJ</i>	<i>1</i>	<i>802 GLASS</i>	<i>-</i>	<i>S</i>	<i>E418.1 & SW8020</i>	<i>-02</i>	
<i>CR-A 155603</i>	<i>4/25/16</i>	<i>1546</i>	<i>MJ</i>	<i>1</i>	<i>802 GLASS</i>	<i>-</i>	<i>S</i>	<i>E418.1 & SW8020</i>	<i>-03</i>	
<i>CR-A 155604</i>	<i>4/25/16</i>	<i>1555</i>	<i>MJ</i>	<i>1</i>	<i>802 GLASS</i>	<i>-</i>	<i>S</i>	<i>E418.1 & SW8020</i>	<i>-04</i>	
<i>CR-A 155605</i>	<i>4/25/16</i>	<i>1610</i>	<i>MJ</i>	<i>1</i>	<i>802 GLASS</i>	<i>-</i>	<i>S</i>	<i>E418.1 & SW8020</i>	<i>-05</i>	
<i>CR-A 155606</i>	<i>4/25/16</i>	<i>1640</i>	<i>MJ</i>	<i>1</i>	<i>802 GLASS</i>	<i>-</i>	<i>S</i>	<i>E418.1 & SW8020</i>	<i>-06</i>	
<i>CR-A 155607</i>	<i>4/25/16</i>	<i>1632</i>	<i>MJ</i>	<i>1</i>	<i>802 GLASS</i>	<i>-</i>	<i>S</i>	<i>E418.1 & SW8020</i>	<i>-07</i>	
<i>CR-A 155608</i>	<i>4/25/16</i>	<i>1652</i>	<i>MJ</i>	<i>1</i>	<i>802 GLASS</i>	<i>-</i>	<i>S</i>	<i>E418.1 & SW8020</i>	<i>-08</i>	
<i>CR-A 155609</i>	<i>4/25/16</i>	<i>1701</i>	<i>MJ</i>	<i>1</i>	<i>802 GLASS</i>	<i>-</i>	<i>S</i>	<i>E418.1 & SW8020</i>	<i>-09</i>	
COMMENTS: <i>96-0877</i>										
COLLECTED & RELEASED BY <i>[Signature]</i>			DATE <i>4/26/16</i>	TIME <i>17:30</i>	TURNAROUND TIME <i>7 days</i>					
RECEIVED BY <i>[Signature]</i>			DATE <i>4/26/16</i>	TIME <i>07:00</i>	RELINQUISHED BY				DATE <i>11</i>	TIME
RECORD RETURNED BY			DATE <i>11</i>	TIME	SHIPPING NUMBER:					

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CR-A 1557

324166

CHAIN OF CUSTODY RECORD

USE A BALLPOINT PEN, BLACK INK, AND PRESS FIRMLY. INSTRUCTIONS ARE ON THE BACK

PROJECT NAME: <i>NAS Ft Worth VST & Gmy</i>			LABORATORY NAME & ADDRESS: <i>CERTES</i>								
PROJECT NUMBER: <i>10K70260</i>			7209 Wisconsin St # 200								
WBS CODE:			SUBCONTRACT / D.O. No. <i>Dallas Tx.</i>								
SAMPLE NUMBER	COLLECTION		SAMPLER'S INITIALS	NUMBER OF CONTAINERS	CONTAINER SIZE AND TYPE	PRESERVATIVE	MATRIX CODE	ANALYSES REQUESTED	GC	CONDITION ON RECEIPT	
	DATE	TIME									
CR-A 155701	4/25/96	1715	MJ	1	802 Glass	-	S	E418.1 SW8020		-10	
CR-A 155702	4/25/96	1720	MJ	1	802 Glass	-	S	E418.1 SW8020		-11	
CR-A 155703	4/25/96	1741	MJ	1	802 Glass	-	S	E418.1 SW8020		-12	
CR-A 155704	4/25/96	1748	MJ	1	802 Glass	-	S	E418.1 SW8020		-13	
CR-A 155705	4/25/96	1830	MJ	2	40 ml VDA	HCL W		SW8020		-14	
CR-A 155706	4/25/96	1830	MJ	1	1L Panda	HCL W		E418.1		-15	
CR-A 155707	4/25/96	1845	MJ	1	40 ml VDA	HCL W		SW8020		-16	
			<i>[Signature]</i> 4/26/96								<i>[Signature]</i>
COMMENTS: <i>96-0873</i>											
COLLECTED & RELEASED BY <i>[Signature]</i>			DATE 4/26/96	TIME 07:30	TURNAROUND TIME						
RECEIVED BY <i>[Signature]</i>			DATE 4/27/96	TIME 0:00	RELINQUISHED BY				DATE / /	TIME :	
RECORD RETURNED BY			DATE / /	TIME :	SHIPPING NUMBER:						

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32416

CR-A1560

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CHAIN OF CUSTODY RECORD

USE A BALLPOINT PEN, BLACK INK, AND PRESS FIRMLY. INSTRUCTIONS ARE ON THE BACK

PROJECT NAME: <u>NASFW UST Removal / UPGRADE</u>					LABORATORY NAME & ADDRESS: <u>CORTES</u>						
PROJECT NUMBER: <u>10K70200</u>					LABORATORY ADDRESS: <u>2209 WISCONSIN ST.</u>						
WBS CODE:			SUBCONTRACT / D.O. No. <u>DALLAS TX</u>								
SAMPLE NUMBER	COLLECTION		SAMPLER'S INITIALS	NUMBER OF CONTAINERS	CONTAINER SIZE AND TYPE	PRESERVATIVE	MATRIX CODE	ANALYSES REQUESTED	QC	CONDITION ON RECEIPT	
	DATE	TIME									
- CR-A156001	5/1/96	1922	MSB	1	8 oz GLASS	4°C	S	SW8020 BTEX, E418.1		-01	
- CR-A156002	5/1/96	1922	DDS	1	8 oz GLASS	4°C	S	SW8270		-02	
- CR-A156003	5/1/96	1945	DDS	1	8 oz GLASS	4°C	S	SW8020 BTEX E418.1		-03	
- CR-A156004	5/1/96	1945	DDS	1	8 oz GLASS	4°C	S	SW8270		-04	
- CR-A156005	5/1/96	1928	DDS	1	8 oz GLASS	4°C	S	SW8020 BTEX E418.1		-05	
- CR-A156006	5/1/96	1928	DDS	1	8 oz GLASS	4°C	S	SW8270		-06	
- CR-A156007	5/1/96	1925	DDS	1	8 oz GLASS	4°C	S	SW8020 BTEX E418.1		-07	
- CR-A156008	5/1/96	1925	DDS	1	8 oz GLASS	4°C	S	SW8270		-08	
- CR-A156009	5/2/96	1130	DDS	1	40-ml VOA	HCl	W	SW8020 BTEX		-09	
COMMENTS: <u>96-908</u>											
COLLECTED & RELEASED BY <u>Wann Schultz</u>			DATE <u>5/2/96</u>	TIME <u>15:20</u>	TURNAROUND TIME						
RECEIVED BY <u>Jon L. 2</u>			DATE <u>5/2/96</u>	TIME <u>15:20</u>	RELINQUISHED BY <u>Jon L. 2</u>			DATE <u>5/2/96</u>	TIME <u>17:25</u>		
RECORD RETURNED BY			DATE	TIME	SHIPPING NUMBER:						

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32416C

CR-A1561

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CHAIN OF CUSTODY RECORD

USE A BALLPOINT PEN, BLACK INK, AND PRESS FIRMLY. INSTRUCTIONS ARE ON THE BACK

PROJECT NAME: <u>NAPLW UST REMOVAL / UPGRADE</u>						LABORATORY NAME & ADDRESS: <u>CERTES</u>				
PROJECT NUMBER: <u>10K70200</u>						2209 WIS. ST				
WBS CODE:			SUBCONTRACT / D.O. No.			DALLAS, TX				
SAMPLE NUMBER	COLLECTION		SAMPLER'S INITIALS	NUMBER OF CONTAINERS	CONTAINER SIZE AND TYPE	PRESER-VATIVE	MATRIX CODE	ANALYSES REQUESTED	GC	CONDITION ON RECEIPT
	DATE	TIME								
- CR-A156101	5/2/96	0750	DOS	1	8 oz. DOS 1-L GLASS	HCl, 4°C	SW	SW8020 BTEX DOS E418.1		-10
- CR-A156102	5/2/96	0750	DOS	1	8 oz. DOS 1-L GLASS	4°C	SW	SW8020		-11
- CR-A156103	5/1/96	2005	DOS	1	8 oz. GLASS	4°C	S	SW8020 BTEX E418.1		-12
- CR-A156104	5/1/96	2008	DOS	1	8 oz. GLASS	4°C	S	SW8020 BTEX E418.1		-13
- CR-A156105	5/1/96	2010	DOS	1	8 oz. GLASS	4°C	S	SW8020 BTEX E418.1		-14
- CR-A156106	5/1/96	2015	DOS	1	8 oz. GLASS	4°C	S	SW8020 BTEX E418.1		-15
- CR-A156107	5/2/96	0750	DOS	3	40ml VOA	HCl	W	SW8020 BTEX		-16
COMMENTS: <u>96-909</u>										
COLLECTED & RELEASED BY: <u>Jan Schuly</u>			DATE: <u>5/2/96</u>	TIME: <u>15:20</u>	TURNAROUND TIME					
RECEIVED BY: <u>Jon D. 2</u>			DATE: <u>5/2/96</u>	TIME: <u>15:20</u>	RELINQUISHED BY: <u>Jon D. 2</u>			DATE: <u>5/2/96</u>	TIME: <u>17:25</u>	
RECORD RETURNED BY:			DATE: <u>1/1</u>	TIME:	SHIPPING NUMBER:					

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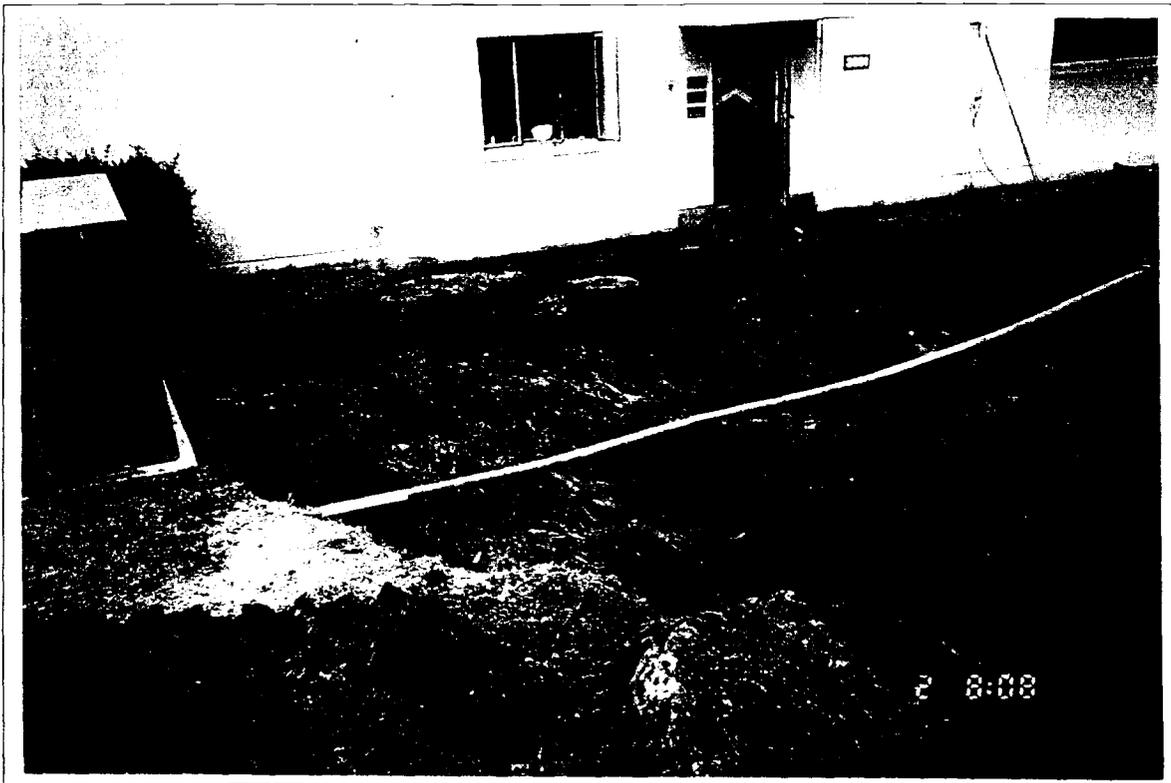
324169

APPENDIX C

PHOTOGRAPHS



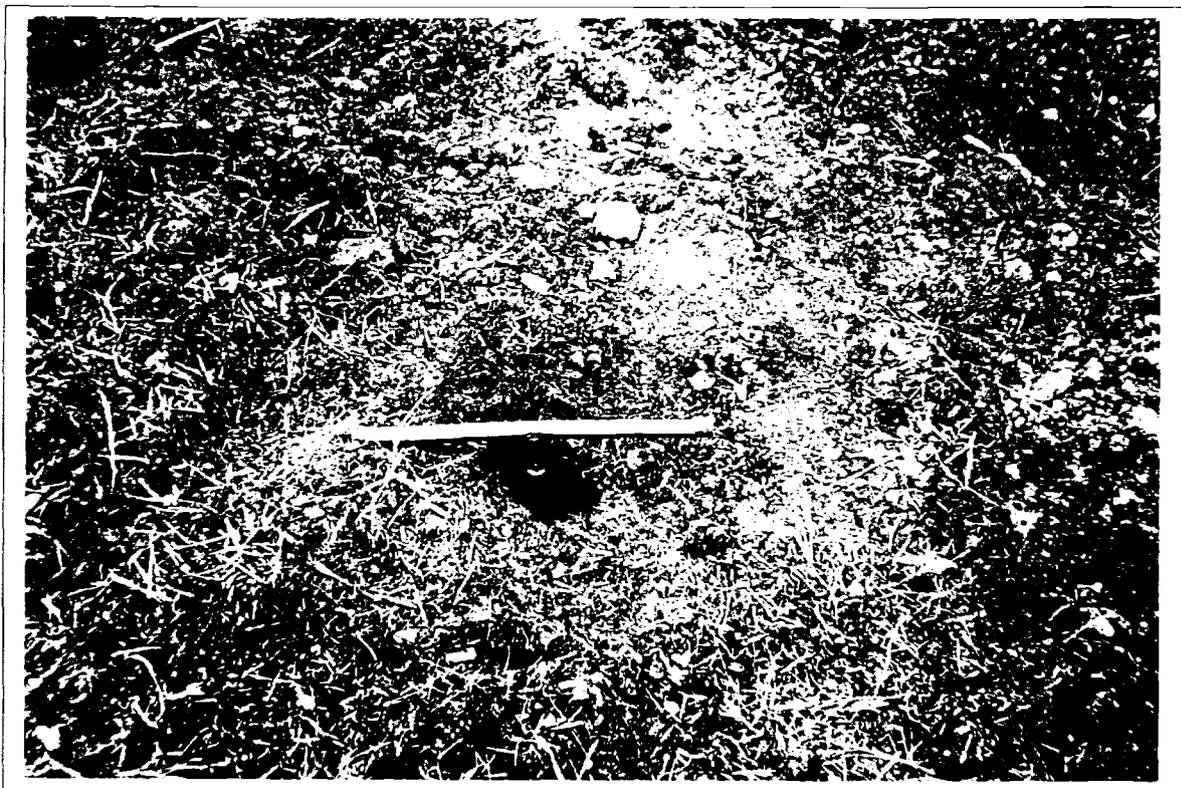
Preparing to flush and purge UST 3001-3. Note east sidewall (right) along Bldg. 3001 is intact prior to the tank's removal. Looking north. (1-MAY-96)



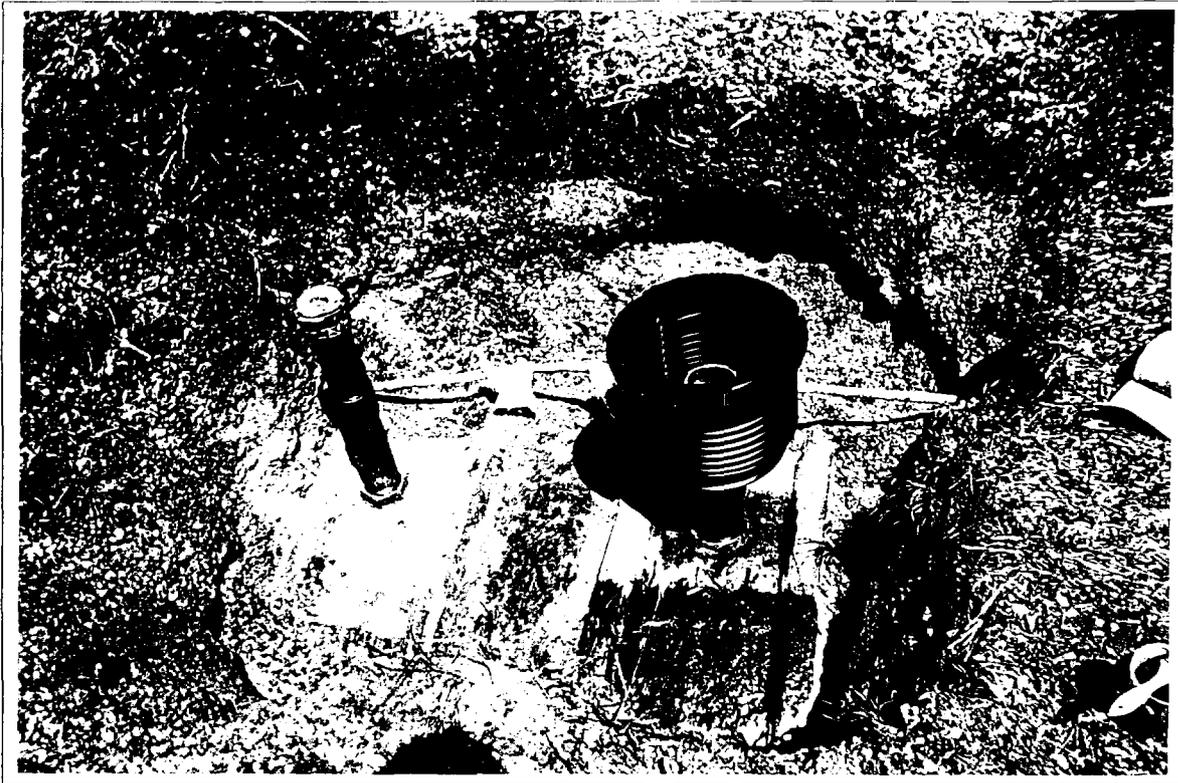
UST 3001-3 excavation after tank removal. Note the east sidewall collapse and groundwater that has infiltrated into the excavation. Looking east. (2-MAY-96)



Preparing to flush and purge UST 4210-1 (tilted) and UST 4210-2. Looking northeast. (1-APR-96)



Collecting pipeline trench sample TE-4210-P2 using a 5.5-foot hand-auger. (3-APR-96)

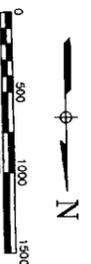
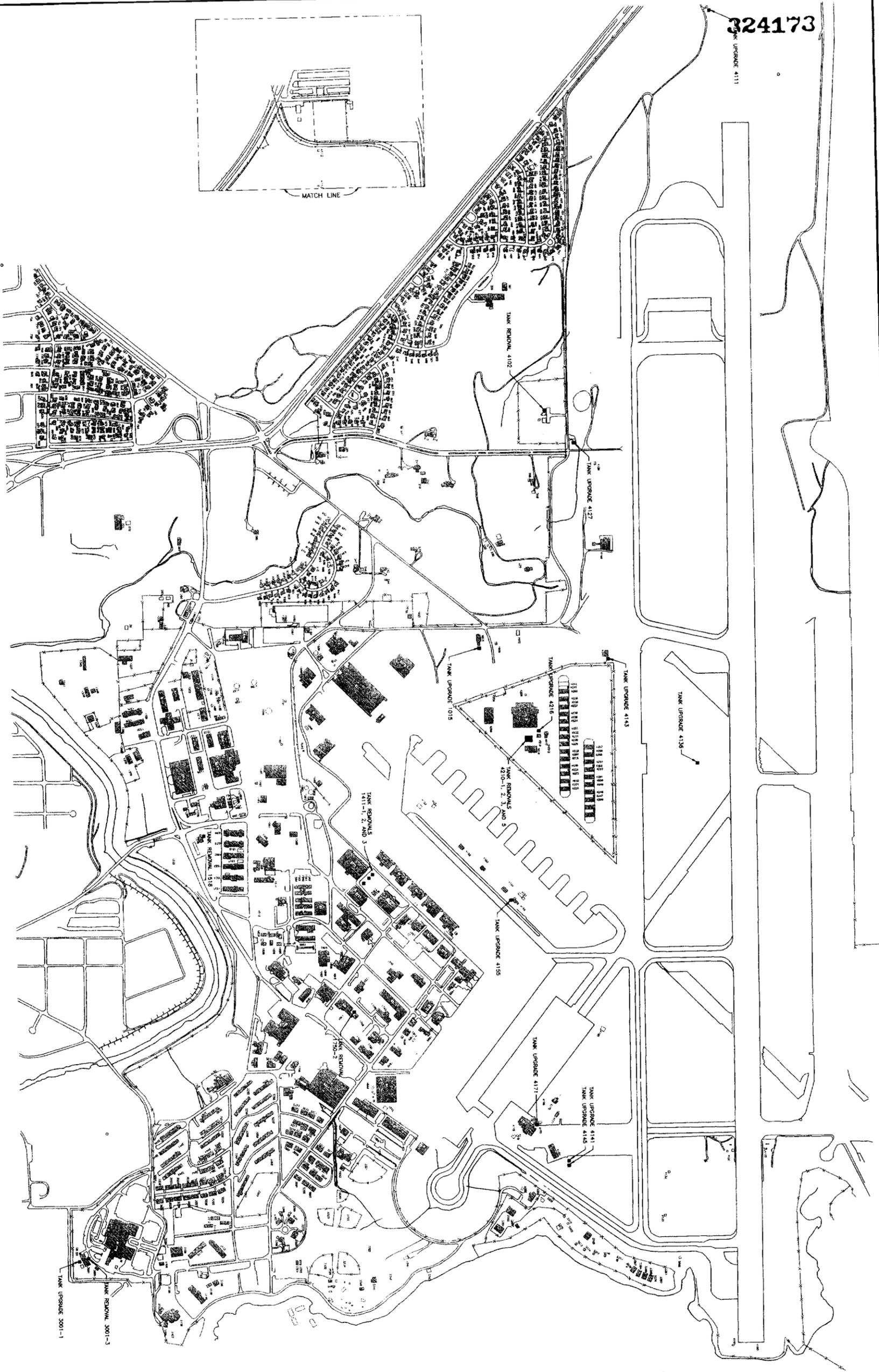
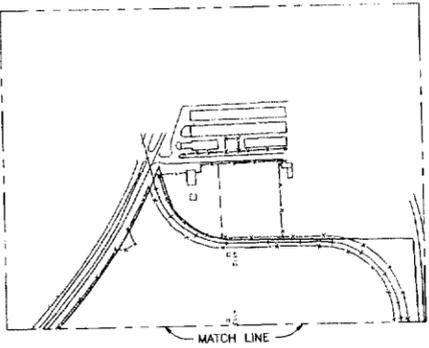


UST upgrade at 4216-1 showing sub-grade spill-protection and patch on fiberglass tank. (23-APR-96)



Above-grade spill containment upgrade installed at UST 4143-1. Looking west. (27-JUN-96)

TANK UPGRADE 4111



NAVAL AIR STATION FORT WORTH, TEXAS			
UNDERGROUND STORAGE TANKS UPGRADED AND REMOVED SPRING 1996			
PROJ. MGR. L. SCHULTER	ROAD FILE NO. PLATE 1 DWG	FRAME NO. PLATE 1	DATE 3/14/97
DRAWN BY J. HUNTER	PROJ. NO. 10-K-70200		

324174

324175

FINAL PAGE

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324176

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