CITY OF GALVESTON
BROWNFIELDS SITE ASSESSMENT PILOT PROJECT

Phase I Environmental Site Assessment Report

For The

Old Central/Carver Park
Galveston, Texas

Prepared By
KMA Environmental Services, Inc.
Texas City, Texas

November 2000

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CITY OF GALVESTON
BROWNFIELDS SITE ASSESSMENT PILOT PROJECT

PHASE I ENVIRONMENTAL SITE ASSESSMENT REPORT FOR THE

OLD CENTRAL/CARVER PARK AREA GALVESTON, TEXAS

Date Prepared: November 13, 2000
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EPA Brownfields Project Officer: Ms. Camisha Scott
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Prepared for
The City of Galveston

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FOR THE
OLD CENTRAL/CARVER PARK
GALVESTON, TEXAS

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TITLE AND APPROVAL SHEET

PHASE I ENVIRONMENTAL SITE ASSESSMENT REPORT FOR THE OLD CENTRAL/CARVER PARK AREA GALVESTON, TEXAS

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Title: BSAPP Project Coordinator, KMA Environmental Services, Inc.

Signature: Win Turner Date: 12/8/00

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Title: BSAPP Project Manager, KMA Environmental Services, Inc.

Signature: Frank W. Thomas Date: 12/8/00

ACRONYMS

PHASE I ENVIRONMENTAL SITE ASSESSMENT REPORT FOR THE OLD CENTRAL/CARVER PARK AREA GALVESTON, TEXAS

AST	Aboveground Storage Tank
ASTM	America Society for Testing and Materials
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CERCLIS	Comprehensive Environmental Response, Compensation, and Liability Information System
CFR	Code of Federal Regulations
CORRACTS	Corrective Action Report
EDR	Environmental Data Resources, Inc.
EPA	Environmental Protection Agency
EPCRA	Emergency Planning and Community Right-to-Know Act
ERNS	Emergency Response Notification System
ESA	Environmental Site Assessment
HL&P	Houston Lighting and Power (Reliant Energy)
KMA	KMA Environmental Services, Inc.
LPST	Leaking Petroleum Storage Tank
LUST	Leaking Underground Storage Tank
MSDS	Material Safety Data Sheet
NFRAP	No Further Remedial Action Planned
NRCS	Natural Resource Conservation Service (formerly Soil Conservation Service)
NPL	National Priority List (aka Federal Superfund)
PCBs	Polychlorinated Biphenyls
ppm	Parts per Million
PST	Petroleum Storage Tank
RCRA	Resource Conservation Recovery Act
RCRIS	Resource Conservation Recovery Information System
SHWS	State Hazardous Waste Sites (aka State Superfund)
TSD	RCRA Treatment, Storage, and/or Disposal Facility
TNRCC	Texas Natural Resource Conservation Commission
USGS	United States Geological Survey
UST	Underground Storage Tank

CITY OF GALVESTON BROWNFIELDS SITE ASSESSMENT PILOT PROJECT
EXTENDED PHASE 1 ENVIRONMENTAL SITE ASSESSMENT REPORT
OLD CENTRAL/CARVER PARK AREA

1.0 EXECUTIVE SUMMARY

Under the City of Galveston Texas' Brownfields Site Assessment Pilot Project (BSAPP), the City has agreed to produce an overall Environmental Site Assessment (ESA) for the Old Central/ Carver Park area. This document presents the findings of the ESA.

Mr. Win Turner; P.E., and Mr. Frank Thomas; P.G., conducted on-site assessments starting in October1999, and ending in October 2000, to visually inspect and evaluate if there are any obvious environmental impairments from current or previous activities on the subject property. The ESA process also involved reviewing available documents, government reports, database searches, and personal interviews.

Site Location: The subject site area of the Old Central/Carver Park area is defined as the following: The northern boundary is Port Industrial Boulevard (or Water Street); the eastern boundary is 26th Street; the southern boundary is Broadway (or Avenue J); the western boundary is 54th Street. The site location is shown on Figure 1.

Subject Property Status: The subject property is a mixture of residential housing, public housing, commercial, and light industrial.

CONCLUSIONS

Based on examination of aerial photographs, visual inspection, record reviews, and personal interviews several locations of potential environmental concern were located. ***However, it should be noted that the environmental concerns at all of the locations either have been satisfactorily addressed or are in the process of being addressed.*** The types of sites identified include:

- Two Voluntary Cleanup Programs (Falstaff Brewery & Former Black Wrecker Site)
- Twenty Leaking Underground Storage Tank Sites
- Nineteen Underground Storage Tank Sites
- Three Aboveground Storage Tank Sites
- One Former Manufactured Gas Site
- Thirteen RCRIS Small Quantity Generator Sites
- One Solid Waste Transfer Station Facility

2.0 PURPOSE AND SCOPE

The purpose of this Phase I ESA is to attempt to identify the obvious presence of, or the potential for, contamination of the subject property by hazardous substances. The scope of services included the following activities:

- Review of available environmental reports for the subject site.
- Physical inspection of the site and adjacent tracts.
- Review of historical aerial photographs of the site.
- Review of Sanborn Maps
- Review of the City Directory was not performed due to the lack of their existence for this area.
- Review of reasonably obtainable public agency records concerning the storage, treatment, and/or disposal of hazardous substances and the registration of, and reported releases of, petroleum storage tanks in the vicinity of the subject property.
- Personal interviews.
- Preparation of a report summarizing the findings of this Phase I ESA, including recommendations for further study, if warranted.

3.0 SITE BACKGROUND/OPERATING HISTORY

The Old Central/Carver Park area was originally known as the "Factory District" of Galveston. Historically, the blocks bordered by Postoffice Street, Broadway, 25th Street, and 29th Street were developed as residential streets and included some structures as grand as any built in the East End. This was especially true for Ball and Sealy Avenues and Broadway.

Market and Mechanic Streets developed as a small-scale west-side extension of the business district, which was across 25th Street. Industrial and port activities dominated the area closest to the Bay as well as to the west of 29th Street. By the time of the Civil War, this area accommodated several full-block cotton compress complexes, the city's gasworks, and the Galveston, Houston & Henderson Railroad depot.

Whereas the Strand and adjacent streets east of 25th Street evolved into an architectural showcase that touted Galveston's port economy, the same streets west of 25th Street developed, following the Civil War, a very different identity – and reputation. It was here that Galveston squeezed its greatest concentration of poor immigrants, African-Americans, and transient workers, along with many of the smaller businesses, both respectable and not so respectable, associated with a port economy.

As the city expanded westward in the late 19th century, the Factory District, most particularly the streets closest to Broadway, became a popular location for housing owned and occupied by laboring-class families. At the same time, the area developed an even heavier industrial flavor, the blocks between 29th and 32nd Streets becoming an almost continuous strip of cotton compresses from the Bay to Sealy Avenue. Other large industrial complexes were built in the northwest section.
With its high density, poorly maintained properties – many, if not most, of them rental – and industrial activities, the Factory District was a prime target for demolition once the city pursued a serious code enforcement program in the 1960s. Large sections of the Factory District had already been replaced by public housing projects in the 1940s and 1950s.

Historically, the Old Central and Carver Park Neighborhoods were two distinct areas. Now the two areas comprise a single, impoverished community. Old Central is located in the North Central section of Galveston adjacent to the central business district and Port of Galveston. The Carver Park area is located in the northwest portion of Galveston.

Together the two areas comprise 748 acres with approximately 2000 residents of low to moderate income. The last official community plan adopted by the City of Galveston in early 1990 states, *"the decline in industries has led to high unemployment [in Old Central/Carver Park]. The predominately African-American and Hispanic neighborhood is in crucial need of economic development and affordable housing...The presence of vacant commercial properties and the burgeoning idle labor force offer a potential for development."*

Population – Eighty-three percent of the Old Central/Carver Park community is non-white while Galveston as a whole is 39 percent non-white.

Family income – Median household income, compared to Galveston's $20,825 is $10,417. Four of the five census tracts in Galveston having concentrations of more than 50 percent low income households are located in the Old Central/Carver Park area.

Employment Levels – Unemployment in the community is tracked at a level of 22.4 percent, while the level of unemployment for the city of Galveston is 9.9 percent. And certain tracts in the community report unemployment levels as high as 70 percent (Demographics based upon 1990 Census).

3.1 Aerial Photograph Review

Aerial photographs were obtained for the subject area from Environmental Data Resources, Inc. (EDR). Photographs from 1958, 1969, 1978, and 1990 were reviewed in order to evaluate historical land use and to identify evidence of the previous generation, storage and/or disposal of hazardous substances on the subject site. Aerial photographs are included in Appendix A.

3.2 Sanborn Maps

The Sanborn Mapping and Geographic Information Service has been producing maps of industrial areas and central business districts across the country for fire insurance purposes since the 1860s. These maps are updated periodically and often indicate detail property use, construction of buildings, and location of gasoline storage tanks. The most recent update for Galveston was 1986. These maps were used to locate potential sites of environmental concern.

3.3 Geology and Hydrogeology

The following information was obtained from the University of Texas, Bureau of Economic Geology, and the U.S. Department of Agriculture Soil Conservation Service, Texas Agricultural Experiment Station, and the U.S. Geological Survey Quadrangle Map.

The area is located in the Gulf Coastal Plains physiographic region. The Gulf Coastal Plain is described as gently rolling to a nearly level (flat) plain, which gradually drops in elevation as the plain approaches the Gulf of Mexico. The plain is a sedimentary depositional feature.

The regional geology in the Galveston area consists of sediments that were deposited in fluvial, deltaic, coastal, inter-deltaic and marine shelf environments. Sediments underlying the facility were deposited in Tertiary and Quaternary Periods. Depositional environments expressed by these sediments are similar to the currently active depositional environments along and offshore from the present-day Texas Coast. During active deposition, sedimentary wedges pro-graded into the Gulf of Mexico basin. The interplay among sediment deposition, compaction, and movement along growth faults resulted in numerous shoreline regressions and transgressions. Repetitive reoccupation of the same depositional sites has produced a sequence of vertically stacked depositional systems comprising varying amounts of sand, silt, and clay.

The predominant surficial deposits are marine fill and spoil material overlying the Beaumont Formation, which is also called the Beaumont Clay. The Beaumont Formation consists mostly of clay, sand, and silt deposited by rivers in the form of delta plains and levees, some marine sediments were deposited. In the Galveston area, the upper part of the Beaumont Formation consists of calcareous, red, yellow, or brown clay that weathers to a bluish gray or black soil.

Water-bearing formations in the Galveston area are, from oldest to youngest: the Catahoula Sandstone, the Oakville Sandstone, and the Lagarto Clay of Miocene age; the Goliad Sand and the Willis Sand of Pliocene age; the Lissie Formation and the Beaumont Clay of the Pleistocene age and alluvium of Recent age.

Groundwater movement in the uppermost transmissive zones is slow due to the low permeability of the sediments. The clastic transmissive zone material was deposited in saline or brackish water, which has since been partially flushed with fresh water. Most of this fresh water is from direct infiltration of precipitation within the surrounding areas.

Because the uppermost transmissive zones are lenticular in shape and of limited areal extent, the quality of water from these sands is somewhat variable. In the Galveston area, the water produced from these uppermost zones is generally very soft, with predominant bicarbonate and chloride anions. Predominant cations are sodium and calcium. The approximate depth to groundwater is 2-3 feet bgs. The general direction of groundwater flow in this area is variable and is tidal controlled. It should be noted that the shallow transmissive zones are not used as drinking water sources in the Galveston area.

3.4 Surface Water and Utilities

Utility locations, easements, right-of-ways were not located as a part of this ESA. Maps are located in the City of Galveston Public Works Department, City Hall, 203 Rosenberg. Contact the City Engineer, Mr. Charles Warner at (409) 797-3630 for additional information.

4.0 REGULATORY REVIEW

Environmental Data Resources, Inc. (EDR) was contracted to conduct a search of available environmental records. The reports meet the government records search requirements of ASTM Standard Practice for Environmental Site Assessments, E 1527-00. Numerous sites were identified within, and adjacent to, the Old Central/Carver Park area. The following is a list of databases that were researched. The sites identified within the Old Central/Carver Park area are presented in Table 1, the sites adjacent to the subject area are presented in Table 2. The entire EDR search package is included in Appendix B.

NPL.....National Priority List
Delisted NPL.....NPL Deletions
RCRIS-TSD.....Resource Conservation and Recovery Information System
SHWS.....State Hazardous Waste Site
CERCLIS.....Comprehensive Environmental Response, Compensation, and Liability Information System
CERC-NFRAP...Comprehensive Environmental Response, Compensation, and Liability Information System
CORRACTS.....Corrective Action Report
SWF/LF.....Permitted Solid Waste Facilities/Land-Fill
AST.....Petroleum Storage Tank Database
RAATS.....RCRA Administrative Action Tracking System
RCRIS-LQG.....Resource Conservation and Recovery Information System
HMIRS.....Hazardous Materials Information Reporting System
PADS.....PCB Activity Database System
ERNS.....Emergency Response Notification System
FINDS.....Facility Index System/Facility Identification Initiative Program Summary Rpt
TRIS.....Toxic Chemical Release Inventory System
NPL Lien.....NPL Liens
TSCA.....Toxic Substance Control Act
MLTS.....Material Licensing Tracking System
TX SPILLS.....Texas Spills
WasteMgt.....Waste Management
TX MM.....Multi Media Enforcement Cases
TX IHW.....Industrial and Hazardous Waste Database
CLI.....MSW Closed and Abandoned Landfills
ROD.....Record of Decision
CONSENT.....Superfund (CERCLA) Consent Decrees

Leaking Underground Storage Tanks (LUST)

The LUST reports contain an inventory of reported leaking underground storage tank incidents. The data come from the Texas Natural Resource Conservation Commission's Leaking Petroleum Storage Tank Database.

A review of the LUST list dated 04/01/99 has revealed that there are twenty LUST sites within the Old Central/Carver Park study area and an additional fourteen LUST sites within the 1/2 mile search radius. The LUST sites and the status of each are included in Tables 1 and 2.

All of the environmental concerns associated with the identified LUST sites have been, or are in the process of being addressed under the supervision of the TNRCC. Within the Old Central/Carver Park area 10 of the 20 LUST sites have been closed, requiring no further action. The other 10 are in various phases of investigation, monitoring, and/or active remediation. Ten of the 14 LUST sites located within ½ mile of the area have been closed, requiring no further action. The remaining four are also in various phases of investigation, monitoring, and/or remediation. All LUST locations are shown on Figure 1.

It should be noted that only USTs that have been registered with the TNRCC will appear in the database. "Ghost" or unknown USTs probably exist in the area; however, there is no way to verify their existence.

Underground Storage Tanks (USTs)

The Underground Storage Tank database contains registered USTs. USTs are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA). The data comes from the Texas Natural Resource Conservation Commission's Petroleum Storage Tank Database.

A review of the UST list dated 04/01/99 revealed there are 19 UST sites within the Old Central/Carver Park study area (Table 1). There are 10 UST sites located within the 0.25 mile search radius of the study area (Table 2). All UST locations are shown on Figure 1.

Resource Conservation and Recovery Act (RCRA)

The RCRA database includes selected information on sites that generate, store, treat, or dispose of hazardous waste as defined by the Act. The source of this database is the U.S. EPA. A review of the RCRIS-Small Quantity Generator (SQG) list dated 07/01/99 revealed there are thirteen RCRIS-SQG sites within the Old Central/Carver Park study area (Table 1). None of the sites have had any violations. There are six RCRIS-SQG sites located within the 0.25 mile search radius of the study area (Table 2). Only one of the sites, Pilgrims Cleaners located at 1210 Tremont has had a reported violation. The status of this facility is not known.

The RCRA database includes selected information on sites that generate, store, treat, or dispose of hazardous waste as defined by the Act. The source of this database is the U.S. EPA. A review of the RCRA-Large Quantity Generator (LQG) list dated 07/01/1999 has revealed that there are no RCRIS-LQG sites within the Old Central/Carver Park study area and only one RCRIS-LQG within the 0.25 mile search radius (Table 2). No violations have been reported at this facility.

(Coal Gas) Former Manufactured Gas Sites

What is now Shields Park was the part of the Galveston Gas Works Manufactured Gas Plant (MGP). The former plant occupied two blocks bordered on the north by Avenue D (Market Street), by 32nd Street to the east, Avenue F (Church Street) to the south, and 33rd Street on the west. The main plant was located on the northern block now occupied by Southern Union Gas Company. The southern block (Shields Park) housed the tank storage area for the plant.

Before interstate pipelines brought natural gas to cities and towns located far from gas fields, MGPs provided communities with gas needed for heating, lighting, and cooking. The process used to manufacture gas from coal and oil varied according to the year the plant was built and the raw materials available. Three primary processes accounted for the bulk of operations at MGPs: the coal carbonization process, the carbureted water gas process, and oil gas process. All were based on technology whereby the coal or oil was put through high temperature destructive distillation, resulting in a low-Btu gas. The gas was then enriched to increase its Btu value and purified.

MGP processes produced large quantities of byproducts. Coal and oil tars, sludges, purifier box wastes and gas scrubbing wastes including arsenic and cyanide were among the undesirable results of manufacturing gas. MGP residues contain a potpourri of contaminants, including metals and other inorganics, volatile organic compounds, phenolics, and polynuclear aromatic hydrocarbons. Needless to say, these materials were not managed according to modern standards of environmental protection. [EI Digest May, 1995]

The Galveston Gas Works was constructed in the 1870s and operated until the early 1900s. Southern Union Gas Company took over ownership of the Galveston Gas Works in 1949. The storage tanks were removed from the southern property in the 1950s.

Falstaff Brewing Company purchased the Shield Park area from Southern Union Gas Company in June 1963. The City of Galveston purchased the Shields Park area on June 24, 1993 for $60,729 from the Falstaff Brewing Company. Southern Union Gas Company donated the park equipment and landscaping after the City took over ownership.

In March 1987, the site was reported to the Texas Water Commission (what is now the TNRCC) for investigation. The Texas Water Commission conducted a Preliminary Assessment of the site in June 1987, and a Site Inspection in January 1990. At that time the site was designated as ***No Further Remedial Action Planned***. Letters of No Further Action from the TWC and from EPA are included in Appendix C.

In September 1997, the City of Galveston contracted GEI Consultants to perform a Risk Assessment (RA) for the site. Soil and air samples were collected as part of the RA. The outcome of the health risk evaluation, indicated that construction of basketball courts on the paved surface would be safe given that the surface is maintained in good condition. Landscaped areas, constructed with imported top soil, would be safe for site visitors, including children. A copy of the Risk Assessment Report is included in Appendix D.

Texas Voluntary Cleanup Program Sites

There are two Voluntary Cleanup Program (VCP) sites within the Old Central/Carver Park study area:

- Falstaff Brewing Company
- Former Black Wrecker Site

Two additional VCP sites are located within ½ mile of the study area:

- SPT Co Wood Preserving Site
- Chevron Bulk Plant

Each VCP site is discussed below:

Falstaff Brewing Company is located at 33rd and Church Street . At the present time, the subject facility is commercial in nature and being utilized as a warehouse. The project site is a former brewery, which has been inactive since the early 1980s. Rehabilitation of the subject property began in 1997, with the occupation of the former bottling plant. Current plans call for the rehabilitation of the entire property for future commercial use. This commercial use could include commercial storage, commercial office space, and/or manufacturing.

The subject site has historically been utilized for the brewing and bottling of beer. A review of Sanborn Fire Insurance Maps available for the area indicate that the property has been used in the past for single-family residences, brewery, stables, spray pond (painting related to the brewery), a filling station, carwash, and private garage.

As of May 16, 2000 several site assessments have been conducted. These assessments indicated that heavy metal and petroleum hydrocarbon contamination is present at the site. Additional investigations are planned to determine the extent of the contamination and the associated risks. If warranted, remediation will be conducted. The most current site assessment work plan is included in Appendix E.

In addition to the heavy metal and petroleum hydrocarbon contamination discussed above, the site had been impacted from a release of transformer oils containing PCBs. Apparently vandals entered the vacant brewery in the 1980s and ruptured several transformers, releasing approximately 2000 gallons of PCB dielectric fluid. The release was reported to the US EPA on March 1, 1993. Soil and groundwater investigations were conducted and the site was subsequently remediated of all PCB contamination in 1999. A copy of the Interim Response Action Completion Report is included in Appendix E.

Former Black Wrecker Site, located at 600 51st Street, was foreclosed on for delinquent property taxes and conveyed by Sheriff's deed to the City of Galveston on December 8, 1997. The City holds the property in trust for all taxing entities. Wrecker lot activities performed by Theresa Black, the former owner, apparently contaminated the property. The Texas Natural Resource

Conservation Commission (TNRCC) was aware of the contamination, and urged the taxing entities to consider entering the site into the VCP for remediation.

Assistant City Attorney Robert Graves contacted the City's Brownfield Site Assessment Pilot Project (BSAPP) in December 1998, about entering the site into the brownfields program to assist in the process. As the site is located in the Old Central/Carver Park area, a focus area for the BSAPP program, and is a publicly owned site, it was accepted into the BSAPP. The BSAPP Project Coordinator, KMA Environmental Services, Inc. (KMA) coordinated the project efforts at the site, and the dealing with the U.S. EPA and TNRCC. On behalf of the BSAPP, KMA applied to the TNRCC VCP for site assessment services for the site. TNRCC, through their contractor, IT Corporation, provided an updated Phase I ESA, a Phase II ESA, and a Brownfields Site Assessment. These reports were completed in January 2000 and summarized herein.

The TNRCC VCP Brownfields Coordinator, Mr. Byron Ellington, reviewed the documents and assigned the site a VCP number (G-17). Additionally, the U.S. EPA's Region 6 Superfund Emergency Response group, through their contractor Ecology and Environment, provided hazardous characterization of the waste liquid containers remaining on site.

It was noted that insufficient data was collected in the Phase II ESA to determine the lateral and vertical extent of the contamination. Therefore, the TNRCC directed IT Corporation to collect additional field data. Thirty eight samples, from fifteen boring locations, were collected and analyzed for lead; four samples were analyzed for total petroleum hydrocarbons (TPH); six samples semivolatile organic compounds; six for total recoverable hydrocarbons; and six for metals (arsenic, barium, chromium, and lead). Three samples were also collected for Synthetic Precipitation Leaching Procedure (SPLP) metals analysis. One sample was collected from Drum-1A for Toxicity Characteristic Leaching Procedure (TCLP) analysis.

Groundwater samples were collected from 5 of the boring locations and sampled for volatile and semivolatile organic compounds, TPH and metals (arsenic, barium, chromium, and lead). No contaminants above regulatory levels were detected.

IT Corporation submitted analytical summary tables, sample location drawings, and the laboratory data packages to the TNRCC VCP Section and to the BSAPP Coordinator on April 3, 2000. The information was used to identify the areas and contaminants of concern as discussed below. Summary tables and drawings are included n Appendix F of this report.

FINDINGS OF THE ASSESSMENTS

- Two areas of the site were found to be contaminated with lead in the shallow soils (0 to 2 feet) at levels exceeding the groundwater protection value of 150 mg/kg.

- Two areas of the site were found be contaminated with total petroleum hydrocarbons (TPH) in the shallow soils (0 to 1 foot) at levels exceeding the commercial/industrial soil Protective Concentration Level (PCL) for both human exposure and groundwater protection of 2,300 mg/kg.

- One additional area just behind the concrete pad was noted to be visibly stained with oil and grease.

The five areas of concern are listed below and shown on the figures included in Appendix F.

Location/Boring Number	*Contaminant of Concern*	*Approximate Area of Excavation*
Area 1 B5A	Lead @ 193.107 mg/kg	15' x 15' x 2' = 17 cubic yards
Area 2 B15	Lead @ 250 mg/kg	15' x 15' x 2' = 17 cubic yards
Area 3 B3	TPH @ 22,130 mg/kg	15' x 15' x 1' = 9 cubic yards
Area 4 B7	TPH @ 11,300 mg/kg	15' x 15' x 1' = 9 cubic yards
Area 5 – Oily Area Behind Concrete Pad		30' x 15' x 1' = 17 cubic yards

REMEDIATION PLAN

As of the writing of this report, the approval to proceed with remediation was received from the tax foreclosed property Resale Committee. The Committee requested the city of coordinate the cleanup. As of this time, cleanup has not commenced. The cleanup plan discussed with the TNRCC is as follows. The drums, tires, and other miscellaneous debris will be removed by the City of Galveston and disposed of through the City's Recycling Center.

Areas 1 and 2 were identified to have lead contamination exceeding the 150 mg/kg regulatory level. These areas will be excavated to a depth of 2-feet. Confirmation samples will be collected from the 4 side walls of each excavated area, and 1 composite sample will be collected from the bottom of each excavated area. The samples will be analyzed for total lead. If the results indicate that the contaminated material has been removed, the area will be backfilled with clean imported clay material and compacted. If the results indicate that contamination exceeding the regulatory level remains, additional excavation and confirmation sampling be conducted.

Areas 3 and 4 were identified to have TPH contamination exceeding the 2,300 mg/kg regulatory level. Area 5 is stained with oil and grease. These areas will be excavated to a depth of 1-foot. Confirmation samples will be collected from the side-walls and bottoms of each area as described above. After reviewing the analytical results, and it can be shown that the contaminated material has been removed, these areas will be backfilled and the material compacted.

The excavated material will be placed in 15 cubic yard roll-off containers, and will remain covered at all times. Two composite soil samples will be collected for waste characterization. The disposal contractor requires the soils be analyzed for benzene, toluene, ethylbenzene, xylenes, TPH, and TCLP metals.

Based on the waste characterization the soil will be transported to the appropriate landfill for disposal.

SPT Co Wood Preserving Site is owned by Southern Pacific Transportation Company and is located at 4100 Port Industrial Boulevard. It is 15 acres in size, relatively flat, covered with vegetation and surrounded by a perimeter fence with one gate to restrict access. The site is a former bulk creosote terminal. Creosote was delivered and pumped through an underground wooden pipeline to two aboveground storage tanks (AST) formerly located at the southeast corner of the site. No structures currently exist at the site.

Several investigations conducted at the site, and on surrounding properties, indicate that the soil and groundwater have been impacted with creosote contamination. The investigation of the site is currently on-going. The most recent investigation report (February 1998) is included in Appendix G

Chevron Bulk Plant is owned by the University of Texas Medical Branch and is located at 700 Port Industrial Boulevard. The contaminants at the site were petroleum hydrocarbons. The site has been remediated and closed with no further action required.

Transformers

Numerous pole mounted electrical transformers are located within the Old Central/Carver Park area. Reliant Energy was contacted regarding the potential PCB content of the transformers. Reliant Energy responded with a letter (Appendix H) that stated they were in compliance with EPA regulations regarding PCBs.

Pipelines

The only pipelines noted in the area were Southern Union Gas Company distribution pipelines, and pipelines from three of Mitchell Energy Company gas wells.

Air Emissions

State and local environmental agencies operate air monitoring sites, where sensitive equipment measures the concentration of different air pollutants (carbon monoxide, ozone, particulate mater smaller than 10 microns (PM-10), lead, sulfur dioxide, and nitrogen dioxide). Some types of equipment run continuously, measuring pollutant concentration every few minutes, and calculating an average concentration for each hour of the day and night. Other types of equipment operate intermittently, perhaps every other day or every sixth day. The equipment runs for a specified time period, often 24 hours, and subsequent laboratory analysis determines the average pollutant concentration during the measurement time.

The individual measurements – 1-hour and 24-hour average air pollutant concentrations – are submitted to EPA and stored in the Aerometric Information Retrieval System (AIRS) database.

Four AIRS monitoring sites are located within the Old Central/Carver Park area and three within the search radius of the study area.

Within the Old Central/Carver Park Area

GBE Automotive	3502 Broadway
Mr. Muffler & Brake Shop	4527 Broadway
Mitchell Energy Corp.	4810 Post Office
Quality Cleaners & Laundry	5117 Broadway

Within the Search Radius of the Old Central/Carver Park Area

Gonzales Tire and Supply	2502 Broadway
Pilgrim Cleaners	1210 Tremont
Stan Blast Abrasives Co. Inc.	5712 Port Industrial

EPA has designated Galveston County (and several adjacent counties) to be a non-attainment area for Ozone pollution based on the 1-hour air quality standard.

Solid Waste Facility/Landfill

Only one Solid Waste Facility (SWF) was located within the Old Central/Carver Park area. This is the BFI Transfer Station located at 5515 Port Industrial Boulevard.

Spills

TNRCC maintains a database of all reported industrial and non-industrial spills in the state of Texas. Section 26.039 of the Texas Water Code requires that accidental spills and releases be reported to the TNRCC. Only one minor spill was reported within the Old Central/Carver Park area. On December 16, 1991, approximately 20 gallons of oil was spilled at the corner of 26th and Broadway.

Radon

Radon is a naturally occurring radioactive gas that is produced by the radioactive decay of uranium. It has no smell or taste, and cannot be seen. High concentrations of radon can be found in soils and rocks containing uranium, granite, shale, phosphate, and pitchblende. Radon can accumulate inside an enclosed structure to levels that can pose a risk to human health. The risk generally increases as the level of radon and duration of exposure increases.

A review of the U.S. EPA's Map of Radon for Texas regarding radon concentrations for the Old Central/Carver Park area was conducted. The area is located within EPA Radon Zone 3 for Galveston County. Only one site has been reportedly tested for radon in the Zip Code area 77573. The average activity was 0.160 pCi/L, well below the action level of 4.0 pCi/L.

Lead Paint

The following article written by Kelly Davis was published in the ***Galveston County Daily News on May 10, 2000.*** The article is in reference to blood-lead levels in children in Zip Code areas 77550 and 77551. Most of Old Central/Carver Park area lies within the Zip Code 77550, with the western most section in Zip Code 77551. However, it should be noted that these Zip Code areas cover a significantly greater area than just the Old Central/Carver Park area. According to Ms. Sharon Strain at the Galveston Housing Authority, all public housing has been inspected for lead in the Old Central/Carver Park area.

> Nationally, at least 5 percent of children have blood-lead levels of 10 parts per million or higher. Andrew Cuomo, secretary of the U.S. Department of Housing and Urban Development, has labeled the situation an epidemic.
>
> In 1998, nearly a quarter of all children tested in Zip Code 77550 and more than 11 percent of children tested in Zip code 77551 had blood-lead levels elevated enough to warrant concern among health officials.
>
> Over time, blood-lead levels of more than 10 micrograms per deciliter can cause many problems, including permanent reduction in intelligence, hyperactivity, insomnia, anemia, and behavioral problems.
>
> Many of the children with high lead levels are from poor families living in substandard housing, but not all them are. Some are middle class kids living in Galveston's historic neighborhoods.
>
> The culprit is lead-based paint.
>
> Until 1978, lead was a major component of paint, so homes built before 1978 probably contain some of it. Fully 90 percent of homes built before 1940 contain lead paint, and the older the home, the higher the likelihood and the higher the concentration.
>
> Some paints before 1920 contained 50-percent lead by weight.
>
> How does the lead wind up in the bloodstreams of children? Health officials say it's simple. Children playing in and around lead-contaminated homes get lead on their hands and then they put their hands in their mouths.
>
> What can we do about it?

Endangered Species

Based on the site inspection, endangered species are not expected to be present in the Old Central/Carver Park area.

Wetlands

The National Wetland Inventory information was obtained from the U.S. Fish and Wildlife Service. No wetlands are located within the Old Central/Carver Park area.

Wild and Scenic Rivers

There are no rivers in the Old Central/Carver Park area.

Scientific Significance

The area does not appear to contain features of scientific significance.

Sole Source Aquifers

According to the TNRCC, the area is underlain by the Chicot aquifer, which is not considered a sole-source aquifer.

Undeveloped Coastal Dunes and Beaches

The Old Central/Carver Park area is not located in the vicinity of coastal dunes and beaches.

Floodplains

Flood zone data was obtained from the Federal Emergency Management Agency (FEMA). The Old Central/Carver Park area is located within the 100-year Floodplain (Figure 1).

National Natural Landmarks

No natural landmarks were noted in the Old Central/Carver Park area.

Wilderness Area

The Old Central/Carver Park area is not located within, or adjacent to, a wilderness area.

Special Resources Clearinghouse or Recreational Areas

No evidence of special resources were observed in the Old Central/Carver Park area. Two public parks are located within the area: Shields Park, located at 3228 Church and Wright Cuney Park, located at 718 41st Street.

Asbestos Containing Materials

Asbestos containing material (ACM) is defined by regulatory agencies as a material containing greater than one percent asbestos. In order to define a material as non-ACM, a minimum number of samples must be collected and analyzed dependent upon the type and quantity of the homogeneous material. OSHA regulations require that certain materials found in buildings constructed prior to 1980 be presumed to be ACM, unless analyzed and proven otherwise. According to Ms. Sharon Strain at the Galveston Housing Authority, all public housing the Old Central/Carver Park area have been inspected for ACM.

Bulk Chemical Storage Areas

The only bulk chemical storage area noted in the study area is the crude oil tanks at Mitchell Energy Corporation's oil well located at 49th and Post Office.

Industrial, Manufacturing, and Storage Activities of Potential Concern

The following sites of potential environmental concerns were noted within the Old Central/ Carver Park study area:

- Reliant Energy Transformer Station — 26th and Post Office
- Reliant Energy Transformer Station — 53rd and Market
- Aluminum Recycling Storage Area — 30th and Market
- Aluminum Recycling Storage Area — 34th and Church
- Mitchell Energy Corporation Gas Well — 41st and Church
- Mitchell Energy Corporation Gas Well — 46th and Church
- Mitchell Energy Oil Well/Bulk Storage — 49th and Church
- City Auto Salvage Yard — 44th and Post Office
- Ace of Galveston Salvage Yard — 516 51st Street

Observed Railroad Spurs

Numerous railroad spurs are located within, and adjacent to, the Old Central/Carver Park area as shown on Figure 1. Two railroad roundhouses, which were removed in the 1980s, operated within the Old Central/Carver Park area. One was located just west of 37th Street and south of Port Industrial Boulevard. The other roundhouse was located at approximately 45th street and just south of Port Industrial Boulevard.

5.0 SPECIAL RESOURCES

Historic Preservation

Two locations of Historic Preservation are located within the Old Central/Carver Park area. The Henry Beissner House, located 2818 Ball Avenue, and Willis-Moody Mansion at 2618 Broadway are listed on the National Register of Historic Places. The Willis-Moody Mansion is also listed as a Recorded Texas Historic Landmark.

Well, for one thing, we can get our children tested. Chuck Chambers, an epidemiologist for the health district, recommends testing all children under the age of 6 in Zip Codes 77550 and 77551.

There is no reason not to do this.

The county's health clinics, the University of Texas Medical Branch and local private physicians all administer the test, which is relatively simple and inexpensive.

Secondly, we can test our homes for lead, and if we find it, we can remove it.

Of course, that's easier said than done. If done right, eradicating lead from a building can cost thousands of dollars. If done wrong, it can make a dangerous situation even worse.

Thirdly, we can enforce the laws on the books.

Local, state, and federal statutes all regulate removal of lead paint from building. The City of Galveston has a relatively strict lead abatement code limiting the use of power grinders and sanders on exteriors of any building built before 1978. [A copy of this code is provided in Appendix I – the user should be aware that this is the current code for the year 2000 and is subject to change in the future]

Whether these regulation are enforced, however, remains in question. According to the city's housing inspectors have issued no citations in two years.

Finally, we can allocate money to address this problem.

HUD has asked Congress for $120 million to reduce lead hazards in the homes of the nation's poor. HUD estimates that by preventing adverse effects of lead on children's health and development, the economic benefits will exceed the cost of lead abatement by $8.9 billion.

The bottom line is that lead contamination is a serious problem nationwide, and it's a potentially devastating problem in Galveston.

We must take it seriously.

6.0 LIMITATIONS ON THE ASSESSMENT

This preliminary assessment has included a thorough review of information relating to the potential for environmental concerns at the subject site. However, no environmental site assessment can wholly eliminate uncertainty regarding the potential for recognized environmental conditions in connection with a property. There exists a possibility that potential sources of contamination have escaped detection due to the limitation on the scope of our services, inaccuracy of regulatory records, or the presence of undetected and unreported environmental accidents.

Tables

TABLE 1

OLD CENTRAL/CARVER PARK - ENVIRONMENTAL DATABASE SEARCH - SITES LOCATED WITHIN OLD CENTRAL/CARVER PARK AREA

Facility Index System/Facility Initiative Program Summary Report (FINDS)		
Site	**Address**	**Comments**
Houston Industries, Inc. Galveston	502 27th Street	Permit Compliance System (PCS)
Dobbins Metal Shop	3224 Broadway	National Compliance Database (NCDB)
GBE Automotive	3502 Broadway	AIRS Facility System (AIRS/AFS)
Mr. Muffler & Brake Shop	4527 Broadway	AIRS Facility System (AIRS/AFS)
Mitchell Energy Corp.	4810 Post Office	AIRS Facility System (AIRS/AFS)
Quality Cleaners & Laundry	5117 Broadway	AIRS Facility System (AIRS/AFS)

Texas Industrial and Hazardous Waste Database (TX IHW)		
Site	**Address**	**Comments**
Waste Control, Inc.	2801 Avenue C	Registration is a Transporter of Waste - Active
Galveston Service Center	502 27th Street	Registration is a Generator of Waste - Inactive
Island Transit	3115 Market Street	Registration is a Generator of Waste - Active
Garage	502 32nd Street	Registration is a Generator of Waste - Inactive
Pearl Brewing Company	3301 Church Street	Registration is a Generator of Waste - Inactive
G & M Automotive	2812 Broadway	Registration is a Generator of Waste - Active
#108373	3301 Broadway	Registration is a Generator of Waste - Inactive
Exxon	3228 Broadway	Registration is a Generator of Waste - Inactive
#930	3628 Broadway	Registration is a Generator of Waste - Inactive
Malin Environmental, Inc.	5220 Avenue G	Registration is a Generator of Waste - Active
Pat Hartnett	4427 Broadway	Registration is a Generator of Waste - Inactive
AAMCO Transmission	4520 Broadway	Registration is a Generator of Waste - Active
Quality Cleaners & Laundry	5117 Broadway	Registration is a Generator of Waste - Active
ARAMCO, Inc.	5105 Broadway	Registration is a Generator of Waste - Inactive
#67466	5028 Broadway	Registration is a Generator of Waste - Inactive

TABLE 1

OLD CENTRAL/CARVER PARK - ENVIRONMENTAL DATABASE SEARCH - SITES LOCATED WITHIN OLD CENTRAL/CARVER PARK AREA

LEAKING UNDERGROUND STORAGE TANKS (LUST)		
Site	**Address**	**Status**
Port of Galveston	123 25th Street	Incident reported, INITIAL DIRECTIVES ISSUED - AWAITING RESPONSE 1 Tank Abandoned In Place 2 Tanks Temporarily Out of Service
Bluebonnet Warehouses	29th & Mechanic	Minor soil contamination - CASE CLOSED 1 Tank Removed From Ground
Galveston Service Center	502 27th Street	Groundwater impacted, no threat to receptors - CASE CLOSED
M-1 Drilling Fluids Company	4150 Port Industrial	No groundwater impacted - CASE CLOSED
Warehouse	402-424 Thirtieth Street	Groundwater impacted, no threat to receptors - CLOSURE PENDING REVIEW
Tony Hone Firestone Tire	2302 Broadway	Groundwater impacted, non-public/non-domestic water supply well within 0.25 miles - PHASE II IN PROGRESS
7 AM Food Store	2728 Broadway	Groundwater other than class 1B - CASE CLOSED Facility Remains In Use - 2 Tanks & 1 Tank Temporarily Out of Service
Chevron #60108373	3301 Broadway	Groundwater impacted - FINAL CONCURRENCE PENDING DOCUMENT- ATION OF WELL PLUGGING REPORT Facility Remains In Use - 3 Tanks
Exxon Co. USA 6-7352	3228 Broadway	No groundwater impacted, no threat to receptors - CASE CLOSED 1 Tank Removed From Ground - 3 Tanks Remain In Use
Reynolds Aluminum Recycling	3524 Broadway	Groundwater impacted, no threat to receptors - CASE CLOSED 5 Tanks Removed From Ground
M G Automotive	3701 Broadway	No groundwater impacted, no threat to receptors - CASE CLOSED 2 Tanks Removed From Ground
Diamond Shamrock #353	3927 Broadway	Groundwater impacted, no threat to receptors - CONCURRENCE PENDING DOCUMENTATION OF WELL PLUGGING 2 Tanks Removed From Ground
RAS 6-2682	3827 Broadway	Groundwater impacted other than class 1B - CASE CLOSED 4 Tanks Removed From Ground
Closed Service Station	3826 Broadway	No groundwater impacted - PHASE II REPORT RECEIVED - REVIEW PEND.

TABLE 1

OLD CENTRAL/CARVER PARK - ENVIRONMENTAL DATABASE SEARCH - SITES LOCATED WITHIN OLD CENTRAL/CARVER PARK AREA

LEAKING UNDERGROUND STORAGE TANKS (LUST)		
Site	**Address**	**Status**
Former Shell Retail Facility	4427 Broadway	Groundwater impacted, no threat to receptors - CASE CLOSED 4 Tanks Abandoned In Place
Former AW Quinn Distributing	6006 Broadway	Soil contamination only - CASE CLOSED
Diaz Service Center	1325 39th Street	Groundwater impacted other than class 1B - CASE CLOSED Site Remaines In Use - 3 Tanks
Exxon Station #6-4692	5028 Broadway	Groundwater impacted, no threat to receptors - PHASE III IN PROGRESS 4 Tanks Removed From Ground
Site Name Unknown	1370 E. 40th St.	Soil contamination only - CASE CLOSED
Stop N Go #817	5401 Broadway	Soil contamination only - CASE CLOSED 2 Tanks Removed From Ground

UNDERGROUND STORAGE TANKS (UST)		
Site	**Address**	**Comments**
City of Galveston-Old Garage	319 29th Street	Removed from ground (3) In Use (1)
Young & Company	2710 Avenue D	Removed from ground (1)
Galveston Service Center	502 27th Street	Abandoned in place (1) Removed from ground (2) In Use (2)
Municipal Transit Garage	3115 Market Street	In Use (3) Abandoned in place (1)
Southern Union Gas	402 33rd Street	No Information
Chevron #108373 LUST	3301 Broadway	In Use (3)
City of Galveston-Municipal Garage	502 32nd Street	In Use (3) Temporarily Out of Service (1)
Site #343	3202 Broadway	No Information
Shop N Go	3627 Broadway	In Use (4)
Stop N Bye Food Mart	3825 Broadway	In Use (2)
Pit Stop	4401 Broadway	In Use (3)
Diaz Service Center LUST	1325 39th Street	In Use (3)
Galveston Work Center	1224 43rd Street	In Use (1) Abandoned in place (1)
#701	5315 Broadway	No Information

TABLE 1

OLD CENTRAL/CARVER PARK - ENVIRONMENTAL DATABASE SEARCH - SITES LOCATED WITHIN OLD CENTRAL/CARVER PARK AREA

UNDERGROUND STORAGE TANKS (UST)		
Site	**Address**	**Comments**
Broadway Gas Station	5411 Broadway	In Use (3)
Broadway Funeral Home	5815 Broadway	Temporarily Out of Service (1)
7 AM Food Store LUST	2728 Broadway	In Use (2) Temporarily Out of Service (1)
Dunn Equipment	2701 Broadway	In Use (2)
Exxon Co. USA 6-7352 LUST	3228 Broadway	Removed from ground (1) In Use (3)

Above Ground Storage Tanks (AST)		
Site	**Address**	**Comments**
Galveston Transfer Station	5515 Harborside Drive	Diesel Tanks (2) - In Use (1) - Out of Service (1)
Aimcore Galv. Terminal	4800 Port Industrial	Diesel Tanks (1) - In Use (1)
Action Wrecker & Trucking	601 51st Street	Diesel Tanks (1) - In Use (1)

Resource Conservation and Recovery Information System - Small Quantity Generator (RCRIS-SQG)		
Site	**Address**	**Comments**
Houston Industries, Inc.	502 27th Street	No Violations Found
Champion Building Products	3902 Port Industrial	No Violations Found
Island Transit	3115 Market Street	No Violations Found
The City of Galveston	502 32nd Street	No Violations Found
Sullivan Enterprises, Inc.	4800 Port Industrial Blvd.	Conditionally Exempt SQG - No Violations Found
G & M Automotive	2812 Broadway	No Violations Found
Chevron USA, Inc. #108373	3301 Broadway	No Violations Found
Tune up Masters	3628 Broadway	No Violations Found
Galveston Ind. School District	1326 31st Street	No Violations Found
Malin Environmental	5220 Avenue G	No Violations Found
AAMCO Transmission	4520 Broadway	No Violations Found
Quality Cleaners & Laundry	5117 Broadway	No Violations Found
ARAMCO, Inc.	5105 Broadway	No Violations Found

TABLE 1

OLD CENTRAL/CARVER PARK - ENVIRONMENTAL DATABASE SEARCH - SITES LOCATED WITHIN OLD CENTRAL/CARVER PARK AREA

SPILLS		
Site	**Address**	**Comments**
26th Street / Broadway	26 Street / Broadway	A minor spill of 20 gallons of oil was spilled at the intersection of 26th Street and Broadway on 12/16/1991. The cause was reported as Human Error. There is no information on the clean-up of this spill.

(COAL GAS) Former Manufactured Gas		
Site	**Address**	**Comments**
Galveston Gas Company	Avenue D or Market	Galveston Gas Works occupied two blocks bordered on the north by Ave. D (Market St), by 32nd Street to the east, Ave. F (Church) to the south, and 33rd Street on the west. Avenue E intersects the two blocks running east to west. Galveston Gas Works investigated and remediated the site, which is now the location of Shield Park. NFRAP

Solid Waste Facility/Landfill (SWF/LF)		
Site	**Address**	**Comments**
Not Reported	5515 Port Industrial	Transfer Station Facility - City of Galveston

Texas Voluntary Cleanup Program (TX VCP)		
Site	**Address**	**Comments**
Falstaff Brewing Company	33rd & Church Street	PCB, TPH, and Metals contamination - soils and groundwater - Investigation
Former Black Wrecker Site	600 51st Street	Lead, Oil & Grease - Investigation completed, pending remediation

TABLE 2

OLD CENTRAL/CARVER PARK - ENVIRONMENTAL DATABASE SEARCH - SITES LOCATED WITHIN 1/2 MILE RADIUS

Facility Index System/Facility Initative Program Summary Report (FINDS)		
Site	**Address**	**Comments**
Galveston, City of	2514 Sealy	National Compliance Database (NCDB)
Hornbeck Offshore Operators	2317 Broadway	Hazardous Waste Transporter - No Violations Found
Gonzales Tire & Supply	2502 Broadway	AIRS Facility System (AIRS/AFS)
Pilgrims Cleaners	1210 Treamont	AIRS Facility System (AIRS/AFS)
Stan Blast Abrasives Co., Inc.	5712 Port Industrial	AIRS Facility System (AIRS/AFS)

Texas Industrial and Hazardous Waste Database (TX IHW)		
Site	**Address**	**Comments**
US Coast Guard Marine Safety	601 Rosenberg, RM 301	Registration is a Generator of Waste - Inactive
Goodyear Tire & Rubber	504 25th Street	Registration is a Generator of Waste - Inactive
Pilgrim Cleaners	1210 Tremont	Registration is a Generator of Waste - Inactive
Galv. Co. Health Department	4424 Avenue N	Registration is a Generator of Waste - Active
Port of Galv. Waterfront	Port of Galveston	Registration is a Generator of Waste - Inactive

TABLE 2

OLD CENTRAL/CARVER PARK - ENVIRONMENTAL DATABASE SEARCH - SITES LOCATED WITHIN 1/2 MILE RADIUS

LEAKING UNDERGROUND STORAGE TANKS (LUST)		
Site	**Address**	**Status**
Farmers Marine Copper Works	1908 Strand	Incident reported, INITIAL DIRECTIVES NOT YET ISSUED
Houston Ship Repair, Inc.	1802 Mechanic	No groundwater impacted - CASE CLOSED
Port of Galveston	123 25th Street	Incident reported, INITIAL DIRECTIVES ISSUED - AWAITING RESPONSE 1 Tank Abandoned In Place 2 Tanks Temporialy Out of Service
Goodyear Tire & Rubber	504 25th Street	No groundwater impacted - CASE CLOSED 1 Tank Removed From Ground
Galveston County Sheriff Dept.	715 19th Street	Groundwater impacted, no threat to receptors
BMA-Galveston, Inc.	707 Tremont Street	Minor soil contamination - CASE CLOSED
Tony Hone Firestone Tire	2302 Broadway	Groundwater impacted, non-public/non-domestic water supply well within 0.25 miles - PHASE II IN PROGRESS
Stop N Go #2493	2525 Broadway	Groundwater impacted, non-public/non-domestic water supply well within 0.25 miles - PHASE III IN PROGRESS AND QUARTERLY MONITORING Facility Remains In Use - 3 Tanks
Galveston Tire & Supply	2502 Broadway	Groundwater impacted - FINAL CONCURRENCE PENDING DOCUMENT-ATION OF WELL PLUGGING REPORT 1 Tank Removed From Ground - 5 Tanks Remain In Use
Former 7-Eleven Store #24760	2501 Broadway	Groundwater impacted, no threat to receptors - PHASE II IN PROGRESS 1 Tank Abandoned In Place
Vacant 1.08-Acre Tract	2427 Broadway	Groundwater impacted, no threat to receptors - CASE CLOSED
Armour Butterowe Building	1111 23rd Street	No groundwater impacted, no threat to receptors - CASE CLOSED
Ansell Megna Investments	1616-24 Tremont	No groundwater impacted - INCIDENT REPORTED - INITIAL DIRECTIVES NOT YET ISSUED
Chevron #108372	6027 Broadway	Groundwater impacted, no threat to receptors - CASE CLOSED
Former AW Quinn Distributing	6006 Broadway	Soil contamination only - CASE CLOSED
Site Name Unknown	1370 E. 40th St.	Soil contamination only - CASE CLOSED
Galveston Fire Fighting Grounds	59th Street	Groundwater impacted, no threat to receptors - CASE CLOSED
Fisca Oil Service Station #79	5411 Broadway	Group 1 groundwater, plume has/likely to migrate off-site - CASE CLOSED

TABLE 2

OLD CENTRAL/CARVER PARK - ENVIRONMENTAL DATABASE SEARCH - SITES LOCATED WITHIN 1/2 MILE RADIUS

UNDERGROUND STORAGE TANKS (UST)		
Site	**Address**	**Comments**
Gulf Vacuum Service, Inc.	2081 Old Mexico Road	In Use (2)
Southeast Packing Co.	Pier 22	In Use (2)
Galveston County Sheriff Dept.	715 19th Street	Removed from ground (3)
Old Southern Union Gas Bldg.	908 25th Street	Temporaily Out of Service (1)
Galveston Southfield Co.	822 Rosenberg Street	Removed from ground (1) In Use (1)
Trans Seafood Market	2231 Broadway	In Use (2)
Broadway Mobil	2227 Broadway	In Use (4)
Stop N Go #2493 LUST	2525 Broadway	In Use (3)
Galveston Tire & Supply LUST	2502 Broadway	Removed from ground (1) In Use (5)
Shell Oil Co. Retail Facility	602 Broadway	In Use (6)

Resource Conservation and Recovery Information System - Small Quantity Generatory (RCRIS-SQG)		
Site	**Address**	**Comments**
US Coast Guard Marine Safety	601 Rosenberg, RM 301	No Violations Found
Holiday, Inc. - Old-Datsun	25th & Church	No Violations Found
Goodyear Auto Service Center	504-25th Street	No Violations Found
Hornbeck Offshore Operators	2317 Broadway	No Violations Found
Hunter F. Fred	2228 Broadway	No Violations Found
Pilgrim Cleaners	1210 Tremont	1 Violation Found - Generator - All Requirements
Resource Conservation and Recovery Information System - Large Quantity Generatory (RCRIS-LQG)		
Site	**Address**	**Comments**
Stones Auto Service	2419 Mechanic	No Violations Found

TABLE 2

OLD CENTRAL/CARVER PARK - ENVIRONMENTAL DATABASE SEARCH - SITES LOCATED WITHIN 1/2 MILE RADIUS

Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS)		
Site	**Address**	**Comments**
Half-Mile Lagoon	On 51st Port Industrial	The site consisted of a large leveed impoundment, approximately 1/2 mile long. The site was reported to EPA in May 1990, Preliminary Assessment was conducted in June 1993, and the Site Inpsection in October 1997. No further remedial action was planned for the site.

Solid Waste Facility/Landfill (SWF/LF)		
Site	**Address**	**Comments**
UTMB	700 Port Industrial	UTMB Solid Waste Incineration Facility without Energy Recovery

Texas Voluntary Cleanup Program (TX VCP)		
Site	**Address**	**Comments**
Chevron Bulk Plant #60165535	700 Port Industrial	Hydrocarbon contamination - soils and groundwater - Complete
SPT Co. Wood Preserving Site	4100 Port Industrial	Creosote contamination - soils and groundwater - Investigation

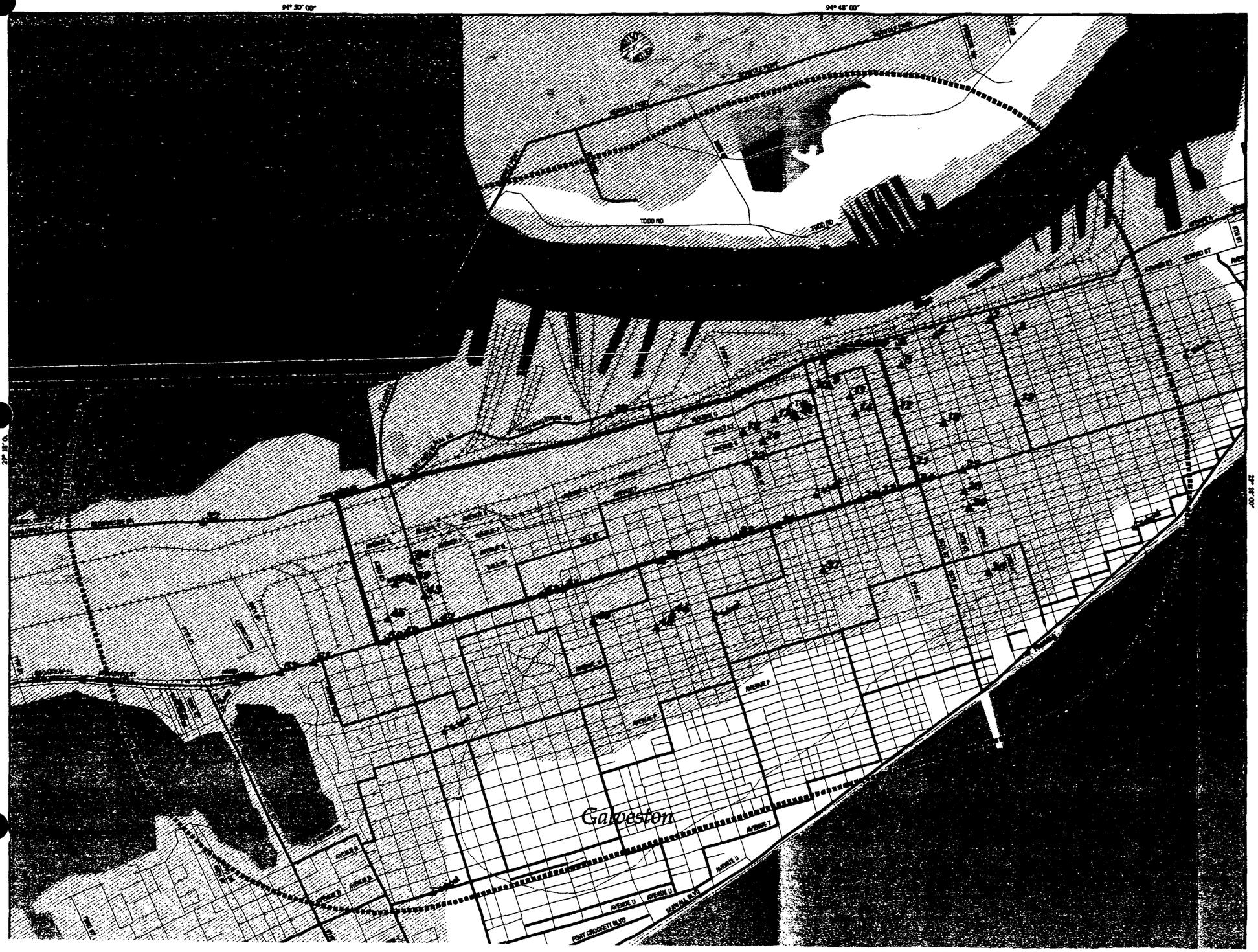
Figures

MAP LEGEND (FIGURE 1)

MAP ID	SITE	DATABASE
1	Gulf Vacuum Service, Inc.	UST
1	McCoy Bldg. Center	UST
1	Southeast Packing Co.	UST
2	Farmers Marine Copper Works	LUST
3	Houston Ship Repair, Inc.	LUST
4	Jules Lauve, Jr., Inc.	UST
5	2415 Strand	UST
6	Port of Galveston	LUST, UST
6	Previous Fueling Facility	UST
7	Century Papers, Inc.	UST
8	Stones Auto Service	RCRIS-LQG
9	Waste Control	FINDS, TX IHW
10	Bluebonnet Warehouses	LUST, UST
10	City of Galveston-Old Garage	UST
11	Young & Company	UST
12	Goodyear Auto Service Center	RCRIS-SQG, FINDS, LUST, UST, TX IHW
12	Holiday, Inc. - Old-Datsun	RCRIS-SQG, FINDS
12	US Coast Guard Marine Safety	RCRIS-SQG, FINDS, TX IHW
13	Galveston County Sheriff Dept.	LUST, UST
14	Galveston Service Center	LUST, UST, TX IHW
14	Houston Industries, Inc.	RCRIS-SQG, FINDS
15	Champion Building Products	RCRIS-SQG, FINDS
15	M-1 Drilling Fluids Company	LUST
16	Warehouse	LUST, UST
17	Island Transit	RCRIS-SQG, FINDS, TX IHW
17	Municipal Transit Garage	UST
18	BMA of Galveston	LUST, UST
19	Chevron #108373	UST
19	Galveston Gas Company	CERCLIS-NFRAP, COAL GAS
19	Southern Union Gas	UST
20	City of Galveston-Municipal Garage	UST
20	Garage	TX IHW
20	The City of Galveston	RCRIS-SQG, FINDS
21	Galveston Southfield Co.	UST
21	Galveston, City of	FINDS
21	Old Southern Union Gas Bldg.	UST
22	Pearl Brewing Company (Falstaff)	UST, TX IHW
23	Broadway Mobil	UST
23	Hornbeck Offshore Operators	RCRIS-SQG, FINDS
23	Hunter F. Fred	RCRIS-SQG, FINDS
23	Tony Hone Firestone Tire	LUST, UST
23	Trans Food Market	UST
24	Chief Auto Parts #24760	UST
24	Former 7-Eleven Store #24760	LUST
24	Galveston Tire & Supply	LUST, UST
24	Gonzales Tire & Supply	FINDS
24	Not Reported	TX SPILLS
24	Stop N Go #2493	LUST, UST
24	Vacant 1.08-Acre Tract	LUST
25	Galveston Transfer Station	AST
26	Armour Butterowe Building	LUST
27	7 AM Food Store	UST
27	Dunn Equipment	UST
27	Seven AM Food Store	LUST
28	Sullivan Enterprises, Inc.	RCRIS-SQG, FINDS

MAP LEGEND (FIGURE 1)

MAP ID	SITE	DATABASE
29	G & M Automotive	RCRIS-SQG, FINDS, TX IHW
30	Pilgrim Cleaners	RCRIS-SQG, FINDS, TX IHW
31	#108373	TX IHW
31	Chevron #60108373	LUST, RCRIS-SQG, FINDS
31	Dobbins Metal Shop	FINDS
31	Exxon Co. USA 6-7352	LUST, UST, TX IHW
31	Site #343	UST
32	Not Reported	SWF/LF
33	Galveston Radiator	UST
33	GBE Automotive	FINDS
33	Reynolds Aluminum Recycling	LUST, UST
34	#930	TX IHW
34	M G Automotive	LUST, UST
34	Shop N Go	UST
34	Stop N Go #1731	UST
34	Tune up Masters	RCRIS-SQG, FINDS
35	Commercial Property	UST
35	Diamond Shamrock #353	LUST, UST
35	RAS 6-2682	LUST, UST
35	Stop N Bye Food Mart	UST
35	Stop N Go #2601	UST
36	Action Wrecker & Trucking	AST
37	Galveston Ind. School District	RCRIS-SQG
37	Galveston School District	FINDS
38	Closed Service Station	LUST
39	Half-Mile Lagoon	CERCLIS, FINDS
40	Malin Environmental	RCRIS-SQG, FINDS, TX IHW
41	Ansell Megna Investments	LUST
41	Pat Hartnett	TX IHW
41	Pit Stop	UST
41	Shell Oil Company	UST
42	AAMCO Transmission	RCRIS-SQG, FINDS, TX IHW
42	Mr. Muffler & Brake Shop	FINDS
43	Uniform & Linen	UST
44	Diaz Service Center	UST
44	Former Shell Retail Facility	LUST
45	Closed Street	UST
46	Galveston Work Center	UST
47	#67466	TX IHW
47	ARAMCO, Inc.	RCRIS-SQG, FINDS, TX IHW
47	Chevron #108372	LUST
47	Exxon Co. USA 6-4692	UST
47	Quality Cleaners & Laundry	RCRIS-SQG, FINDS, TX IHW
48	Former AW Quinn Distributing	LUST
49	#701	UST
50	Broadway Gas Station	UST
50	Diaz Service Center	LUST
50	Stop N Go #817	UST
51	Broadway Funeral Home	UST
51	J. R. McConnell	UST
52	Exxon Station #6-4692	LUST
52	Not Reported	LUST
53	Chevron Facility #108372	UST
53	Stop N Go #817	LUST



Old Central/Carver Park Area

- Listed Sites
- Earthquake Epicenters (Richter 5 or greater)
- Study Area Boundary
- Roads
- Major Roads
- Waterways
- Railroads
- Contour Lines
- Pipelines
- Powerlines
- Fault Lines
- Water
- Superfund Sites
- 100-Yr Flood Zones
- Wetlands

N

Galveston, TX

0 1/4 1/2

Scale in Miles

Environmental Data Resources, Inc.

APPENDIX A

Aerial Photographs

The EDR-Aerial Photography Print Service

Old Central/Carver Park Area
Old Central/Carver Park Area
Galveston, TX 77550

September 8, 1999

Inquiry Number: 407975-4

Environmental Data Resources, Inc.
an edr company

The Source For Environmental Risk Management Data

3530 Post Road
Southport, Connecticut 06490

Nationwide Customer Service

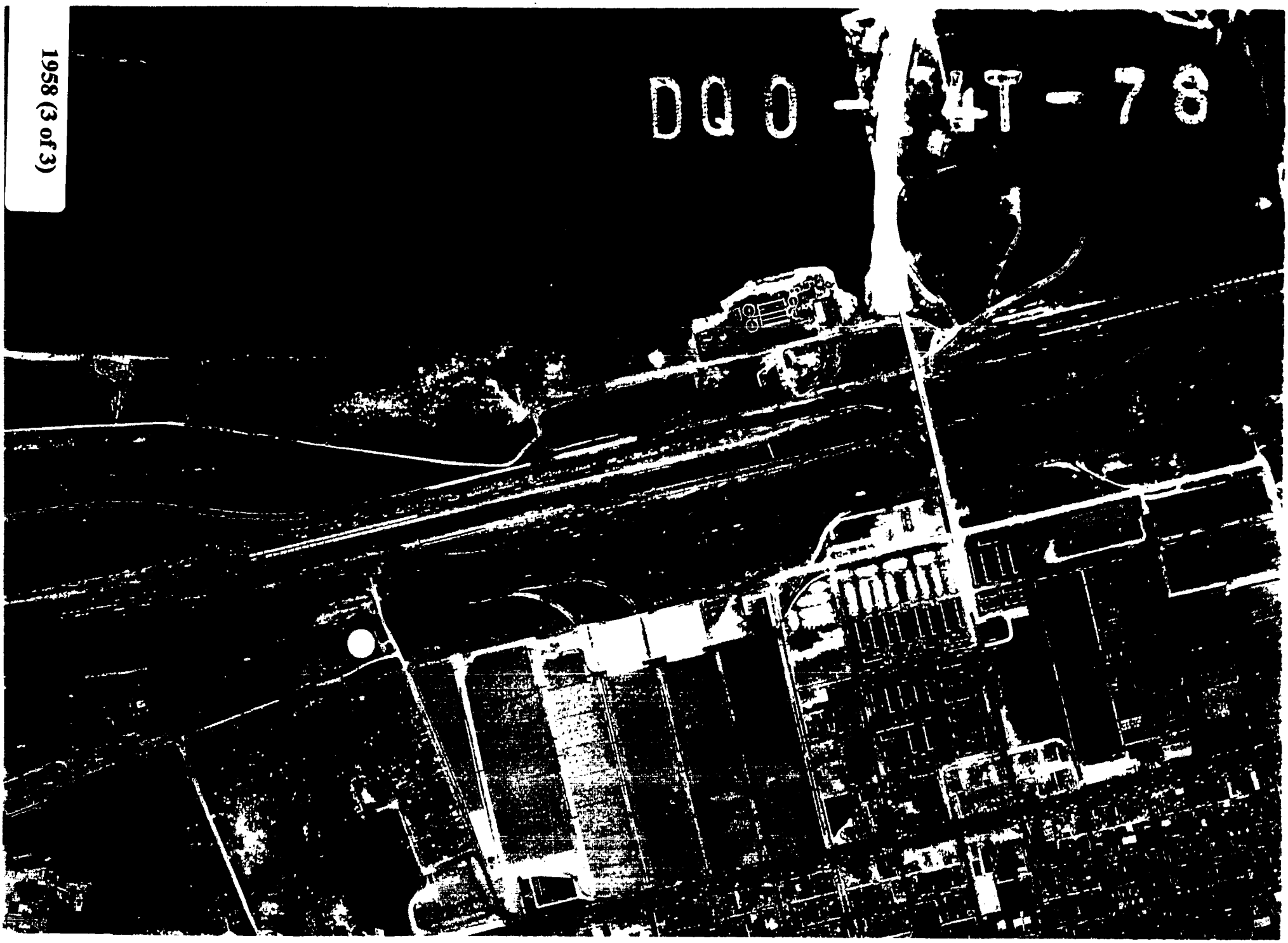
Telephone: 1-800-352-0050
Fax: 1-800-231-6802

1958 (1 of 3)

1958 (2 of 3)

GALVESTON

1958 (3 of 3)



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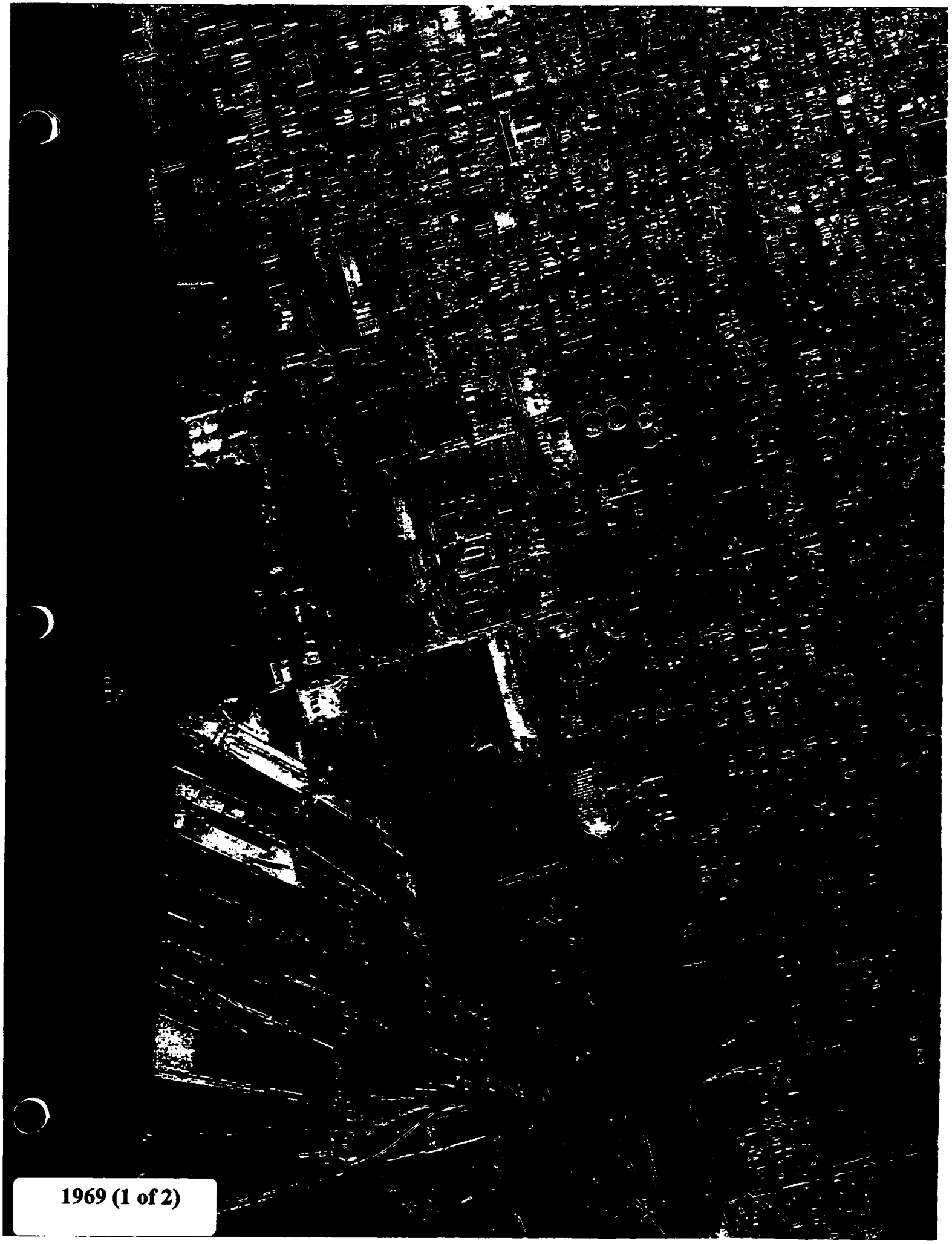

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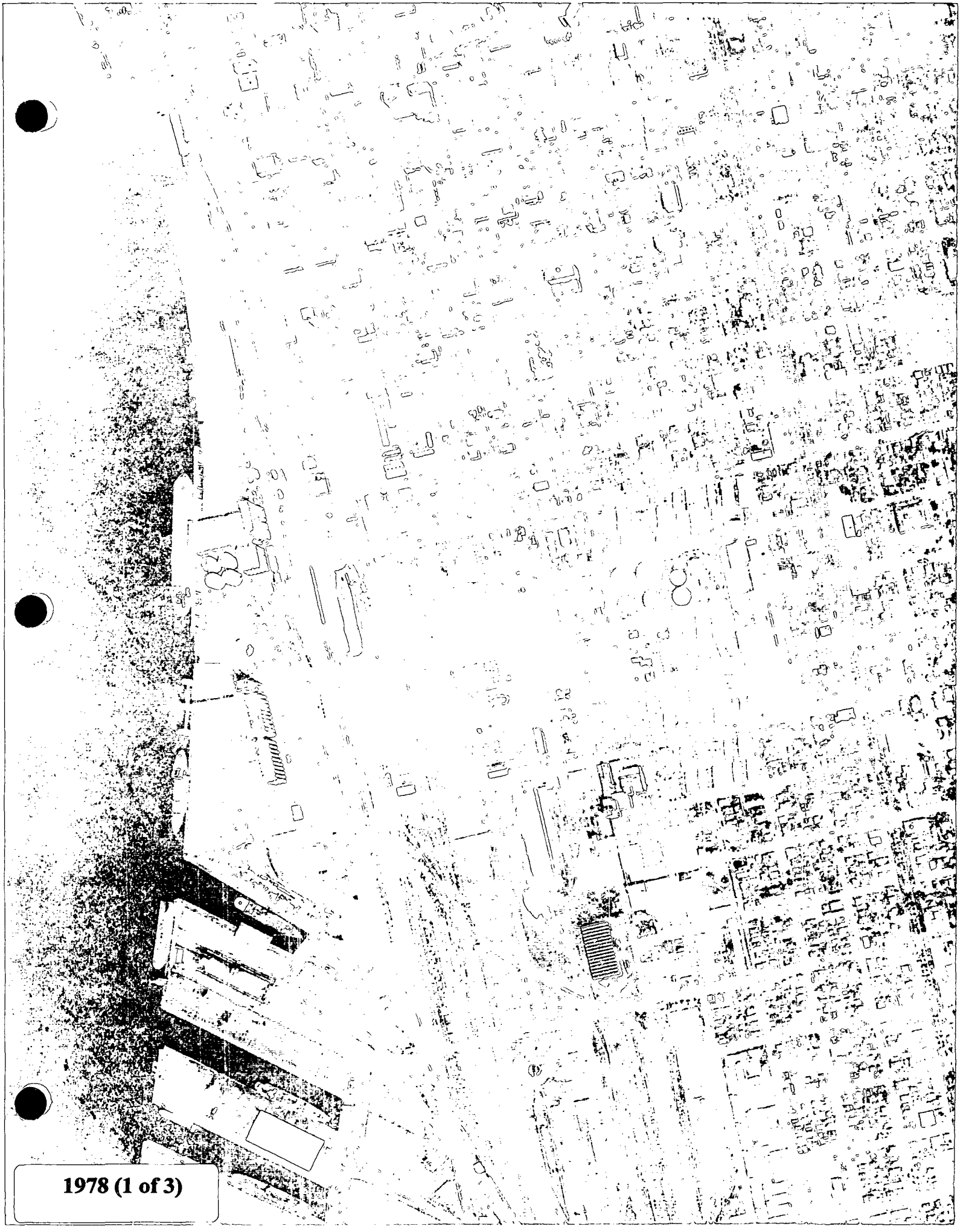
1969 (2 of 2)



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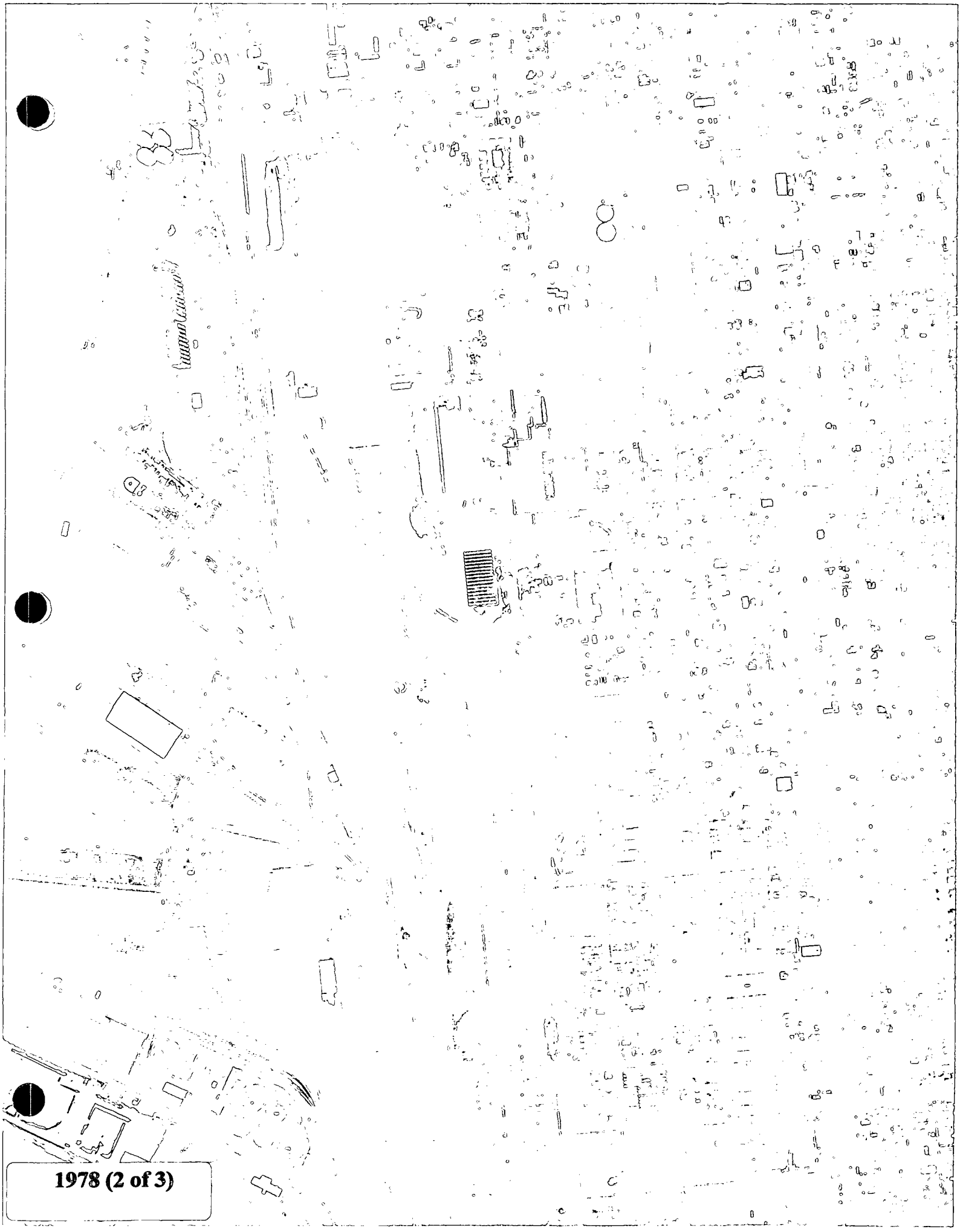

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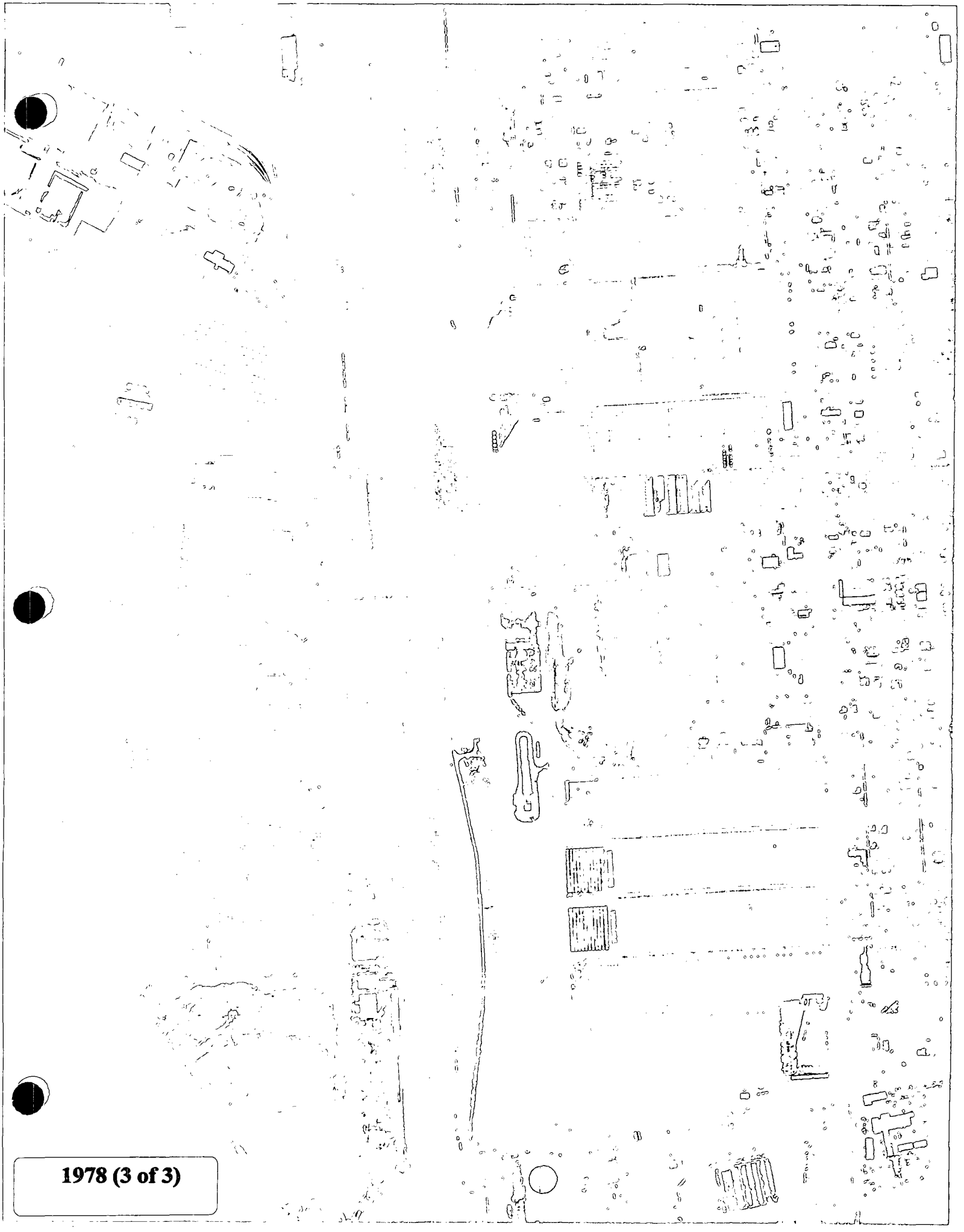
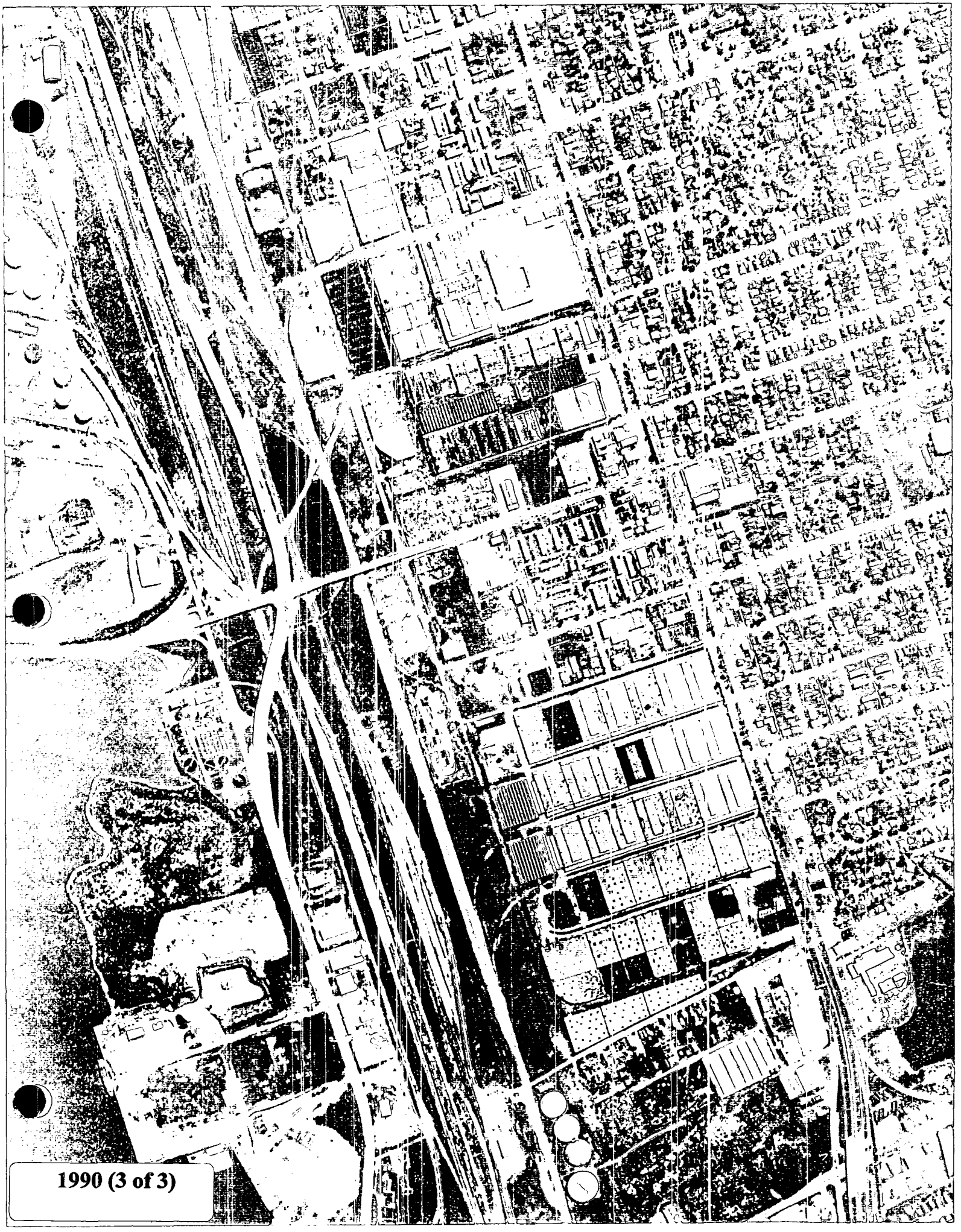


1978 (3 of 3)

1990 (1 of 3)

1990 (2 of 3)



1990 (3 of 3)

APPENDIX B

EDR Search Package

The EDR Area Study Report

Study Area
Old Central/Carver Park Area
Galveston, Texas

September 02, 1999

Inquiry number 407975.2s

Environmental Data Resources, Inc.
an edr company

The Source For Environmental Risk Management Data

3530 Post Road
Southport, Connecticut 06490

Nationwide Customer Service

Telephone: 1-800-352-0050
Fax: 1-800-231-6802
Internet: www.edrnet.com

EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc. (EDR).

The address of the subject property for which the search was intended is:

OLD CENTRAL/CARVER PARK AREA
GALVESTON, TX 77550

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records within the requested search area for the following Databases:

NPL:..... National Priority List
Delisted NPL:..... NPL Deletions
RCRIS-TSD:..... Resource Conservation and Recovery Information System
SHWS:..... State Haz. Waste
CORRACTS:..... Corrective Action Report
RAATS:..... RCRA Administrative Action Tracking System
HMIRS:..... Hazardous Materials Information Reporting System
PADS:..... PCB Activity Database System
ERNS:..... Emergency Response Notification System
TRIS:..... Toxic Chemical Release Inventory System
NPL Lien:..... NPL Liens
TSCA:..... Toxic Substances Control Act
MLTS:..... Material Licensing Tracking System
WasteMgt:..... WasteMgt
TX VCP:..... Texas Natural Resource Conservation Commission
TX MM:..... Multi Media Enforcement Cases
CLI:..... MSW Closed and Abandoned Landfills
AIRS:..... Aerometric Information Retrieval System Facility Subsystem
ROD:..... ROD
CONSENT:..... Superfund (CERCLA) Consent Decrees
MINES:..... Mines Master Index File

Unmapped (orphan) sites are not considered in the foregoing analysis.

EXECUTIVE SUMMARY

Search Results:

Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

CERCLIS: The Comprehensive Environmental Response, Compensation and Liability Information System contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA).
CERCLIS contains sites which are either proposed to or on the National Priorities List (NPL) and sites which are in the screening and assessment phase for possible inclusion on the NPL.

A review of the CERCLIS list, as provided by EDR, and dated 04/21/1999 has revealed that there is 1 CERCLIS site within the searched area.

Site	Address	Map ID	Page
HALF-MILE LAGOON	***ON 51ST OFF PORT INDUST***	***39***	***87***

CERCLIS-NFRAP: As of February 1995. CERCLIS sites designated "No Further Remedial Action Planned" (NFRAP) have been removed from CERCLIS. NFRAP sites may be sites where, following an initial investigation, no contamination was found, contamination was removed quickly without the need for the site to be placed on the NPL, or the contamination was not serious enough to require Federal Superfund Action or NPL consideration. EPA has removed approximately 25,000 NFRAP sites to lift the unintended barriers to the redevelopment of these properties and has archived them as historical records so EPA does not needlessly repeat the investigations in the future. This policy change is part of the EPA's Brownfields Redevelopment Program to help cities, states, private investors and affected citizens to promote economic redevelopment of unproductive urban sites.

A review of the CERC-NFRAP list, as provided by EDR, and dated 04/21/1999 has revealed that there is 1 CERC-NFRAP site within the searched area.

Site	Address	Map ID	Page
GALVESTON GAS COMPANY	33RD & AVENUE D	19	31

SWF/LF: The Solid Waste Facilities/Landfill Sites records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. The data come from the Texas Natural Resource Conservation Commission's permitted Solid Waste Facilities list.

A review of the SWF/LF list, as provided by EDR, and dated 06/01/1999 has revealed that there is 1 SWF/LF site within the searched area.

Site	Address	Map ID	Page
Not reported	5515 PORT INDUSTRIAL BL	32	63

EXECUTIVE SUMMARY

LUST: The Leaking Underground Storage Tank Incident Reports contain an inventory of reported leaking underground storage tank incidents. The data come from the Texas Natural Resource Conservation Commission's Leaking Petroleum Storage Tank Database.

A review of the LUST list, as provided by EDR, and dated 04/01/1999 has revealed that there are 33 LUST sites within the searched area.

Site	Address	Map ID	Page
FARMERS MARINE COPPER WORKS	1908 STRAND	2	4
HOUSTON SHIP REPAIR INC	1802 MECHANIC	3	5
PORT OF GALVESTON	***123 25TH ST***	***6***	***8***
BLUEBONNET WAREHOUSES	29TH	10	15
GOODYEAR TIRE & RUBBER	***504 25TH ST***	***12***	***17***
GALVESTON COUNTY SHERIFF DEPT	***715 19TH ST***	***13***	***20***
GALVESTON SERVICE CENTER	***502 27TH ST***	***14***	***22***
M-I DRILLING FLUIDS CO	4150 PORT INDUSTRIAL	15	25
WAREHOUSE	***402-424 THIRTIETH ST***	***16***	***26***
BMA-GALVESTON INC	707 TREMONT ST	18	30
TONY HONE FIRESTONE TIRE	***2302 BROADWAY ST***	***23***	***40***
STOP N GO #2493	***2525 BROADWAY ST***	***24***	***45***
GALVESTON TIRE & SUPPLY	***2502 BROADWAY ST***	***24***	***47***
FORMER 7-ELEVEN STORE # 24760	2501 BROADWAY	24	51
VACANT 1.08-ACRE TRACT	2427 BROADWAY	24	51
ARMOUR BUTTEROWE BUILDING	1111 23RD ST	26	53
SEVEN A M FOOD STORE	2728 BROADWAY	27	54
CHEVRON #60108373	3301 AVE J	31	58
EXXON CO. USA 6-7352	***3228 BROADWAY ST***	***31***	***59***
REYNOLDS ALUMINUM RECYCLING	***3524 AVE J (BROADWAY)***	***33***	***63***
M G AUTOMOTIVE	***3701 BROADWAY ST***	***34***	***70***
DIAMOND SHAMROCK #353	***3927 BROADWAY ST***	***35***	***77***
RAS 6-2682	***3827 BROADWAY ST***	***35***	***81***
CLOSED SERVICE STATION	3826 BROADWAY	35	85
ANSELL MEGNA INVESTMENTS	1616-24 TREMONT ST	38	86
FORMER SHELL RETAIL FACILITY	4427 BROADWAY	41	91
DIAZ SERV CTR	1325 39TH	44	96
EXXON STATION #6-4692	5028 BROADWAY	47	103
Not reported	1370 E 40TH ST	48	103
STOP N GO #817	5401 BROADWAY	50	106
CHEVRON SS #108372	6027 BROADWAY	52	109
FORMER A W QUINN DISTRIBUTING	6006 BROADWAY	52	110
CHEVRON FACILITY #108372	***6027 BROADWAY ST # &61S***	***53***	***110***

UST: The Underground Storage Tank database contains registered USTs. USTs are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA). The data come from the Texas Natural Resource Conservation Commission's Petroleum Storage Tank Database.

A review of the UST list, as provided by EDR, and dated 04/01/1999 has revealed that there are 56 UST sites within the searched area.

Site	Address	Map ID	Page
GULF VACUUM SERVICE, INC.	PO BOX 300	1	2
SOUTHEAST PACKING CO.	PO BOX 1226	1	3
MCCOY BLDG CENT.	PO BOX 247	1	4
JULES LAUVE, JR., INC.	2210 STRAND ST	4	5
2415 STRAND	2415 STRAND ST	5	6
PREVIOUS FUELING FACILITY	25TH AND STRAND	6	7

EXECUTIVE SUMMARY

Site	Address	Map ID	Page
PORT OF GALVESTON	***123 25TH ST***	***6***	***8***
CENTURY PAPERS INC	112 28TH ST	7	11
CITY OF GALVESTON-OLD GARAGE	319 29TH ST	10	12
BLUEBONNET WAREHOUSE	29TH @ MECHANIC	10	15
YOUNG & COMPANY	2710 AVENUE D	11	15
GOODYEAR TIRE & RUBBER	***504 25TH ST***	***12***	***17***
GALVESTON COUNTY SHERIFF DEPT	***715 19TH ST***	***13***	***20***
GALVESTON SERVICE CENTER	***502 27TH ST***	***14***	***22***
WAREHOUSE	***402-424 THIRTIETH ST***	***16***	***26***
MUNICIPLE TRANSIT GARAGE	3115 MARKET ST	17	27
BMA OF GALVESTON	707 TREMONT ST	18	30
SOUTHERN UNION GAS CO	402 33RD ST	19	31
CHEVRON FAC #108373	3301 AVENUE J # 33RD	19	31
CITY OF GALVESTON MUNI GARAGE	502 32ND ST	20	33
OLD SOUTHERN UNION GAS BUILDIN	908 25TH ST	21	36
GALVESTON SOUTHFIELD CO	822 ROSENBERG ST	21	37
PEARL BREWING CO.	PO BOX 93	22	38
TONY HONE FIRESTONE TIRE	***2302 BROADWAY ST***	***23***	***40***
TRANS SEAFOOD MARKET	2231 AVENUE J	23	40
BROADWAY MOBIL	2227 BROADWAY ST	23	42
STOP N GO #2493	***2525 BROADWAY ST***	***24***	***45***
GALVESTON TIRE & SUPPLY	***2502 BROADWAY ST***	***24***	***47***
CHIEF AUTO PARTS #24760	2501 BROADWAY ST	24	50
7 AM FOOD STORE	2728 BROADWAY ST	27	53
DUNN EQUIPMENT INC	2701 BROADWAY ST	27	55
EXXON CO. USA 6-7352	***3228 BROADWAY ST***	***31***	***59***
SITE #343	3202 BROADWAY ST	31	63
REYNOLDS ALUMINUM RECYCLING	***3524 AVE J (BROADWAY)***	***33***	***63***
GALVESTON RADIATOR	3428 BROADWAY ST	33	67
M G AUTOMOTIVE	***3701 BROADWAY ST***	***34***	***70***
STOP-N-GO MARKETS #1731	3712 BROADWAY ST	34	71
SHOP N GO	3627 BROADWAY ST	34	73
COMMERCIAL PROPERTY	4010 AVENUE J	35	76
DIAMOND SHAMROCK #353	***3927 BROADWAY ST***	***35***	***77***
STOP N GO #2601	3902 BROADWAY ST	35	80
RAS 6-2682	***3827 BROADWAY ST***	***35***	***81***
STOP-N-BYE FOOD MART, INC.	3825 BROADWAY ST	35	84
SHELL OIL CO	4427 BROADWAY ST	41	89
PIT STOP	4401 BROADWAY ST	41	91
UNIFORM & LINEN	820 51ST ST	43	94
DIAZ SERVICE CENTER	1325 39TH ST	44	94
CLOSED STREET	5309-15 AVENUE I	45	96
GALVESTON WORK CENTER	1224 43RD ST	46	98
EXXON CO., USA 6-4692	5028 BROADWAY ST	47	100
#701	5315 BROADWAY ST	49	104
BROADWAY GAS STATION	5411 BROADWAY ST	50	104
STOP-N-GO #817	5401 BROADWAY ST	50	106
J.R. MCCONNELL	5828 BROADWAY ST	51	107
BROADWAY FUNERAL HOME	5815 BROADWAY ST	51	109
CHEVRON FACILITY #108372	***6027 BROADWAY ST # &61S***	***53***	***110***

EXECUTIVE SUMMARY

AST: The Aboveground Storage Tank database contains registered ASTs. The data come from the Texas Natural Resource Conservation Commission's Petroleum Storage Tank Database.

A review of the AST list, as provided by EDR, and dated 04/01/1999 has revealed that there are 2 AST sites within the searched area.

Site	Address	Map ID	Page
GALVESTON TRANSFER STATION	5515 HARBORSIDE DR	25	52
ACTION WRECKER & TRUCKING	601 51ST ST	36	85

RCRIS: The Resource Conservation and Recovery Act database includes selected information on sites that generate, store, treat, or dispose of hazardous waste as defined by the Act. The source of this database is the U.S. EPA.

A review of the RCRIS-SQG list, as provided by EDR, and dated 07/01/1999 has revealed that there are 19 RCRIS-SQG sites within the searched area.

Site	Address	Map ID	Page
US COAST GUARD MARINE SAFETY O	*601 ROSENBERG RM 301 PO*	*12*	*16*
HOLIDAY INC OLDS-DATSUN	*25TH & CHURCH*	*12*	*16*
GOODYEAR AUTO SERVICE CENTER	*504-25TH STREET*	*12*	*19*
HOUSTON INDUSTRIES INC GALVEST	*502 27TH STREET*	*14*	*22*
CHAMPION BUILDING PRODUCTS	*3902 PORT INDUSTRIAL RO*	*15*	*26*
ISLAND TRANSIT	*3115 MARKET STREET*	*17*	*29*
THE CITY OF GALVESTON	*502 32ND ST*	*20*	*33*
HORNBECK OFFSHORE OPERATORS IN	*2317 BROADWAY*	*23*	*40*
HUNTER FRED F	*2228 BROADWAY*	*23*	*42*
SULLIVAN ENTERPRISES INC	*4800 PORT INDUSTRIAL BL*	*28*	*56*
G & M AUTOMOTIVE	*2812 BROADWAY*	*29*	*56*
PILGRIM CLEANERS	*1210 TREMONT*	*30*	*57*
CHEVRON USA INC #108373	*3301 AVE J & 33RD*	*31*	*58*
TUNEUP MASTERS	*3628 BROADWAY*	*34*	*76*
GALVESTON IND SCHOOL DIST	*1326 31ST ST*	*37*	*86*
MALIN ENVIRONMENTAL INC	*5220 AVE G*	*40*	*88*
AAMCO TRANSMSN	*4520 BROADWAY*	*42*	*93*
QUALITY CLEANERS & LAUNDRY	*5117 BROADWAY*	*47*	*99*
ARAMCO INC	*5105 BROADWAY*	*47*	*100*

RCRIS: The Resource Conservation and Recovery Act database includes selected information on sites that generate, store, treat, or dispose of hazardous waste as defined by the Act. The source of this database is the U.S. EPA.

A review of the RCRIS-LQG list, as provided by EDR, and dated 07/01/1999 has revealed that there is 1 RCRIS-LQG site within the searched area.

Site	Address	Map ID	Page
STONES AUTO SERVICE	*2419 MECHANIC*	*8*	*12*

EXECUTIVE SUMMARY

FINDS: The Facility Index System contains both facility information and "pointers" to other sources of information that contain more detail. These include: RCRIS; Permit Compliance System (PCS); Aerometric Information Retrieval System (AIRS); FATES (FIFRA [Federal Insecticide Fungicide Rodenticide Act] and TSCA Enforcement System, FTTS [FIFRA/TSCA Tracking System]; CERCLIS; DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes); Federal Underground Injection Control (FURS); Federal Reporting Data System (FRDS); Surface Impoundments (SIA); TSCA Chemicals in Commerce Information System (CICS); PADS; RCRA-J (medical waste transporters/disposers); TRIS; and TSCA. The source of this database is the U.S. EPA/NTIS.

A review of the FINDS list, as provided by EDR, and dated 04/01/1999 has revealed that there are 26 FINDS sites within the searched area.

Site	Address	Map ID	Page
STONES AUTO SERVICE	*2419 MECHANIC*	*8*	*12*
US COAST GUARD MARINE SAFETY O	*601 ROSENBERG RM 301 PO*	*12*	*16*
HOLIDAY INC OLDS-DATSUN	*25TH & CHURCH*	*12*	*16*
GOODYEAR AUTO SERVICE CENTER	*504-25TH STREET*	*12*	*19*
HOUSTON INDUSTRIES INC GALVEST	*502 27TH STREET*	*14*	*22*
CHAMPION BUILDING PRODUCTS	*3902 PORT INDUSTRIAL RO*	*15*	*26*
ISLAND TRANSIT	*3115 MARKET STREET*	*17*	*29*
THE CITY OF GALVESTON	*502 32ND ST*	*20*	*33*
GALVESTON, CITY OF	2514 SEALY	21	37
HORNBECK OFFSHORE OPERATORS IN	*2317 BROADWAY*	*23*	*40*
HUNTER FRED F	*2228 BROADWAY*	*23*	*42*
GONZALES TIRE & SUPPLY	2502 BROADWAY	24	51
SULLIVAN ENTERPRISES INC	*4800 PORT INDUSTRIAL BL*	*28*	*56*
G & M AUTOMOTIVE	*2812 BROADWAY*	*29*	*56*
PILGRIM CLEANERS	*1210 TREMONT*	*30*	*57*
CHEVRON USA INC #108373	*3301 AVE J & 33RD*	*31*	*58*
DOBBINS METAL SHOP	3224 BROADWAY	31	63
GBE AUTOMOTIVE	3502 BROADWAY	33	66
TUNEUP MASTERS	*3628 BROADWAY*	*34*	*76*
GALVESTON IND SCHOOL DIST	*1326 31ST ST*	*37*	*86*
HALF-MILE LAGOON	*ON 51ST OFF PORT INDUST*	*39*	*87*
MALIN ENVIRONMENTAL INC	*5220 AVE G*	*40*	*88*
MR. MUFFLER & BRAKE SHOP	4527 BROADWAY	42	93
AAMCO TRANSMSN	*4520 BROADWAY*	*42*	*93*
QUALITY CLEANERS & LAUNDRY	*5117 BROADWAY*	*47*	*99*
ARAMCO INC	*5105 BROADWAY*	*47*	*100*

SPILLS: The Spills Database comes from the Texas Natural Resource Conservation Commission.

A review of the TX Spills list, as provided by EDR, has revealed that there is 1 TX Spills site within the searched area.

Site	Address	Map ID	Page
Not reported	26TH / BROADWAY	24	44

EXECUTIVE SUMMARY

TX IHW: The Industrial and Hazardous Waste Database contains summary reports by waste handlers, generators and shippers in Texas.

A review of the TX IHW list, as provided by EDR, and dated 12/31/1998 has revealed that there are 18 TX IHW sites within the searched area.

Site	Address	Map ID	Page
WASTE CONTROL	2801 AVENUE C	9	12
US COAST GUARD MARINE SAFETY O	601 ROSENBERG ST STE 30	12	17
GOODYEAR TIRE & RUBBER	*504 25TH ST*	*12*	*17*
GALVESTON SERVICE CENTER	*502 27TH ST*	*14*	*22*
ISLAND TRANSIT	*3115 MARKET STREET*	*17*	*29*
GARAGE	502 32ND ST	20	36
PEARL BREWING COMPANY - -- FAC	3301 CHURCH ST	22	39
G & M AUTOMOTIVE	*2812 BROADWAY*	*29*	*56*
PILGRIM CLEANERS	*1210 TREMONT*	*30*	*57*
#108373	3301 AVENUE J	31	59
EXXON	3228 BROADWAY ST	31	62
#930	3628 BROADWAY ST	34	76
MALIN ENVIRONMENTAL INC	5220 AVENUE G	40	87
PAT HARTNETT	4427 AVENUE J	41	88
AAMCO TRANSMSN	*4520 BROADWAY*	*42*	*93*
QUALITY CLEANERS & LAUNDRY	*5117 BROADWAY*	*47*	*99*
ARAMCO INC	*5105 BROADWAY*	*47*	*100*
67466	5028 BROADWAY ST	47	102

(Coal Gas) Former Manufactured gas (Coal Gas) Sites:

The existence and location of Coal Gas sites is provided exclusively to EDR by Real Property Scan, Inc. Copyright 1993 Real Property Scan, Inc. For a technical description of the types of hazards which may be found at such sites, contact your EDR customer service representative

A review of the Coal Gas list, as provided by EDR, has revealed that there is 1 Coal Gas site within the searched area.

Site	Address	Map ID	Page
GALVESTON GAS CO.	AVENUE D OR MARKET W.	19	31

EXECUTIVE SUMMARY

Please refer to the end of the findings report for unmapped orphan sites due to poor or inadequate address information.

MAP FINDINGS SUMMARY

Database	Total Plotted
NPL	0
Delisted NPL	0
RCRIS-TSD	0
State Haz. Waste	0
CERCLIS	1
CERC-NFRAP	1
CORRACTS	0
State Landfill	1
LUST	33
UST	56
AST	2
RAATS	0
RCRIS Sm. Quan. Gen.	19
RCRIS Lg. Quan. Gen.	1
HMIRS	0
PADS	0
ERNS	0
FINDS	26
TRIS	0
NPL Liens	0
TSCA	0
MLTS	0
TX Spills	1
WasteMgt	0
TX VCP	0
Tx Multimedia	0
Tx Ind Haz Waste	18
CLI	0
AIRS	0
ROD	0
CONSENT	0
Coal Gas	1
MINES	0

* Sites may be listed in more than one database

GULF VACUUM SERVICE, INC. (Continued) **U001278689**

Equipment Installed Date:	Not reported
Equipment Installer:	Not reported
Contractor Registration Number:	Not reported
Tank Registration Date:	01/05/89
Installer License Number:	Not reported

---

1 **SOUTHEAST PACKING CO.** **UST** **U001275526**
PO BOX 1226 **N/A**
GALVESTON, TX 77553

UST:

Facility ID:	0043511	Customer ID:	00114
Tank ID:	2	Installation Date:	01/01/71
Tank Installer:	Not reported	Tank Tested:	No
Tank Emptied:	No	Status Date:	Not reported
Capacity:	6000	Unit ID:	20283

Tank Material of Construction:	Steel
Pipe Material of Construction:	Steel
Other Materials of Construction:	Not reported
Tank Status:	In Use
Tank Construction & Containment:	Not reported
Pipe Construction & Containment:	Not reported
Other Construction & Containment:	Not reported
Tank Substance Stored:	Not reported
Other Substance Stored:	Empty
Tank Release Detection:	None
Pipe Release Detection:	None
Other Release Detection:	Not reported
Tank Corrosion Protection:	None
Pipe Corrosion Protection:	None
Pipe Corrosion Protection II:	Noncorrodible Material (c.g. FRP)
Other Corrosion Protection:	Not reported
Spill and Overfill Protection:	Unknown/None
Spill and Overfill Protection II:	Tight-Fill Fitting
Vapor Recovery Equipment Status:	Not reported
Equipment Installed Date:	Not reported
Equipment Installer:	Not reported
Contractor Registration Number:	Not reported
Tank Registration Date:	05/27/86
Installer License Number:	Not reported

Facility ID:	0043511	Customer ID:	00114
Tank ID:	1	Installation Date:	01/01/71
Tank Installer:	Not reported	Tank Tested:	No
Tank Emptied:	No	Status Date:	Not reported
Capacity:	6000	Unit ID:	20283

Tank Material of Construction:	Steel
Pipe Material of Construction:	Steel
Other Materials of Construction:	Not reported
Tank Status:	In Use
Tank Construction & Containment:	Not reported
Pipe Construction & Containment:	Not reported
Other Construction & Containment:	Not reported
Tank Substance Stored:	Not reported
Other Substance Stored:	Empty
Tank Release Detection:	None
Pipe Release Detection:	None
Other Release Detection:	Not reported
Tank Corrosion Protection:	None

SOUTHEAST PACKING CO. (Continued) **U001275526**

Pipe Corrosion Protection:	None
Pipe Corrosion Protection II:	Noncorrodible Material (c.g. FRP)
Other Corrosion Protection:	Not reported
Spill and Overfill Protection:	Unknown/None
Spill and Overfill Protection II:	Tight-Fill Fitting
Vapor Recovery Equipment Status:	Not reported
Equipment Installed Date:	Not reported
Equipment Installer:	Not reported
Contractor Registration Number:	Not reported
Tank Registration Date:	05/27/86
Installer License Number:	Not reported

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1 **MCCOY BLDG CENT.** **UST** **U001261413**
PO BOX 247 **N/A**
GALVESTON, TX 77551

UST:

Facility ID:	0027649	Customer ID:	00072
Tank ID:	1	Installation Date:	01/01/68
Tank Installer:	Not reported	Tank Tested:	No
Tank Emptied:	No	Status Date:	08/07/90
Capacity:	1000	Unit ID:	01463

Tank Material of Construction:	Steel
Pipe Material of Construction:	Steel
Other Materials of Construction:	Not reported
Tank Status:	Removed from the Ground
Tank Construction & Containment:	Not reported
Pipe Construction & Containment:	Not reported
Other Construction & Containment:	Not reported
Tank Substance Stored:	Gasoline
Other Substance Stored:	Not reported
Tank Release Detection:	None
Pipe Release Detection:	None
Other Release Detection:	Not reported
Tank Corrosion Protection:	Not reported
Pipe Corrosion Protection:	None
Pipe Corrosion Protection II:	Noncorrodible Material (c.g. FRP)
Other Corrosion Protection:	Not reported
Spill and Overfill Protection:	Unknown/None
Spill and Overfill Protection II:	Tight-Fill Fitting
Vapor Recovery Equipment Status:	Not reported
Equipment Installed Date:	Not reported
Equipment Installer:	Not reported
Contractor Registration Number:	Not reported
Tank Registration Date:	05/08/86
Installer License Number:	Not reported

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2 **FARMERS MARINE COPPER WORKS** **LUST** **S103502290**
1908 STRAND **N/A**
GALVESTON, TX 77553

Map ID / Direction / Distance / Distance (ft.)	Site	Database(s)	EDR ID Number / EPA ID Number
1	**GULF VACUUM SERVICE, INC.** **PO BOX 300** **GALVESTON, TX 77623**	**UST**	**U001278689** **N/A**

UST:

Facility ID:	0047374	Customer ID:	00123
Tank ID:	2	Installation Date:	01/01/77
Tank Installer:	Not reported	Tank Tested:	Yes
Tank Emptied:	No	Status Date:	Not reported
Capacity:	2000	Unit ID:	24080

Tank Material of Construction:	Steel
Pipe Material of Construction:	Steel
Other Materials of Construction:	Not reported
Tank Status:	In Use
Tank Construction & Containment:	Not reported
Pipe Construction & Containment:	Not reported
Other Construction & Containment:	Not reported
Tank Substance Stored:	Gasoline
Other Substance Stored:	Not reported
Tank Release Detection:	Vapor Monitoring
Pipe Release Detection:	Vapor Monitoring
Other Release Detection:	Not reported
Tank Corrosion Protection:	Not reported
Pipe Corrosion Protection:	None
Pipe Corrosion Protection II:	Noncorrodible Material (c.g. FRP)
Other Corrosion Protection:	Not reported
Spill and Overfill Protection:	Unknown/None
Spill and Overfill Protection II:	Tight-Fill Fitting
Vapor Recovery Equipment Status:	Not reported
Equipment Installed Date:	Not reported
Equipment Installer:	Not reported
Contractor Registration Number:	Not reported
Tank Registration Date:	01/05/89
Installer License Number:	Not reported

Facility ID:	0047374	Customer ID:	00123
Tank ID:	1	Installation Date:	01/01/77
Tank Installer:	Not reported	Tank Tested:	Yes
Tank Emptied:	No	Status Date:	Not reported
Capacity:	8000	Unit ID:	24080

Tank Material of Construction:	Steel
Pipe Material of Construction:	Steel
Other Materials of Construction:	Not reported
Tank Status:	In Use
Tank Construction & Containment:	Not reported
Pipe Construction & Containment:	Not reported
Other Construction & Containment:	Not reported
Tank Substance Stored:	Diesel
Other Substance Stored:	Not reported
Tank Release Detection:	Vapor Monitoring
Pipe Release Detection:	Vapor Monitoring
Other Release Detection:	Not reported
Tank Corrosion Protection:	Not reported
Pipe Corrosion Protection:	None
Pipe Corrosion Protection II:	Noncorrodible Material (c.g. FRP)
Other Corrosion Protection:	Not reported
Spill and Overfill Protection:	Unknown/None
Spill and Overfill Protection II:	Tight-Fill Fitting
Vapor Recovery Equipment Status:	Not reported

FARMERS MARINE COPPER WORKS (Continued) **S103502290**

LUST:

Facility ID:	0012328	Discovery Date:	Not reported
Data Entry Date:	12/9/98	Lead Office:	CENTRAL OFFICE LEAD
PST Coordinator:	XYZ	RPR Coordinator:	XYZ
Region:	12	Region City ID:	HOUSTON
Leaking Tank #:	113757		
Responsible Party:	FARMERS MARINE COPPER WORKS		
RP Contact:	SID FARMER		
RP Address:	PO BOX 748 GALVESTON, TX 77553		
RP Telephone:	281/338-9991		
County Code:	084		
Priority:	4.0		
Status:	INCIDENT REPORTED, INITIAL DIRECTIVES NOT YET ISSUED		

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3 **HOUSTON SHIP REPAIR INC** **LUST** **S103501848**
1802 MECHANIC **N/A**
GALVESTON, TX

LUST:

Facility ID:	Not reported	Discovery Date:	8/15/95
Data Entry Date:	7/24/97	Lead Office:	CENTRAL OFFICE LEAD
PST Coordinator:	XYZ	RPR Coordinator:	XYZ
Region:	12	Region City ID:	HOUSTON
Leaking Tank #:	112493		
Responsible Party:	HOUSTON SHIP REPAIR INC		
RP Contact:	EDWARD MOTTER		
RP Address:	16201 WOOD DR CHANNELVIEW, TX 77530		
RP Telephone:	281/452-1087		
County Code:	084		
Priority:	NO GW IMPACT, NO APPARENT THREATS OR IMPACTS TO RECEPTORS		
Status:	FINAL CONCURRENCE ISSUED, CASE CLOSED		

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4 **JULES LAUVE, JR., INC.** **UST** **U001275461**
2210 STRAND ST **N/A**
GALVESTON, TX 77550

UST:

Facility ID:	0043442	Customer ID:	00114
Tank ID:	1	Installation Date:	08/31/87
Tank Installer:	Not reported	Tank Tested:	No
Tank Emptied:	No	Status Date:	11/12/98
Capacity:	1000	Unit ID:	20238

Tank Material of Construction:	Not reported
Pipe Material of Construction:	Steel
Other Materials of Construction:	Not reported
Tank Status:	Abandoned In-place
Tank Construction & Containment:	Not reported
Pipe Construction & Containment:	Not reported
Other Construction & Containment:	Not reported
Tank Substance Stored:	Not reported
Other Substance Stored:	Empty
Tank Release Detection:	None
Pipe Release Detection:	None
Other Release Detection:	Not reported
Tank Corrosion Protection:	None
Pipe Corrosion Protection:	None

JULES LAUVE, JR., INC. (Continued) **U001275461**

Pipe Corrosion Protection II:	Noncorrodible Material (c.g. FRP)
Other Corrosion Protection:	Not reported
Spill and Overfill Protection:	Unknown/None
Spill and Overfill Protection II:	Tight-Fill Fitting
Vapor Recovery Equipment Status:	Not reported
Equipment Installed Date:	Not reported
Equipment Installer:	Not reported
Contractor Registration Number:	Not reported
Tank Registration Date:	05/27/86
Installer License Number:	Not reported

Facility ID:	0043442	Customer ID:	00188
Tank ID:	2	Installation Date:	08/31/87
Tank Installer:	Not reported	Tank Tested:	No
Tank Emptied:	No	Status Date:	11/12/98
Capacity:	1000	Unit ID:	20238

Tank Material of Construction:	Steel
Pipe Material of Construction:	Steel
Other Materials of Construction:	Not reported
Tank Status:	Abandoned In-place
Tank Construction & Containment:	Single Wall
Pipe Construction & Containment:	Single Wall
Other Construction & Containment:	Single Wall
Tank Substance Stored:	Gasoline
Other Substance Stored:	Not reported
Tank Release Detection:	None
Pipe Release Detection:	None
Other Release Detection:	Not reported
Tank Corrosion Protection:	None
Pipe Corrosion Protection:	None
Pipe Corrosion Protection II:	Noncorrodible Material (c.g. FRP)
Other Corrosion Protection:	Not reported
Spill and Overfill Protection:	Unknown/None
Spill and Overfill Protection II:	Tight-Fill Fitting
Vapor Recovery Equipment Status:	Not reported
Equipment Installed Date:	Not reported
Equipment Installer:	Not reported
Contractor Registration Number:	Not reported
Tank Registration Date:	11/23/98
Installer License Number:	Not reported

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5 **2415 STRAND** **UST** **U001291221**
2415 STRAND ST **N/A**
GALVESTON, TX 77553

UST:

Facility ID:	0062021	Customer ID:	00144
Tank ID:	2	Installation Date:	08/31/87
Tank Installer:	Not reported	Tank Tested:	No
Tank Emptied:	No	Status Date:	06/15/94
Capacity:	0	Unit ID:	37138

Tank Material of Construction:	Not reported
Pipe Material of Construction:	Not reported
Other Materials of Construction:	Not reported
Tank Status:	Removed from the Ground
Tank Construction & Containment:	Not reported
Pipe Construction & Containment:	Not reported
Other Construction & Containment:	Not reported
Tank Substance Stored:	Gasoline

2415 STRAND (Continued) **U001291221**

Other Substance Stored:	Not reported
Tank Release Detection:	None
Pipe Release Detection:	None
Other Release Detection:	Not reported
Tank Corrosion Protection:	None
Pipe Corrosion Protection:	None
Pipe Corrosion Protection II:	Noncorrodible Material (c.g. FRP)
Other Corrosion Protection:	Not reported
Spill and Overfill Protection:	Unknown/None
Spill and Overfill Protection II:	Tight-Fill Fitting
Vapor Recovery Equipment Status:	Not reported
Equipment Installed Date:	Not reported
Equipment Installer:	Not reported
Contractor Registration Number:	Not reported
Tank Registration Date:	12/13/91
Installer License Number:	Not reported

Facility ID:	0062021	Customer ID:	00144
Tank ID:	1	Installation Date:	08/31/87
Tank Installer:	Not reported	Tank Tested:	No
Tank Emptied:	No	Status Date:	06/15/94
Capacity:	0	Unit ID:	37138

Tank Material of Construction:	Not reported
Pipe Material of Construction:	Not reported
Other Materials of Construction:	Not reported
Tank Status:	Removed from the Ground
Tank Construction & Containment:	Not reported
Pipe Construction & Containment:	Not reported
Other Construction & Containment:	Not reported
Tank Substance Stored:	Diesel
Other Substance Stored:	Not reported
Tank Release Detection:	None
Pipe Release Detection:	None
Other Release Detection:	Not reported
Tank Corrosion Protection:	None
Pipe Corrosion Protection:	None
Pipe Corrosion Protection II:	Noncorrodible Material (c.g. FRP)
Other Corrosion Protection:	Not reported
Spill and Overfill Protection:	Unknown/None
Spill and Overfill Protection II:	Tight-Fill Fitting
Vapor Recovery Equipment Status:	Not reported
Equipment Installed Date:	Not reported
Equipment Installer:	Not reported
Contractor Registration Number:	Not reported
Tank Registration Date:	12/13/91
Installer License Number:	Not reported

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6 **PREVIOUS FUELING FACILITY** **UST** **U002112575**
25TH AND STRAND **N/A**
GALVESTON, TX 77550

UST:

Facility ID:	0066318	Customer ID:	00173
Tank ID:	1	Installation Date:	01/01/77
Tank Installer:	Not reported	Tank Tested:	No
Tank Emptied:	No	Status Date:	01/18/95
Capacity:	550	Unit ID:	45521

Tank Material of Construction:	Steel
Pipe Material of Construction:	Steel

PREVIOUS FUELING FACILITY (Continued) **U002112575**

Other Materials of Construction:	Not reported
Tank Status:	Removed from the Ground
Tank Construction & Containment:	Single Wall
Pipe Construction & Containment:	Single Wall
Other Construction & Containment:	Single Wall
Tank Substance Stored:	Gasoline
Other Substance Stored:	Not reported
Tank Release Detection:	None
Pipe Release Detection:	None
Other Release Detection:	Not reported
Tank Corrosion Protection:	None
Pipe Corrosion Protection:	None
Pipe Corrosion Protection II:	Noncorrodible Material (c.g. FRP)
Other Corrosion Protection:	Not reported
Spill and Overfill Protection:	Unknown/None
Spill and Overfill Protection II:	Tight-Fill Fitting
Vapor Recovery Equipment Status:	Not reported
Equipment Installed Date:	Not reported
Equipment Installer:	Not reported
Contractor Registration Number:	Not reported
Tank Registration Date:	01/03/95
Installer License Number:	Not reported

Facility ID:	0066318	Customer ID:	00173
Tank ID:	2	Installation Date:	01/01/77
Tank Installer:	Not reported	Tank Tested:	No
Tank Emptied:	No	Status Date:	01/18/95
Capacity:	550	Unit ID:	45521

Tank Material of Construction:	Steel
Pipe Material of Construction:	Steel
Other Materials of Construction:	Not reported
Tank Status:	Removed from the Ground
Tank Construction & Containment:	Single Wall
Pipe Construction & Containment:	Single Wall
Other Construction & Containment:	Single Wall
Tank Substance Stored:	Gasoline
Other Substance Stored:	Not reported
Tank Release Detection:	None
Pipe Release Detection:	None
Other Release Detection:	Not reported
Tank Corrosion Protection:	None
Pipe Corrosion Protection:	None
Pipe Corrosion Protection II:	Noncorrodible Material (c.g. FRP)
Other Corrosion Protection:	Not reported
Spill and Overfill Protection:	Unknown/None
Spill and Overfill Protection II:	Tight-Fill Fitting
Vapor Recovery Equipment Status:	Not reported
Equipment Installed Date:	Not reported
Equipment Installer:	Not reported
Contractor Registration Number:	Not reported
Tank Registration Date:	01/03/95
Installer License Number:	Not reported

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6 **PORT OF GALVESTON** **LUST** **U001264436**
123 25TH ST **UST** **N/A**
GALVESTON, TX 77550

PORT OF GALVESTON (Continued) **U001264436**

LUST:

Facility ID:	Not reported	Discovery Date:	12/18/98
Data Entry Date:	1/18/99	Lead Office:	CENTRAL OFFICE LEAD
PST Coordinator:	XYZ	RPR Coordinator:	DELONDA ALEXANDER
Region:	12	Region City ID:	Houston
Leaking Tank #:	114337		
Responsible Party:	PORT OF GALVESTON		
RP Contact:	ALBERT CHURCHILL		
RP Address:	123 ROSENBERG ST GALVESTON, TX 77550		
RP Telephone:	409/765-9321		
County Code:	084		
Priority:	4.0		
Status:	INCIDENT REPORTED, INITIAL DIRECTIVES NOT YET ISSUED		

UST:

Facility ID:	0031051	Customer ID:	00081
Tank ID:	5	Installation Date:	01/01/77
Tank Installer:	Not reported	Tank Tested:	No
Tank Emptied:	No	Status Date:	00/00/00
Capacity:	1000	Unit ID:	14616

Tank Material of Construction:	Not reported
Pipe Material of Construction:	Not reported
Other Materials of Construction:	Not reported
Tank Status:	Temporarily Out of Service
Tank Construction & Containment:	Not reported
Pipe Construction & Containment:	Not reported
Other Construction & Containment:	Not reported
Tank Substance Stored:	Used Oil
Other Substance Stored:	Not reported
Tank Release Detection:	None
Pipe Release Detection:	None
Other Release Detection:	Not reported
Tank Corrosion Protection:	None
Pipe Corrosion Protection:	None
Pipe Corrosion Protection II:	Noncorrodible Material (c.g. FRP)
Other Corrosion Protection:	Not reported
Spill and Overfill Protection:	Unknown/None
Spill and Overfill Protection II:	Tight-Fill Fitting
Vapor Recovery Equipment Status:	Not reported
Equipment Installed Date:	Not reported
Equipment Installer:	Not reported
Contractor Registration Number:	Not reported
Tank Registration Date:	05/08/86
Installer License Number:	Not reported

Facility ID:	0031051	Customer ID:	00081
Tank ID:	4	Installation Date:	01/01/77
Tank Installer:	Not reported	Tank Tested:	No
Tank Emptied:	No	Status Date:	00/00/00
Capacity:	2000	Unit ID:	14616

Tank Material of Construction:	Not reported
Pipe Material of Construction:	Not reported
Other Materials of Construction:	Not reported
Tank Status:	Temporarily Out of Service
Tank Construction & Containment:	Not reported
Pipe Construction & Containment:	Not reported

PORT OF GALVESTON (Continued) **U001264436**

Other Construction & Containment:	Not reported
Tank Substance Stored:	Diesel
Other Substance Stored:	Not reported
Tank Release Detection:	None
Pipe Release Detection:	None
Other Release Detection:	Not reported
Tank Corrosion Protection:	None
Pipe Corrosion Protection:	None
Pipe Corrosion Protection II:	Noncorrodible Material (c.g. FRP)
Other Corrosion Protection:	Not reported
Spill and Overfill Protection:	Unknown/None
Spill and Overfill Protection II:	Tight-Fill Fitting
Vapor Recovery Equipment Status:	Not reported
Equipment Installed Date:	Not reported
Equipment Installer:	Not reported
Contractor Registration Number:	Not reported
Tank Registration Date:	05/08/86
Installer License Number:	Not reported

Facility ID:	0031051	Customer ID:	00081
Tank ID:	3	Installation Date:	01/01/52
Tank Installer:	Not reported	Tank Tested:	No
Tank Emptied:	No	Status Date:	12/31/76
Capacity:	1000	Unit ID:	14616

Tank Material of Construction:	Not reported
Pipe Material of Construction:	Not reported
Other Materials of Construction:	Not reported
Tank Status:	Abandoned In-place
Tank Construction & Containment:	Not reported
Pipe Construction & Containment:	Not reported
Other Construction & Containment:	Not reported
Tank Substance Stored:	Diesel
Other Substance Stored:	Not reported
Tank Release Detection:	None
Pipe Release Detection:	None
Other Release Detection:	Not reported
Tank Corrosion Protection:	None
Pipe Corrosion Protection:	None
Pipe Corrosion Protection II:	Noncorrodible Material (c.g. FRP)
Other Corrosion Protection:	Not reported
Spill and Overfill Protection:	Unknown/None
Spill and Overfill Protection II:	Tight-Fill Fitting
Vapor Recovery Equipment Status:	Not reported
Equipment Installed Date:	Not reported
Equipment Installer:	Not reported
Contractor Registration Number:	Not reported
Tank Registration Date:	05/08/86
Installer License Number:	Not reported

Facility ID:	0031051	Customer ID:	00081
Tank ID:	2	Installation Date:	01/01/65
Tank Installer:	Not reported	Tank Tested:	No
Tank Emptied:	No	Status Date:	Not reported
Capacity:	8000	Unit ID:	14616

Tank Material of Construction:	Steel
Pipe Material of Construction:	Steel
Other Materials of Construction:	Not reported

PORT OF GALVESTON (Continued) **U001264436**

Tank Status:	In Use
Tank Construction & Containment:	Single Wall
Pipe Construction & Containment:	Single Wall
Other Construction & Containment:	Single Wall
Tank Substance Stored:	Gasoline
Other Substance Stored:	Not reported
Tank Release Detection:	Inventory Control
Tank Release Detection II:	Tightness Testing
Pipe Release Detection:	Tightness Testing
Other Release Detection:	Not reported
Tank Corrosion Protection:	Not reported
Pipe Corrosion Protection:	Not reported
Pipe Corrosion Protection II:	Noncorrodible Material (c.g. FRP)
Other Corrosion Protection:	Not reported
Spill and Overfill Protection:	Unknown/None
Spill and Overfill Protection II:	Tight-Fill Fitting
Vapor Recovery Equipment Status:	Not reported
Equipment Installed Date:	Not reported
Equipment Installer:	Not reported
Contractor Registration Number:	Not reported
Tank Registration Date:	05/08/86
Installer License Number:	Not reported

Facility ID:	0031051	Customer ID:	00081
Tank ID:	1	Installation Date:	01/01/80
Tank Installer:	Not reported	Tank Tested:	No
Tank Emptied:	No	Status Date:	Not reported
Capacity:	12000	Unit ID:	14616

Tank Material of Construction:	Fiberglass-Reinforced Plastic (FRP)
Pipe Material of Construction:	Steel
Other Materials of Construction:	Not reported
Tank Status:	In Use
Tank Construction & Containment:	Not reported
Pipe Construction & Containment:	Not reported
Other Construction & Containment:	Not reported
Tank Substance Stored:	Diesel
Other Substance Stored:	Not reported
Tank Release Detection:	None
Pipe Release Detection:	None
Other Release Detection:	Not reported
Tank Corrosion Protection:	None
Pipe Corrosion Protection:	None
Pipe Corrosion Protection II:	Noncorrodible Material (c.g. FRP)
Other Corrosion Protection:	Not reported
Spill and Overfill Protection:	Unknown/None
Spill and Overfill Protection II:	Tight-Fill Fitting
Vapor Recovery Equipment Status:	Not reported
Equipment Installed Date:	Not reported
Equipment Installer:	Not reported
Contractor Registration Number:	Not reported
Tank Registration Date:	05/08/86
Installer License Number:	Not reported

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7 **CENTURY PAPERS INC** **UST** **U001291138**
112 28TH ST **N/A**
GALVESTON, TX 77550

Map ID Direction Distance Distance (ft.)	Site	Database(s)	EDR ID Number EPA ID Number
8	**STONES AUTO SERVICE** **2419 MECHANIC** **GALVESTON, TX 77550**	**FINDS** **RCRIS-LQG**	**1000311878** **TXD087728358**

RCRIS:

Owner: GARY W STONE
(000) 000-0000

Contact: W STONE
(409) 762-8972

Record Date: 08/08/1985

Classification: Large Quantity Generator

Used Oil Recyc: No

Violation Status: No violations found

9	**WASTE CONTROL** **2801 AVENUE C** **GALVESTON, TX**	**TX IHW**	**S103604603** **N/A**

TX IHW:

Registration Number:	40285
Registration Initial Notification Date:	10/15/1982
Registration Last Amendment Date:	Not reported
EPA Identification:	TXD
TNRCC Premit Number:	093968618
Description of Facility Site Location:	2801 Avenue C, Galveston, TX
Site Primary Standard Industrial Code:	Not reported
Registration is a Generator of Waste:	No
Registration is a Receivers of Waste:	No
Registration is a Transporter of Waste:	Yes
Registration is a Transfer Facility:	No
Mexican Facility:	Does not represent a Maquiladora (Mexican Facility)
Facility Status:	Active
Type of Generator:	Not reported
Company Name:	Waste Control, Inc.
Facility County:	Not reported
TNRCC Region:	Not reported
Mailing Address:	P.O. Box 66 Galveston, TX 77553
Mailing County:	USA
Contact:	Ronald Graber
Contact Telephone Number:	713-763-3050

Additional detail may be available for this site. Please contact your EDR Account Executive for more information

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10	**CITY OF GALVESTON-OLD GARAGE** **319 29TH ST** **GALVESTON, TX 77550**	**UST**	**U001259109** **N/A**

UST:

Facility ID:	0024957	Customer ID:	00064
Tank ID:	1	Installation Date:	01/01/46
Tank Installer:	Not reported	Tank Tested:	Yes
Tank Emptied:	No	Status Date:	04/20/88
Capacity:	5000	Unit ID:	47006
Tank Material of Construction:	Steel		
Pipe Material of Construction:	Steel		

CITY OF GALVESTON-OLD GARAGE (Continued) **U001259109**

Other Materials of Construction:	Not reported
Tank Status:	Removed from the Ground
Tank Construction & Containment:	Not reported
Pipe Construction & Containment:	Not reported
Other Construction & Containment:	Not reported
Tank Substance Stored:	Gasoline
Other Substance Stored:	Not reported
Tank Release Detection:	None
Pipe Release Detection:	None
Other Release Detection:	Not reported
Tank Corrosion Protection:	Not reported
Pipe Corrosion Protection:	None
Pipe Corrosion Protection II:	Noncorrodible Material (c.g. FRP)
Other Corrosion Protection:	Not reported
Spill and Overfill Protection:	Unknown/None
Spill and Overfill Protection II:	Tight-Fill Fitting
Vapor Recovery Equipment Status:	Not reported
Equipment Installed Date:	Not reported
Equipment Installer:	Not reported
Contractor Registration Number:	Not reported
Tank Registration Date:	05/08/86
Installer License Number:	Not reported

Facility ID:	0024957	Customer ID:	00064
Tank ID:	3	Installation Date:	01/01/46
Tank Installer:	Not reported	Tank Tested:	Yes
Tank Emptied:	No	Status Date:	04/20/88
Capacity:	5000	Unit ID:	47006

Tank Material of Construction:	Steel
Pipe Material of Construction:	Steel
Other Materials of Construction:	Not reported
Tank Status:	Removed from the Ground
Tank Construction & Containment:	Not reported
Pipe Construction & Containment:	Not reported
Other Construction & Containment:	Not reported
Tank Substance Stored:	Diesel
Other Substance Stored:	Not reported
Tank Release Detection:	None
Pipe Release Detection:	None
Other Release Detection:	Not reported
Tank Corrosion Protection:	Not reported
Pipe Corrosion Protection:	None
Pipe Corrosion Protection II:	Noncorrodible Material (c.g. FRP)
Other Corrosion Protection:	Not reported
Spill and Overfill Protection:	Unknown/None
Spill and Overfill Protection II:	Tight-Fill Fitting
Vapor Recovery Equipment Status:	Not reported
Equipment Installed Date:	Not reported
Equipment Installer:	Not reported
Contractor Registration Number:	Not reported
Tank Registration Date:	05/08/86
Installer License Number:	Not reported

Facility ID:	0024957	Customer ID:	00064
Tank ID:	2	Installation Date:	01/01/46
Tank Installer:	Not reported	Tank Tested:	Yes
Tank Emptied:	No	Status Date:	04/20/88

CITY OF GALVESTON-OLD GARAGE (Continued) **U001259109**

Capacity:	5000	Unit ID:	47006
Tank Material of Construction:	Steel		
Pipe Material of Construction:	Steel		
Other Materials of Construction:	Not reported		
Tank Status:	Removed from the Ground		
Tank Construction & Containment:	Not reported		
Pipe Construction & Containment:	Not reported		
Other Construction & Containment:	Not reported		
Tank Substance Stored:	Gasoline		
Other Substance Stored:	Not reported		
Tank Release Detection:	None		
Pipe Release Detection:	None		
Other Release Detection:	Not reported		
Tank Corrosion Protection:	Not reported		
Pipe Corrosion Protection:	None		
Pipe Corrosion Protection II:	Noncorrodible Material (c.g. FRP)		
Other Corrosion Protection:	Not reported		
Spill and Overfill Protection:	Unknown/None		
Spill and Overfill Protection II:	Tight-Fill Fitting		
Vapor Recovery Equipment Status:	Not reported		
Equipment Installed Date:	Not reported		
Equipment Installer:	Not reported		
Contractor Registration Number:	Not reported		
Tank Registration Date:	05/08/86		
Installer License Number:	Not reported		

Facility ID:	0024957	Customer ID:	00176
Tank ID:	8677	Installation Date:	05/01/88
Tank Installer:	Not reported	Tank Tested:	No
Tank Emptied:	No	Status Date:	Not reported
Capacity:	15000	Unit ID:	47006
Tank Material of Construction:	Fiberglass-Reinforced Plastic (FRP)		
Pipe Material of Construction:	Steel		
Other Materials of Construction:	Not reported		
Tank Status:	In Use		
Tank Construction & Containment:	Single Wall		
Pipe Construction & Containment:	Not reported		
Other Construction & Containment:	Single Wall		
Tank Substance Stored:	Diesel		
Other Substance Stored:	Not reported		
Tank Release Detection:	Inventory Control		
Pipe Release Detection:	Not reported		
Other Release Detection:	Not reported		
Tank Corrosion Protection:	External Coatings - Laminate/Tape/Wrap		
Pipe Corrosion Protection:	Not reported		
Pipe Corrosion Protection II:	Noncorrodible Material (c.g. FRP)		
Other Corrosion Protection:	Not reported		
Spill and Overfill Protection:	Tight-Fill Fitting		
Spill and Overfill Protection II:	Tight-Fill Fitting		
Vapor Recovery Equipment Status:	Not reported		
Equipment Installed Date:	Not reported		
Equipment Installer:	Not reported		
Contractor Registration Number:	Not reported		
Tank Registration Date:	10/25/95		
Installer License Number:	Not reported		

10 BLUEBONNET WAREHOUSES — **LUST** — **S103498510** / **N/A**
29TH
GALVESTON, TX 77550

LUST:

Facility ID:	0063202	Discovery Date:	6/5/92
Data Entry Date:	7/16/92	Lead Office:	1/2
PST Coordinator:	HMW	RPR Coordinator:	RPR
Region:	12	Region City ID:	HOUSTON
Leaking Tank #:	103422		
Responsible Party:	NURSE JOHN		
RP Contact:	JOHN NURSE		
RP Address:	3802 WATER ST GALVESTON, TX 77550		
RP Telephone:	409/763-8856		
County Code:	084		
Priority:	MINOR SOIL CONTAMINATION - DOES NOT REQUIRE A RAP		
Status:	FINAL CONCURRENCE ISSUED, CASE CLOSED		

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10 BLUEBONNET WAREHOUSE — **UST** — **U001292277** / **N/A**
29TH @ MECHANIC
GALVESTON, TX 77550

UST:

Facility ID:	0063202	Customer ID:	00146
Tank ID:	1	Installation Date:	01/01/66
Tank Installer:	Not reported	Tank Tested:	No
Tank Emptied:	No	Status Date:	05/08/92
Capacity:	1100	Unit ID:	38783

Tank Material of Construction:	Steel
Pipe Material of Construction:	Steel
Other Materials of Construction:	Not reported
Tank Status:	Removed from the Ground
Tank Construction & Containment:	Single Wall
Pipe Construction & Containment:	Single Wall
Other Construction & Containment:	Single Wall
Tank Substance Stored:	Gasoline
Other Substance Stored:	Not reported
Tank Release Detection:	None
Pipe Release Detection:	None
Other Release Detection:	Not reported
Tank Corrosion Protection:	None
Pipe Corrosion Protection:	None
Pipe Corrosion Protection II:	Noncorrodible Material (c.g. FRP)
Other Corrosion Protection:	Not reported
Spill and Overfill Protection:	Unknown/None
Spill and Overfill Protection II:	Tight-Fill Fitting
Vapor Recovery Equipment Status:	Not reported
Equipment Installed Date:	Not reported
Equipment Installer:	Not reported
Contractor Registration Number:	Not reported
Tank Registration Date:	06/23/92
Installer License Number:	Not reported

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11 YOUNG & COMPANY — **UST** — **U001293780** / **N/A**
2710 AVENUE D
GALVESTON, TX

UST:

Facility ID:	0056760	Customer ID:	00136

YOUNG & COMPANY (Continued) **U001293780**

Tank ID:	1	Installation Date:	Not reported
Tank Installer:	Not reported	Tank Tested:	No
Tank Emptied:	No	Status Date:	09/24/90
Capacity:	0	Unit ID:	29969

Tank Material of Construction:	Steel
Pipe Material of Construction:	Steel
Other Materials of Construction:	Not reported
Tank Status:	Removed from the Ground
Tank Construction & Containment:	Single Wall
Pipe Construction & Containment:	Single Wall
Other Construction & Containment:	Single Wall
Tank Substance Stored:	Not reported
Other Substance Stored:	Empty
Tank Release Detection:	None
Pipe Release Detection:	None
Other Release Detection:	Not reported
Tank Corrosion Protection:	Not reported
Pipe Corrosion Protection:	None
Pipe Corrosion Protection II:	Noncorrodible Material (c.g. FRP)
Other Corrosion Protection:	Not reported
Spill and Overfill Protection:	Tight-Fill Fitting
Spill and Overfill Protection II:	Tight-Fill Fitting
Vapor Recovery Equipment Status:	Not reported
Equipment Installed Date:	Not reported
Equipment Installer:	Not reported
Contractor Registration Number:	Not reported
Tank Registration Date:	10/25/90
Installer License Number:	Not reported

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12 **US COAST GUARD MARINE SAFETY OFFICE** **RCRIS-SQG** **1000178581**
601 ROSENBERG RM 301 PO BLDG **FINDS** **TX0690308374**
GALVESTON, TX 77550

RCRIS:

Owner:	US GOVERNMENT (000) 000-0000
Contact:	WILLIAM BURNS (409) 766-3687
Record Date:	09/18/1986
Classification:	Small Quantity Generator
Used Oil Recyc:	No
Violation Status:	No violations found

FINDS:
Other Pertinent Environmental Activity Identified at Site:
Federal Facility Information System (FFIS)

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12 **HOLIDAY INC OLDS-DATSUN** **RCRIS-SQG** **1000247891**
25TH & CHURCH **FINDS** **TXD981155047**
GALVESTON, TX 77550

HOLIDAY INC OLDS-DATSUN (Continued) **1000247891**

RCRIS:

Owner:	PAGAN,BOB (000) 000-0000
Contact:	IM FISHER (409) 765-7707
Record Date:	*03/12/1986*
Classification:	Small Quantity Generator
Used Oil Recyc:	No
Violation Status:	No violations found

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12 **US COAST GUARD MARINE SAFETY OFFICE** **TX IHW** **S102753144**
601 ROSENBERG ST STE 301 **N/A**
GALVESTON, TX 77550

TX IHW:

Registration Number:	70740
Registration Initial Notification Date:	11/21/1986
Registration Last Amendment Date:	03/27/1987
EPA Identification:	TXO
TNRCC Premit Number:	981903321
Description of Facility Site Location:	REFER TO TWC SW REG # 70609 - EPA ID # TX0690308374
Site Primary Standard Industrial Code:	00 Not reported
Registration is a Generator of Waste:	Yes
Registration is a Receivers of Waste:	No
Registration is a Transporter of Waste:	No
Registration is a Transfer Facility:	No
Mexican Facility:	Does not represent a Maquiladora (Mexican Facility)
Facility Status:	Inactive
Type of Generator:	Non-industrial and/or municipal, CESQG
Company Name:	US COAST GUARD MARINE SAFETY OFFICE
Facility County:	Not reported
TNRCC Region:	Not reported
Mailing Address:	601 ROSENBERG RM301 PO BOX BLDG GALVESTON, TX 77550
Mailing County:	USA
Contact:	WILLIAM BURNS
Contact Telephone Number:	409-766-3687

Additional detail may be available for this site. Please contact your EDR Account Executive for more information

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12 **GOODYEAR TIRE & RUBBER** **TX IHW** **U001248866**
504 25TH ST **LUST** **N/A**
GALVESTON, TX 77553 **UST**

GOODYEAR TIRE & RUBBER (Continued) **U001248866**

LUST:

Facility ID:	0013208	Discovery Date:	4/5/93
Data Entry Date:	5/7/93	Lead Office:	1P/1
PST Coordinator:	AES/UII	RPR Coordinator:	DLB
Region:	12	Region City ID:	HOUSTON
Leaking Tank #:	106474		
Responsible Party:	GOODYEAR TIRE & RUBBER CO		
RP Contact:	CYNTHIA DAVIS		
RP Address:	1144 E MARKET ST AKRON, OH 44316 - 0001		
RP Telephone:	Not reported		
County Code:	084		
Priority:	NO GW IMPACT, NO APPARENT THREATS OR IMPACTS TO RECEPTORS		
Status:	FINAL CONCURRENCE ISSUED, CASE CLOSED		

TX IHW:

Registration Number:	61513
Registration Initial Notification Date:	09/30/1985
Registration Last Amendment Date:	Not reported
EPA Identification:	Not reported
TNRCC Premit Number:	Not reported
Description of Facility Site Location:	504 25th, Galveston, TX
Site Primary Standard Industrial Code:	Not reported
Registration is a Generator of Waste:	Yes
Registration is a Receivers of Waste:	No
Registration is a Transporter of Waste:	No
Registration is a Transfer Facility:	No
Mexican Facility:	Does not represent a Maquiladora (Mexican Facility)
Facility Status:	Inactive
Type of Generator:	Non-industrial and/or municipal, CESQG
Company Name:	Goodyear Auto Service Center
Facility County:	Not reported
TNRCC Region:	Not reported
Mailing Address:	P.O. Box 390 Galveston, TX 77553
Mailing County:	USA
Contact:	Not reported
Contact Telephone Number:	Not reported

Additional detail may be available for this site. Please contact your EDR Account Executive for more information

Registration Number:	73022
Registration Initial Notification Date:	11/07/1986
Registration Last Amendment Date:	02/13/1987
EPA Identification:	TXD
TNRCC Premit Number:	149983058
Description of Facility Site Location:	504 25th Street, Galveston, TX
Site Primary Standard Industrial Code:	Not reported
Registration is a Generator of Waste:	Yes
Registration is a Receivers of Waste:	No
Registration is a Transporter of Waste:	No
Registration is a Transfer Facility:	No
Mexican Facility:	Does not represent a Maquiladora (Mexican Facility)
Facility Status:	Inactive
Type of Generator:	Non-industrial and/or municipal, CESQG
Company Name:	Goodyear Auto Service Center

GOODYEAR TIRE & RUBBER (Continued) **U001248866**

Facility County:	Not reported
TNRCC Region:	Not reported
Mailing Address:	321 Century Plaza Suite 115 Houston, TX 77073
Mailing County:	USA
Contact:	W. E. Penny
Contact Telephone Number:	713-672-9481

Additional detail may be available for this site. Please contact your EDR Account Executive for more information

UST:

Facility ID:	0013208	Customer ID:	00034
Tank ID:	1	Installation Date:	01/01/74
Tank Installer:	Not reported	Tank Tested:	Yes
Tank Emptied:	No	Status Date:	03/30/93
Capacity:	550	Unit ID:	06490

Tank Material of Construction:	Steel
Pipe Material of Construction:	Steel
Other Materials of Construction:	Not reported
Tank Status:	Removed from the Ground
Tank Construction & Containment:	Not reported
Pipe Construction & Containment:	Not reported
Other Construction & Containment:	Not reported
Tank Substance Stored:	Used Oil
Other Substance Stored:	Not reported
Tank Release Detection:	Not reported
Pipe Release Detection:	None
Other Release Detection:	MTG
Tank Corrosion Protection:	None
Pipe Corrosion Protection:	None
Pipe Corrosion Protection II:	Noncorrodible Material (c.g. FRP)
Other Corrosion Protection:	Not reported
Spill and Overfill Protection:	Unknown/None
Spill and Overfill Protection II:	Tight-Fill Fitting
Vapor Recovery Equipment Status:	Not reported
Equipment Installed Date:	Not reported
Equipment Installer:	Not reported
Contractor Registration Number:	Not reported
Tank Registration Date:	05/08/86
Installer License Number:	Not reported

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12 **GOODYEAR AUTO SERVICE CENTER** **RCRIS-SQG** **1000194736**
504-25TH STREET **FINDS** **TXD149983058**
GALVESTON, TX 77553

RCRIS:

Owner:	GOODYEAR T&R CO (000) 000-0000
Contact:	WE PENNY (713) 672-9481
Record Date:	11/10/1986
Classification:	Small Quantity Generator

GOODYEAR AUTO SERVICE CENTER *(Continued)* **1000194736**

Used Oil Recyc: No

Violation Status: No violations found

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13 **GALVESTON COUNTY SHERIFF DEPT** **LUST** **U001257754**
715 19TH ST **UST** **N/A**
GALVESTON, TX 77550

LUST:

Facility ID:	0023418	Discovery Date:	10/26/92
Data Entry Date:	12/16/92	Lead Office:	CENTRAL OFFICE LEAD
PST Coordinator:	ZL/WMK/KBS	RPR Coordinator:	ZL
Region:	12	Region City ID:	HOUSTON
Leaking Tank #:	105209		
Responsible Party:	GALVESTON COUNTY		
RP Contact:	G MICHAEL FITZGERALD		
RP Address:	123 ROSENBERG #4157 GALVESTON, TX 77550		
RP Telephone:	409/766-2260		
County Code:	084		
Priority:	GW IMPACTED, NO APPARENT THREATS OR IMPACTS TO RECEPTORS		
Status:	PHASE 3 IN PROGRESS		

UST:

Facility ID:	0023418	Customer ID:	00060
Tank ID:	1	Installation Date:	01/01/71
Tank Installer:	Not reported	Tank Tested:	No
Tank Emptied:	No	Status Date:	10/21/92
Capacity:	10000	Unit ID:	11566

Tank Material of Construction:	Steel
Pipe Material of Construction:	Steel
Other Materials of Construction:	Not reported
Tank Status:	Removed from the Ground
Tank Construction & Containment:	Not reported
Pipe Construction & Containment:	Not reported
Other Construction & Containment:	Not reported
Tank Substance Stored:	Gasoline
Other Substance Stored:	Not reported
Tank Release Detection:	None
Pipe Release Detection:	None
Other Release Detection:	Not reported
Tank Corrosion Protection:	Not reported
Pipe Corrosion Protection:	None
Pipe Corrosion Protection II:	Noncorrodible Material (c.g. FRP)
Other Corrosion Protection:	Not reported
Spill and Overfill Protection:	Unknown/None
Spill and Overfill Protection il:	Tight-Fill Fitting
Vapor Recovery Equipment Status:	Not reported
Equipment Installed Date:	Not reported
Equipment Installer:	Not reported
Contractor Registration Number:	Not reported
Tank Registration Date:	05/08/86
Installer License Number:	*Not reported*

Facility ID:	0023418	Customer ID:	00060
Tank ID:	3	Installation Date:	01/01/71
Tank Installer:	Not reported	Tank Tested:	No
Tank Emptied:	No	Status Date:	10/21/92
Capacity:	10000	Unit ID:	11566

GALVESTON COUNTY SHERIFF DEPT (Continued) **U001257754**

Tank Material of Construction:	Steel
Pipe Material of Construction:	Steel
Other Materials of Construction:	Not reported
Tank Status:	Removed from the Ground
Tank Construction & Containment:	Not reported
Pipe Construction & Containment:	Not reported
Other Construction & Containment:	Not reported
Tank Substance Stored:	Diesel
Other Substance Stored:	Not reported
Tank Release Detection:	None
Pipe Release Detection:	None
Other Release Detection:	Not reported
Tank Corrosion Protection:	Not reported
Pipe Corrosion Protection:	None
Pipe Corrosion Protection II:	Noncorrodible Material (c.g. FRP)
Other Corrosion Protection:	Not reported
Spill and Overfill Protection:	Unknown/None
Spill and Overfill Protection II:	Tight-Fill Fitting
Vapor Recovery Equipment Status:	Not reported
Equipment Installed Date:	Not reported
Equipment Installer:	Not reported
Contractor Registration Number:	Not reported
Tank Registration Date:	05/08/86
Installer License Number:	Not reported

Facility ID:	0023418	Customer ID:	00060
Tank ID:	2	Installation Date:	01/01/71
Tank Installer:	Not reported	Tank Tested:	No
Tank Emptied:	No	Status Date:	10/21/92
Capacity:	10000	Unit ID:	11566

Tank Material of Construction:	Steel
Pipe Material of Construction:	Steel
Other Materials of Construction:	Not reported
Tank Status:	Removed from the Ground
Tank Construction & Containment:	Not reported
Pipe Construction & Containment:	Not reported
Other Construction & Containment:	Not reported
Tank Substance Stored:	Diesel
Other Substance Stored:	Not reported
Tank Release Detection:	None
Pipe Release Detection:	None
Other Release Detection:	Not reported
Tank Corrosion Protection:	Not reported
Pipe Corrosion Protection:	None
Pipe Corrosion Protection II:	Noncorrodible Material (c.g. FRP)
Other Corrosion Protection:	Not reported
Spill and Overfill Protection:	Unknown/None
Spill and Overfill Protection II:	Tight-Fill Fitting
Vapor Recovery Equipment Status:	Not reported
Equipment Installed Date:	Not reported
Equipment Installer:	Not reported
Contractor Registration Number:	Not reported
Tank Registration Date:	05/08/86
Installer License Number:	Not reported

14 HOUSTON INDUSTRIES INC GALVESTON SVC CTR — RCRIS-SQG, FINDS — 1000121793, TXD981518475
502 27TH STREET
GALVESTON, TX 77550

RCRIS:
Owner: HOUSTON INDUSTRIES INC
(713) 945-8201
Contact: WF MCGUIRE
(713) 922-2186
Record Date: 03/30/1998
Classification: Small Quantity Generator
Used Oil Recyc: No
Violation Status: No violations found

FINDS:
Other Pertinent Environmental Activity Identified at Site:
Permit Compliance System (PCS)

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14 GALVESTON SERVICE CENTER — TX IHW, LUST, UST — U001266490, N/A
502 27TH ST
GALVESTON, TX 77550

LUST:

Facility ID:	0033340	Discovery Date:	5/27/88
Data Entry Date:	6/3/88	Lead Office:	CENTRAL OFFICE LEAD
PST Coordinator:	APB/MCL/WMK/ASM	RPR Coordinator:	APB
Region:	12	Region City ID:	HOUSTON
Leaking Tank #:	091911		

Responsible Party: HOUSTON LIGHTING & POWER
RP Contact: R. C. PATYRAK
RP Address: PO BOX 1700
HOUSTON, TX 77251 - 1700
RP Telephone: 713/945-7360
County Code: 084
Priority: GW IMPACTED, NO APPARENT THREATS OR IMPACTS TO RECEPTORS
Status: FINAL CONCURRENCE ISSUED, CASE CLOSED

TX IHW:
Registration Number: 34341
Registration Initial Notification Date: 01/13/1984
Registration Last Amendment Date: 11/10/1998
EPA Identification: TXD
TNRCC Premit Number: 981518475
Description of Facility Site Location: 502 27th St., Galveston, TX 77550
Site Primary Standard Industrial Code: 49110
Electric Services
Trans. & Utilities
Registration is a Generator of Waste: Yes
Registration is a Receivers of Waste: No
Registration is a Transporter of Waste: No
Registration is a Transfer Facility: No
Mexican Facility: Does not represent a Maquiladora (Mexican Facility)
Facility Status: Inactive
Type of Generator: Non-industrial and/or municipal, CESQG
Company Name: Houston Industries Incorporated
Facility County: Not reported
TNRCC Region: Not reported
Mailing Address: PO Box 1700

GALVESTON SERVICE CENTER (Continued) **U001266490**

Houston, TX 77251
Mailing County: USA
Contact: R.T. Bye
Contact Telephone Number: 713-945-8201

Additional detail may be available for this site. Please contact your EDR Account Executive for more information

UST:

Facility ID:	0033340	Customer ID:	00088
Tank ID:	1	Installation Date:	01/01/64
Tank Installer:	Not reported	Tank Tested:	No
Tank Emptied:	No	Status Date:	04/09/88
Capacity:	14700	Unit ID:	15541

Tank Material of Construction:	Steel
Pipe Material of Construction:	Steel
Other Materials of Construction:	Not reported
Tank Status:	Abandoned In-place
Tank Construction & Containment:	Single Wall
Pipe Construction & Containment:	Single Wall
Other Construction & Containment:	Single Wall
Tank Substance Stored:	Gasoline
Other Substance Stored:	Not reported
Tank Release Detection:	None
Pipe Release Detection:	None
Other Release Detection:	Not reported
Tank Corrosion Protection:	Not reported
Pipe Corrosion Protection:	None
Pipe Corrosion Protection II:	Noncorrodible Material (c.g. FRP)
Other Corrosion Protection:	Not reported
Spill and Overfill Protection:	Unknown/None
Spill and Overfill Protection II:	Tight-Fill Fitting
Vapor Recovery Equipment Status:	Not reported
Equipment Installed Date:	Not reported
Equipment Installer:	Not reported
Contractor Registration Number:	Not reported
Tank Registration Date:	05/08/86
Installer License Number:	Not reported

Facility ID:	0033340	Customer ID:	00088
Tank ID:	2	Installation Date:	01/01/80
Tank Installer:	Not reported	Tank Tested:	No
Tank Emptied:	No	Status Date:	04/15/92
Capacity:	12000	Unit ID:	15541

Tank Material of Construction:	Steel
Pipe Material of Construction:	Fiberglass-Reinforced Plastic (FRP)
Other Materials of Construction:	Not reported
Tank Status:	Removed from the Ground
Tank Construction & Containment:	Single Wall
Pipe Construction & Containment:	Single Wall
Other Construction & Containment:	Single Wall
Tank Substance Stored:	Gasoline
Other Substance Stored:	Not reported
Tank Release Detection:	None
Pipe Release Detection:	Line Leak Detectors
Pipe Release Detection II:	Tightness Testing
Other Release Detection:	Not reported
Tank Corrosion Protection:	Cathodic Protection System

GALVESTON SERVICE CENTER (Continued) **U001266490**

Pipe Corrosion Protection:	Noncorrodible Material (c.g. FRP)
Pipe Corrosion Protection II:	Noncorrodible Material (c.g. FRP)
Other Corrosion Protection:	None
Spill and Overfill Protection:	Unknown/None
Spill and Overfill Protection II:	Tight-Fill Fitting
Vapor Recovery Equipment Status:	Not reported
Equipment Installed Date:	Not reported
Equipment Installer:	Not reported
Contractor Registration Number:	Not reported
Tank Registration Date:	05/08/86
Installer License Number:	Not reported

Facility ID:	0033340	Customer ID:	00088
Tank ID:	3	Installation Date:	01/01/80
Tank Installer:	Not reported	Tank Tested:	No
Tank Emptied:	No	Status Date:	04/15/92
Capacity:	12000	Unit ID:	15541

Tank Material of Construction:	Steel
Pipe Material of Construction:	Fiberglass-Reinforced Plastic (FRP)
Other Materials of Construction:	Not reported
Tank Status:	Removed from the Ground
Tank Construction & Containment:	Single Wall
Pipe Construction & Containment:	Single Wall
Other Construction & Containment:	Single Wall
Tank Substance Stored:	Diesel
Other Substance Stored:	Not reported
Tank Release Detection:	None
Pipe Release Detection:	Line Leak Detectors
Pipe Release Detection II:	Tightness Testing
Other Release Detection:	Not reported
Tank Corrosion Protection:	Cathodic Protection System
Pipe Corrosion Protection:	Noncorrodible Material (c.g. FRP)
Pipe Corrosion Protection II:	Noncorrodible Material (c.g. FRP)
Other Corrosion Protection:	Not reported
Spill and Overfill Protection:	Unknown/None
Spill and Overfill Protection II:	Tight-Fill Fitting
Vapor Recovery Equipment Status:	Not reported
Equipment Installed Date:	Not reported
Equipment Installer:	Not reported
Contractor Registration Number:	Not reported
Tank Registration Date:	05/08/86
Installer License Number:	Not reported

Facility ID:	0033340	Customer ID:	00088
Tank ID:	2B	Installation Date:	05/01/92
Tank Installer:	Not reported	Tank Tested:	No
Tank Emptied:	No	Status Date:	Not reported
Capacity:	10000	Unit ID:	15541

Tank Material of Construction:	Fiberglass-Reinforced Plastic (FRP)
Pipe Material of Construction:	Fiberglass-Reinforced Plastic (FRP)
Other Materials of Construction:	Not reported
Tank Status:	In Use
Tank Construction & Containment:	Double Wall
Pipe Construction & Containment:	Single Wall
Pipe Construction & Containment II:	External Jacket System
Other Construction & Containment:	Double Wall
Tank Substance Stored:	Diesel

GALVESTON SERVICE CENTER (Continued) **U001266490**

Other Substance Stored:	Not reported
Tank Release Detection:	Tightness Testing
Tank Release Detection II:	Interstitial Monitoring for Double Wall USTs
Pipe Release Detection:	Line Leak Detectors
Pipe Release Detection II:	Tightness Testing
Other Release Detection:	Auto Tank Gauging
Tank Corrosion Protection:	Noncorrodible Material (c.g. FRP)
Pipe Corrosion Protection:	Noncorrodible Material (c.g. FRP)
Pipe Corrosion Protection II:	Noncorrodible Material (c.g. FRP)
Other Corrosion Protection:	Non Corrodible Mater
Spill and Overfill Protection:	Automatic Overfill Device - Shut-Off Valve
Spill and Overfill Protection II:	Tight-Fill Fitting
Vapor Recovery Equipment Status:	Not reported
Equipment Installed Date:	Not reported
Equipment Installer:	Not reported
Contractor Registration Number:	Not reported
Tank Registration Date:	05/08/86
Installer License Number:	Not reported

Facility ID:	0033340	Customer ID:	00088
Tank ID:	1A	Installation Date:	05/01/92
Tank Installer:	Not reported	Tank Tested:	No
Tank Emptied:	No	Status Date:	Not reported
Capacity:	10000	Unit ID:	15541

Tank Material of Construction:	Fiberglass-Reinforced Plastic (FRP)
Pipe Material of Construction:	Fiberglass-Reinforced Plastic (FRP)
Other Materials of Construction:	Not reported
Tank Status:	In Use
Tank Construction & Containment:	Double Wall
Pipe Construction & Containment:	Single Wall
Pipe Construction & Containment II:	External Jacket System
Other Construction & Containment:	Double Wall
Tank Substance Stored:	Gasoline
Other Substance Stored:	Not reported
Tank Release Detection:	Tightness Testing
Tank Release Detection II:	Interstitial Monitoring for Double Wall USTs
Pipe Release Detection:	Line Leak Detectors
Pipe Release Detection II:	Tightness Testing
Other Release Detection:	Auto Tank Gauging
Tank Corrosion Protection:	Noncorrodible Material (c.g. FRP)
Pipe Corrosion Protection:	Noncorrodible Material (c.g. FRP)
Pipe Corrosion Protection II:	Noncorrodible Material (c.g. FRP)
Other Corrosion Protection:	Non Corrodible Mater
Spill and Overfill Protection:	Automatic Overfill Device - Shut-Off Valve
Spill and Overfill Protection II:	Tight-Fill Fitting
Vapor Recovery Equipment Status:	Not reported
Equipment Installed Date:	Not reported
Equipment Installer:	Not reported
Contractor Registration Number:	Not reported
Tank Registration Date:	05/08/86
Installer License Number:	Not reported

---

15 **M-I DRILLING FLUIDS CO** **LUST** **S103499950**
4150 PORT INDUSTRIAL **N/A**
GALVESTON, TX

M-I DRILLING FLUIDS CO (Continued) **S103499950**

LUST:

Facility ID:	0016168	Discovery Date:	10/8/93
Data Entry Date:	10/29/93	Lead Office:	DISTRICT LEAD
PST Coordinator:	RPR	RPR Coordinator:	RPR
Region:	12	Region City ID:	HOUSTON
Leaking Tank #:	107320		
Responsible Party:	M-I DRILLING FLUIDS CO		
RP Contact:	Not reported		
RP Address:	PO BOX 2117 GALVESTON, TX 77553		
RP Telephone:	713/488-1057		
County Code:	084		
Priority:	NO GW IMPACT, NO APPARENT THREATS OR IMPACTS TO RECEPTORS		
Status:	FINAL CONCURRENCE ISSUED, CASE CLOSED		

---

15 **CHAMPION BUILDING PRODUCTS** **RCRIS-SQG** **1000302566**
3902 PORT INDUSTRIAL ROAD **FINDS** **TXD080862303**
GALVESTON, TX 77551

RCRIS:

Owner:	CHAMPION INTERNATIONAL CORPORATION (000) 000-0000
Contact:	RON PRESLEY (513) 868-4261
Record Date:	08/18/1980
Classification:	Conditionally Exempt Small Quantity Generator
Used Oil Recyc:	No
Violation Status:	No violations found

---

16 **WAREHOUSE** **LUST** **U001962424**
402-424 THIRTIETH ST **UST** **N/A**
GALVESTON, TX 77551

LUST:

Facility ID:	0065919	Discovery Date:	9/1/94
Data Entry Date:	10/7/94	Lead Office:	1/1P/1/2
PST Coordinator:	EJC/RPR/AES/ERN	RPR Coordinator:	EJC
Region:	12	Region City ID:	HOUSTON
Leaking Tank #:	108582		
Responsible Party:	JACK MILLER		
RP Contact:	JACK MILLER		
RP Address:	21 ADLER CIR GALVESTON, TX 77551		
RP Telephone:	409/744-4497		
County Code:	084		
Priority:	GW IMPACTED, NO APPARENT THREATS OR IMPACTS TO RECEPTORS		
Status:	SITE CLOSURE APPLICATION SUBMITTED, REVIEW PENDING		

UST:

Facility ID:	0065919	Customer ID:	00171
Tank ID:	1	Installation Date:	00/00/00
Tank Installer:	Not reported	Tank Tested:	No
Tank Emptied:	No	Status Date:	08/26/94
Capacity:	560	Unit ID:	44836
Tank Material of Construction:	Steel		

WAREHOUSE (Continued) **U001962424**

Pipe Material of Construction:	Steel
Other Materials of Construction:	Not reported
Tank Status:	Removed from the Ground
Tank Construction & Containment:	Single Wall
Pipe Construction & Containment:	Single Wall
Other Construction & Containment:	Single Wall
Tank Substance Stored:	Gasoline
Other Substance Stored:	Not reported
Tank Release Detection:	None
Pipe Release Detection:	None
Other Release Detection:	Not reported
Tank Corrosion Protection:	None
Pipe Corrosion Protection:	None
Pipe Corrosion Protection II:	Noncorrodible Material (c.g. FRP)
Other Corrosion Protection:	Not reported
Spill and Overfill Protection:	Unknown/None
Spill and Overfill Protection II:	Tight-Fill Fitting
Vapor Recovery Equipment Status:	Not reported
Equipment Installed Date:	Not reported
Equipment Installer:	Not reported
Contractor Registration Number:	Not reported
Tank Registration Date:	08/22/94
Installer License Number:	Not reported

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17 **MUNICIPLE TRANSIT GARAGE** **UST** **U001238443**
3115 MARKET ST **N/A**
GALVESTON, TX 77550

UST:

Facility ID:	0001251	Customer ID:	00003
Tank ID:	1	Installation Date:	01/01/83
Tank Installer:	Not reported	Tank Tested:	No
Tank Emptied:	No	Status Date:	Not reported
Capacity:	10000	Unit ID:	00688

Tank Material of Construction:	Fiberglass-Reinforced Plastic (FRP)
Pipe Material of Construction:	Steel
Other Materials of Construction:	Not reported
Tank Status:	In Use
Tank Construction & Containment:	Not reported
Pipe Construction & Containment:	Not reported
Other Construction & Containment:	Not reported
Tank Substance Stored:	Diesel
Other Substance Stored:	Not reported
Tank Release Detection:	None
Pipe Release Detection:	None
Other Release Detection:	Not reported
Tank Corrosion Protection:	Noncorrodible Material (c.g. FRP)
Pipe Corrosion Protection:	None
Pipe Corrosion Protection II:	Noncorrodible Material (c.g. FRP)
Other Corrosion Protection:	Not reported
Spill and Overfill Protection:	Unknown/None
Spill and Overfill Protection II:	Tight-Fill Fitting
Vapor Recovery Equipment Status:	Not reported
Equipment Installed Date:	Not reported
Equipment Installer:	Not reported
Contractor Registration Number:	Not reported
Tank Registration Date:	05/08/86
Installer License Number:	Not reported

MUNICIPLE TRANSIT GARAGE (Continued) **U001238443**

Facility ID:	0001251	Customer ID:	00003
Tank ID:	2	Installation Date:	01/01/83
Tank Installer:	Not reported	Tank Tested:	No
Tank Emptied:	No	Status Date:	Not reported
Capacity:	10000	Unit ID:	00688

Tank Material of Construction:	Fiberglass-Reinforced Plastic (FRP)
Pipe Material of Construction:	Steel
Other Materials of Construction:	Not reported
Tank Status:	In Use
Tank Construction & Containment:	Not reported
Pipe Construction & Containment:	Not reported
Other Construction & Containment:	Not reported
Tank Substance Stored:	Diesel
Other Substance Stored:	Not reported
Tank Release Detection:	None
Pipe Release Detection:	None
Other Release Detection:	Not reported
Tank Corrosion Protection:	Noncorrodible Material (c.g. FRP)
Pipe Corrosion Protection:	None
Pipe Corrosion Protection II:	Noncorrodible Material (c.g. FRP)
Other Corrosion Protection:	Not reported
Spill and Overfill Protection:	Unknown/None
Spill and Overfill Protection II:	Tight-Fill Fitting
Vapor Recovery Equipment Status:	Not reported
Equipment Installed Date:	Not reported
Equipment Installer:	Not reported
Contractor Registration Number:	Not reported
Tank Registration Date:	05/08/86
Installer License Number:	Not reported

Facility ID:	0001251	Customer ID:	00003
Tank ID:	4	Installation Date:	01/01/83
Tank Installer:	Not reported	Tank Tested:	No
Tank Emptied:	No	Status Date:	04/30/85
Capacity:	10000	Unit ID:	00688

Tank Material of Construction:	Fiberglass-Reinforced Plastic (FRP)
Pipe Material of Construction:	Steel
Other Materials of Construction:	Not reported
Tank Status:	Abandoned In-place
Tank Construction & Containment:	Not reported
Pipe Construction & Containment:	Not reported
Other Construction & Containment:	Not reported
Tank Substance Stored:	Gasoline
Other Substance Stored:	Not reported
Tank Release Detection:	None
Pipe Release Detection:	None
Other Release Detection:	Not reported
Tank Corrosion Protection:	Noncorrodible Material (c.g. FRP)
Pipe Corrosion Protection:	None
Pipe Corrosion Protection II:	Noncorrodible Material (c.g. FRP)
Other Corrosion Protection:	Not reported
Spill and Overfill Protection:	Unknown/None
Spill and Overfill Protection II:	Tight-Fill Fitting
Vapor Recovery Equipment Status:	Not reported
Equipment Installed Date:	Not reported
Equipment Installer:	Not reported

MUNICIPLE TRANSIT GARAGE (Continued) **U001238443**

Contractor Registration Number:	Not reported
Tank Registration Date:	05/08/86
Installer License Number:	Not reported

Facility ID:	0001251	Customer ID:	00003
Tank ID:	3	Installation Date:	01/01/85
Tank Installer:	Not reported	Tank Tested:	No
Tank Emptied:	No	Status Date:	Not reported
Capacity:	10000	Unit ID:	00688

Tank Material of Construction:	Fiberglass-Reinforced Plastic (FRP)
Pipe Material of Construction:	Steel
Other Materials of Construction:	Not reported
Tank Status:	In Use
Tank Construction & Containment:	Not reported
Pipe Construction & Containment:	Not reported
Other Construction & Containment:	Not reported
Tank Substance Stored:	Gasoline
Other Substance Stored:	Not reported
Tank Release Detection:	None
Pipe Release Detection:	None
Other Release Detection:	Not reported
Tank Corrosion Protection:	Noncorrodible Material (c.g. FRP)
Pipe Corrosion Protection:	None
Pipe Corrosion Protection II:	Noncorrodible Material (c.g. FRP)
Other Corrosion Protection:	Not reported
Spill and Overfill Protection:	Unknown/None
Spill and Overfill Protection II:	Tight-Fill Fitting
Vapor Recovery Equipment Status:	Not reported
Equipment Installed Date:	Not reported
Equipment Installer:	Not reported
Contractor Registration Number:	Not reported
Tank Registration Date:	05/08/86
Installer License Number:	Not reported

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17 **ISLAND TRANSIT**
3115 MARKET STREET
GALVESTON, TX 77550

TX IHW **1000151871**
RCRIS-SQG **TXD981514052**
FINDS

RCRIS:

Owner: CITY OF GALVESTON
(000) 000-0000

Contact: ALLEN SCOTT
(409) 762-2903

Record Date: 08/25/1997

Classification: Small Quantity Generator

Used Oil Recyc: No

Violation Status: No violations found

TX IHW:

Registration Number:	61690
Registration Initial Notification Date:	09/30/1985
Registration Last Amendment Date:	01/15/1997
EPA Identification:	TXD
TNRCC Premit Number:	981514052
Description of Facility Site Location:	3115 Market Street, Galveston, TX
Site Primary Standard Industrial Code:	41180

ISLAND TRANSIT (Continued) **1000151871**

	Not reported
Registration is a Generator of Waste:	Yes
Registration is a Receivers of Waste:	No
Registration is a Transporter of Waste:	No
Registration is a Transfer Facility:	No
Mexican Facility:	Does not represent a Maquiladora (Mexican Facility)
Facility Status:	Active
Type of Generator:	Non-industrial and/or municipal, SQG
Company Name:	Island Transit
Facility County:	Not reported
TNRCC Region:	Not reported
Mailing Address:	3115 Market Street Galveston, TX 77550
Mailing County:	USA
Contact:	Joe Varela
Contact Telephone Number:	409-762-2903

Additional detail may be available for this site. Please contact your EDR Account Executive for more information

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18 **BMA-GALVESTON INC** **LUST** **S103498725**
707 TREMONT ST **N/A**
GALVESTON, TX 77550

LUST:

Facility ID:	0055684	Discovery Date:	7/31/92
Data Entry Date:	8/25/92	Lead Office:	DISTRICT LEAD
PST Coordinator:	HMW	RPR Coordinator:	HELEN WELCH
Region:	12	Region City ID:	HOUSTON
Leaking Tank #:	104031		
Responsible Party:	NATIONAL MEDICAL CARE		
RP Contact:	MARTIN TURNBULL		
RP Address:	1601 TRAPELO RD WALTHAM, MA 02154		
RP Telephone:	617/466-9850		
County Code:	084		
Priority:	MINOR SOIL CONTAMINATION - DOES NOT REQUIRE A RAP		
Status:	FINAL CONCURRENCE ISSUED, CASE CLOSED		

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18 **BMA OF GALVESTON** **UST** **U001285891**
707 TREMONT ST **N/A**
GALVESTON, TX 77550

UST:

Facility ID:	0055684	Customer ID:	00135
Tank ID:	1	Installation Date:	01/01/77
Tank Installer:	Not reported	Tank Tested:	Yes
Tank Emptied:	No	Status Date:	07/27/93
Capacity:	500	Unit ID:	30038

Tank Material of Construction:	Steel
Pipe Material of Construction:	Not reported
Other Materials of Construction:	Not reported
Tank Status:	Removed from the Ground
Tank Construction & Containment:	Not reported
Pipe Construction & Containment:	Not reported
Other Construction & Containment:	Not reported
Tank Substance Stored:	Diesel
Other Substance Stored:	Not reported

BMA OF GALVESTON (Continued) **U001285891**

Tank Release Detection:	None
Pipe Release Detection:	None
Other Release Detection:	Not reported
Tank Corrosion Protection:	None
Pipe Corrosion Protection:	None
Pipe Corrosion Protection II:	Noncorrodible Material (c.g. FRP)
Other Corrosion Protection:	Not reported
Spill and Overfill Protection:	Unknown/None
Spill and Overfill Protection II:	Tight-Fill Fitting
Vapor Recovery Equipment Status:	Not reported
Equipment Installed Date:	Not reported
Equipment Installer:	Not reported
Contractor Registration Number:	Not reported
Tank Registration Date:	08/28/90
Installer License Number:	Not reported

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19 **GALVESTON GAS CO.** **Coal Gas** **G000001317**
AVENUE D OR MARKET W. **N/A**
GALVESTON, TX 77550

COAL GAS SITE DESCRIPTION:
Galveston Gas Works occupies two blocks bordered on the north by Avenue D (Market W.), by 32nd Street to the east, Ave. F or Church to the south, and 33rd St. on the west. Avenue E intersects the two blocks running east to west.

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19 **SOUTHERN UNION GAS CO** **UST** **U001273552**
402 33RD ST **N/A**
GALVESTON, TX 77550

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19 **GALVESTON GAS COMPANY** **CERC-NFRAP** **1000432001**
33RD & AVENUE D **TXD981910318**
GALVESTON, TX 77550

CERCLIS-NFRAP Classification Data:

Site Incident Category:	Not reported	Federal Facility:	Not a Federal Facility
Ownership Status:	Other	NPL Status:	Not on the NPL
Site Description:	COAL GASIFICATION PLANT OPERATED LATE 1800'S TO EARLY 1900'S COAL GASIFICATION PLANT OPERATED LATE 1800'S TO EARLY 1900'S		

CERCLIS-NFRAP Assessment History:

Assessment:	DISCOVERY	Completed:	19870301
Assessment:	PRELIMINARY ASSESSMENT	Completed:	19870601
Assessment:	SITE INSPECTION	Completed:	19900101

CERCLIS-NFRAP Alias Name(s):
GALVESTON GAS COMPANY

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19 **CHEVRON FAC #108373** **UST** **U001262235**
3301 AVENUE J # 33RD **N/A**
GALVESTON, TX 77550

UST:

Facility ID:	0028598	Customer ID:	00075
Tank ID:	1	Installation Date:	03/01/87
Tank Installer:	Not reported	Tank Tested:	No
Tank Emptied:	No	Status Date:	Not reported
Capacity:	10000	Unit ID:	13675

CHEVRON FAC #108373 (Continued) **U001262235**

Tank Material of Construction:	Fiberglass-Reinforced Plastic (FRP)
Pipe Material of Construction:	Fiberglass-Reinforced Plastic (FRP)
Other Materials of Construction:	Not reported
Tank Status:	In Use
Tank Construction & Containment:	Single Wall
Pipe Construction & Containment:	Single Wall
Other Construction & Containment:	Single Wall
Tank Substance Stored:	Gasoline
Other Substance Stored:	Not reported
Tank Release Detection:	Stat. Inventory Reconciliation (SIR)
Tank Release Detection II:	Inventory Control
Pipe Release Detection:	Line Leak Detectors
Pipe Release Detection II:	Stat. Inventory Reconciliation (SIR)
Other Release Detection:	Tightness Testing
Tank Corrosion Protection:	Noncorrodible Material (c.g. FRP)
Pipe Corrosion Protection:	Noncorrodible Material (c.g. FRP)
Pipe Corrosion Protection II:	Noncorrodible Material (c.g. FRP)
Other Corrosion Protection:	Not reported
Spill and Overfill Protection:	Automatic Overfill Device - Flow Restricter Valve
Spill and Overfill Protection II:	Tight-Fill Fitting
Vapor Recovery Equipment Status:	Stage 2 Vapor Recovery Equipment Installed
Equipment Installed Date:	02/23/94
Equipment Installer:	Not reported
Contractor Registration Number:	Not reported
Tank Registration Date:	05/08/86
Installer License Number:	Not reported

Facility ID:	0028598	Customer ID:	00075
Tank ID:	3	Installation Date:	03/01/87
Tank Installer:	Not reported	Tank Tested:	No
Tank Emptied:	No	Status Date:	Not reported
Capacity:	10000	Unit ID:	13675

Tank Material of Construction:	Fiberglass-Reinforced Plastic (FRP)
Pipe Material of Construction:	Fiberglass-Reinforced Plastic (FRP)
Other Materials of Construction:	Not reported
Tank Status:	In Use
Tank Construction & Containment:	Single Wall
Pipe Construction & Containment:	Single Wall
Other Construction & Containment:	Single Wall
Tank Substance Stored:	Gasoline
Other Substance Stored:	Not reported
Tank Release Detection:	Stat. Inventory Reconciliation (SIR)
Tank Release Detection II:	Inventory Control
Pipe Release Detection:	Line Leak Detectors
Pipe Release Detection II:	Stat. Inventory Reconciliation (SIR)
Other Release Detection:	Tightness Testing
Tank Corrosion Protection:	Noncorrodible Material (c.g. FRP)
Pipe Corrosion Protection:	Noncorrodible Material (c.g. FRP)
Pipe Corrosion Protection II:	Noncorrodible Material (c.g. FRP)
Other Corrosion Protection:	Not reported
Spill and Overfill Protection:	Automatic Overfill Device - Flow Restricter Valve
Spill and Overfill Protection II:	Tight-Fill Fitting
Vapor Recovery Equipment Status:	Stage 2 Vapor Recovery Equipment Installed
Equipment Installed Date:	02/23/94
Equipment Installer:	Not reported
Contractor Registration Number:	Not reported
Tank Registration Date:	05/08/86

CHEVRON FAC #108373 (Continued) **U001262235**

Installer License Number: Not reported

Facility ID:	0028598	Customer ID:	00075
Tank ID:	2	Installation Date:	03/01/87
Tank Installer:	Not reported	Tank Tested:	No
Tank Emptied:	No	Status Date:	Not reported
Capacity:	10000	Unit ID:	13675

Tank Material of Construction:	Fiberglass-Reinforced Plastic (FRP)
Pipe Material of Construction:	Fiberglass-Reinforced Plastic (FRP)
Other Materials of Construction:	Not reported
Tank Status:	In Use
Tank Construction & Containment:	Single Wall
Pipe Construction & Containment:	Single Wall
Other Construction & Containment:	Single Wall
Tank Substance Stored:	Gasoline
Other Substance Stored:	Not reported
Tank Release Detection:	Stat. Inventory Reconciliation (SIR)
Tank Release Detection II:	Inventory Control
Pipe Release Detection:	Line Leak Detectors
Pipe Release Detection II:	Stat. Inventory Reconciliation (SIR)
Other Release Detection:	Tightness Testing
Tank Corrosion Protection:	Noncorrodible Material (c.g. FRP)
Pipe Corrosion Protection:	Noncorrodible Material (c.g. FRP)
Pipe Corrosion Protection II:	Noncorrodible Material (c.g. FRP)
Other Corrosion Protection:	Not reported
Spill and Overfill Protection:	Automatic Overfill Device - Flow Restricter Valve
Spill and Overfill Protection II:	Tight-Fill Fitting
Vapor Recovery Equipment Status:	Stage 2 Vapor Recovery Equipment Installed
Equipment Installed Date:	02/23/94
Equipment Installer:	Not reported
Contractor Registration Number:	Not reported
Tank Registration Date:	05/08/86
Installer License Number:	Not reported

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20 **THE CITY OF GALVESTON** **RCRIS-SQG** **1000431996**
502 32ND ST **FINDS** **TXD981594674**
GALVESTON, TX 77550

RCRIS:

Owner: CITY OF GALVESTON
(000) 000-0000

Contact: LEE-A PEHNKE
(409) 766-2149

Record Date: 08/25/1997

Classification: Small Quantity Generator

Used Oil Recyc: Yes

Violation Status: No violations found

---

20 **CITY OF GALVESTON MUNI GARAGE** **UST** **U001238703**
502 32ND ST **N/A**
GALVESTON, TX 77550

UST:

Facility ID:	0001553	Customer ID:	00003
Tank ID:	1	Installation Date:	02/01/84

CITY OF GALVESTON MUNI GARAGE (Continued) **U001238703**

Tank Installer:	Not reported	Tank Tested:	Yes
Tank Emptied:	No	Status Date:	Not reported
Capacity:	10000	Unit ID:	00688

Tank Material of Construction:	Fiberglass-Reinforced Plastic (FRP)
Pipe Material of Construction:	Steel
Other Materials of Construction:	Not reported
Tank Status:	In Use
Tank Construction & Containment:	Single Wall
Pipe Construction & Containment:	Single Wall
Other Construction & Containment:	ing
Tank Substance Stored:	Diesel
Other Substance Stored:	Not reported
Tank Release Detection:	Automatic In-Tank Monitoring & Inventory Control
Tank Release Detection II:	Inventory Control
Pipe Release Detection:	None
Other Release Detection:	Not reported
Tank Corrosion Protection:	Noncorrodible Material (c.g. FRP)
Pipe Corrosion Protection:	External Coatings - Laminate/Tape/Wrap
Pipe Corrosion Protection II:	Noncorrodible Material (c.g. FRP)
Other Corrosion Protection:	External Dielectric
Spill and Overfill Protection:	Automatic Overfill Device - Flow Restricter Valve
Spill and Overfill Protection II:	Tight-Fill Fitting
Vapor Recovery Equipment Status:	Not reported
Equipment Installed Date:	Not reported
Equipment Installer:	Not reported
Contractor Registration Number:	Not reported
Tank Registration Date:	05/08/86
Installer License Number:	Not reported

Facility ID:	0001553	Customer ID:	00003
Tank ID:	3	Installation Date:	05/01/84
Tank Installer:	Not reported	Tank Tested:	Yes
Tank Emptied:	No	Status Date:	Not reported
Capacity:	10000	Unit ID:	00688

Tank Material of Construction:	Fiberglass-Reinforced Plastic (FRP)
Pipe Material of Construction:	Steel
Other Materials of Construction:	Not reported
Tank Status:	In Use
Tank Construction & Containment:	Single Wall
Pipe Construction & Containment:	Not reported
Other Construction & Containment:	ing
Tank Substance Stored:	Gasoline
Other Substance Stored:	Not reported
Tank Release Detection:	Automatic In-Tank Monitoring & Inventory Control
Tank Release Detection II:	Inventory Control
Pipe Release Detection:	None
Other Release Detection:	Not reported
Tank Corrosion Protection:	Noncorrodible Material (c.g. FRP)
Pipe Corrosion Protection:	External Coatings - Laminate/Tape/Wrap
Pipe Corrosion Protection II:	Noncorrodible Material (c.g. FRP)
Other Corrosion Protection:	External Dielectric
Spill and Overfill Protection:	Automatic Overfill Device - Flow Restricter Valve
Spill and Overfill Protection II:	Tight-Fill Fitting
Vapor Recovery Equipment Status:	Not reported
Equipment Installed Date:	Not reported
Equipment Installer:	Not reported
Contractor Registration Number:	Not reported

CITY OF GALVESTON MUNI GARAGE (Continued) **U001238703**

Tank Registration Date: 05/08/86
Installer License Number: Not reported

Facility ID:	0001553	Customer ID:	00003
Tank ID:	2	Installation Date:	08/31/87
Tank Installer:	Not reported	Tank Tested:	Yes
Tank Emptied:	Yes	Status Date:	06/01/97
Capacity:	0	Unit ID:	00688

Tank Material of Construction: Fiberglass-Reinforced Plastic (FRP)
Pipe Material of Construction: Steel
Other Materials of Construction: Not reported
Tank Status: Temporarily Out of Service
Tank Construction & Containment: Single Wall
Pipe Construction & Containment: Not reported
Other Construction & Containment: Single Wall
Tank Substance Stored: Diesel
Other Substance Stored: Not reported
Tank Release Detection: Automatic In-Tank Monitoring & Inventory Control
Pipe Release Detection: None
Other Release Detection: Not reported
Tank Corrosion Protection: Noncorrodible Material (c.g. FRP)
Pipe Corrosion Protection: External Coatings - Laminate/Tape/Wrap
Pipe Corrosion Protection II: Noncorrodible Material (c.g. FRP)
Other Corrosion Protection: Not reported
Spill and Overfill Protection: Automatic Overfill Device - Flow Restricter Valve
Spill and Overfill Protection II: Tight-Fill Fitting
Vapor Recovery Equipment Status: Not reported
Equipment Installed Date: Not reported
Equipment Installer: Not reported
Contractor Registration Number: Not reported
Tank Registration Date: 05/08/86
Installer License Number: Not reported

Facility ID:	0001553	Customer ID:	00003
Tank ID:	4	Installation Date:	02/01/84
Tank Installer:	Not reported	Tank Tested:	Yes
Tank Emptied:	No	Status Date:	Not reported
Capacity:	1000	Unit ID:	00688

Tank Material of Construction: Fiberglass-Reinforced Plastic (FRP)
Pipe Material of Construction: Steel
Other Materials of Construction: Not reported
Tank Status: In Use
Tank Construction & Containment: Single Wall
Pipe Construction & Containment: Single Wall
Other Construction & Containment: ing
Tank Substance Stored: Used Oil
Other Substance Stored: Not reported
Tank Release Detection: Automatic In-Tank Monitoring & Inventory Control
Pipe Release Detection: None
Other Release Detection: Not reported
Tank Corrosion Protection: Noncorrodible Material (c.g. FRP)
Pipe Corrosion Protection: External Coatings - Laminate/Tape/Wrap
Pipe Corrosion Protection II: Noncorrodible Material (c.g. FRP)
Other Corrosion Protection: External Dielectric
Spill and Overfill Protection: Automatic Overfill Device - Flow Restricter Valve
Spill and Overfill Protection II: Tight-Fill Fitting
Vapor Recovery Equipment Status: Not reported

CITY OF GALVESTON MUNI GARAGE (Continued) **U001238703**

Equipment Installed Date:	Not reported
Equipment Installer:	Not reported
Contractor Registration Number:	Not reported
Tank Registration Date:	05/08/86
Installer License Number:	Not reported

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20 **GARAGE** **TX IHW** **S103608216**
502 32ND ST **N/A**
GALVESTON, TX 77550

TX IHW:

Registration Number:	72208
Registration Initial Notification Date:	11/07/1986
Registration Last Amendment Date:	02/06/1987
EPA Identification:	TXD
TNRCC Premit Number:	981594674
Description of Facility Site Location:	502 32nd Street, Galveston, TX
Site Primary Standard Industrial Code:	Not reported
Registration is a Generator of Waste:	Yes
Registration is a Receivers of Waste:	No
Registration is a Transporter of Waste:	No
Registration is a Transfer Facility:	No
Mexican Facility:	Does not represent a Maquiladora (Mexican Facility)
Facility Status:	Inactive
Type of Generator:	Non-industrial and/or municipal, SQG
Company Name:	The City of Galveston
Facility County:	Not reported
TNRCC Region:	Not reported
Mailing Address:	P.O. Box 779 Galveston, TX 77553
Mailing County:	USA
Contact:	David A. Smith
Contact Telephone Number:	409-766-2149

Additional detail may be available for this site. Please contact your EDR Account Executive for more information

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21 **OLD SOUTHERN UNION GAS BUILDING** **UST** **U003040521**
908 25TH ST **N/A**
GALVESTON, TX 77555

UST:

Facility ID:	0067748	Customer ID:	00177
Tank ID:	1	Installation Date:	08/31/87
Tank Installer:	Not reported	Tank Tested:	No
Tank Emptied:	No	Status Date:	00/00/00
Capacity:	0	Unit ID:	47358

Tank Material of Construction:	Steel
Pipe Material of Construction:	Not reported
Other Materials of Construction:	Not reported
Tank Status:	Temporarily Out of Service
Tank Construction & Containment:	Single Wall
Pipe Construction & Containment:	Not reported
Other Construction & Containment:	Single Wall
Tank Substance Stored:	Not reported
Other Substance Stored:	Unknown
Tank Release Detection:	None
Pipe Release Detection:	Not reported

OLD SOUTHERN UNION GAS BUILDING (Continued) **U003040521**

Other Release Detection:	Not reported
Tank Corrosion Protection:	None
Pipe Corrosion Protection:	Not reported
Pipe Corrosion Protection II:	Noncorrodible Material (c.g. FRP)
Other Corrosion Protection:	Not reported
Spill and Overfill Protection:	Unknown/None
Spill and Overfill Protection II:	Tight-Fill Fitting
Vapor Recovery Equipment Status:	Not reported
Equipment Installed Date:	Not reported
Equipment Installer:	Not reported
Contractor Registration Number:	Not reported
Tank Registration Date:	12/27/95
Installer License Number:	Not reported

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21 **GALVESTON, CITY OF** FINDS **1000654534**
2514 SEALY **I06#19910716**
GALVESTON, TX 77550

FINDS:
Other Pertinent Environmental Activity Identified at Site:
National Compliance Database (NCDB)

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21 **GALVESTON SOUTHFIELD CO** UST **U001254434**
822 ROSENBERG ST **N/A**
GALVESTON, TX 77550

UST:

Facility ID:	0019559	Customer ID:	00050
Tank ID:	1	Installation Date:	01/01/85
Tank Installer:	Not reported	Tank Tested:	Yes
Tank Emptied:	No	Status Date:	02/16/95
Capacity:	6000	Unit ID:	22573

Tank Material of Construction:	Steel
Pipe Material of Construction:	Not reported
Other Materials of Construction:	COPPER PIPING
Tank Status:	Removed from the Ground
Tank Construction & Containment:	Single Wall
Pipe Construction & Containment:	Single Wall
Other Construction & Containment:	Single Wall
Tank Substance Stored:	Diesel
Other Substance Stored:	Not reported
Tank Release Detection:	Tightness Testing
Pipe Release Detection:	Tightness Testing
Other Release Detection:	Automatic Mon.
Tank Corrosion Protection:	Cathodic Protection System
Pipe Corrosion Protection:	Cathodic Protection System
Pipe Corrosion Protection II:	Noncorrodible Material (c.g. FRP)
Other Corrosion Protection:	Not reported
Spill and Overfill Protection:	Automatic Overfill Device - Shut-Off Valve
Spill and Overfill Protection II:	Tight-Fill Fitting
Vapor Recovery Equipment Status:	Not reported
Equipment Installed Date:	Not reported
Equipment Installer:	Not reported
Contractor Registration Number:	Not reported
Tank Registration Date:	05/08/86
Installer License Number:	Not reported

Facility ID:	0019559	Customer ID:	00050

GALVESTON SOUTHFIELD CO (Continued) **U001254434**

Tank ID:	2	Installation Date:	01/01/73
Tank Installer:	Not reported	Tank Tested:	Yes
Tank Emptied:	No	Status Date:	Not reported
Capacity:	5000	Unit ID:	22573

Tank Material of Construction:	Fiberglass-Reinforced Plastic (FRP)
Pipe Material of Construction:	Fiberglass-Reinforced Plastic (FRP)
Other Materials of Construction:	Not reported
Tank Status:	In Use
Tank Construction & Containment:	Single Wall
Pipe Construction & Containment:	Double Wall
Other Construction & Containment:	Single Wall
Tank Substance Stored:	Diesel
Other Substance Stored:	Not reported
Tank Release Detection:	Automatic In-Tank Monitoring & Inventory Control
Tank Release Detection II:	Tightness Testing
Pipe Release Detection:	Tightness Testing
Other Release Detection:	Automatic Mon.
Tank Corrosion Protection:	External Coatings - Laminate/Tape/Wrap
Tank Corrosion Protection II:	Noncorrodible Material (c.g. FRP)
Pipe Corrosion Protection:	External Coatings - Laminate/Tape/Wrap
Pipe Corrosion Protection II:	Noncorrodible Material (c.g. FRP)
Other Corrosion Protection:	Non-Corrodible Mater
Spill and Overfill Protection:	Automatic Overfill Device - Flow Restricter Valve
Spill and Overfill Protection II:	Tight-Fill Fitting
Vapor Recovery Equipment Status:	Not reported
Equipment Installed Date:	Not reported
Equipment Installer:	Not reported
Contractor Registration Number:	Not reported
Tank Registration Date:	05/08/86
Installer License Number:	Not reported

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22 **PEARL BREWING CO.** **UST** **U001271037**
PO BOX 93 **N/A**
GALVESTON, TX 77550

UST:

Facility ID:	0038401	Customer ID:	00101
Tank ID:	2	Installation Date:	01/01/68
Tank Installer:	Not reported	Tank Tested:	No
Tank Emptied:	No	Status Date:	12/30/78
Capacity:	12000	Unit ID:	21226

Tank Material of Construction:	Steel
Pipe Material of Construction:	Steel
Other Materials of Construction:	Not reported
Tank Status:	Abandoned In-place
Tank Construction & Containment:	Not reported
Pipe Construction & Containment:	Not reported
Other Construction & Containment:	Not reported
Tank Substance Stored:	Not reported
Other Substance Stored:	Vinyl Acetate
Tank Release Detection:	None
Pipe Release Detection:	None
Other Release Detection:	Not reported
Tank Corrosion Protection:	Not reported
Pipe Corrosion Protection:	None
Pipe Corrosion Protection II:	Noncorrodible Material (c.g. FRP)
Other Corrosion Protection:	Not reported
Spill and Overfill Protection:	Unknown/None
Spill and Overfill Protection II:	Tight-Fill Fitting

PEARL BREWING CO. (Continued) **U001271037**

Vapor Recovery Equipment Status:	Not reported
Equipment Installed Date:	Not reported
Equipment Installer:	Not reported
Contractor Registration Number:	Not reported
Tank Registration Date:	05/08/86
Installer License Number:	Not reported

Facility ID:	0038401	Customer ID:	00101
Tank ID:	1	Installation Date:	01/01/68
Tank Installer:	Not reported	Tank Tested:	No
Tank Emptied:	No	Status Date:	12/30/78
Capacity:	12000	Unit ID:	21226

Tank Material of Construction:	Steel
Pipe Material of Construction:	Steel
Other Materials of Construction:	Not reported
Tank Status:	Abandoned In-place
Tank Construction & Containment:	Not reported
Pipe Construction & Containment:	Not reported
Other Construction & Containment:	Not reported
Tank Substance Stored:	Not reported
Other Substance Stored:	Methyl Ethyl Ketone
Tank Release Detection:	None
Pipe Release Detection:	None
Other Release Detection:	Not reported
Tank Corrosion Protection:	Not reported
Pipe Corrosion Protection:	None
Pipe Corrosion Protection II:	Noncorrodible Material (c.g. FRP)
Other Corrosion Protection:	Not reported
Spill and Overfill Protection:	Unknown/None
Spill and Overfill Protection II:	Tight-Fill Fitting
Vapor Recovery Equipment Status:	Not reported
Equipment Installed Date:	Not reported
Equipment Installer:	Not reported
Contractor Registration Number:	Not reported
Tank Registration Date:	05/08/86
Installer License Number:	Not reported

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22 **PEARL BREWING COMPANY - – FACILITY IS C** **TX IHW** **S103599161**
3301 CHURCH ST **N/A**
GALVESTON, TX 77553

TX IHW:

Registration Number:	30202
Registration Initial Notification Date:	06/02/1980
Registration Last Amendment Date:	09/30/1983
EPA Identification:	Not reported
TNRCC Premit Number:	Not reported
Description of Facility Site Location:	3301 CHURCH ST, GALVESTON, TX, 77553
Site Primary Standard Industrial Code:	20820
	Malt Beverages Manufacturing
Registration is a Generator of Waste:	Yes
Registration is a Receivers of Waste:	No
Registration is a Transporter of Waste:	No
Registration is a Transfer Facility:	No
Mexican Facility:	Does not represent a Maquiladora (Mexican Facility)
Facility Status:	Inactive
Type of Generator:	Not reported
Company Name:	PEARL BREWING COMPANY

PEARL BREWING COMPANY - – FACILITY IS C (Continued) **S103599161**

Facility County:	Not reported
TNRCC Region:	Not reported
Mailing Address:	3301 CHURCH ST GALVESTON, TX 77553
Mailing County:	USA
Contact:	Phil Hammerschmidt
Contact Telephone Number:	713-763-6446

Additional detail may be available for this site. Please contact your EDR Account Executive for more information

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23 **HORNBECK OFFSHORE OPERATORS IN** **RCRIS-SQG** **1000307791**
2317 BROADWAY **FINDS** **TXD054453881**
GALVESTON, TX 77550

RCRIS:

Owner:	HORNBECK OFFSHORE SERV. (000) 000-0000
Contact:	HARVEY HASKETT (409) 762-8228
Record Date:	10/14/1986
Classification:	Hazardous Waste Transporter
Used Oil Recyc:	No
Violation Status:	No violations found

---

23 **TONY HONE FIRESTONE TIRE** **LUST** **U001255332**
2302 BROADWAY ST **UST** **N/A**
GALVESTON, TX 77550

LUST:

Facility ID:	0020571	Discovery Date:	3/5/93
Data Entry Date:	4/16/93	Lead Office:	1/1P/1
PST Coordinator:	EJC/AES/ZL/TJL	RPR Coordinator:	EJC
Region:	12	Region City ID:	HOUSTON
Leaking Tank #:	106283		
Responsible Party:	BRIDGESTONE/FIRESTONE		
RP Contact:	DEBRA HAMLIN		
RP Address:	1200 FIRESTONE PKWY AKRON, OH 44317 - 0001		
RP Telephone:	847/981-2403		
County Code:	084		
Priority:	GW IMPACT, NON-PUBLIC/NON-DOMESTIC H20 SUPPLY WELL W/IN .25mi		
Status:	PHASE 2 IN PROGRESS		

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23 **TRANS SEAFOOD MARKET** **UST** **U001542840**
2231 AVENUE J **N/A**
SAN LEON, TX 77539

UST:

Facility ID:	0065031	Customer ID:	00149
Tank ID:	1	Installation Date:	12/01/93
Tank Installer:	Not reported	Tank Tested:	No
Tank Emptied:	No	Status Date:	Not reported

TRANS SEAFOOD MARKET (Continued) **U001542840**

Capacity:	15000	Unit ID:	41313
Tank Material of Construction:	Fiberglass-Reinforced Plastic (FRP)		
Pipe Material of Construction:	Fiberglass-Reinforced Plastic (FRP)		
Other Materials of Construction:	Not reported		
Tank Status:	In Use		
Tank Construction & Containment:	Single Wall		
Pipe Construction & Containment:	Single Wall		
Other Construction & Containment:	Single Wall		
Tank Substance Stored:	Gasoline		
Other Substance Stored:	Not reported		
Tank Release Detection:	Vapor Monitoring		
Pipe Release Detection:	Line Leak Detectors		
Other Release Detection:	Not reported		
Tank Corrosion Protection:	Noncorrodible Material (c.g. FRP)		
Tank Corrosion Protection II:	Noncorrodible Material (c.g. FRP)		
Pipe Corrosion Protection:	Noncorrodible Material (c.g. FRP)		
Pipe Corrosion Protection II:	Noncorrodible Material (c.g. FRP)		
Other Corrosion Protection:	Not reported		
Spill and Overfill Protection:	Automatic Overfill Device - Flow Restricter Valve		
Spill and Overfill Protection II:	Tight-Fill Fitting		
Vapor Recovery Equipment Status:	Not reported		
Equipment Installed Date:	Not reported		
Equipment Installer:	Not reported		
Contractor Registration Number:	Not reported		
Tank Registration Date:	09/30/93		
Installer License Number:	Not reported		

Facility ID:	0065031	Customer ID:	00149
Tank ID:	2	Installation Date:	12/01/93
Tank Installer:	Not reported	Tank Tested:	No
Tank Emptied:	No	Status Date:	Not reported
Capacity:	15000	Unit ID:	41313
Tank Material of Construction:	Fiberglass-Reinforced Plastic (FRP)		
Pipe Material of Construction:	Fiberglass-Reinforced Plastic (FRP)		
Other Materials of Construction:	Not reported		
Tank Status:	In Use		
Tank Construction & Containment:	Single Wall		
Pipe Construction & Containment:	Single Wall		
Other Construction & Containment:	Single Wall		
Tank Substance Stored:	Gasoline		
Other Substance Stored:	Not reported		
Tank Release Detection:	Vapor Monitoring		
Pipe Release Detection:	Line Leak Detectors		
Other Release Detection:	Not reported		
Tank Corrosion Protection:	Noncorrodible Material (c.g. FRP)		
Tank Corrosion Protection II:	Noncorrodible Material (c.g. FRP)		
Pipe Corrosion Protection:	Noncorrodible Material (c.g. FRP)		
Pipe Corrosion Protection II:	Noncorrodible Material (c.g. FRP)		
Other Corrosion Protection:	Not reported		
Spill and Overfill Protection:	Automatic Overfill Device - Flow Restricter Valve		
Spill and Overfill Protection II:	Tight-Fill Fitting		
Vapor Recovery Equipment Status:	Not reported		
Equipment Installed Date:	Not reported		
Equipment Installer:	Not reported		
Contractor Registration Number:	Not reported		
Tank Registration Date:	09/30/93		
Installer License Number:	Not reported		

23 HUNTER FRED F
2228 BROADWAY
GALVESTON, TX 77550

RCRIS-SQG **1000401340**
FINDS **TXD065091050**

RCRIS:

Owner: FRED F HUNTER CORP
(000) 000-0000

Contact: HOWARD HEERWAGEN
(713) 765-9466

Record Date: 08/04/1980

Classification: Small Quantity Generator

Used Oil Recyc: No

Violation Status: No violations found

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23 BROADWAY MOBIL
2227 BROADWAY ST
GALVESTON, TX 77550

UST **U001260615**
N/A

UST:

Facility ID:	0026699	Customer ID:	00069
Tank ID:	1	Installation Date:	01/01/68
Tank Installer:	Not reported	Tank Tested:	No
Tank Emptied:	No	Status Date:	Not reported
Capacity:	6000	Unit ID:	25559

Tank Material of Construction:	Steel
Pipe Material of Construction:	Steel
Other Materials of Construction:	Not reported
Tank Status:	In Use
Tank Construction & Containment:	Not reported
Pipe Construction & Containment:	Not reported
Other Construction & Containment:	Not reported
Tank Substance Stored:	Gasoline
Other Substance Stored:	Not reported
Tank Release Detection:	None
Pipe Release Detection:	None
Other Release Detection:	Not reported
Tank Corrosion Protection:	Cathodic Protection System
Pipe Corrosion Protection:	Cathodic Protection System
Pipe Corrosion Protection II:	Noncorrodible Material (c.g. FRP)
Other Corrosion Protection:	Not reported
Spill and Overfill Protection:	Unknown/None
Spill and Overfill Protection II:	Tight-Fill Fitting
Vapor Recovery Equipment Status:	Not reported
Equipment Installed Date:	Not reported
Equipment Installer:	Not reported
Contractor Registration Number:	Not reported
Tank Registration Date:	05/08/86
Installer License Number:	Not reported

Facility ID:	0026699	Customer ID:	00069
Tank ID:	3	Installation Date:	01/01/68
Tank Installer:	Not reported	Tank Tested:	No
Tank Emptied:	No	Status Date:	Not reported
Capacity:	8000	Unit ID:	25559

Tank Material of Construction:	Steel
Pipe Material of Construction:	Steel
Other Materials of Construction:	Not reported

BROADWAY MOBIL (Continued) **U001260615**

Tank Status:	In Use
Tank Construction & Containment:	Not reported
Pipe Construction & Containment:	Not reported
Other Construction & Containment:	Not reported
Tank Substance Stored:	Gasoline
Other Substance Stored:	Not reported
Tank Release Detection:	None
Pipe Release Detection:	None
Other Release Detection:	Not reported
Tank Corrosion Protection:	Cathodic Protection System
Pipe Corrosion Protection:	Cathodic Protection System
Pipe Corrosion Protection II:	Noncorrodible Material (c.g. FRP)
Other Corrosion Protection:	Not reported
Spill and Overfill Protection:	Unknown/None
Spill and Overfill Protection II:	Tight-Fill Fitting
Vapor Recovery Equipment Status:	Not reported
Equipment Installed Date:	Not reported
Equipment Installer:	Not reported
Contractor Registration Number:	Not reported
Tank Registration Date:	05/08/86
Installer License Number:	Not reported

Facility ID:	0026699	Customer ID:	00069
Tank ID:	2	Installation Date:	01/01/68
Tank Installer:	Not reported	Tank Tested:	No
Tank Emptied:	No	Status Date:	Not reported
Capacity:	8000	Unit ID:	25559

Tank Material of Construction:	Steel
Pipe Material of Construction:	Steel
Other Materials of Construction:	Not reported
Tank Status:	In Use
Tank Construction & Containment:	Not reported
Pipe Construction & Containment:	Not reported
Other Construction & Containment:	Not reported
Tank Substance Stored:	Gasoline
Other Substance Stored:	Not reported
Tank Release Detection:	None
Pipe Release Detection:	None
Other Release Detection:	Not reported
Tank Corrosion Protection:	Cathodic Protection System
Pipe Corrosion Protection:	Cathodic Protection System
Pipe Corrosion Protection II:	Noncorrodible Material (c.g. FRP)
Other Corrosion Protection:	Not reported
Spill and Overfill Protection:	Unknown/None
Spill and Overfill Protection II:	Tight-Fill Fitting
Vapor Recovery Equipment Status:	Not reported
Equipment Installed Date:	Not reported
Equipment Installer:	Not reported
Contractor Registration Number:	Not reported
Tank Registration Date:	05/08/86
Installer License Number:	Not reported

Facility ID:	0026699	Customer ID:	00069
Tank ID:	4	Installation Date:	01/01/68
Tank Installer:	Not reported	Tank Tested:	No
Tank Emptied:	No	Status Date:	Not reported
Capacity:	550	Unit ID:	25559

BROADWAY MOBIL (Continued) **U001260615**

Tank Material of Construction:	Steel
Pipe Material of Construction:	Steel
Other Materials of Construction:	Not reported
Tank Status:	In Use
Tank Construction & Containment:	Not reported
Pipe Construction & Containment:	Not reported
Other Construction & Containment:	Not reported
Tank Substance Stored:	Used Oil
Other Substance Stored:	Not reported
Tank Release Detection:	None
Pipe Release Detection:	None
Other Release Detection:	Not reported
Tank Corrosion Protection:	Cathodic Protection System
Pipe Corrosion Protection:	Cathodic Protection System
Pipe Corrosion Protection II:	Noncorrodible Material (c.g. FRP)
Other Corrosion Protection:	Not reported
Spill and Overfill Protection:	Unknown/None
Spill and Overfill Protection II:	Tight-Fill Fitting
Vapor Recovery Equipment Status:	Not reported
Equipment Installed Date:	Not reported
Equipment Installer:	Not reported
Contractor Registration Number:	Not reported
Tank Registration Date:	05/08/86
Installer License Number:	Not reported

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24 **TX Spills** **S101724818**
N/A

26TH / BROADWAY
GALVESTON (County), TX

SPILLS:

Date of Spill:	12/16/1991		
Material:	OIL	Media Affected:	Not reported
District:	Odessa	Origin:	Highway Vehicle
Cause:	Human Error	Adequate Clean:	NO
Release Date:	12/16/1991	Classification:	Minor
Spill Time:	Not reported	Time Reported:	Not reported
Amnt Spilled:	20 GAL	Amnt in Water:	Not reported
Water Affected:	NONE	Basin Code:	Not reported
Basin Name:	GA		
Respnsbl Party:	UNK		
	0		
	X, TX 0		
RP Phone(s):	0 -		
Interim Report:	Yes		
Information Final:	Not reported		
Coordinator:	D. FAWN		
Regional Number:	Not reported	Occurance End	Not reported
Reported By:	Not reported	Representing:	Not reported
Rpt by Phone:	Not reported	Rpt by Phone 2:	Not reported
Rpt by Region:	Not reported	Material Code:	Not reported
Facility Contact:	Not reported	Facility Phone:	Not reported
Lat/Long:	Not reported	Air Release:	Not reported
Permit Number:	Not reported	EPA Number:	Not reported

Refered to Enforcement Date:	Not reported
Letter Requested Date:	Not reported
Letter Recieved Date:	Not reported
Remediation Start Date:	Not reported
Remediation Cleanup Date:	Not reported
Cleanup Required Date:	Not reported

(Continued) **S101724818**

Was Air Program Notified: Not reported
Email of Regions, & TDH: Not reported
QA Password: Not reported
Was the Form Checked for Accuracy: Not reported
Investigator: Not reported | Agency: Not reported
Inspection Date: Not reported
Other Agency: Not reported | Notification Date: Not reported
Person Notified: Not reported | Notifier: Not reported

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24 **STOP N GO #2493** **LUST** **U003040516**
2525 BROADWAY ST **UST** **N/A**
GALVESTON, TX 77550

LUST:
Facility ID: 0035239 | Discovery Date: 8/15/91
Data Entry Date: 9/5/91 | Lead Office: 1/1P/1/1P/1
PST Coordinator: SKV/AES/SKV/AES | RPR Coordinator: SKV
Region: 12 | Region City ID: HOUSTON
Leaking Tank #: 099996
Responsible Party: DIAMOND SHAMROCK REF & MKTG CO
RP Contact: LOUIS MOSCONI
RP Address: 1117 SILBER ROAD, BLDG C
HOUSTON, TX 77055
RP Telephone: 713/263-7377
County Code: 084
Priority: GW IMPACT, PUBLIC/COMESTIC WATER SUPPLY WELL W/IN 0.25mi
Status: PHASE 3 IN PROGRESS AND QUARTERLY MONITORING IN PROGRESS

UST:
Facility ID: 0035239 | Customer ID: 00093
Tank ID: 3 | Installation Date: 01/01/85
Tank Installer: Not reported | Tank Tested: No
Tank Emptied: No | Status Date: Not reported
Capacity: 1000 | Unit ID: 21599
Tank Material of Construction: Composite (steel with FRP laminate)
Pipe Material of Construction: Fiberglass-Reinforced Plastic (FRP)
Other Materials of Construction: Not reported
Tank Status: In Use
Tank Construction & Containment: Single Wall
Pipe Construction & Containment: Single Wall
Other Construction & Containment: Single Wall
Tank Substance Stored: Diesel
Other Substance Stored: Not reported
Tank Release Detection: Stat. Inventory Reconciliation (SIR)
Tank Release Detection II: Inventory Control
Pipe Release Detection: Line Leak Detectors
Pipe Release Detection II: Stat. Inventory Reconciliation (SIR)
Other Release Detection: MTG
Tank Corrosion Protection: Composite Tank (steel w/FRP laminate)
Tank Corrosion Protection II: Noncorrodible Material (c.g. FRP)
Pipe Corrosion Protection: Noncorrodible Material (c.g. FRP)
Pipe Corrosion Protection II: Noncorrodible Material (c.g. FRP)
Other Corrosion Protection: Not reported
Spill and Overfill Protection: Automatic Overfill Device - Flow Restricter Valve
Spill and Overfill Protection II: Tight-Fill Fitting
Vapor Recovery Equipment Status: Not reported
Equipment Installed Date: Not reported
Equipment Installer: Not reported
Contractor Registration Number: Not reported

STOP N GO #2493 (Continued) **U003040516**

Tank Registration Date: 05/02/86
Installer License Number: Not reported

Facility ID:	0035239	Customer ID:	00093
Tank ID:	2	Installation Date:	01/01/85
Tank Installer:	Not reported	Tank Tested:	No
Tank Emptied:	No	Status Date:	Not reported
Capacity:	1000	Unit ID:	21599

Tank Material of Construction: Composite (steel with FRP laminate)
Pipe Material of Construction: Fiberglass-Reinforced Plastic (FRP)
Other Materials of Construction: Not reported
Tank Status: In Use
Tank Construction & Containment: Single Wall
Pipe Construction & Containment: Single Wall
Other Construction & Containment: Single Wall
Tank Substance Stored: Gasoline
Other Substance Stored: Not reported
Tank Release Detection: Stat. Inventory Reconciliation (SIR)
Tank Release Detection II: Inventory Control
Pipe Release Detection: Line Leak Detectors
Pipe Release Detection II: Stat. Inventory Reconciliation (SIR)
Other Release Detection: MTG
Tank Corrosion Protection: Composite Tank (steel w/FRP laminate)
Tank Corrosion Protection II: Noncorrodible Material (c.g. FRP)
Pipe Corrosion Protection: Noncorrodible Material (c.g. FRP)
Pipe Corrosion Protection II: Noncorrodible Material (c.g. FRP)
Other Corrosion Protection: Not reported
Spill and Overfill Protection: Automatic Overfill Device - Flow Restricter Valve
Spill and Overfill Protection II: Tight-Fill Fitting
Vapor Recovery Equipment Status: Not reported
Equipment Installed Date: Not reported
Equipment Installer: Not reported
Contractor Registration Number: Not reported
Tank Registration Date: 05/02/86
Installer License Number: Not reported

Facility ID:	0035239	Customer ID:	00093
Tank ID:	1	Installation Date:	01/01/85
Tank Installer:	Not reported	Tank Tested:	No
Tank Emptied:	No	Status Date:	Not reported
Capacity:	1000	Unit ID:	21599

Tank Material of Construction: Composite (steel with FRP laminate)
Pipe Material of Construction: Fiberglass-Reinforced Plastic (FRP)
Other Materials of Construction: Not reported
Tank Status: In Use
Tank Construction & Containment: Single Wall
Pipe Construction & Containment: Single Wall
Other Construction & Containment: Single Wall
Tank Substance Stored: Gasoline
Other Substance Stored: Not reported
Tank Release Detection: Stat. Inventory Reconciliation (SIR)
Tank Release Detection II: Inventory Control
Pipe Release Detection: Line Leak Detectors
Pipe Release Detection II: Stat. Inventory Reconciliation (SIR)
Other Release Detection: MTG
Tank Corrosion Protection: Composite Tank (steel w/FRP laminate)
Tank Corrosion Protection II: Noncorrodible Material (c.g. FRP)

STOP N GO #2493 (Continued) **U003040516**

Pipe Corrosion Protection:	Noncorrodible Material (c.g. FRP)
Pipe Corrosion Protection II:	Noncorrodible Material (c.g. FRP)
Other Corrosion Protection:	Not reported
Spill and Overfill Protection:	Automatic Overfill Device - Flow Restricter Valve
Spill and Overfill Protection II:	Tight-Fill Fitting
Vapor Recovery Equipment Status:	Not reported
Equipment Installed Date:	Not reported
Equipment Installer:	Not reported
Contractor Registration Number:	Not reported
Tank Registration Date:	05/02/86
Installer License Number:	Not reported

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24 **GALVESTON TIRE & SUPPLY** **LUST** **U001262237**
2502 BROADWAY ST **UST** **N/A**
GALVESTON, TX 77550

LUST:

Facility ID:	0028600	Discovery Date:	2/12/96
Data Entry Date:	3/6/96	Lead Office:	1P/1/2
PST Coordinator:	AES/XYZ	RPR Coordinator:	VYF
Region:	12	Region City ID:	HOUSTON
Leaking Tank #:	110479		
Responsible Party:	CHEVRON PRODUCTS COMPANY		
RP Contact:	GRAIG DODD		
RP Address:	PO BOX 4256 HOUSTON, TX 77210		
RP Telephone:	713/219-5229		
County Code:	084		
Priority:	GW IMPACT, PUBLIC/COMESTIC WATER SUPPLY WELL W/IN 0.25mi		
Status:	FINAL CONCURRENCE PENDING DOCUMENTATION OF WELL PLUGGING		

UST:

Facility ID:	0028600	Customer ID:	00075
Tank ID:	1	Installation Date:	01/01/74
Tank Installer:	Not reported	Tank Tested:	No
Tank Emptied:	No	Status Date:	05/01/83
Capacity:	1000	Unit ID:	13675

Tank Material of Construction:	Fiberglass-Reinforced Plastic (FRP)
Pipe Material of Construction:	Fiberglass-Reinforced Plastic (FRP)
Other Materials of Construction:	Not reported
Tank Status:	Removed from the Ground
Tank Construction & Containment:	Not reported
Pipe Construction & Containment:	Not reported
Other Construction & Containment:	Not reported
Tank Substance Stored:	Used Oil
Other Substance Stored:	Not reported
Tank Release Detection:	None
Pipe Release Detection:	None
Other Release Detection:	Not reported
Tank Corrosion Protection:	None
Pipe Corrosion Protection:	None
Pipe Corrosion Protection II:	Noncorrodible Material (c.g. FRP)
Other Corrosion Protection:	Not reported
Spill and Overfill Protection:	Unknown/None
Spill and Overfill Protection II:	Tight-Fill Fitting
Vapor Recovery Equipment Status:	Not reported
Equipment Installed Date:	Not reported
Equipment Installer:	Not reported
Contractor Registration Number:	Not reported

GALVESTON TIRE & SUPPLY (Continued) **U001262237**

Tank Registration Date: 05/08/86
Installer License Number: Not reported

Facility ID:	0028600	Customer ID:	00075
Tank ID:	4	Installation Date:	01/01/74
Tank Installer:	Not reported	Tank Tested:	No
Tank Emptied:	No	Status Date:	Not reported
Capacity:	9564	Unit ID:	13675

Tank Material of Construction: Fiberglass-Reinforced Plastic (FRP)
Pipe Material of Construction: Fiberglass-Reinforced Plastic (FRP)
Other Materials of Construction: Not reported
Tank Status: In Use
Tank Construction & Containment: Single Wall
Pipe Construction & Containment: Single Wall
Other Construction & Containment: Single Wall
Tank Substance Stored: Gasoline
Other Substance Stored: Not reported
Tank Release Detection: Inventory Control
Tank Release Detection II: Tightness Testing
Pipe Release Detection: Line Leak Detectors
Pipe Release Detection II: Tightness Testing
Other Release Detection: Not reported
Tank Corrosion Protection: Noncorrodible Material (c.g. FRP)
Pipe Corrosion Protection: Noncorrodible Material (c.g. FRP)
Pipe Corrosion Protection II: Noncorrodible Material (c.g. FRP)
Other Corrosion Protection: Not reported
Spill and Overfill Protection: Automatic Overfill Device - Flow Restricter Valve
Spill and Overfill Protection II: Tight-Fill Fitting
Vapor Recovery Equipment Status: Stage 2 Vapor Recovery Equipment Installed
Equipment Installed Date: 02/24/94
Equipment Installer: Not reported
Contractor Registration Number: Not reported
Tank Registration Date: 05/08/86
Installer License Number: Not reported

Facility ID:	0028600	Customer ID:	00075
Tank ID:	3	Installation Date:	01/01/74
Tank Installer:	Not reported	Tank Tested:	No
Tank Emptied:	No	Status Date:	Not reported
Capacity:	9564	Unit ID:	13675

Tank Material of Construction: Fiberglass-Reinforced Plastic (FRP)
Pipe Material of Construction: Fiberglass-Reinforced Plastic (FRP)
Other Materials of Construction: Not reported
Tank Status: In Use
Tank Construction & Containment: Single Wall
Pipe Construction & Containment: Single Wall
Other Construction & Containment: Single Wall
Tank Substance Stored: Gasoline
Other Substance Stored: Not reported
Tank Release Detection: Inventory Control
Tank Release Detection II: Tightness Testing
Pipe Release Detection: Line Leak Detectors
Pipe Release Detection II: Tightness Testing
Other Release Detection: Not reported
Tank Corrosion Protection: Noncorrodible Material (c.g. FRP)
Pipe Corrosion Protection: Noncorrodible Material (c.g. FRP)
Pipe Corrosion Protection II: Noncorrodible Material (c.g. FRP)

GALVESTON TIRE & SUPPLY (Continued) **U001262237**

Other Corrosion Protection: Not reported
Spill and Overfill Protection: Automatic Overfill Device - Flow Restricter Valve
Spill and Overfill Protection II: Tight-Fill Fitting
Vapor Recovery Equipment Status: Stage 2 Vapor Recovery Equipment Installed
Equipment Installed Date: 02/24/94
Equipment Installer: Not reported
Contractor Registration Number: Not reported
Tank Registration Date: 05/08/86
Installer License Number: Not reported

Facility ID:	0028600	Customer ID:	00075
Tank ID:	2	Installation Date:	01/01/74
Tank Installer:	Not reported	Tank Tested:	No
Tank Emptied:	No	Status Date:	Not reported
Capacity:	9564	Unit ID:	13675

Tank Material of Construction: Fiberglass-Reinforced Plastic (FRP)
Pipe Material of Construction: Fiberglass-Reinforced Plastic (FRP)
Other Materials of Construction: Not reported
Tank Status: In Use
Tank Construction & Containment: Single Wall
Pipe Construction & Containment: Single Wall
Other Construction & Containment: Single Wall
Tank Substance Stored: Gasoline
Other Substance Stored: Not reported
Tank Release Detection: Inventory Control
Tank Release Detection II: Tightness Testing
Pipe Release Detection: Line Leak Detectors
Pipe Release Detection II: Tightness Testing
Other Release Detection: Not reported
Tank Corrosion Protection: Noncorrodible Material (c.g. FRP)
Pipe Corrosion Protection: Noncorrodible Material (c.g. FRP)
Pipe Corrosion Protection II: Noncorrodible Material (c.g. FRP)
Other Corrosion Protection: Not reported
Spill and Overfill Protection: Automatic Overfill Device - Flow Restricter Valve
Spill and Overfill Protection II: Tight-Fill Fitting
Vapor Recovery Equipment Status: Stage 2 Vapor Recovery Equipment Installed
Equipment Installed Date: 02/24/94
Equipment Installer: Not reported
Contractor Registration Number: Not reported
Tank Registration Date: 05/08/86
Installer License Number: Not reported

Facility ID:	0028600	Customer ID:	00075
Tank ID:	5	Installation Date:	01/01/74
Tank Installer:	Not reported	Tank Tested:	No
Tank Emptied:	No	Status Date:	Not reported
Capacity:	9728	Unit ID:	13675

Tank Material of Construction: Fiberglass-Reinforced Plastic (FRP)
Pipe Material of Construction: Fiberglass-Reinforced Plastic (FRP)
Other Materials of Construction: Not reported
Tank Status: In Use
Tank Construction & Containment: Single Wall
Pipe Construction & Containment: Single Wall
Other Construction & Containment: Single Wall
Tank Substance Stored: Diesel
Other Substance Stored: Not reported
Tank Release Detection: Inventory Control

GALVESTON TIRE & SUPPLY (Continued) **U001262237**

Tank Release Detection II:	Tightness Testing
Pipe Release Detection:	Line Leak Detectors
Pipe Release Detection II:	Tightness Testing
Other Release Detection:	Not reported
Tank Corrosion Protection:	Noncorrodible Material (c.g. FRP)
Pipe Corrosion Protection:	Noncorrodible Material (c.g. FRP)
Pipe Corrosion Protection II:	Noncorrodible Material (c.g. FRP)
Other Corrosion Protection:	Not reported
Spill and Overfill Protection:	Automatic Overfill Device - Flow Restricter Valve
Spill and Overfill Protection II:	Tight-Fill Fitting
Vapor Recovery Equipment Status:	Not reported
Equipment Installed Date:	Not reported
Equipment Installer:	Not reported
Contractor Registration Number:	Not reported
Tank Registration Date:	05/08/86
Installer License Number:	Not reported

Facility ID:	0028600	Customer ID:	00075
Tank ID:	1A	Installation Date:	05/01/83
Tank Installer:	Not reported	Tank Tested:	No
Tank Emptied:	No	Status Date:	Not reported
Capacity:	548	Unit ID:	13675

Tank Material of Construction:	Fiberglass-Reinforced Plastic (FRP)
Pipe Material of Construction:	Fiberglass-Reinforced Plastic (FRP)
Other Materials of Construction:	Not reported
Tank Status:	In Use
Tank Construction & Containment:	Single Wall
Pipe Construction & Containment:	Not reported
Other Construction & Containment:	Single Wall
Tank Substance Stored:	Used Oil
Other Substance Stored:	Not reported
Tank Release Detection:	Inventory Control
Tank Release Detection II:	Tightness Testing
Pipe Release Detection:	Line Leak Detectors
Pipe Release Detection II:	Tightness Testing
Other Release Detection:	Not reported
Tank Corrosion Protection:	Noncorrodible Material (c.g. FRP)
Pipe Corrosion Protection:	Noncorrodible Material (c.g. FRP)
Pipe Corrosion Protection II:	Noncorrodible Material (c.g. FRP)
Other Corrosion Protection:	Not reported
Spill and Overfill Protection:	Automatic Overfill Device - Flow Restricter Valve
Spill and Overfill Protection II:	Tight-Fill Fitting
Vapor Recovery Equipment Status:	Not reported
Equipment Installed Date:	Not reported
Equipment Installer:	Not reported
Contractor Registration Number:	Not reported
Tank Registration Date:	05/08/86
Installer License Number:	Not reported

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24 **CHIEF AUTO PARTS #24760** **UST** **U001287930**
2501 BROADWAY ST **N/A**
GALVESTON, TX 77550

UST:

Facility ID:	0058137	Customer ID:	00138
Tank ID:	1	Installation Date:	Not reported
Tank Installer:	Not reported	Tank Tested:	No
Tank Emptied:	No	Status Date:	10/31/85
Capacity:	9999	Unit ID:	33342

CHIEF AUTO PARTS #24760 (Continued) **U001287930**

Tank Material of Construction:	Not reported
Pipe Material of Construction:	Not reported
Other Materials of Construction:	Not reported
Tank Status:	Abandoned In-place
Tank Construction & Containment:	Not reported
Pipe Construction & Containment:	Not reported
Other Construction & Containment:	Not reported
Tank Substance Stored:	Not reported
Other Substance Stored:	Empty
Tank Release Detection:	None
Pipe Release Detection:	None
Other Release Detection:	Not reported
Tank Corrosion Protection:	None
Pipe Corrosion Protection:	None
Pipe Corrosion Protection II:	Noncorrodible Material (c.g. FRP)
Other Corrosion Protection:	Not reported
Spill and Overfill Protection:	Unknown/None
Spill and Overfill Protection II:	Tight-Fill Fitting
Vapor Recovery Equipment Status:	Not reported
Equipment Installed Date:	Not reported
Equipment Installer:	Not reported
Contractor Registration Number:	Not reported
Tank Registration Date:	04/29/91
Installer License Number:	Not reported

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24 **GONZALES TIRE & SUPPLY** **FINDS** **1001251056**
2502 BROADWAY **TX0965927**
GALVESTON, TX 77550

FINDS:
Other Pertinent Environmental Activity Identified at Site:
AIRS Facility System (AIRS/AFS)

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24 **FORMER 7-ELEVEN STORE # 24760** **LUST** **S103499014**
2501 BROADWAY **N/A**
GALVESTON, TX

LUST:

Facility ID:	0033342	Discovery Date:	9/17/92
Data Entry Date:	10/23/92	Lead Office:	1/1P/1
PST Coordinator:	VRK/AES/MCL/KMC	RPR Coordinator:	VRK
Region:	12	Region City ID:	HOUSTON
Leaking Tank #:	104783		
Responsible Party:	SOUTHLAND CORP		
RP Contact:	JANE LOMAS		
RP Address:	1201 BELTLINE RD. COPPELL, TX 75019		
RP Telephone:	817/341-8313		
County Code:	084.		
Priority:	GW IMPACT, PUB/DOM WATER SUPPLY WELL W/IN .25 - .5 mi		
Status:	PHASE 2 IN PROGRESS		

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24 **VACANT 1.08-ACRE TRACT** **LUST** **S103502105**
2427 BROADWAY **N/A**
GALVESTON, TX

VACANT 1.08-ACRE TRACT (Continued) **S103502105**

LUST:

Facility ID:	Not reported	Discovery Date:	6/12/98
Data Entry Date:	7/22/98	Lead Office:	CENTRAL OFFICE LEAD
PST Coordinator:	XYZ	RPR Coordinator:	PHG
Region:	12	Region City ID:	HOUSTON
Leaking Tank #:	113356		
Responsible Party:	TEXAS FIRST BANK - GALVESTON		
RP Contact:	MATTHEW T DOYLE		
RP Address:	3232 PALMER HWY TEXAS CITY, TX 77592		
RP Telephone:	409/948-6577		
County Code:	084		
Priority:	GW IMPACTED, NO APPARENT THREATS OR IMPACTS TO RECEPTORS		
Status:	INCIDENT REPORTED, INITIAL DIRECTIVES NOT YET ISSUED		

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25 **GALVESTON TRANSFER STATION** **AST** **A100122660**
5515 HARBORSIDE DR **N/A**
GALVESTON, TX 77553

AST:

Facility ID:	0050342	Owner ID:	00155102
Tank ID:	1	Facility Type:	Fleet refueling
Number of USTs:	Not reported	Number of ASTs:	2
Capacity:	0010000	Tank Status:	Not in use
Customer ID:	50711		
Contact:	Geeck, Deena	Contact phone:	713-675-6101
Content:	Diesel	Other content:	Not reported
Containment:	Not reported	Other Contain.:	Not reported
Material:	Steel	Other material:	Not reported
Facility phone:	Not reported	Date Installed:	01/01/83
Facility Manager:	Not reported	Manager Title:	Not reported
Owner:	BFI Waste Systems of North Ameri		
Owner Address:	5757A Oat Houston, TX 77078		
Date out of use:	08/31/93		
Date registration form was received:	02/23/90		
Vapor recovery equipment status:	Not reported		
State 2 equipment installed:	Not reported		

Facility ID:	0050342	Owner ID:	00176415
Tank ID:	2	Facility Type:	Fleet refueling
Number of USTs:	Not reported	Number of ASTs:	2
Capacity:	0010000	Tank Status:	In use
Customer ID:	50711		
Contact:	Geeck, Deena	Contact phone:	713-675-6101
Content:	Diesel	Other content:	Not reported
Containment:	Concrete	Other Contain.:	Not reported
Material:	Not reported	Other material:	Not reported
Facility phone:	Not reported	Date Installed:	01/01/83
Facility Manager:	Not reported	Manager Title:	Not reported
Owner:	BFI Waste Systems of North Ameri		
Owner Address:	5757A Oat Houston, TX 77078		
Date out of use:	Not reported		
Date registration form was received:	02/23/90		
Vapor recovery equipment status:	Not reported		
State 2 equipment installed:	Not reported		

26 **ARMOUR BUTTEROWE BUILDING** | **LUST** | **S103500473**
1111 23RD ST | **N/A**
GALVESTON, TX

LUST:

Facility ID:	Not reported	Discovery Date:	2/22/94
Data Entry Date:	11/1/94	Lead Office:	DISTRICT LEAD
PST Coordinator:	RPR	RPR Coordinator:	RPR
Region:	12	Region City ID:	HOUSTON
Leaking Tank #:	108654		
Responsible Party:	GEORGE P MITCHELL		
RP Contact:	MICHAEL GAERTHER		
RP Address:	305 21ST ST GALVESTON, TX 77550		
RP Telephone:	409/762-0500		
County Code:	084		
Priority:	NO GW IMPACT, NO APPARENT THREATS OR IMPACTS TO RECEPTORS		
Status:	FINAL CONCURRENCE ISSUED, CASE CLOSED		

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27 **7 AM FOOD STORE** | **UST** | **U001277939**
2728 BROADWAY ST | **N/A**
GALVESTON, TX 77551

UST:

Facility ID:	0046485	Customer ID:	00121
Tank ID:	3	Installation Date:	01/01/76
Tank Installer:	Not reported	Tank Tested:	No
Tank Emptied:	No	Status Date:	00/00/00
Capacity:	4000	Unit ID:	49418

Tank Material of Construction:	Steel
Pipe Material of Construction:	Steel
Other Materials of Construction:	Not reported
Tank Status:	Temporarily Out of Service
Tank Construction & Containment:	Not reported
Pipe Construction & Containment:	Not reported
Other Construction & Containment:	Not reported
Tank Substance Stored:	Not reported
Other Substance Stored:	Empty
Tank Release Detection:	None
Pipe Release Detection:	None
Other Release Detection:	Not reported
Tank Corrosion Protection:	Not reported
Pipe Corrosion Protection:	None
Pipe Corrosion Protection II:	Noncorrodible Material (c.g. FRP)
Other Corrosion Protection:	Not reported
Spill and Overfill Protection:	Unknown/None
Spill and Overfill Protection II:	Tight-Fill Fitting
Vapor Recovery Equipment Status:	Not reported
Equipment Installed Date:	Not reported
Equipment Installer:	Not reported
Contractor Registration Number:	Not reported
Tank Registration Date:	10/03/88
Installer License Number:	Not reported

Facility ID:	0046485	Customer ID:	00121
Tank ID:	2	Installation Date:	01/01/76
Tank Installer:	Not reported	Tank Tested:	No
Tank Emptied:	No	Status Date:	Not reported
Capacity:	6000	Unit ID:	49418

Tank Material of Construction:	Steel
Pipe Material of Construction:	Fiberglass-Reinforced Plastic (FRP)

7 AM FOOD STORE (Continued) **U001277939**

Other Materials of Construction:	Not reported
Tank Status:	In Use
Tank Construction & Containment:	Not reported
Pipe Construction & Containment:	Not reported
Other Construction & Containment:	Not reported
Tank Substance Stored:	Gasoline
Other Substance Stored:	Not reported
Tank Release Detection:	None
Pipe Release Detection:	None
Other Release Detection:	Not reported
Tank Corrosion Protection:	Not reported
Pipe Corrosion Protection:	Cathodic Protection System
Pipe Corrosion Protection II:	Noncorrodible Material (c.g. FRP)
Other Corrosion Protection:	Not reported
Spill and Overfill Protection:	Unknown/None
Spill and Overfill Protection II:	Tight-Fill Fitting
Vapor Recovery Equipment Status:	Not reported
Equipment Installed Date:	Not reported
Equipment Installer:	Not reported
Contractor Registration Number:	Not reported
Tank Registration Date:	10/03/88
Installer License Number:	Not reported

Facility ID:	0046485	Customer ID:	00121
Tank ID:	1	Installation Date:	01/01/76
Tank Installer:	Not reported	Tank Tested:	No
Tank Emptied:	No	Status Date:	Not reported
Capacity:	6000	Unit ID:	49418

Tank Material of Construction:	Steel
Pipe Material of Construction:	Fiberglass-Reinforced Plastic (FRP)
Other Materials of Construction:	Not reported
Tank Status:	In Use
Tank Construction & Containment:	Not reported
Pipe Construction & Containment:	Not reported
Other Construction & Containment:	Not reported
Tank Substance Stored:	Gasoline
Other Substance Stored:	Not reported
Tank Release Detection:	None
Pipe Release Detection:	None
Other Release Detection:	Not reported
Tank Corrosion Protection:	Not reported
Pipe Corrosion Protection:	Cathodic Protection System
Pipe Corrosion Protection II:	Noncorrodible Material (c.g. FRP)
Other Corrosion Protection:	Not reported
Spill and Overfill Protection:	Unknown/None
Spill and Overfill Protection II:	Tight-Fill Fitting
Vapor Recovery Equipment Status:	Not reported
Equipment Installed Date:	Not reported
Equipment Installer:	Not reported
Contractor Registration Number:	Not reported
Tank Registration Date:	10/03/88
Installer License Number:	Not reported

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27 **SEVEN A M FOOD STORE** **LUST** **S103496719**
2728 BROADWAY **N/A**
GALVESTON, TX 77550

SEVEN A M FOOD STORE (Continued) **S103496719**

LUST:

Facility ID:	0046485	Discovery Date:	5/20/91
Data Entry Date:	5/20/91	Lead Office:	CENTRAL OFFICE LEAD
PST Coordinator:	ARP	RPR Coordinator:	ANTONIO PENA
Region:	12	Region City ID:	HOUSTON
Leaking Tank #:	099020		
Responsible Party:	MALIK ABDUL		
RP Contact:	ABDUL MALIK		
RP Address:	5757 WESTHEIMER 3-300 HOUSTON, TX 77057		
RP Telephone:	713/974-6484		
County Code:	084		
Priority:	GROUNDWATER OTHER THAN 1B, SITE CHARACTERIZATION INCOMPLETE		
Status:	FINAL CONCURRENCE ISSUED, CASE CLOSED		

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27 **DUNN EQUIPMENT INC** **UST** **U001273421**
2701 BROADWAY ST **N/A**
GALVESTON, TX 77550

UST:

Facility ID:	0040983	Customer ID:	00108
Tank ID:	2	Installation Date:	01/01/62
Tank Installer:	Not reported	Tank Tested:	Yes
Tank Emptied:	No	Status Date:	Not reported
Capacity:	0	Unit ID:	18786

Tank Material of Construction:	Steel
Pipe Material of Construction:	Not reported
Other Materials of Construction:	Not reported
Tank Status:	In Use
Tank Construction & Containment:	Not reported
Pipe Construction & Containment:	Not reported
Other Construction & Containment:	Not reported
Tank Substance Stored:	Gasoline
Other Substance Stored:	Not reported
Tank Release Detection:	None
Pipe Release Detection:	None
Other Release Detection:	Not reported
Tank Corrosion Protection:	None
Pipe Corrosion Protection:	None
Pipe Corrosion Protection II:	Noncorrodible Material (c.g. FRP)
Other Corrosion Protection:	Not reported
Spill and Overfill Protection:	Unknown/None
Spill and Overfill Protection II:	Tight-Fill Fitting
Vapor Recovery Equipment Status:	Not reported
Equipment Installed Date:	Not reported
Equipment Installer:	Not reported
Contractor Registration Number:	Not reported
Tank Registration Date:	05/08/86
Installer License Number:	Not reported

Facility ID:	0040983	Customer ID:	00108
Tank ID:	1	Installation Date:	01/01/62
Tank Installer:	Not reported	Tank Tested:	Yes
Tank Emptied:	No	Status Date:	Not reported
Capacity:	0	Unit ID:	18786

Tank Material of Construction:	Steel
Pipe Material of Construction:	Not reported
Other Materials of Construction:	Not reported

DUNN EQUIPMENT INC (Continued) **U001273421**

Tank Status:	In Use
Tank Construction & Containment:	Not reported
Pipe Construction & Containment:	Not reported
Other Construction & Containment:	Not reported
Tank Substance Stored:	Diesel
Other Substance Stored:	Not reported
Tank Release Detection:	None
Pipe Release Detection:	None
Other Release Detection:	Not reported
Tank Corrosion Protection:	None
Pipe Corrosion Protection:	None
Pipe Corrosion Protection II:	Noncorrodible Material (c.g. FRP)
Other Corrosion Protection:	Not reported
Spill and Overfill Protection:	Unknown/None
Spill and Overfill Protection II:	Tight-Fill Fitting
Vapor Recovery Equipment Status:	Not reported
Equipment Installed Date:	Not reported
Equipment Installer:	Not reported
Contractor Registration Number:	Not reported
Tank Registration Date:	05/08/86
Installer License Number:	Not reported

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28 **SULLIVAN ENTERPRISES INC**
4800 PORT INDUSTRIAL BLVD
GALVESTON, TX 77552

RCRIS-SQG **1000982589**
FINDS **TX0000962555**

RCRIS:

Owner:	SULLIVAN ENTERPRISES INC (713) 486-1520
Contact:	LARRY MAREK (713) 486-1520
Record Date:	12/01/1994
Classification:	Not reported
Used Oil Recyc:	No
Violation Status:	No violations found

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29 **G & M AUTOMOTIVE**
2812 BROADWAY
GALVESTON, TX 77550

TX IHW **1000103115**
RCRIS-SQG **TXD079395042**
FINDS

RCRIS:

Owner:	MELVIN URIARTE (000) 000-0000
Contact:	MELVIN URIARTE (713) 763-5531
Record Date:	11/06/1989
Classification:	Small Quantity Generator

G & M AUTOMOTIVE (Continued) **1000103115**

Used Oil Recyc: No

Violation Status: No violations found

TX IHW:

Registration Number:	61364
Registration Initial Notification Date:	09/30/1984
Registration Last Amendment Date:	03/16/1997
EPA Identification:	TXD
TNRCC Premit Number:	079395042
Description of Facility Site Location:	2812 Broadway, Galveston, TX
Site Primary Standard Industrial Code:	75390 Automotive Repair Shops, NEC Services
Registration is a Generator of Waste:	Yes
Registration is a Receivers of Waste:	No
Registration is a Transporter of Waste:	No
Registration is a Transfer Facility:	No
Mexican Facility:	Does not represent a Maquiladora (Mexican Facility)
Facility Status:	Active
Type of Generator:	Non-industrial and/or municipal, SQG
Company Name:	G & M Automotive
Facility County:	Not reported
TNRCC Region:	Not reported
Mailing Address:	2812 Broadway Galveston, TX 77550
Mailing County:	USA
Contact:	Melvin Uriarte
Contact Telephone Number:	713-763-5531

Additional detail may be available for this site. Please contact your EDR Account Executive for more information

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30 **PILGRIM CLEANERS**
1210 TREMONT
GALVESTON, TX 77550

TX IHW **1000236756**
RCRIS-SQG **TXD981047095**
FINDS

RCRIS:

Owner:	FARINE ORMOND GEORGE JR (000) 000-0000
Contact:	ARY-W FARINE (713) 488-2669
Record Date:	12/19/1984
Classification:	Small Quantity Generator

Used Oil Recyc: No

Violation Status: Violation information exist

There are 1 violation record(s) reported at this site:

Evaluation	Area of Violation	Date of Compliance
Other Evaluation	Generator-All Requirements	

PILGRIM CLEANERS (Continued) **1000236756**

FINDS:
Other Pertinent Environmental Activity Identified at Site:
AIRS Facility System (AIRS/AFS)

TX IHW:

Registration Number:	67214
Registration Initial Notification Date:	09/30/1985
Registration Last Amendment Date:	08/21/1987
EPA Identification:	TXD
TNRCC Premit Number:	981047095
Description of Facility Site Location:	1210 Tremont, Galveston, TX
Site Primary Standard Industrial Code:	Not reported
Registration is a Generator of Waste:	Yes
Registration is a Receivers of Waste:	No
Registration is a Transporter of Waste:	No
Registration is a Transfer Facility:	No
Mexican Facility:	Does not represent a Maquiladora (Mexican Facility)
Facility Status:	Inactive
Type of Generator:	Non-industrial and/or municipal, SQG
Company Name:	Pilgrim Cleaners
Facility County:	Not reported
TNRCC Region:	Not reported
Mailing Address:	1210 Tremont Galveston, TX 77550
Mailing County:	USA
Contact:	Gary Farine
Contact Telephone Number:	409-762-9013

Additional detail may be available for this site. Please contact your EDR Account Executive for more information

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31 **CHEVRON USA INC #108373** **RCRIS-SQG** **1000653743**
3301 AVE J & 33RD **FINDS** **TXD988035135**
GALVESTON, TX 77550

RCRIS:

Owner:	CHEVRON USA INC (713) 754-3500
Contact:	HOWARD J O DONNELL (713) 754-3656
Record Date:	05/01/1991
Classification:	Small Quantity Generator
Used Oil Recyc:	No
Violation Status:	No violations found

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31 **CHEVRON #60108373** **LUST** **S103501150**
3301 AVE J **N/A**
GALVESTON, TX

CHEVRON #60108373 (Continued) **S103501150**

LUST:

Facility ID:	0028598	Discovery Date:	2/15/96
Data Entry Date:	3/6/96	Lead Office:	1P/1/2
PST Coordinator:	AES/XYZ	RPR Coordinator:	VYF
Region:	12	Region City ID:	HOUSTON
Leaking Tank #:	110484		
Responsible Party:	CHEVRON PRODUCTS COMPANY		
RP Contact:	GRAIG DODD		
RP Address:	PO BOX 4256 HOUSTON, TX 77210		
RP Telephone:	713/219-5229		
County Code:	084		
Priority:	GW IMPACT, PUB/DOM WATER SUPPLY WELL W/IN .25 - .5 mi		
Status:	FINAL CONCURRENCE PENDING DOCUMENTATION OF WELL PLUGGING		

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31 **#108373** **TX IHW** **S102758884**
3301 AVENUE J **N/A**
GALVESTON, TX 77550

TX IHW:

Registration Number:	79186
Registration Initial Notification Date:	10/27/1992
Registration Last Amendment Date:	07/28/1997
EPA Identification:	TXD
TNRCC Premit Number:	988035135
Description of Facility Site Location:	3301 Avenue J, Galveston, TX
Site Primary Standard Industrial Code:	Not reported
Registration is a Generator of Waste:	Yes
Registration is a Receivers of Waste:	No
Registration is a Transporter of Waste:	No
Registration is a Transfer Facility:	No
Mexican Facility:	Does not represent a Maquiladora (Mexican Facility)
Facility Status:	Inactive
Type of Generator:	Non-industrial and/or municipal, SQG
Company Name:	Chevron
Facility County:	Not reported
TNRCC Region:	Not reported
Mailing Address:	P.O. Box 4256 Houston, TX 77210
Mailing County:	USA
Contact:	Kathryn Minter
Contact Telephone Number:	713-754-3500

Additional detail may be available for this site. Please contact your EDR Account Executive for more information

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31 **EXXON CO. USA 6-7352** **LUST** **U001260613**
3228 BROADWAY ST **UST** **N/A**
GALVESTON, TX 77550

EXXON CO. USA 6-7352 (Continued) **U001260613**

LUST:

Facility ID:	0026697	Discovery Date:	7/1/93
Data Entry Date:	8/3/93	Lead Office:	1/2
PST Coordinator:	JES/MCL/KGM/UII	RPR Coordinator:	JES
Region:	12	Region City ID:	HOUSTON
Leaking Tank #:	106925		
Responsible Party:	EXXON COMPANY USA		
RP Contact:	DEBBIE H. HUNTER		
RP Address:	PO BOX 2180 HOUSTON, TX 77252 - 2180		
RP Telephone:	713/656-2312		
County Code:	084		
Priority:	NO GW IMPACT, NO APPARENT THREATS OR IMPACTS TO RECEPTORS		
Status:	FINAL CONCURRENCE ISSUED, CASE CLOSED		

UST:

Facility ID:	0026697	Customer ID:	00069
Tank ID:	4	Installation Date:	01/01/84
Tank Installer:	Not reported	Tank Tested:	No
Tank Emptied:	No	Status Date:	01/19/97
Capacity:	1000	Unit ID:	04194

Tank Material of Construction:	Fiberglass-Reinforced Plastic (FRP)
Pipe Material of Construction:	Fiberglass-Reinforced Plastic (FRP)
Other Materials of Construction:	Not reported
Tank Status:	Removed from the Ground
Tank Construction & Containment:	Single Wall
Pipe Construction & Containment:	Single Wall
Other Construction & Containment:	Single Wall
Tank Substance Stored:	Used Oil
Other Substance Stored:	Not reported
Tank Release Detection:	Inventory Control
Tank Release Detection II:	Tightness Testing
Pipe Release Detection:	Line Leak Detectors
Pipe Release Detection II:	Tightness Testing
Other Release Detection:	Not reported
Tank Corrosion Protection:	Noncorrodible Material (c.g. FRP)
Pipe Corrosion Protection:	Noncorrodible Material (c.g. FRP)
Pipe Corrosion Protection II:	Noncorrodible Material (c.g. FRP)
Other Corrosion Protection:	Not reported
Spill and Overfill Protection:	Automatic Overfill Device - Flow Restricter Valve
Spill and Overfill Protection II:	Tight-Fill Fitting
Vapor Recovery Equipment Status:	Not reported
Equipment Installed Date:	Not reported
Equipment Installer:	Not reported
Contractor Registration Number:	Not reported
Tank Registration Date:	05/08/86
Installer License Number:	Not reported

Facility ID:	0026697	Customer ID:	00069
Tank ID:	3	Installation Date:	01/01/84
Tank Installer:	Not reported	Tank Tested:	No
Tank Emptied:	No	Status Date:	Not reported
Capacity:	10000	Unit ID:	04194

Tank Material of Construction:	Fiberglass-Reinforced Plastic (FRP)
Pipe Material of Construction:	Fiberglass-Reinforced Plastic (FRP)
Other Materials of Construction:	Not reported
Tank Status:	In Use

EXXON CO. USA 6-7352 (Continued) **U001260613**

Tank Construction & Containment:	Single Wall
Pipe Construction & Containment:	Single Wall
Other Construction & Containment:	Single Wall
Tank Substance Stored:	Gasoline
Other Substance Stored:	Not reported
Tank Release Detection:	Automatic In-Tank Monitoring & Inventory Control
Tank Release Detection II:	Inventory Control
Pipe Release Detection:	Line Leak Detectors
Pipe Release Detection II:	Tightness Testing
Other Release Detection:	Tightness Testing
Tank Corrosion Protection:	Noncorrodible Material (c.g. FRP)
Pipe Corrosion Protection:	Noncorrodible Material (c.g. FRP)
Pipe Corrosion Protection II:	Noncorrodible Material (c.g. FRP)
Other Corrosion Protection:	Not reported
Spill and Overfill Protection:	Automatic Overfill Device - Flow Restricter Valve
Spill and Overfill Protection II:	Tight-Fill Fitting
Vapor Recovery Equipment Status:	Not reported
Equipment Installed Date:	Not reported
Equipment Installer:	Not reported
Contractor Registration Number:	Not reported
Tank Registration Date:	05/08/86
Installer License Number:	Not reported

Facility ID:	0026697	Customer ID:	00069
Tank ID:	2	Installation Date:	01/01/84
Tank Installer:	Not reported	Tank Tested:	No
Tank Emptied:	No	Status Date:	Not reported
Capacity:	10000	Unit ID:	04194

Tank Material of Construction:	Fiberglass-Reinforced Plastic (FRP)
Pipe Material of Construction:	Fiberglass-Reinforced Plastic (FRP)
Other Materials of Construction:	Not reported
Tank Status:	In Use
Tank Construction & Containment:	Single Wall
Pipe Construction & Containment:	Single Wall
Other Construction & Containment:	Single Wall
Tank Substance Stored:	Gasoline
Other Substance Stored:	Not reported
Tank Release Detection:	Automatic In-Tank Monitoring & Inventory Control
Tank Release Detection II:	Inventory Control
Pipe Release Detection:	Line Leak Detectors
Pipe Release Detection II:	Tightness Testing
Other Release Detection:	Tightness Testing
Tank Corrosion Protection:	Noncorrodible Material (c.g. FRP)
Pipe Corrosion Protection:	Noncorrodible Material (c.g. FRP)
Pipe Corrosion Protection II:	Noncorrodible Material (c.g. FRP)
Other Corrosion Protection:	Not reported
Spill and Overfill Protection:	Automatic Overfill Device - Flow Restricter Valve
Spill and Overfill Protection II:	Tight-Fill Fitting
Vapor Recovery Equipment Status:	Not reported
Equipment Installed Date:	Not reported
Equipment Installer:	Not reported
Contractor Registration Number:	Not reported
Tank Registration Date:	05/08/86
Installer License Number:	Not reported

Facility ID:	0026697	Customer ID:	00069
Tank ID:	1	Installation Date:	01/01/84

EXXON CO. USA 6-7352 (Continued) **U001260613**

Tank Installer:	Not reported	Tank Tested:	No
Tank Emptied:	No	Status Date:	Not reported
Capacity:	10000	Unit ID:	04194

Tank Material of Construction:	Fiberglass-Reinforced Plastic (FRP)
Pipe Material of Construction:	Fiberglass-Reinforced Plastic (FRP)
Other Materials of Construction:	Not reported
Tank Status:	In Use
Tank Construction & Containment:	Single Wall
Pipe Construction & Containment:	Single Wall
Other Construction & Containment:	Single Wall
Tank Substance Stored:	Gasoline
Other Substance Stored:	Not reported
Tank Release Detection:	Automatic In-Tank Monitoring & Inventory Control
Tank Release Detection II:	Inventory Control
Pipe Release Detection:	Line Leak Detectors
Pipe Release Detection II:	Tightness Testing
Other Release Detection:	Tightness Testing
Tank Corrosion Protection:	Noncorrodible Material (c.g. FRP)
Pipe Corrosion Protection:	Noncorrodible Material (c.g. FRP)
Pipe Corrosion Protection II:	Noncorrodible Material (c.g. FRP)
Other Corrosion Protection:	Not reported
Spill and Overfill Protection:	Automatic Overfill Device - Flow Restricter Valve
Spill and Overfill Protection II:	Tight-Fill Fitting
Vapor Recovery Equipment Status:	Not reported
Equipment Installed Date:	Not reported
Equipment Installer:	Not reported
Contractor Registration Number:	Not reported
Tank Registration Date:	05/08/86
Installer License Number:	Not reported

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31 **EXXON** **TX IHW** **1000653192**
3228 BROADWAY ST **N/A**
GALVESTON, TX 77550

TX IHW:

Registration Number:	77162
Registration Initial Notification Date:	06/28/1991
Registration Last Amendment Date:	07/17/1995
EPA Identification:	TXD
TNRCC Premit Number:	988029369
Description of Facility Site Location:	3228 Broadway, Galveston, TX
Site Primary Standard Industrial Code:	Not reported
Registration is a Generator of Waste:	Yes
Registration is a Receivers of Waste:	No
Registration is a Transporter of Waste:	No
Registration is a Transfer Facility:	No
Mexican Facility:	*Does not represent a Maquiladora (Mexican Facility)*
Facility Status:	Inactive
Type of Generator:	Non-industrial and/or municipal, CESQG
Company Name:	Exxon Company, U.S.A.
Facility County:	Not reported
TNRCC Region:	Not reported
Mailing Address:	Room 2753X P.O. Box 2180 Houston, TX 77252
Mailing County:	USA
Contact:	Alda S. Pool
Contact Telephone Number:	713-656-7709

EXXON (Continued) **1000653192**

Additional detail may be available for this site. Please contact your EDR Account Executive for more information

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31 **DOBBINS METAL SHOP** **FINDS** **1000649425**
3224 BROADWAY **I06#19861211**
GALVESTON, TX 77550

FINDS:
Other Pertinent Environmental Activity Identified at Site:
National Compliance Database (NCDB)

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31 **SITE #343** **UST** **U001253978**
3202 BROADWAY ST **N/A**
GALVESTON, TX 77550

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32 **SWF/LF** **S103220375**
5515 PORT INDUSTRIAL BLVD **N/A**
GALVESTON, TX

LF:

Facility ID:	164
Population Served:	80000
Area Served:	GALVESTON
Tons per Day:	180
Yards per Day:	0.00
Estimated Cleanup Date:	19770401
Removal Status:	PER.TRANSFERRED 3/4/98
Engineer:	MDG
Status Date:	02/09/1988
Business Type:	CITY
Organic Acres:	1.89
Facility Status:	PROPOSED SITE
Amendment:	Not reported
Recieved Date:	03/31/1975
Region:	STATE
Region Code:	12
Extra Territorial Jurisdiction:	N CITY LIMITS
Lat/Long:	29° 17.85' 0" / 94° 50.00' 0"
Applicant Name:	GALVESTON, CITY OF
Applicant Address:	PO BOX 779 GALVESTON, TX 77553
Applicant Telephone:	(713) 626-7292
River Basin Code:	11
Responsible Engenier:	MDG
Start Date:	02/09/1988
County Code:	84
Owner Name:	GALVESTON, CITY OF
Owner Address:	P.O. BOX 779 GALVESTON, TX 77550
Facility Type:	TRANSFER STATION FACILITY
Permit Status:	Permit Issued

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33 **REYNOLDS ALUMINUM RECYCLING** **LUST** **U001264804**
3524 AVE J (BROADWAY) **UST** **N/A**
GALVESTON, TX 77550

REYNOLDS ALUMINUM RECYCLING (Continued) **U001264804**

LUST:

Facility ID:	0031468	Discovery Date:	9/16/93
Data Entry Date:	12/1/93	Lead Office:	1/2
PST Coordinator:	AES/RPR	RPR Coordinator:	SAH
Region:	12	Region City ID:	HOUSTON
Leaking Tank #:	107249		
Responsible Party:	MOROVICH LEO		
RP Contact:	LEO MOROVICH		
RP Address:	PO BOX 427 LA GRANGE, TX 78945		
RP Telephone:	409/247-4812		
County Code:	084		
Priority:	GW IMPACTED, NO APPARENT THREATS OR IMPACTS TO RECEPTORS		
Status:	FINAL CONCURRENCE ISSUED, CASE CLOSED		

UST:

Facility ID:	0031468	Customer ID:	00082
Tank ID:	4	Installation Date:	01/01/56
Tank Installer:	Not reported	Tank Tested:	Yes
Tank Emptied:	No	Status Date:	12/31/73
Capacity:	3000	Unit ID:	14819

Tank Material of Construction:	Steel
Pipe Material of Construction:	Steel
Other Materials of Construction:	Not reported
Tank Status:	Removed from the Ground
Tank Construction & Containment:	Not reported
Pipe Construction & Containment:	Not reported
Other Construction & Containment:	Not reported
Tank Substance Stored:	Not reported
Other Substance Stored:	Empty
Tank Release Detection:	None
Pipe Release Detection:	None
Other Release Detection:	Not reported
Tank Corrosion Protection:	Not reported
Pipe Corrosion Protection:	None
Pipe Corrosion Protection II:	Noncorrodible Material (c.g. FRP)
Other Corrosion Protection:	Not reported
Spill and Overfill Protection:	Unknown/None
Spill and Overfill Protection II:	Tight-Fill Fitting
Vapor Recovery Equipment Status:	Not reported
Equipment Installed Date:	Not reported
Equipment Installer:	Not reported
Contractor Registration Number:	Not reported
Tank Registration Date:	05/15/86
Installer License Number:	Not reported

Facility ID:	0031468	Customer ID:	00082
Tank ID:	1	Installation Date:	01/01/56
Tank Installer:	Not reported	Tank Tested:	Yes
Tank Emptied:	No	Status Date:	12/31/73
Capacity:	6000	Unit ID:	14819

Tank Material of Construction:	Steel
Pipe Material of Construction:	Steel
Other Materials of Construction:	Not reported
Tank Status:	Removed from the Ground
Tank Construction & Containment:	Not reported
Pipe Construction & Containment:	Not reported

REYNOLDS ALUMINUM RECYCLING (Continued) **U001264804**

Other Construction & Containment:	Not reported
Tank Substance Stored:	Not reported
Other Substance Stored:	Empty
Tank Release Detection:	None
Pipe Release Detection:	None
Other Release Detection:	Not reported
Tank Corrosion Protection:	Not reported
Pipe Corrosion Protection:	None
Pipe Corrosion Protection II:	Noncorrodible Material (c.g. FRP)
Other Corrosion Protection:	Not reported
Spill and Overfill Protection:	Unknown/None
Spill and Overfill Protection II:	Tight-Fill Fitting
Vapor Recovery Equipment Status:	Not reported
Equipment Installed Date:	Not reported
Equipment Installer:	Not reported
Contractor Registration Number:	Not reported
Tank Registration Date:	05/15/86
Installer License Number:	Not reported

Facility ID:	0031468	Customer ID:	00082
Tank ID:	3	Installation Date:	01/01/56
Tank Installer:	Not reported	Tank Tested:	Yes
Tank Emptied:	No	Status Date:	12/31/73
Capacity:	3000	Unit ID:	14819

Tank Material of Construction:	Steel
Pipe Material of Construction:	Steel
Other Materials of Construction:	Not reported
Tank Status:	Removed from the Ground
Tank Construction & Containment:	Not reported
Pipe Construction & Containment:	Not reported
Other Construction & Containment:	Not reported
Tank Substance Stored:	Not reported
Other Substance Stored:	Empty
Tank Release Detection:	None
Pipe Release Detection:	None
Other Release Detection:	Not reported
Tank Corrosion Protection:	Not reported
Pipe Corrosion Protection:	None
Pipe Corrosion Protection II:	Noncorrodible Material (c.g. FRP)
Other Corrosion Protection:	Not reported
Spill and Overfill Protection:	Unknown/None
Spill and Overfill Protection II:	Tight-Fill Fitting
Vapor Recovery Equipment Status:	Not reported
Equipment Installed Date:	Not reported
Equipment Installer:	Not reported
Contractor Registration Number:	Not reported
Tank Registration Date:	05/15/86
Installer License Number:	Not reported

Facility ID:	0031468	Customer ID:	00082
Tank ID:	2	Installation Date:	01/01/56
Tank Installer:	Not reported	Tank Tested:	Yes
Tank Emptied:	No	Status Date:	12/31/73
Capacity:	6000	Unit ID:	14819

Tank Material of Construction:	Steel
Pipe Material of Construction:	Steel
Other Materials of Construction:	Not reported

REYNOLDS ALUMINUM RECYCLING (Continued) **U001264804**

Tank Status:	Removed from the Ground
Tank Construction & Containment:	Not reported
Pipe Construction & Containment:	Not reported
Other Construction & Containment:	Not reported
Tank Substance Stored:	Not reported
Other Substance Stored:	Empty
Tank Release Detection:	None
Pipe Release Detection:	None
Other Release Detection:	Not reported
Tank Corrosion Protection:	Not reported
Pipe Corrosion Protection:	None
Pipe Corrosion Protection II:	Noncorrodible Material (c.g. FRP)
Other Corrosion Protection:	Not reported
Spill and Overfill Protection:	Unknown/None
Spill and Overfill Protection II:	Tight-Fill Fitting
Vapor Recovery Equipment Status:	Not reported
Equipment Installed Date:	Not reported
Equipment Installer:	Not reported
Contractor Registration Number:	Not reported
Tank Registration Date:	05/15/86
Installer License Number:	Not reported

Facility ID:	0031468	Customer ID:	00082
Tank ID:	5	Installation Date:	Not reported
Tank Installer:	Not reported	Tank Tested:	Yes
Tank Emptied:	No	Status Date:	12/31/73
Capacity:	3000	Unit ID:	14819

Tank Material of Construction:	Not reported
Pipe Material of Construction:	Steel
Other Materials of Construction:	Not reported
Tank Status:	Removed from the Ground
Tank Construction & Containment:	Not reported
Pipe Construction & Containment:	Not reported
Other Construction & Containment:	Not reported
Tank Substance Stored:	Not reported
Other Substance Stored:	Empty
Tank Release Detection:	None
Pipe Release Detection:	None
Other Release Detection:	Not reported
Tank Corrosion Protection:	None
Pipe Corrosion Protection:	None
Pipe Corrosion Protection II:	Noncorrodible Material (c.g. FRP)
Other Corrosion Protection:	Not reported
Spill and Overfill Protection:	Unknown/None
Spill and Overfill Protection II:	Tight-Fill Fitting
Vapor Recovery Equipment Status:	Not reported
Equipment Installed Date:	Not reported
Equipment Installer:	Not reported
Contractor Registration Number:	Not reported
Tank Registration Date:	05/15/86
Installer License Number:	Not reported

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33 **GBE AUTOMOTIVE**
3502 BROADWAY
GALVESTON, TX 77550

FINDS **1001251037**
TX0966613

GBE AUTOMOTIVE (Continued) **1001251037**

FINDS:
Other Pertinent Environmental Activity Identified at Site:
AIRS Facility System (AIRS/AFS)

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33 **GALVESTON RADIATOR** UST **U002263001**
3428 BROADWAY ST **N/A**
GALVESTON, TX 77550

UST:

Facility ID:	0023309	Customer ID:	00060
Tank ID:	1	Installation Date:	01/01/54
Tank Installer:	Not reported	Tank Tested:	No
Tank Emptied:	No	Status Date:	11/03/98
Capacity:	550	Unit ID:	46756

Tank Material of Construction:	Steel
Pipe Material of Construction:	Steel
Other Materials of Construction:	Not reported
Tank Status:	Removed from the Ground
Tank Construction & Containment:	Not reported
Pipe Construction & Containment:	Not reported
Other Construction & Containment:	Not reported
Tank Substance Stored:	Used Oil
Other Substance Stored:	Not reported
Tank Release Detection:	None
Pipe Release Detection:	None
Other Release Detection:	Not reported
Tank Corrosion Protection:	Not reported
Pipe Corrosion Protection:	None
Pipe Corrosion Protection II:	Noncorrodible Material (c.g. FRP)
Other Corrosion Protection:	Not reported
Spill and Overfill Protection:	Unknown/None
Spill and Overfill Protection II:	Tight-Fill Fitting
Vapor Recovery Equipment Status:	Not reported
Equipment Installed Date:	Not reported
Equipment Installer:	Not reported
Contractor Registration Number:	Not reported
Tank Registration Date:	05/08/86
Installer License Number:	Not reported

Facility ID:	0023309	Customer ID:	00060
Tank ID:	6	Installation Date:	01/01/71
Tank Installer:	Not reported	Tank Tested:	No
Tank Emptied:	No	Status Date:	11/03/98
Capacity:	4000	Unit ID:	46756

Tank Material of Construction:	Fiberglass-Reinforced Plastic (FRP)
Pipe Material of Construction:	Fiberglass-Reinforced Plastic (FRP)
Other Materials of Construction:	Not reported
Tank Status:	Removed from the Ground
Tank Construction & Containment:	Not reported
Pipe Construction & Containment:	Not reported
Other Construction & Containment:	Not reported
Tank Substance Stored:	Gasoline
Other Substance Stored:	Not reported
Tank Release Detection:	None
Pipe Release Detection:	None
Other Release Detection:	Not reported
Tank Corrosion Protection:	None
Pipe Corrosion Protection:	None

GALVESTON RADIATOR (Continued) **U002263001**

Pipe Corrosion Protection II: Noncorrodible Material (c.g. FRP)
Other Corrosion Protection: Not reported
Spill and Overfill Protection: Unknown/None
Spill and Overfill Protection II: Tight-Fill Fitting
Vapor Recovery Equipment Status: Not reported
Equipment Installed Date: Not reported
Equipment Installer: Not reported
Contractor Registration Number: Not reported
Tank Registration Date: 05/08/86
Installer License Number: Not reported

Facility ID: 0023309 Customer ID: 00060
Tank ID: 5 Installation Date: 01/01/54
Tank Installer: Not reported Tank Tested: No
Tank Emptied: No Status Date: 11/03/98
Capacity: 4000 Unit ID: 46756
Tank Material of Construction: Steel
Pipe Material of Construction: Steel
Other Materials of Construction: Not reported
Tank Status: Removed from the Ground
Tank Construction & Containment: Not reported
Pipe Construction & Containment: Not reported
Other Construction & Containment: Not reported
Tank Substance Stored: Gasoline
Other Substance Stored: Not reported
Tank Release Detection: None
Pipe Release Detection: None
Other Release Detection: Not reported
Tank Corrosion Protection: Not reported
Pipe Corrosion Protection: None
Pipe Corrosion Protection II: Noncorrodible Material (c.g. FRP)
Other Corrosion Protection: Not reported
Spill and Overfill Protection: Unknown/None
Spill and Overfill Protection II: Tight-Fill Fitting
Vapor Recovery Equipment Status: Not reported
Equipment Installed Date: Not reported
Equipment Installer: Not reported
Contractor Registration Number: Not reported
Tank Registration Date: 05/08/86
Installer License Number: Not reported

Facility ID: 0023309 Customer ID: 00060
Tank ID: 2 Installation Date: 01/01/54
Tank Installer: Not reported Tank Tested: No
Tank Emptied: No Status Date: 11/03/98
Capacity: 2000 Unit ID: 46756
Tank Material of Construction: Steel
Pipe Material of Construction: Steel
Other Materials of Construction: Not reported
Tank Status: Removed from the Ground
Tank Construction & Containment: Not reported
Pipe Construction & Containment: Not reported
Other Construction & Containment: Not reported
Tank Substance Stored: Gasoline
Other Substance Stored: Not reported
Tank Release Detection: None
Pipe Release Detection: None

GALVESTON RADIATOR (Continued) **U002263001**

Other Release Detection:	Not reported
Tank Corrosion Protection:	Not reported
Pipe Corrosion Protection:	None
Pipe Corrosion Protection II:	Noncorrodible Material (c.g. FRP)
Other Corrosion Protection:	Not reported
Spill and Overfill Protection:	Unknown/None
Spill and Overfill Protection II:	Tight-Fill Fitting
Vapor Recovery Equipment Status:	Not reported
Equipment Installed Date:	Not reported
Equipment Installer:	Not reported
Contractor Registration Number:	Not reported
Tank Registration Date:	05/08/86
Installer License Number:	Not reported

Facility ID:	0023309	Customer ID:	00060
Tank ID:	4	Installation Date:	01/01/54
Tank Installer:	Not reported	Tank Tested:	No
Tank Emptied:	No	Status Date:	11/03/98
Capacity:	3000	Unit ID:	46756

Tank Material of Construction:	Steel
Pipe Material of Construction:	Steel
Other Materials of Construction:	Not reported
Tank Status:	Removed from the Ground
Tank Construction & Containment:	Not reported
Pipe Construction & Containment:	Not reported
Other Construction & Containment:	Not reported
Tank Substance Stored:	Gasoline
Other Substance Stored:	Not reported
Tank Release Detection:	None
Pipe Release Detection:	None
Other Release Detection:	Not reported
Tank Corrosion Protection:	Not reported
Pipe Corrosion Protection:	None
Pipe Corrosion Protection II:	Noncorrodible Material (c.g. FRP)
Other Corrosion Protection:	Not reported
Spill and Overfill Protection:	Unknown/None
Spill and Overfill Protection II:	Tight-Fill Fitting
Vapor Recovery Equipment Status:	Not reported
Equipment Installed Date:	Not reported
Equipment Installer:	Not reported
Contractor Registration Number:	Not reported
Tank Registration Date:	05/08/86
Installer License Number:	Not reported

Facility ID:	0023309	Customer ID:	00060
Tank ID:	3	Installation Date:	01/01/54
Tank Installer:	Not reported	Tank Tested:	No
Tank Emptied:	No	Status Date:	11/03/98
Capacity:	3000	Unit ID:	46756

Tank Material of Construction:	Steel
Pipe Material of Construction:	Steel
Other Materials of Construction:	Not reported
Tank Status:	Removed from the Ground
Tank Construction & Containment:	Not reported
Pipe Construction & Containment:	Not reported
Other Construction & Containment:	Not reported
Tank Substance Stored:	Gasoline

GALVESTON RADIATOR (Continued) **U002263001**

Other Substance Stored:	Not reported
Tank Release Detection:	None
Pipe Release Detection:	None
Other Release Detection:	Not reported
Tank Corrosion Protection:	Not reported
Pipe Corrosion Protection:	None
Pipe Corrosion Protection II:	Noncorrodible Material (c.g. FRP)
Other Corrosion Protection:	Not reported
Spill and Overfill Protection:	Unknown/None
Spill and Overfill Protection II:	Tight-Fill Fitting
Vapor Recovery Equipment Status:	Not reported
Equipment Installed Date:	Not reported
Equipment Installer:	Not reported
Contractor Registration Number:	Not reported
Tank Registration Date:	05/08/86
Installer License Number:	Not reported

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34 **M G AUTOMOTIVE** **LUST** **U003113640**
3701 BROADWAY ST **UST** **N/A**
GALVESTON, TX 77550

LUST:

Facility ID:	0068798	Discovery Date:	Not reported
Data Entry Date:	6/17/96	Lead Office:	DISTRICT LEAD
PST Coordinator:	XYZ	RPR Coordinator:	KKC
Region:	12	Region City ID:	HOUSTON
Leaking Tank #:	111215		
Responsible Party:	GLADYS HENRY		
RP Contact:	STEFAN STAMOULIS		
RP Address:	PO BOX 1252 GALVESTON, TX 77553		
RP Telephone:	409/480-3554		
County Code:	084		
Priority:	NO GW IMPACT, NO APPARENT THREATS OR IMPACTS TO RECEPTORS		
Status:	INCIDENT REPORTED, INITIAL DIRECTIVES NOT YET ISSUED		

UST:

Facility ID:	0068798	Customer ID:	00181
Tank ID:	1	Installation Date:	08/31/87
Tank Installer:	Not reported	Tank Tested:	No
Tank Emptied:	No	Status Date:	02/13/96
Capacity:	5000	Unit ID:	48849

Tank Material of Construction:	Not reported
Pipe Material of Construction:	Not reported
Other Materials of Construction:	Not reported
Tank Status:	Removed from the Ground
Tank Construction & Containment:	Not reported
Pipe Construction & Containment:	Not reported
Other Construction & Containment:	Not reported
Tank Substance Stored:	Not reported
Other Substance Stored:	Unknown
Tank Release Detection:	None
Pipe Release Detection:	None
Other Release Detection:	Not reported
Tank Corrosion Protection:	None
Pipe Corrosion Protection:	None
Pipe Corrosion Protection II:	Noncorrodible Material (c.g. FRP)
Other Corrosion Protection:	Not reported
Spill and Overfill Protection:	Unknown/None

M G AUTOMOTIVE (Continued) **U003113640**

Spill and Overfill Protection II: Tight-Fill Fitting
Vapor Recovery Equipment Status: Not reported
Equipment Installed Date: Not reported
Equipment Installer: Not reported
Contractor Registration Number: Not reported
Tank Registration Date: 08/13/96
Installer License Number: Not reported

Facility ID:	0068798	Customer ID:	00181
Tank ID:	2	Installation Date:	08/31/87
Tank Installer:	Not reported	Tank Tested:	No
Tank Emptied:	No	Status Date:	02/13/96
Capacity:	5000	Unit ID:	48849

Tank Material of Construction: Not reported
Pipe Material of Construction: Not reported
Other Materials of Construction: Not reported
Tank Status: Removed from the Ground
Tank Construction & Containment: Not reported
Pipe Construction & Containment: Not reported
Other Construction & Containment: Not reported
Tank Substance Stored: Not reported
Other Substance Stored: Unknown
Tank Release Detection: None
Pipe Release Detection: None
Other Release Detection: Not reported
Tank Corrosion Protection: None
Pipe Corrosion Protection: None
Pipe Corrosion Protection II: Noncorrodible Material (c.g. FRP)
Other Corrosion Protection: Not reported
Spill and Overfill Protection: Unknown/None
Spill and Overfill Protection II: Tight-Fill Fitting
Vapor Recovery Equipment Status: Not reported
Equipment Installed Date: Not reported
Equipment Installer: Not reported
Contractor Registration Number: Not reported
Tank Registration Date: 08/13/96
Installer License Number: Not reported

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34 **STOP-N-GO MARKETS #1731** **UST** **U003566573**
3712 BROADWAY ST **N/A**
GALVESTON, TX 77550

UST:

Facility ID:	0039823	Customer ID:	00105
Tank ID:	4	Installation Date:	01/01/85
Tank Installer:	Not reported	Tank Tested:	No
Tank Emptied:	Yes	Status Date:	05/25/93
Capacity:	10000	Unit ID:	12307

Tank Material of Construction: Fiberglass-Reinforced Plastic (FRP)
Pipe Material of Construction: Fiberglass-Reinforced Plastic (FRP)
Other Materials of Construction: Not reported
Tank Status: Removed from the Ground
Tank Construction & Containment: Not reported
Pipe Construction & Containment: Not reported
Other Construction & Containment: Not reported
Tank Substance Stored: Diesel
Other Substance Stored: Not reported
Tank Release Detection: None
Pipe Release Detection: None

STOP-N-GO MARKETS #1731 (Continued) **U003566573**

Other Release Detection:	Not reported
Tank Corrosion Protection:	Noncorrodible Material (c.g. FRP)
Pipe Corrosion Protection:	None
Pipe Corrosion Protection II:	Noncorrodible Material (c.g. FRP)
Other Corrosion Protection:	Not reported
Spill and Overfill Protection:	Unknown/None
Spill and Overfill Protection II:	Tight-Fill Fitting
Vapor Recovery Equipment Status:	Not reported
Equipment Installed Date:	Not reported
Equipment Installer:	Not reported
Contractor Registration Number:	Not reported
Tank Registration Date:	05/08/86
Installer License Number:	Not reported

Facility ID:	0039823	Customer ID:	00105
Tank ID:	1	Installation Date:	01/01/85
Tank Installer:	Not reported	Tank Tested:	No
Tank Emptied:	Yes	Status Date:	05/25/93
Capacity:	10000	Unit ID:	12307

Tank Material of Construction:	Fiberglass-Reinforced Plastic (FRP)
Pipe Material of Construction:	Fiberglass-Reinforced Plastic (FRP)
Other Materials of Construction:	Not reported
Tank Status:	Removed from the Ground
Tank Construction & Containment:	Not reported
Pipe Construction & Containment:	Not reported
Other Construction & Containment:	Not reported
Tank Substance Stored:	Gasoline
Other Substance Stored:	Not reported
Tank Release Detection:	None
Pipe Release Detection:	None
Other Release Detection:	Not reported
Tank Corrosion Protection:	Noncorrodible Material (c.g. FRP)
Pipe Corrosion Protection:	None
Pipe Corrosion Protection II:	Noncorrodible Material (c.g. FRP)
Other Corrosion Protection:	Not reported
Spill and Overfill Protection:	Unknown/None
Spill and Overfill Protection II:	Tight-Fill Fitting
Vapor Recovery Equipment Status:	Not reported
Equipment Installed Date:	Not reported
Equipment Installer:	Not reported
Contractor Registration Number:	Not reported
Tank Registration Date:	05/08/86
Installer License Number:	Not reported

Facility ID:	0039823	Customer ID:	00105
Tank ID:	3	Installation Date:	01/01/85
Tank Installer:	Not reported	Tank Tested:	No
Tank Emptied:	Yes	Status Date:	05/25/93
Capacity:	10000	Unit ID:	12307

Tank Material of Construction:	Fiberglass-Reinforced Plastic (FRP)
Pipe Material of Construction:	Fiberglass-Reinforced Plastic (FRP)
Other Materials of Construction:	Not reported
Tank Status:	Removed from the Ground
Tank Construction & Containment:	Not reported
Pipe Construction & Containment:	Not reported
Other Construction & Containment:	Not reported
Tank Substance Stored:	Gasoline

STOP-N-GO MARKETS #1731 (Continued) **U003566573**

Other Substance Stored:	Not reported
Tank Release Detection:	None
Pipe Release Detection:	None
Other Release Detection:	Not reported
Tank Corrosion Protection:	Noncorrodible Material (c.g. FRP)
Pipe Corrosion Protection:	None
Pipe Corrosion Protection II:	Noncorrodible Material (c.g. FRP)
Other Corrosion Protection:	Not reported
Spill and Overfill Protection:	Unknown/None
Spill and Overfill Protection II:	Tight-Fill Fitting
Vapor Recovery Equipment Status:	Not reported
Equipment Installed Date:	Not reported
Equipment Installer:	Not reported
Contractor Registration Number:	Not reported
Tank Registration Date:	05/08/86
Installer License Number:	Not reported

Facility ID:	0039823	Customer ID:	00105
Tank ID:	2	Installation Date:	01/01/85
Tank Installer:	Not reported	Tank Tested:	No
Tank Emptied:	Yes	Status Date:	05/25/93
Capacity:	10000	Unit ID:	12307

Tank Material of Construction:	Fiberglass-Reinforced Plastic (FRP)
Pipe Material of Construction:	Fiberglass-Reinforced Plastic (FRP)
Other Materials of Construction:	Not reported
Tank Status:	Removed from the Ground
Tank Construction & Containment:	Not reported
Pipe Construction & Containment:	Not reported
Other Construction & Containment:	Not reported
Tank Substance Stored:	Gasoline
Other Substance Stored:	Not reported
Tank Release Detection:	None
Pipe Release Detection:	None
Other Release Detection:	Not reported
Tank Corrosion Protection:	Noncorrodible Material (c.g. FRP)
Pipe Corrosion Protection:	None
Pipe Corrosion Protection II:	Noncorrodible Material (c.g. FRP)
Other Corrosion Protection:	Not reported
Spill and Overfill Protection:	Unknown/None
Spill and Overfill Protection II:	Tight-Fill Fitting
Vapor Recovery Equipment Status:	Not reported
Equipment Installed Date:	Not reported
Equipment Installer:	Not reported
Contractor Registration Number:	Not reported
Tank Registration Date:	05/08/86
Installer License Number:	Not reported

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34 **SHOP N GO** **UST** **U001289805**
3627 BROADWAY ST **N/A**
GALVESTON, TX 77590

UST:

Facility ID:	0060448	Customer ID:	00142
Tank ID:	4	Installation Date:	07/01/80
Tank Installer:	Not reported	Tank Tested:	No
Tank Emptied:	No	Status Date:	Not reported
Capacity:	5000	Unit ID:	40291

Tank Material of Construction:	Steel
Pipe Material of Construction:	Not reported

SHOP N GO (Continued) **U001289805**

Other Materials of Construction:	Not reported
Tank Status:	In Use
Tank Construction & Containment:	Single Wall
Pipe Construction & Containment:	Not reported
Other Construction & Containment:	Single Wall
Tank Substance Stored:	Diesel
Other Substance Stored:	Not reported
Tank Release Detection:	Inventory Control
Pipe Release Detection:	None
Other Release Detection:	Not reported
Tank Corrosion Protection:	Not reported
Pipe Corrosion Protection:	None
Pipe Corrosion Protection II:	Noncorrodible Material (c.g. FRP)
Other Corrosion Protection:	Not reported
Spill and Overfill Protection:	Automatic Overfill Device - Shut-Off Valve
Spill and Overfill Protection II:	Tight-Fill Fitting
Vapor Recovery Equipment Status:	Not reported
Equipment Installed Date:	Not reported
Equipment Installer:	Not reported
Contractor Registration Number:	Not reported
Tank Registration Date:	10/08/91
Installer License Number:	Not reported

Facility ID:	0060448	Customer ID:	00142
Tank ID:	1	Installation Date:	07/01/80
Tank Installer:	Not reported	Tank Tested:	No
Tank Emptied:	No	Status Date:	Not reported
Capacity:	5000	Unit ID:	40291

Tank Material of Construction:	Steel
Pipe Material of Construction:	Not reported
Other Materials of Construction:	Not reported
Tank Status:	In Use
Tank Construction & Containment:	Single Wall
Pipe Construction & Containment:	Not reported
Other Construction & Containment:	Single Wall
Tank Substance Stored:	Diesel
Other Substance Stored:	Not reported
Tank Release Detection:	Inventory Control
Pipe Release Detection:	None
Other Release Detection:	Not reported
Tank Corrosion Protection:	Not reported
Pipe Corrosion Protection:	None
Pipe Corrosion Protection II:	Noncorrodible Material (c.g. FRP)
Other Corrosion Protection:	Not reported
Spill and Overfill Protection:	Automatic Overfill Device - Shut-Off Valve
Spill and Overfill Protection II:	Tight-Fill Fitting
Vapor Recovery Equipment Status:	Not reported
Equipment Installed Date:	Not reported
Equipment Installer:	Not reported
Contractor Registration Number:	Not reported
Tank Registration Date:	10/08/91
Installer License Number:	Not reported

Facility ID:	0060448	Customer ID:	00142
Tank ID:	2	Installation Date:	07/01/80
Tank Installer:	Not reported	Tank Tested:	No
Tank Emptied:	No	Status Date:	Not reported

SHOP N GO (Continued) **U001289805**

Capacity:	5000	Unit ID:	40291

Tank Material of Construction:	Steel
Pipe Material of Construction:	Not reported
Other Materials of Construction:	Not reported
Tank Status:	In Use
Tank Construction & Containment:	Single Wall
Pipe Construction & Containment:	Not reported
Other Construction & Containment:	Single Wall
Tank Substance Stored:	Diesel
Other Substance Stored:	Not reported
Tank Release Detection:	Inventory Control
Pipe Release Detection:	None
Other Release Detection:	Not reported
Tank Corrosion Protection:	Not reported
Pipe Corrosion Protection:	None
Pipe Corrosion Protection II:	Noncorrodible Material (c.g. FRP)
Other Corrosion Protection:	Not reported
Spill and Overfill Protection:	Automatic Overfill Device - Shut-Off Valve
Spill and Overfill Protection II:	Tight-Fill Fitting
Vapor Recovery Equipment Status:	Not reported
Equipment Installed Date:	Not reported
Equipment Installer:	Not reported
Contractor Registration Number:	Not reported
Tank Registration Date:	10/08/91
Installer License Number:	Not reported

Facility ID:	0060448	Customer ID:	00142
Tank ID:	3	Installation Date:	07/01/80
Tank Installer:	Not reported	Tank Tested:	No
Tank Emptied:	No	Status Date:	Not reported
Capacity:	5000	Unit ID:	40291

Tank Material of Construction:	Steel
Pipe Material of Construction:	Not reported
Other Materials of Construction:	Not reported
Tank Status:	In Use
Tank Construction & Containment:	Single Wall
Pipe Construction & Containment:	Not reported
Other Construction & Containment:	Single Wall
Tank Substance Stored:	Diesel
Other Substance Stored:	Not reported
Tank Release Detection:	Inventory Control
Pipe Release Detection:	None
Other Release Detection:	Not reported
Tank Corrosion Protection:	Not reported
Pipe Corrosion Protection:	None
Pipe Corrosion Protection II:	Noncorrodible Material (c.g. FRP)
Other Corrosion Protection:	Not reported
Spill and Overfill Protection:	Automatic Overfill Device - Shut-Off Valve
Spill and Overfill Protection II:	Tight-Fill Fitting
Vapor Recovery Equipment Status:	Not reported
Equipment Installed Date:	Not reported
Equipment Installer:	Not reported
Contractor Registration Number:	Not reported
Tank Registration Date:	10/08/91
Installer License Number:	Not reported

Map ID Direction Distance Distance (ft.)	Site	Database(s)	EDR ID Number / EPA ID Number
34	**TUNEUP MASTERS** **3628 BROADWAY** **GALVESTON, TX 77550**	**RCRIS-SQG** **FINDS**	**1000224542** **TXD982286247**

RCRIS:

Owner: TUNEUP MASTERS INC
(000) 000-0000

Contact: DON SALE
(818) 999-5600

Record Date: 11/27/1987

Classification: Small Quantity Generator

Used Oil Recyc: No

Violation Status: No violations found

34	**#930** **3628 BROADWAY ST** **GALVESTON, TX**	**TX IHW**	**S102755729** **N/A**

TX IHW:

Registration Number:	74408
Registration Initial Notification Date:	11/13/1987
Registration Last Amendment Date:	01/04/1991
EPA Identification:	TXD
TNRCC Premit Number:	982286247
Description of Facility Site Location:	3628 Broadway, Galveston, TX
Site Primary Standard Industrial Code:	Not reported
Registration is a Generator of Waste:	Yes
Registration is a Receivers of Waste:	No
Registration is a Transporter of Waste:	No
Registration is a Transfer Facility:	No
Mexican Facility:	Does not represent a Maquiladora (Mexican Facility)
Facility Status:	Inactive
Type of Generator:	Non-industrial and/or municipal, CESQG
Company Name:	Tuneup Masters
Facility County:	Not reported
TNRCC Region:	Not reported
Mailing Address:	2001 Corporate Center Drive Newbury Park, CA 91320
Mailing County:	USA
Contact:	George Mayer
Contact Telephone Number:	805-375-1100

Additional detail may be available for this site. Please contact your EDR Account Executive for more information

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35	**COMMERCIAL PROPERTY** **4010 AVENUE J** **GALVESTON, TX 77550**	**UST**	**U003040519** **N/A**

UST:

Facility ID:	0067575	Customer ID:	00177
Tank ID:	1	Installation Date:	08/31/87
Tank Installer:	Not reported	Tank Tested:	No
Tank Emptied:	No	Status Date:	12/31/87
Capacity:	0	Unit ID:	47209
Tank Material of Construction:	Not reported		
Pipe Material of Construction:	Not reported		

COMMERCIAL PROPERTY (Continued) **U003040519**

Other Materials of Construction:	Not reported
Tank Status:	Removed from the Ground
Tank Construction & Containment:	Not reported
Pipe Construction & Containment:	Not reported
Other Construction & Containment:	Not reported
Tank Substance Stored:	Not reported
Other Substance Stored:	Unknown
Tank Release Detection:	Not reported
Pipe Release Detection:	Not reported
Other Release Detection:	Not reported
Tank Corrosion Protection:	Not reported
Pipe Corrosion Protection:	Not reported
Pipe Corrosion Protection II:	Noncorrodible Material (c.g. FRP)
Other Corrosion Protection:	Not reported
Spill and Overfill Protection:	Not reported
Spill and Overfill Protection II:	Tight-Fill Fitting
Vapor Recovery Equipment Status:	Not reported
Equipment Installed Date:	Not reported
Equipment Installer:	Not reported
Contractor Registration Number:	Not reported
Tank Registration Date:	12/15/95
Installer License Number:	Not reported

Facility ID:	0067575	Customer ID:	00177
Tank ID:	2	Installation Date:	08/31/87
Tank Installer:	Not reported	Tank Tested:	No
Tank Emptied:	No	Status Date:	12/31/87
Capacity:	0	Unit ID:	47209

Tank Material of Construction:	Not reported
Pipe Material of Construction:	Not reported
Other Materials of Construction:	Not reported
Tank Status:	Removed from the Ground
Tank Construction & Containment:	Not reported
Pipe Construction & Containment:	Not reported
Other Construction & Containment:	Not reported
Tank Substance Stored:	Not reported
Other Substance Stored:	Unknown
Tank Release Detection:	Not reported
Pipe Release Detection:	Not reported
Other Release Detection:	Not reported
Tank Corrosion Protection:	Not reported
Pipe Corrosion Protection:	Not reported
Pipe Corrosion Protection II:	Noncorrodible Material (c.g. FRP)
Other Corrosion Protection:	Not reported
Spill and Overfill Protection:	Not reported
Spill and Overfill Protection II:	Tight-Fill Fitting
Vapor Recovery Equipment Status:	Not reported
Equipment Installed Date:	Not reported
Equipment Installer:	Not reported
Contractor Registration Number:	Not reported
Tank Registration Date:	12/15/95
Installer License Number:	Not reported

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35 **DIAMOND SHAMROCK #353** LUST **U001272679**
3927 BROADWAY ST UST **N/A**
GALVESTON, TX 77550

DIAMOND SHAMROCK #353 (Continued) **U001272679**

LUST:

Facility ID:	0040161	Discovery Date:	5/15/92
Data Entry Date:	9/30/92	Lead Office:	CENTRAL OFFICE LEAD
PST Coordinator:	SKV/RSV/DRB/LAS	RPR Coordinator:	SKV
Region:	12	Region City ID:	HOUSTON
Leaking Tank #:	103918		
Responsible Party:	DIAMOND SHAMROCK REF & MKTG CO		
RP Contact:	LOUIS MOSCONI		
RP Address:	1117 SILBER RD BDG C HOUSTON, TX 77055		
RP Telephone:	713/263-7377		
County Code:	084		
Priority:	GW IMPACTED, NO APPARENT THREATS OR IMPACTS TO RECEPTORS		
Status:	PHASE 3 IN PROGRESS AND QUARTERLY MONITORING IN PROGRESS		

UST:

Facility ID:	0040161	Customer ID:	00106
Tank ID:	3	Installation Date:	01/01/71
Tank Installer:	Not reported	Tank Tested:	No
Tank Emptied:	No	Status Date:	10/04/93
Capacity:	10000	Unit ID:	21599

Tank Material of Construction:	Steel
Pipe Material of Construction:	Fiberglass-Reinforced Plastic (FRP)
Other Materials of Construction:	Not reported
Tank Status:	Removed from the Ground
Tank Construction & Containment:	Single Wall
Pipe Construction & Containment:	Single Wall
Other Construction & Containment:	Single Wall
Tank Substance Stored:	Gasoline
Other Substance Stored:	Not reported
Tank Release Detection:	Inventory Control
Tank Release Detection II:	Tightness Testing
Pipe Release Detection:	Line Leak Detectors
Pipe Release Detection II:	Tightness Testing
Other Release Detection:	Not reported
Tank Corrosion Protection:	Not reported
Pipe Corrosion Protection:	Noncorrodible Material (c.g. FRP)
Pipe Corrosion Protection II:	Noncorrodible Material (c.g. FRP)
Other Corrosion Protection:	Not reported
Spill and Overfill Protection:	Unknown/None
Spill and Overfill Protection II:	Tight-Fill Fitting
Vapor Recovery Equipment Status:	Not reported
Equipment Installed Date:	Not reported
Equipment Installer:	Not reported
Contractor Registration Number:	Not reported
Tank Registration Date:	05/08/86
Installer License Number:	Not reported

Facility ID:	0040161	Customer ID:	00106
Tank ID:	2	Installation Date:	01/01/71
Tank Installer:	Not reported	Tank Tested:	No
Tank Emptied:	No	Status Date:	10/04/93
Capacity:	10000	Unit ID:	21599

Tank Material of Construction:	Steel
Pipe Material of Construction:	Fiberglass-Reinforced Plastic (FRP)
Other Materials of Construction:	Not reported
Tank Status:	Removed from the Ground

DIAMOND SHAMROCK #353 (Continued) **U001272679**

Tank Construction & Containment:	Single Wall
Pipe Construction & Containment:	Single Wall
Other Construction & Containment:	Single Wall
Tank Substance Stored:	Gasoline
Other Substance Stored:	Not reported
Tank Release Detection:	Inventory Control
Tank Release Detection II:	Tightness Testing
Pipe Release Detection:	Line Leak Detectors
Pipe Release Detection II:	Tightness Testing
Other Release Detection:	Not reported
Tank Corrosion Protection:	Not reported
Pipe Corrosion Protection:	Noncorrodible Material (c.g. FRP)
Pipe Corrosion Protection II:	Noncorrodible Material (c.g. FRP)
Other Corrosion Protection:	Not reported
Spill and Overfill Protection:	Unknown/None
Spill and Overfill Protection II:	Tight-Fill Fitting
Vapor Recovery Equipment Status:	Not reported
Equipment Installed Date:	Not reported
Equipment Installer:	Not reported
Contractor Registration Number:	Not reported
Tank Registration Date:	05/08/86
Installer License Number:	Not reported

Facility ID:	0040161	Customer ID:	00106
Tank ID:	1	Installation Date:	01/01/71
Tank Installer:	Not reported	Tank Tested:	No
Tank Emptied:	No	Status Date:	10/04/93
Capacity:	4000	Unit ID:	21599

Tank Material of Construction:	Steel
Pipe Material of Construction:	Fiberglass-Reinforced Plastic (FRP)
Other Materials of Construction:	Not reported
Tank Status:	Removed from the Ground
Tank Construction & Containment:	Single Wall
Pipe Construction & Containment:	Single Wall
Other Construction & Containment:	Single Wall
Tank Substance Stored:	Gasoline
Other Substance Stored:	Not reported
Tank Release Detection:	Inventory Control
Tank Release Detection II:	Tightness Testing
Pipe Release Detection:	Line Leak Detectors
Pipe Release Detection II:	Tightness Testing
Other Release Detection:	Not reported
Tank Corrosion Protection:	Not reported
Pipe Corrosion Protection:	Noncorrodible Material (c.g. FRP)
Pipe Corrosion Protection II:	Noncorrodible Material (c.g. FRP)
Other Corrosion Protection:	Not reported
Spill and Overfill Protection:	Unknown/None
Spill and Overfill Protection II:	Tight-Fill Fitting
Vapor Recovery Equipment Status:	Not reported
Equipment Installed Date:	Not reported
Equipment Installer:	Not reported
Contractor Registration Number:	Not reported
Tank Registration Date:	05/08/86
Installer License Number:	Not reported

35 **STOP N GO #2601**
3902 BROADWAY ST
GALVESTON, TX 77550

UST | **U003040507**
N/A

UST:

Facility ID:	0035250	Customer ID:	00093
Tank ID:	1	Installation Date:	01/01/83
Tank Installer:	Not reported	Tank Tested:	No
Tank Emptied:	No	Status Date:	05/13/98
Capacity:	12000	Unit ID:	21599

Tank Material of Construction:	Fiberglass-Reinforced Plastic (FRP)
Pipe Material of Construction:	Fiberglass-Reinforced Plastic (FRP)
Other Materials of Construction:	Not reported
Tank Status:	Removed from the Ground
Tank Construction & Containment:	Not reported
Pipe Construction & Containment:	Not reported
Other Construction & Containment:	Not reported
Tank Substance Stored:	Gasoline
Other Substance Stored:	Not reported
Tank Release Detection:	Inventory Control
Pipe Release Detection:	Line Leak Detectors
Pipe Release Detection II:	Stat. Inventory Reconciliation (SIR)
Other Release Detection:	MTG
Tank Corrosion Protection:	None
Pipe Corrosion Protection:	None
Pipe Corrosion Protection II:	Noncorrodible Material (c.g. FRP)
Other Corrosion Protection:	Not reported
Spill and Overfill Protection:	Automatic Overfill Device - Shut-Off Valve
Spill and Overfill Protection II:	Tight-Fill Fitting
Vapor Recovery Equipment Status:	Not reported
Equipment Installed Date:	Not reported
Equipment Installer:	Not reported
Contractor Registration Number:	Not reported
Tank Registration Date:	05/02/86
Installer License Number:	Not reported

Facility ID:	0035250	Customer ID:	00093
Tank ID:	3	Installation Date:	01/01/83
Tank Installer:	Not reported	Tank Tested:	No
Tank Emptied:	No	Status Date:	05/13/98
Capacity:	12000	Unit ID:	21599

Tank Material of Construction:	Fiberglass-Reinforced Plastic (FRP)
Pipe Material of Construction:	Fiberglass-Reinforced Plastic (FRP)
Other Materials of Construction:	Not reported
Tank Status:	Removed from the Ground
Tank Construction & Containment:	Not reported
Pipe Construction & Containment:	Not reported
Other Construction & Containment:	Not reported
Tank Substance Stored:	Gasoline
Other Substance Stored:	Not reported
Tank Release Detection:	Inventory Control
Pipe Release Detection:	Line Leak Detectors
Pipe Release Detection II:	Stat. Inventory Reconciliation (SIR)
Other Release Detection:	MTG
Tank Corrosion Protection:	None
Pipe Corrosion Protection:	None
Pipe Corrosion Protection II:	Noncorrodible Material (c.g. FRP)
Other Corrosion Protection:	Not reported
Spill and Overfill Protection:	Automatic Overfill Device - Shut-Off Valve

STOP N GO #2601 (Continued) **U003040507**

Spill and Overfill Protection II:	Tight-Fill Fitting
Vapor Recovery Equipment Status:	Not reported
Equipment Installed Date:	Not reported
Equipment Installer:	Not reported
Contractor Registration Number:	Not reported
Tank Registration Date:	05/02/86
Installer License Number:	Not reported

Facility ID:	0035250	Customer ID:	00093
Tank ID:	2	Installation Date:	01/01/83
Tank Installer:	Not reported	Tank Tested:	No
Tank Emptied:	No	Status Date:	05/13/98
Capacity:	12000	Unit ID:	21599

Tank Material of Construction:	Fiberglass-Reinforced Plastic (FRP)
Pipe Material of Construction:	Fiberglass-Reinforced Plastic (FRP)
Other Materials of Construction:	Not reported
Tank Status:	Removed from the Ground
Tank Construction & Containment:	Not reported
Pipe Construction & Containment:	Not reported
Other Construction & Containment:	Not reported
Tank Substance Stored:	Gasoline
Other Substance Stored:	Not reported
Tank Release Detection:	Inventory Control
Pipe Release Detection:	Line Leak Detectors
Pipe Release Detection II:	Stat. Inventory Reconciliation (SIR)
Other Release Detection:	MTG
Tank Corrosion Protection:	None
Pipe Corrosion Protection:	None
Pipe Corrosion Protection II:	Noncorrodible Material (c.g. FRP)
Other Corrosion Protection:	Not reported
Spill and Overfill Protection:	Automatic Overfill Device - Shut-Off Valve
Spill and Overfill Protection II:	Tight-Fill Fitting
Vapor Recovery Equipment Status:	Not reported
Equipment Installed Date:	Not reported
Equipment Installer:	Not reported
Contractor Registration Number:	Not reported
Tank Registration Date:	05/02/86
Installer License Number:	Not reported

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35 **RAS 6-2682** **LUST** **U001260650**
3827 BROADWAY ST **UST** **N/A**
GALVESTON, TX 77550

RAS 6-2682 (Continued) **U001260650**

LUST:

Facility ID:	0026738	Discovery Date:	3/10/89
Data Entry Date:	3/13/89	Lead Office:	CENTRAL OFFICE LEAD
PST Coordinator:	PJW/DMN	RPR Coordinator:	PETE WEHNER
Region:	12	Region City ID:	HOUSTON
Leaking Tank #:	092685		
Responsible Party:	EXXON COMPANY USA		
RP Contact:	KRIS GAGNON		
RP Address:	PO BOX 2180 HOUSTON, TX 77252 - 2180		
RP Telephone:	713/656-7743		
County Code:	084		
Priority:	GROUNDWATER OTHER THAN 1B, SITE CHARACTERIZATION INCOMPLETE		
Status:	FINAL CONCURRENCE ISSUED, CASE CLOSED		

UST:

Facility ID:	0026738	Customer ID:	00070
Tank ID:	4	Installation Date:	01/01/73
Tank Installer:	Not reported	Tank Tested:	No
Tank Emptied:	No	Status Date:	07/30/87
Capacity:	550	Unit ID:	04194

Tank Material of Construction:	Steel
Pipe Material of Construction:	Steel
Other Materials of Construction:	Not reported
Tank Status:	Removed from the Ground
Tank Construction & Containment:	Not reported
Pipe Construction & Containment:	Not reported
Other Construction & Containment:	Not reported
Tank Substance Stored:	Used Oil
Other Substance Stored:	Not reported
Tank Release Detection:	None
Pipe Release Detection:	None
Other Release Detection:	Not reported
Tank Corrosion Protection:	Cathodic Protection System
Pipe Corrosion Protection:	Cathodic Protection System
Pipe Corrosion Protection II:	Noncorrodible Material (c.g. FRP)
Other Corrosion Protection:	Not reported
Spill and Overfill Protection:	Unknown/None
Spill and Overfill Protection II:	Tight-Fill Fitting
Vapor Recovery Equipment Status:	Not reported
Equipment Installed Date:	Not reported
Equipment Installer:	Not reported
Contractor Registration Number:	Not reported
Tank Registration Date:	05/08/86
Installer License Number:	Not reported

Facility ID:	0026738	Customer ID:	00070
Tank ID:	1	Installation Date:	01/01/73
Tank Installer:	Not reported	Tank Tested:	No
Tank Emptied:	No	Status Date:	07/30/87
Capacity:	4000	Unit ID:	04194

Tank Material of Construction:	Steel
Pipe Material of Construction:	Steel
Other Materials of Construction:	Not reported
Tank Status:	Removed from the Ground
Tank Construction & Containment:	Not reported
Pipe Construction & Containment:	Not reported

RAS 6-2682 (Continued) **U001260650**

Other Construction & Containment: Not reported
Tank Substance Stored: Gasoline
Other Substance Stored: Not reported
Tank Release Detection: None
Pipe Release Detection: None
Other Release Detection: Not reported
Tank Corrosion Protection: Cathodic Protection System
Pipe Corrosion Protection: Cathodic Protection System
Pipe Corrosion Protection II: Noncorrodible Material (c.g. FRP)
Other Corrosion Protection: Not reported
Spill and Overfill Protection: Unknown/None
Spill and Overfill Protection II: Tight-Fill Fitting
Vapor Recovery Equipment Status: Not reported
Equipment Installed Date: Not reported
Equipment Installer: Not reported
Contractor Registration Number: Not reported
Tank Registration Date: 05/08/86
Installer License Number: Not reported

Facility ID: 0026738 | Customer ID: 00070
Tank ID: 3 | Installation Date: 01/01/73
Tank Installer: Not reported | Tank Tested: No
Tank Emptied: No | Status Date: 07/30/87
Capacity: 8000 | Unit ID: 04194
Tank Material of Construction: Steel
Pipe Material of Construction: Steel
Other Materials of Construction: Not reported
Tank Status: Removed from the Ground
Tank Construction & Containment: Not reported
Pipe Construction & Containment: Not reported
Other Construction & Containment: Not reported
Tank Substance Stored: Gasoline
Other Substance Stored: Not reported
Tank Release Detection: None
Pipe Release Detection: None
Other Release Detection: Not reported
Tank Corrosion Protection: Cathodic Protection System
Pipe Corrosion Protection: Cathodic Protection System
Pipe Corrosion Protection II: Noncorrodible Material (c.g. FRP)
Other Corrosion Protection: Not reported
Spill and Overfill Protection: Unknown/None
Spill and Overfill Protection II: Tight-Fill Fitting
Vapor Recovery Equipment Status: Not reported
Equipment Installed Date: Not reported
Equipment Installer: Not reported
Contractor Registration Number: Not reported
Tank Registration Date: 05/08/86
Installer License Number: Not reported

Facility ID: 0026738 | Customer ID: 00070
Tank ID: 2 | Installation Date: 01/01/73
Tank Installer: Not reported | Tank Tested: No
Tank Emptied: No | Status Date: 07/30/87
Capacity: 6000 | Unit ID: 04194
Tank Material of Construction: Steel
Pipe Material of Construction: Steel
Other Materials of Construction: Not reported

RAS 6-2682 (Continued) **U001260650**

Tank Status:	Removed from the Ground
Tank Construction & Containment:	Not reported
Pipe Construction & Containment:	Not reported
Other Construction & Containment:	Not reported
Tank Substance Stored:	Gasoline
Other Substance Stored:	Not reported
Tank Release Detection:	None
Pipe Release Detection:	None
Other Release Detection:	Not reported
Tank Corrosion Protection:	Cathodic Protection System
Pipe Corrosion Protection:	Cathodic Protection System
Pipe Corrosion Protection II:	Noncorrodible Material (c.g. FRP)
Other Corrosion Protection:	Not reported
Spill and Overfill Protection:	Unknown/None
Spill and Overfill Protection II:	Tight-Fill Fitting
Vapor Recovery Equipment Status:	Not reported
Equipment Installed Date:	Not reported
Equipment Installer:	Not reported
Contractor Registration Number:	Not reported
Tank Registration Date:	05/08/86
Installer License Number:	Not reported

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35 **STOP-N-BYE FOOD MART, INC.** **UST** **U002112576**
3825 BROADWAY ST **N/A**
GALVESTON, TX 77550

UST:

Facility ID:	0066368	Customer ID:	00173
Tank ID:	1	Installation Date:	05/01/94
Tank Installer:	M. Chakravarty	Tank Tested:	Yes
Tank Emptied:	No	Status Date:	Not reported
Capacity:	12000	Unit ID:	45593

Tank Material of Construction:	Composite (steel with FRP laminate)
Pipe Material of Construction:	Fiberglass-Reinforced Plastic (FRP)
Other Materials of Construction:	Not reported
Tank Status:	In Use
Tank Construction & Containment:	Single Wall
Pipe Construction & Containment:	Single Wall
Other Construction & Containment:	Single Wall
Tank Substance Stored:	Gasoline
Other Substance Stored:	Not reported
Tank Release Detection:	Automatic In-Tank Monitoring & Inventory Control
Tank Release Detection II:	Vapor Monitoring
Pipe Release Detection:	Line Leak Detectors
Other Release Detection:	Not reported
Tank Corrosion Protection:	Composite Tank (steel w/FRP laminate)
Pipe Corrosion Protection:	Not reported
Pipe Corrosion Protection II:	Noncorrodible Material (c.g. FRP)
Other Corrosion Protection:	Not reported
Spill and Overfill Protection:	Automatic Overfill Device - Flow Restricter Valve
Spill and Overfill Protection II:	Tight-Fill Fitting
Vapor Recovery Equipment Status:	Not reported
Equipment Installed Date:	Not reported
Equipment Installer:	Petroleum Contamination
Contractor Registration Number:	001067
Tank Registration Date:	01/20/95
Installer License Number:	001396

Facility ID:	0066368	Customer ID:	00173

STOP-N-BYE FOOD MART, INC. (Continued) **U002112576**

Tank ID:	2	Installation Date:	05/01/94
Tank Installer:	M. Chakravarty	Tank Tested:	Yes
Tank Emptied:	No	Status Date:	Not reported
Capacity:	10000	Unit ID:	45593

Tank Material of Construction:	Composite (steel with FRP laminate)
Pipe Material of Construction:	Fiberglass-Reinforced Plastic (FRP)
Other Materials of Construction:	Not reported
Tank Status:	In Use
Tank Construction & Containment:	Single Wall
Pipe Construction & Containment:	Single Wall
Other Construction & Containment:	Single Wall
Tank Substance Stored:	Gasoline
Other Substance Stored:	Not reported
Tank Release Detection:	Automatic In-Tank Monitoring & Inventory Control
Tank Release Detection II:	Vapor Monitoring
Pipe Release Detection:	Line Leak Detectors
Other Release Detection:	Not reported
Tank Corrosion Protection:	Composite Tank (steel w/FRP laminate)
Pipe Corrosion Protection:	Not reported
Pipe Corrosion Protection II:	Noncorrodible Material (c.g. FRP)
Other Corrosion Protection:	Not reported
Spill and Overfill Protection:	Automatic Overfill Device - Flow Restricter Valve
Spill and Overfill Protection II:	Tight-Fill Fitting
Vapor Recovery Equipment Status:	Not reported
Equipment Installed Date:	Not reported
Equipment Installer:	Petroleum Contamination
Contractor Registration Number:	001067
Tank Registration Date:	01/20/95
Installer License Number:	001396

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35 **CLOSED SERVICE STATION** **LUST** **S103496805**
3826 BROADWAY **N/A**
GALVESTON, TX

LUST:

Facility ID:	Not reported	Discovery Date:	6/11/91
Data Entry Date:	6/12/91	Lead Office:	1/1P/1
PST Coordinator:	RPR/AES/JRD/MJM	RPR Coordinator:	H06
Region:	12	Region City ID:	HOUSTON
Leaking Tank #:	099219		

Responsible Party:	COLUMBIA SAVINGS
RP Contact:	DARIN WEINHEIMER
RP Address:	2500 W LOOP S 210 HOUSTON, TX 77027
RP Telephone:	713/888-7709
County Code:	084
Priority:	NO GW IMPACT, NO APPARENT THREATS OR IMPACTS TO RECEPTORS
Status:	PHASE 2 REPORT RECEIVED, REVIEW PENDING

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36 **ACTION WRECKER & TRUCKING** **AST** **A100122674**
601 51ST ST **N/A**
GALVESTON, TX 77551

ACTION WRECKER & TRUCKING (Continued) **A100122674**

AST:

Facility ID:	0055702	Owner ID:	00161993
Tank ID:	1	Facility Type:	Fleet refueling
Number of USTs:	Not reported	Number of ASTs:	1
Capacity:	0002000	Tank Status:	In use
Customer ID:	30065		
Contact:	RICHARD RAMERO	Contact phone:	(409) 763-8077
Content:	Diesel	Other content:	Not reported
Containment:	Not reported	Other Contain.:	Not reported
Material:	Not reported	Other material:	Not reported
Facility phone:	Not reported	Date Installed:	01/01/90
Facility Manager:	Not reported	Manager Title:	Not reported
Owner:	ROMERO, RICHARD		
Owner Address:	PO BOX 349 GALVESTON, TX 77552		

Date out of use: Not reported
Date registration form was received: 08/28/90
Vapor recovery equipment status: Not reported
State 2 equipment installed: Not reported

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37 **GALVESTON IND SCHOOL DIST** **RCRIS-SQG** **1000454709**
1326 31ST ST **FINDS** **TXD987993318**
GALVESTON, TX 77550

RCRIS:

Owner: GALVESTON ISD
(000) 000-0000

Contact: JOHN KIRKENDALL
(409) 762-8181

Record Date: 07/06/1990

Classification: Small Quantity Generator

Used Oil Recyc: No

Violation Status: No violations found

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38 **ANSELL MEGNA INVESTMENTS** **LUST** **S103501477**
1616-24 TREMONT ST **N/A**
GALVESTON, TX

ANSELL MEGNA INVESTMENTS (Continued) **S103501477**

LUST:

Facility ID:	Not reported	Discovery Date:	Not reported
Data Entry Date:	8/8/96	Lead Office:	CENTRAL OFFICE LEAD
PST Coordinator:	XYZ	RPR Coordinator:	OLD
Region:	12	Region City ID:	HOUSTON
Leaking Tank #:	111448		
Responsible Party:	HOUSING FOR HUMANITY INC		
RP Contact:	CHUCK JANKE		
RP Address:	700 LOUISIANA #2510 HOUSTON, TX 77002		
RP Telephone:	713/223-4610		
County Code:	084		
Priority:	NO GW IMPACT, NO APPARENT THREATS OR IMPACTS TO RECEPTORS		
Status:	INCIDENT REPORTED, INITIAL DIRECTIVES NOT YET ISSUED		

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39 **HALF-MILE LAGOON** **CERCLIS 1000482540**
ON 51ST OFF PORT INDUSTRIAL ROAD **FINDS TXD987990413**
PELICAN ISLAND, TX 77551

CERCLIS Classification Data:

Site Incident Category:	Not reported	Federal Facility:	Not a Federal Facility
Ownership Status:	Municipality	NPL Status:	Not on the NPL
Contact:	KAREN BOND	Contact Tel:	(214) 665-6682
Contact:	Carlene Chambers	Contact Tel:	(214) 665-6720
Contact:	Gus Chavarria	Contact Tel:	(214) 665-3162
Contact:	Carl Edlund	Contact Tel:	(214) 665-8125
Contact:	Jhana Enders	Contact Tel:	(214) 665-6654
Contact:	Stan Hitt	Contact Tel:	(214) 665-6735
Contact:	Bill Honker	Contact Tel:	(214) 665-6727
Contact:	Don Markham	Contact Tel:	(214) 665-6675
Contact:	Buddy Parr	Contact Tel:	(214) 665-6670
Contact:	SHIRLEY WORKMAN	Contact Tel:	(214) 655-6760

Site Description: THE SITE CONSISTED OF A LARGE LEVEED IMPOUNDMENT, APPROXIMATELY 1/2 MILE LONG.
THE SITE CONSISTED OF A LARGE LEVEED IMPOUNDMENT, APPROXIMATELY 1/2 MILE LONG.

CERCLIS Assessment History:

Assessment:	DISCOVERY	Completed:	19900501
Assessment:	PRELIMINARY ASSESSMENT	Completed:	19930629
Assessment:	SITE INSPECTION	Completed:	19971009

CERCLIS Site Status:
NFRAP (No Futher Remedial Action Planned

CERCLIS Alias Name(s):
HALF-MILE LAGOON

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40 **MALIN ENVIRONMENTAL INC** **TX IHW S102745297**
5220 AVENUE G **N/A**
GALVESTON, TX 77551

TX IHW:

Registration Number:	39667
Registration Initial Notification Date:	02/20/1992
Registration Last Amendment Date:	12/17/1992
EPA Identification:	TXD
TNRCC Premit Number:	988029419
Description of Facility Site Location:	5220 AVE G GALVESTON TX 77551
Site Primary Standard Industrial Code:	00
	Not reported

MALIN ENVIRONMENTAL INC (Continued) **S102745297**

Registration is a Generator of Waste:	Yes
Registration is a Receivers of Waste:	No
Registration is a Transporter of Waste:	No
Registration is a Transfer Facility:	No
Mexican Facility:	Does not represent a Maquiladora (Mexican Facility)
Facility Status:	Active
Type of Generator:	Industrial, SQG
Company Name:	MALIN ENVIRONMENTAL INC
Facility County:	Not reported
TNRCC Region:	Not reported
Mailing Address:	5220 AVE G P.O. Box 3069 GALVESTON, TX 77552
Mailing County:	USA
Contact:	Eddie Yeager
Contact Telephone Number:	409-744-8510

Additional detail may be available for this site. Please contact your EDR Account Executive for more information

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40 **MALIN ENVIRONMENTAL INC**
5220 AVE G
GALVESTON, TX 77551

RCRIS-SQG **1000653197**
FINDS **TXD988029419**

RCRIS:

Owner:	JAMES MALIN (409) 744-8510
Contact:	RICHARD MILES (409) 737-1267
Record Date:	04/18/1991
Classification:	Small Quantity Generator, Hazardous Waste Transporter
Used Oil Recyc:	No
Violation Status:	No violations found

---

41 **PAT HARTNETT**
4427 AVENUE J
GALVESTON, TX 77550

TX IHW **S103605721**
N/A

TX IHW:

Registration Number:	61535
Registration Initial Notification Date:	09/30/1985
Registration Last Amendment Date:	Not reported
EPA Identification:	Not reported
TNRCC Premit Number:	Not reported
Description of Facility Site Location:	4427 Avenue J, Galveston, TX
Site Primary Standard Industrial Code:	Not reported
Registration is a Generator of Waste:	Yes
Registration is a Receivers of Waste:	No
Registration is a Transporter of Waste:	No
Registration is a Transfer Facility:	No
Mexican Facility:	Does not represent a Maquiladora (Mexican Facility)
Facility Status:	Inactive
Type of Generator:	Non-industrial and/or municipal, CESQG
Company Name:	Shell Service Station
Facility County:	Not reported

PAT HARTNETT (Continued) **S103605721**

TNRCC Region:	Not reported
Mailing Address:	4427 Avenue J Galveston, TX 77550
Mailing County:	USA
Contact:	Pat Hartnett
Contact Telephone Number:	Not reported

Additional detail may be available for this site. Please contact your EDR Account Executive for more information

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41 **SHELL OIL CO** **UST** **U003566567**
4427 BROADWAY ST **N/A**
GALVESTON, TX 77550

UST:

Facility ID:	0033080	Customer ID:	00087
Tank ID:	1	Installation Date:	01/01/67
Tank Installer:	Not reported	Tank Tested:	No
Tank Emptied:	No	Status Date:	12/01/86
Capacity:	550	Unit ID:	52374

Tank Material of Construction:	Steel
Pipe Material of Construction:	Steel
Other Materials of Construction:	Not reported
Tank Status:	Abandoned In-place
Tank Construction & Containment:	Not reported
Pipe Construction & Containment:	Not reported
Other Construction & Containment:	Not reported
Tank Substance Stored:	Used Oil
Other Substance Stored:	Not reported
Tank Release Detection:	None
Pipe Release Detection:	None
Other Release Detection:	Not reported
Tank Corrosion Protection:	None
Pipe Corrosion Protection:	None
Pipe Corrosion Protection II:	Noncorrodible Material (c.g. FRP)
Other Corrosion Protection:	Not reported
Spill and Overfill Protection:	Unknown/None
Spill and Overfill Protection II:	Tight-Fill Fitting
Vapor Recovery Equipment Status:	Not reported
Equipment Installed Date:	Not reported
Equipment Installer:	Not reported
Contractor Registration Number:	Not reported
Tank Registration Date:	05/05/86
Installer License Number:	Not reported

Facility ID:	0033080	Customer ID:	00087
Tank ID:	2	Installation Date:	01/01/67
Tank Installer:	Not reported	Tank Tested:	No
Tank Emptied:	No	Status Date:	12/01/86
Capacity:	5000	Unit ID:	52374

Tank Material of Construction:	Steel
Pipe Material of Construction:	Steel
Other Materials of Construction:	Not reported
Tank Status:	Abandoned In-place
Tank Construction & Containment:	Not reported
Pipe Construction & Containment:	Not reported
Other Construction & Containment:	Not reported
Tank Substance Stored:	Gasoline
Other Substance Stored:	Not reported

SHELL OIL CO (Continued) **U003566567**

Tank Release Detection: None
Pipe Release Detection: None
Other Release Detection: Not reported
Tank Corrosion Protection: None
Pipe Corrosion Protection: None
Pipe Corrosion Protection II: Noncorrodible Material (c.g. FRP)
Other Corrosion Protection: Not reported
Spill and Overfill Protection: Unknown/None
Spill and Overfill Protection II: Tight-Fill Fitting
Vapor Recovery Equipment Status: Not reported
Equipment Installed Date: Not reported
Equipment Installer: Not reported
Contractor Registration Number: Not reported
Tank Registration Date: 05/05/86
Installer License Number: Not reported

Facility ID: 0033080 Customer ID: 00087
Tank ID: 4 Installation Date: 01/01/67
Tank Installer: Not reported Tank Tested: No
Tank Emptied: No Status Date: 12/01/86
Capacity: 8000 Unit ID: 52374
Tank Material of Construction: Fiberglass-Reinforced Plastic (FRP)
Pipe Material of Construction: Fiberglass-Reinforced Plastic (FRP)
Other Materials of Construction: Not reported
Tank Status: Abandoned In-place
Tank Construction & Containment: Not reported
Pipe Construction & Containment: Not reported
Other Construction & Containment: Not reported
Tank Substance Stored: Gasoline
Other Substance Stored: Not reported
Tank Release Detection: None
Pipe Release Detection: None
Other Release Detection: Not reported
Tank Corrosion Protection: None
Pipe Corrosion Protection: None
Pipe Corrosion Protection II: Noncorrodible Material (c.g. FRP)
Other Corrosion Protection: Not reported
Spill and Overfill Protection: Unknown/None
Spill and Overfill Protection II: Tight-Fill Fitting
Vapor Recovery Equipment Status: Not reported
Equipment Installed Date: Not reported
Equipment Installer: Not reported
Contractor Registration Number: Not reported
Tank Registration Date: 05/05/86
Installer License Number: Not reported

Facility ID: 0033080 Customer ID: 00087
Tank ID: 3 Installation Date: 01/01/67
Tank Installer: Not reported Tank Tested: No
Tank Emptied: No Status Date: 12/01/86
Capacity: 5000 Unit ID: 52374
Tank Material of Construction: Steel
Pipe Material of Construction: Steel
Other Materials of Construction: Not reported
Tank Status: Abandoned In-place
Tank Construction & Containment: Not reported
Pipe Construction & Containment: Not reported

SHELL OIL CO (Continued) **U003566567**

Other Construction & Containment:	Not reported
Tank Substance Stored:	Gasoline
Other Substance Stored:	Not reported
Tank Release Detection:	None
Pipe Release Detection:	None
Other Release Detection:	Not reported
Tank Corrosion Protection:	None
Pipe Corrosion Protection:	None
Pipe Corrosion Protection II:	Noncorrodible Material (c.g. FRP)
Other Corrosion Protection:	Not reported
Spill and Overfill Protection:	Unknown/None
Spill and Overfill Protection II:	Tight-Fill Fitting
Vapor Recovery Equipment Status:	Not reported
Equipment Installed Date:	Not reported
Equipment Installer:	Not reported
Contractor Registration Number:	Not reported
Tank Registration Date:	05/05/86
Installer License Number:	Not reported

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41 **FORMER SHELL RETAIL FACILITY** **LUST** **S103495402**
4427 BROADWAY **N/A**
GALVESTON, TX

LUST:

Facility ID:	0033080	Discovery Date:	5/12/90
Data Entry Date:	6/7/90	Lead Office:	CENTRAL OFFICE LEAD
PST Coordinator:	WMK/KMC/DSA	RPR Coordinator:	BILL KOGER
Region:	12	Region City ID:	HOUSTON
Leaking Tank #:	095708		
Responsible Party:	SHELL OIL CO		
RP Contact:	CRAIG SCHNUPP		
RP Address:	1415 W 22ND ST OAK BROOK, IL 60522 - 9008		
RP Telephone:	708/572-5607		
County Code:	084		
Priority:	GW IMPACTED, NO APPARENT THREATS OR IMPACTS TO RECEPTORS		
Status:	FINAL CONCURRENCE ISSUED, CASE CLOSED		

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41 **PIT STOP** **UST** **U003566575**
4401 BROADWAY ST **N/A**
GALVESTON, TX 77553

UST:

Facility ID:	0012810	Customer ID:	00033
Tank ID:	3	Installation Date:	01/01/71
Tank Installer:	Not reported	Tank Tested:	Yes
Tank Emptied:	No	Status Date:	Not reported
Capacity:	3000	Unit ID:	49443

Tank Material of Construction:	Steel
Pipe Material of Construction:	Steel
Other Materials of Construction:	Not reported
Tank Status:	In Use
Tank Construction & Containment:	Not reported
Pipe Construction & Containment:	Not reported
Other Construction & Containment:	Not reported
Tank Substance Stored:	Gasoline
Other Substance Stored:	Not reported
Tank Release Detection:	None

PIT STOP (Continued) **U003566575**

Pipe Release Detection:	None
Other Release Detection:	Not reported
Tank Corrosion Protection:	None
Pipe Corrosion Protection:	None
Pipe Corrosion Protection II:	Noncorrodible Material (c.g. FRP)
Other Corrosion Protection:	Not reported
Spill and Overfill Protection:	Unknown/None
Spill and Overfill Protection II:	Tight-Fill Fitting
Vapor Recovery Equipment Status:	Not reported
Equipment Installed Date:	Not reported
Equipment Installer:	Not reported
Contractor Registration Number:	Not reported
Tank Registration Date:	05/08/86
Installer License Number:	Not reported

Facility ID:	0012810	Customer ID:	00033
Tank ID:	2	Installation Date:	01/01/71
Tank Installer:	Not reported	Tank Tested:	Yes
Tank Emptied:	No	Status Date:	Not reported
Capacity:	6000	Unit ID:	49443

Tank Material of Construction:	Steel
Pipe Material of Construction:	Steel
Other Materials of Construction:	Not reported
Tank Status:	In Use
Tank Construction & Containment:	Not reported
Pipe Construction & Containment:	Not reported
Other Construction & Containment:	Not reported
Tank Substance Stored:	Gasoline
Other Substance Stored:	Not reported
Tank Release Detection:	None
Pipe Release Detection:	None
Other Release Detection:	Not reported
Tank Corrosion Protection:	None
Pipe Corrosion Protection:	None
Pipe Corrosion Protection II:	Noncorrodible Material (c.g. FRP)
Other Corrosion Protection:	Not reported
Spill and Overfill Protection:	Unknown/None
Spill and Overfill Protection II:	Tight-Fill Fitting
Vapor Recovery Equipment Status:	Not reported
Equipment Installed Date:	Not reported
Equipment Installer:	Not reported
Contractor Registration Number:	Not reported
Tank Registration Date:	05/08/86
Installer License Number:	Not reported

Facility ID:	0012810	Customer ID:	00033
Tank ID:	1	Installation Date:	01/01/71
Tank Installer:	Not reported	Tank Tested:	Yes
Tank Emptied:	No	Status Date:	Not reported
Capacity:	6000	Unit ID:	49443

Tank Material of Construction:	Steel
Pipe Material of Construction:	Steel
Other Materials of Construction:	Not reported
Tank Status:	In Use
Tank Construction & Containment:	Not reported
Pipe Construction & Containment:	Not reported
Other Construction & Containment:	Not reported

PIT STOP (Continued) **U003566575**

Tank Substance Stored:	Gasoline
Other Substance Stored:	Not reported
Tank Release Detection:	None
Pipe Release Detection:	None
Other Release Detection:	Not reported
Tank Corrosion Protection:	None
Pipe Corrosion Protection:	None
Pipe Corrosion Protection II:	Noncorrodible Material (c.g. FRP)
Other Corrosion Protection:	Not reported
Spill and Overfill Protection:	Unknown/None
Spill and Overfill Protection II:	Tight-Fill Fitting
Vapor Recovery Equipment Status:	Not reported
Equipment Installed Date:	Not reported
Equipment Installer:	Not reported
Contractor Registration Number:	Not reported
Tank Registration Date:	05/08/86
Installer License Number:	Not reported

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42 **MR. MUFFLER & BRAKE SHOP** FINDS 1001251040
4527 BROADWAY TX0966636
GALVESTON, TX 77551

FINDS:
Other Pertinent Environmental Activity Identified at Site:
AIRS Facility System (AIRS/AFS)

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42 **AAMCO TRANSMSN** TX IHW 1000696277
4520 BROADWAY RCRIS-SQG TXD988070470
GALVESTON, TX 77551 FINDS

RCRIS:

Owner: RALPH WILSON
(409) 744-1673

Contact: RALPH WILSON
(409) 765-6373

Record Date: 05/04/1992

Classification: Small Quantity Generator

Used Oil Recyc: No

Violation Status: No violations found

TX IHW:

Registration Number:	77640
Registration Initial Notification Date:	07/27/1992
Registration Last Amendment Date:	01/20/1997
EPA Identification:	TXD
TNRCC Premit Number:	988070470
Description of Facility Site Location:	4520 Broadway, Galveston
Site Primary Standard Industrial Code:	00
	Not reported
Registration is a Generator of Waste:	Yes
Registration is a Receivers of Waste:	No
Registration is a Transporter of Waste:	No
Registration is a Transfer Facility:	No
Mexican Facility:	Does not represent a Maquiladora (Mexican Facility)
Facility Status:	Active

AAMCO TRANSMSN (Continued) **1000696277**

Type of Generator:	Non-industrial and/or municipal, SQG
Company Name:	AAMCO TRANSMISSIONS
Facility County:	Not reported
TNRCC Region:	Not reported
Mailing Address:	4520 BROADWAY GALVESTON, TX 77551
Mailing County:	USA
Contact:	Ralph Wilson
Contact Telephone Number:	409-765-6373

Additional detail may be available for this site. Please contact your EDR Account Executive for more information

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43 **UNIFORM & LINEN** **UST** **U001268057**
820 51ST ST **N/A**
GALVESTON, TX 77550

UST:

Facility ID:	0035075	Customer ID:	00092
Tank ID:	1	Installation Date:	01/01/78
Tank Installer:	Not reported	Tank Tested:	Yes
Tank Emptied:	No	Status Date:	03/01/88
Capacity:	0	Unit ID:	06447

Tank Material of Construction:	Steel
Pipe Material of Construction:	Steel
Other Materials of Construction:	Not reported
Tank Status:	Removed from the Ground
Tank Construction & Containment:	Not reported
Pipe Construction & Containment:	Not reported
Other Construction & Containment:	Not reported
Tank Substance Stored:	Gasoline
Other Substance Stored:	Not reported
Tank Release Detection:	None
Pipe Release Detection:	None
Other Release Detection:	Not reported
Tank Corrosion Protection:	None
Pipe Corrosion Protection:	None
Pipe Corrosion Protection II:	Noncorrodible Material (c.g. FRP)
Other Corrosion Protection:	Not reported
Spill and Overfill Protection:	Unknown/None
Spill and Overfill Protection II:	Tight-Fill Fitting
Vapor Recovery Equipment Status:	Not reported
Equipment Installed Date:	Not reported
Equipment Installer:	Not reported
Contractor Registration Number:	Not reported
Tank Registration Date:	04/26/86
Installer License Number:	Not reported

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44 **DIAZ SERVICE CENTER** **UST** **U001257741**
1325 39TH ST **N/A**
GALVESTON, TX 77550

UST:

Facility ID:	0023402	Customer ID:	00060
Tank ID:	3	Installation Date:	01/01/66
Tank Installer:	Not reported	Tank Tested:	No
Tank Emptied:	No	Status Date:	Not reported
Capacity:	4000	Unit ID:	11551

DIAZ SERVICE CENTER (Continued) **U001257741**

Tank Material of Construction:	Fiberglass-Reinforced Plastic (FRP)
Pipe Material of Construction:	Fiberglass-Reinforced Plastic (FRP)
Other Materials of Construction:	Not reported
Tank Status:	In Use
Tank Construction & Containment:	Single Wall
Pipe Construction & Containment:	Single Wall
Other Construction & Containment:	Single Wall
Tank Substance Stored:	Gasoline
Other Substance Stored:	Not reported
Tank Release Detection:	Groundwater Monitoring
Tank Release Detection II:	Tightness Testing
Pipe Release Detection:	Line Leak Detectors
Other Release Detection:	Vapor Monitoring
Tank Corrosion Protection:	Composite Tank (steel w/FRP laminate)
Tank Corrosion Protection II:	Noncorrodible Material (c.g. FRP)
Pipe Corrosion Protection:	Not reported
Pipe Corrosion Protection II:	Noncorrodible Material (c.g. FRP)
Other Corrosion Protection:	Not reported
Spill and Overfill Protection:	Automatic Overfill Device - Flow Restricter Valve
Spill and Overfill Protection II:	Tight-Fill Fitting
Vapor Recovery Equipment Status:	Not reported
Equipment Installed Date:	Not reported
Equipment Installer:	Not reported
Contractor Registration Number:	Not reported
Tank Registration Date:	05/08/86
Installer License Number:	Not reported

Facility ID:	0023402	Customer ID:	00060
Tank ID:	2	Installation Date:	01/01/66
Tank Installer:	Not reported	Tank Tested:	No
Tank Emptied:	No	Status Date:	Not reported
Capacity:	2000	Unit ID:	11551

Tank Material of Construction:	Composite (steel with FRP laminate)
Pipe Material of Construction:	Fiberglass-Reinforced Plastic (FRP)
Other Materials of Construction:	Not reported
Tank Status:	In Use
Tank Construction & Containment:	Single Wall
Pipe Construction & Containment:	Single Wall
Other Construction & Containment:	Single Wall
Tank Substance Stored:	Gasoline
Other Substance Stored:	Not reported
Tank Release Detection:	Groundwater Monitoring
Tank Release Detection II:	Tightness Testing
Pipe Release Detection:	Line Leak Detectors
Other Release Detection:	Vapor Monitoring
Tank Corrosion Protection:	Composite Tank (steel w/FRP laminate)
Pipe Corrosion Protection:	Not reported
Pipe Corrosion Protection II:	Noncorrodible Material (c.g. FRP)
Other Corrosion Protection:	Not reported
Spill and Overfill Protection:	Automatic Overfill Device - Flow Restricter Valve
Spill and Overfill Protection II:	Tight-Fill Fitting
Vapor Recovery Equipment Status:	Not reported
Equipment Installed Date:	Not reported
Equipment Installer:	Not reported
Contractor Registration Number:	Not reported
Tank Registration Date:	05/08/86
Installer License Number:	Not reported

DIAZ SERVICE CENTER (Continued) **U001257741**

Facility ID:	0023402	Customer ID:	00060
Tank ID:	1	Installation Date:	01/01/66
Tank Installer:	Not reported	Tank Tested:	No
Tank Emptied:	No	Status Date:	Not reported
Capacity:	2000	Unit ID:	11551

Tank Material of Construction:	Composite (steel with FRP laminate)
Pipe Material of Construction:	Fiberglass-Reinforced Plastic (FRP)
Other Materials of Construction:	Not reported
Tank Status:	In Use
Tank Construction & Containment:	Single Wall
Pipe Construction & Containment:	Single Wall
Other Construction & Containment:	Single Wall
Tank Substance Stored:	Gasoline
Other Substance Stored:	Not reported
Tank Release Detection:	Groundwater Monitoring
Tank Release Detection II:	Tightness Testing
Pipe Release Detection:	Line Leak Detectors
Other Release Detection:	Vapor Monitoring
Tank Corrosion Protection:	Composite Tank (steel w/FRP laminate)
Pipe Corrosion Protection:	Not reported
Pipe Corrosion Protection II:	Noncorrodible Material (c.g. FRP)
Other Corrosion Protection:	Not reported
Spill and Overfill Protection:	Automatic Overfill Device - Flow Restricter Valve
Spill and Overfill Protection II:	Tight-Fill Fitting
Vapor Recovery Equipment Status:	Not reported
Equipment Installed Date:	Not reported
Equipment Installer:	Not reported
Contractor Registration Number:	Not reported
Tank Registration Date:	05/08/86
Installer License Number:	Not reported

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44 **DIAZ SERV CTR** **LUST** **S103495001**
1325 39TH **N/A**
GALVESTON, TX 77550

LUST:

Facility ID:	0023402	Discovery Date:	1/26/90
Data Entry Date:	2/13/90	Lead Office:	1/3/1
PST Coordinator:	MZS/MSG/MSP/BL	RPR Coordinator:	MZS
Region:	12	Region City ID:	HOUSTON
Leaking Tank #:	094628		
Responsible Party:	SHEPPERD MARY G		
RP Contact:	D D SHEPPERD		
RP Address:	5001 AVE R GALVESTON, TX 77551		
RP Telephone:	409/744-8247		
County Code:	084		
Priority:	GROUNDWATER OTHER THAN 1B, SITE CHARACTERIZATION INCOMPLETE		
Status:	FINAL CONCURRENCE ISSUED, CASE CLOSED		

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45 **CLOSED STREET** **UST** **U003040520**
5309-15 AVENUE I **N/A**
GALVESTON, TX 77550

UST:

Facility ID:	0067576	Customer ID:	00177
Tank ID:	1	Installation Date:	08/31/87

CLOSED STREET (Continued) **U003040520**

Tank Installer:	Not reported	Tank Tested:	No
Tank Emptied:	No	Status Date:	08/01/87
Capacity:	0	Unit ID:	47209

Tank Material of Construction:	Not reported
Pipe Material of Construction:	Not reported
Other Materials of Construction:	Not reported
Tank Status:	Removed from the Ground
Tank Construction & Containment:	Not reported
Pipe Construction & Containment:	Not reported
Other Construction & Containment:	Not reported
Tank Substance Stored:	Not reported
Other Substance Stored:	Unknown
Tank Release Detection:	Not reported
Pipe Release Detection:	Not reported
Other Release Detection:	Not reported
Tank Corrosion Protection:	Not reported
Pipe Corrosion Protection:	Not reported
Pipe Corrosion Protection II:	Noncorrodible Material (c.g. FRP)
Other Corrosion Protection:	Not reported
Spill and Overfill Protection:	Not reported
Spill and Overfill Protection II:	Tight-Fill Fitting
Vapor Recovery Equipment Status:	Not reported
Equipment Installed Date:	Not reported
Equipment Installer:	Not reported
Contractor Registration Number:	Not reported
Tank Registration Date:	12/15/95
Installer License Number:	Not reported

Facility ID:	0067576	Customer ID:	00177
Tank ID:	2	Installation Date:	08/31/87
Tank Installer:	Not reported	Tank Tested:	No
Tank Emptied:	No	Status Date:	08/01/87
Capacity:	0	Unit ID:	47209

Tank Material of Construction:	Not reported
Pipe Material of Construction:	Not reported
Other Materials of Construction:	Not reported
Tank Status:	Removed from the Ground
Tank Construction & Containment:	Not reported
Pipe Construction & Containment:	Not reported
Other Construction & Containment:	Not reported
Tank Substance Stored:	Not reported
Other Substance Stored:	Unknown
Tank Release Detection:	Not reported
Pipe Release Detection:	Not reported
Other Release Detection:	Not reported
Tank Corrosion Protection:	Not reported
Pipe Corrosion Protection:	Not reported
Pipe Corrosion Protection II:	Noncorrodible Material (c.g. FRP)
Other Corrosion Protection:	Not reported
Spill and Overfill Protection:	Not reported
Spill and Overfill Protection II:	Tight-Fill Fitting
Vapor Recovery Equipment Status:	Not reported
Equipment Installed Date:	Not reported
Equipment Installer:	Not reported
Contractor Registration Number:	Not reported
Tank Registration Date:	12/15/95
Installer License Number:	Not reported

46 GALVESTON WORK CENTER — **UST** — **U003040505**
1224 43RD ST — **N/A**
GALVESTON, TX 77550

UST:

Facility ID:	0019173	Customer ID:	00049
Tank ID:	1	Installation Date:	01/01/64
Tank Installer:	Not reported	Tank Tested:	Yes
Tank Emptied:	No	Status Date:	09/01/89
Capacity:	10000	Unit ID:	22573

Tank Material of Construction:	Steel
Pipe Material of Construction:	Steel
Other Materials of Construction:	Not reported
Tank Status:	Abandoned In-place
Tank Construction & Containment:	Single Wall
Pipe Construction & Containment:	Single Wall
Other Construction & Containment:	Single Wall
Tank Substance Stored:	Gasoline
Other Substance Stored:	Not reported
Tank Release Detection:	Inventory Control
Pipe Release Detection:	None
Other Release Detection:	Not reported
Tank Corrosion Protection:	Not reported
Pipe Corrosion Protection:	Not reported
Pipe Corrosion Protection II:	Noncorrodible Material (c.g. FRP)
Other Corrosion Protection:	Not reported
Spill and Overfill Protection:	Automatic Overfill Device - Flow Restricter Valve
Spill and Overfill Protection II:	Tight-Fill Fitting
Vapor Recovery Equipment Status:	Not reported
Equipment Installed Date:	Not reported
Equipment Installer:	Not reported
Contractor Registration Number:	Not reported
Tank Registration Date:	05/08/86
Installer License Number:	Not reported

Facility ID:	0019173	Customer ID:	00049
Tank ID:	2	Installation Date:	09/01/89
Tank Installer:	Not reported	Tank Tested:	Yes
Tank Emptied:	No	Status Date:	Not reported
Capacity:	10000	Unit ID:	22573

Tank Material of Construction:	Composite (steel with FRP laminate)
Pipe Material of Construction:	Fiberglass-Reinforced Plastic (FRP)
Other Materials of Construction:	Not reported
Tank Status:	In Use
Tank Construction & Containment:	Single Wall
Pipe Construction & Containment:	Single Wall
Other Construction & Containment:	Single Wall
Tank Substance Stored:	Gasoline
Other Substance Stored:	Not reported
Tank Release Detection:	Not reported
Pipe Release Detection:	Line Leak Detectors
Pipe Release Detection II:	Tightness Testing
Other Release Detection:	Automatic Mon.
Tank Corrosion Protection:	Composite Tank (steel w/FRP laminate)
Tank Corrosion Protection II:	Noncorrodible Material (c.g. FRP)
Pipe Corrosion Protection:	Noncorrodible Material (c.g. FRP)
Pipe Corrosion Protection II:	Noncorrodible Material (c.g. FRP)
Other Corrosion Protection:	Not reported
Spill and Overfill Protection:	Automatic Overfill Device - Shut-Off Valve

GALVESTON WORK CENTER (Continued) **U003040505**

Spill and Overfill Protection II:	Tight-Fill Fitting
Vapor Recovery Equipment Status:	Not reported
Equipment Installed Date:	Not reported
Equipment Installer:	Not reported
Contractor Registration Number:	Not reported
Tank Registration Date:	05/08/86
Installer License Number:	Not reported

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47 QUALITY CLEANERS & LAUNDRY **TX IHW** **1000287285**
5117 BROADWAY **RCRIS-SQG** **TXD025960782**
GALVESTON, TX 77550 **FINDS**

RCRIS:

Owner: MJ MOORE
(000) 000-0000

Contact: M-J MOORE
(409) 762-9176

Record Date: 06/12/1987

Classification: Small Quantity Generator

Used Oil Recyc: No

Violation Status: No violations found

FINDS:

Other Pertinent Environmental Activity Identified at Site:
AIRS Facility System (AIRS/AFS)

TX IHW:

Registration Number:	51269
Registration Initial Notification Date:	07/19/1985
Registration Last Amendment Date:	07/10/1987
EPA Identification:	TXD
TNRCC Premit Number:	025960782
Description of Facility Site Location:	5117 Broadway, Galveston, TX
Site Primary Standard Industrial Code:	Not reported
Registration is a Generator of Waste:	Yes
Registration is a Receivers of Waste:	No
Registration is a Transporter of Waste:	No
Registration is a Transfer Facility:	No
Mexican Facility:	Does not represent a Maquiladora (Mexican Facility)
Facility Status:	Active
Type of Generator:	Non-industrial and/or municipal, CESQG
Company Name:	Quality Cleaners
Facility County:	Not reported
TNRCC Region:	Not reported
Mailing Address:	5117 Broadway Galveston, TX 77550
Mailing County:	USA
Contact:	M. J. Moore
Contact Telephone Number:	713-672-6629

Additional detail may be available for this site. Please contact your EDR Account Executive for more information

47 ARAMCO INC
5105 BROADWAY
GALVESTON, TX 77550

TX IHW / RCRIS-SQG / FINDS
1000297027 / TXD008074783

RCRIS:

Owner: MILAN EARL
(000) 000-0000

Contact: EARL MILAN
(713) 762-9652

Record Date: 08/11/1980

Classification: Conditionally Exempt Small Quantity Generator

Used Oil Recyc: No

Violation Status: No violations found

TX IHW:

Registration Number:	36136
Registration Initial Notification Date:	03/29/1985
Registration Last Amendment Date:	Not reported
EPA Identification:	TXD
TNRCC Premit Number:	008074783
Description of Facility Site Location:	5105 Broadway, Galveston, TX
Site Primary Standard Industrial Code:	25910 Drapery Hardware & Blinds & Shades Manufacturing
Registration is a Generator of Waste:	Yes
Registration is a Receivers of Waste:	No
Registration is a Transporter of Waste:	No
Registration is a Transfer Facility:	No
Mexican Facility:	Does not represent a Maquiladora (Mexican Facility)
Facility Status:	Inactive
Type of Generator:	Not a HW generator
Company Name:	Aramco Outside Blinds, Inc.
Facility County:	Not reported
TNRCC Region:	Not reported
Mailing Address:	P.O. Box R Galveston, TX 77552
Mailing County:	USA
Contact:	Earl L. Milam
Contact Telephone Number:	409-762-9652

Additional detail may be available for this site. Please contact your EDR Account Executive for more information

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47 EXXON CO., USA 6-4692
5028 BROADWAY ST
GALVESTON, TX 77550

UST
U001260588 / N/A

UST:

Facility ID:	0026669	Customer ID:	00069
Tank ID:	4	Installation Date:	01/01/72
Tank Installer:	Not reported	Tank Tested:	No
Tank Emptied:	No	Status Date:	06/30/93
Capacity:	1000	Unit ID:	04194

Tank Material of Construction:	Steel
Pipe Material of Construction:	Steel
Other Materials of Construction:	Not reported
Tank Status:	Removed from the Ground
Tank Construction & Containment:	Not reported

EXXON CO., USA 6-4692 (Continued) **U001260588**

Pipe Construction & Containment:	Not reported
Other Construction & Containment:	Not reported
Tank Substance Stored:	Used Oil
Other Substance Stored:	Not reported
Tank Release Detection:	None
Pipe Release Detection:	None
Other Release Detection:	Not reported
Tank Corrosion Protection:	Cathodic Protection System
Pipe Corrosion Protection:	Cathodic Protection System
Pipe Corrosion Protection II:	Noncorrodible Material (c.g. FRP)
Other Corrosion Protection:	Not reported
Spill and Overfill Protection:	Unknown/None
Spill and Overfill Protection II:	Tight-Fill Fitting
Vapor Recovery Equipment Status:	Not reported
Equipment Installed Date:	Not reported
Equipment Installer:	Not reported
Contractor Registration Number:	Not reported
Tank Registration Date:	05/08/86
Installer License Number:	Not reported

Facility ID:	0026669	Customer ID:	00069
Tank ID:	3	Installation Date:	01/01/72
Tank Installer:	Not reported	Tank Tested:	No
Tank Emptied:	No	Status Date:	06/30/93
Capacity:	8000	Unit ID:	04194

Tank Material of Construction:	Steel
Pipe Material of Construction:	Steel
Other Materials of Construction:	Not reported
Tank Status:	Removed from the Ground
Tank Construction & Containment:	Not reported
Pipe Construction & Containment:	Not reported
Other Construction & Containment:	Not reported
Tank Substance Stored:	Gasoline
Other Substance Stored:	Not reported
Tank Release Detection:	None
Pipe Release Detection:	None
Other Release Detection:	Not reported
Tank Corrosion Protection:	Cathodic Protection System
Pipe Corrosion Protection:	Cathodic Protection System
Pipe Corrosion Protection II:	Noncorrodible Material (c.g. FRP)
Other Corrosion Protection:	Not reported
Spill and Overfill Protection:	Unknown/None
Spill and Overfill Protection II:	Tight-Fill Fitting
Vapor Recovery Equipment Status:	Not reported
Equipment Installed Date:	Not reported
Equipment Installer:	Not reported
Contractor Registration Number:	Not reported
Tank Registration Date:	05/08/86
Installer License Number:	Not reported

Facility ID:	0026669	Customer ID:	00069
Tank ID:	2	Installation Date:	01/01/72
Tank Installer:	Not reported	Tank Tested:	No
Tank Emptied:	No	Status Date:	06/30/93
Capacity:	6000	Unit ID:	04194

Tank Material of Construction:	Steel
Pipe Material of Construction:	Steel

EXXON CO., USA 6-4692 (Continued) **U001260588**

Other Materials of Construction:	Not reported
Tank Status:	Removed from the Ground
Tank Construction & Containment:	Not reported
Pipe Construction & Containment:	Not reported
Other Construction & Containment:	Not reported
Tank Substance Stored:	Gasoline
Other Substance Stored:	Not reported
Tank Release Detection:	None
Pipe Release Detection:	None
Other Release Detection:	Not reported
Tank Corrosion Protection:	Cathodic Protection System
Pipe Corrosion Protection:	Cathodic Protection System
Pipe Corrosion Protection II:	Noncorrodible Material (c.g. FRP)
Other Corrosion Protection:	Not reported
Spill and Overfill Protection:	Unknown/None
Spill and Overfill Protection II:	Tight-Fill Fitting
Vapor Recovery Equipment Status:	Not reported
Equipment Installed Date:	Not reported
Equipment Installer:	Not reported
Contractor Registration Number:	Not reported
Tank Registration Date:	05/08/86
Installer License Number:	Not reported

Facility ID:	0026669	Customer ID:	00069
Tank ID:	1	Installation Date:	01/01/72
Tank Installer:	Not reported	Tank Tested:	No
Tank Emptied:	No	Status Date:	06/30/93
Capacity:	4000	Unit ID:	04194

Tank Material of Construction:	Steel
Pipe Material of Construction:	Steel
Other Materials of Construction:	Not reported
Tank Status:	Removed from the Ground
Tank Construction & Containment:	Not reported
Pipe Construction & Containment:	Not reported
Other Construction & Containment:	Not reported
Tank Substance Stored:	Gasoline
Other Substance Stored:	Not reported
Tank Release Detection:	None
Pipe Release Detection:	None
Other Release Detection:	Not reported
Tank Corrosion Protection:	Cathodic Protection System
Pipe Corrosion Protection:	Cathodic Protection System
Pipe Corrosion Protection II:	Noncorrodible Material (c.g. FRP)
Other Corrosion Protection:	Not reported
Spill and Overfill Protection:	Unknown/None
Spill and Overfill Protection II:	Tight-Fill Fitting
Vapor Recovery Equipment Status:	Not reported
Equipment Installed Date:	Not reported
Equipment Installer:	Not reported
Contractor Registration Number:	Not reported
Tank Registration Date:	05/08/86
Installer License Number:	Not reported

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47 **67466** **TX IHW** **S102757818**
5028 BROADWAY ST **N/A**
GALVESTON, TX 77550

TX IHW:
Registration Number: 77129

67466 (Continued) **S102757818**

Registration Initial Notification Date:	06/28/1991
Registration Last Amendment Date:	07/17/1995
EPA Identification:	TXD
TNRCC Premit Number:	988029377
Description of Facility Site Location:	5028 Broadway, Galveston, TX
Site Primary Standard Industrial Code:	Not reported
Registration is a Generator of Waste:	Yes
Registration is a Receivers of Waste:	No
Registration is a Transporter of Waste:	No
Registration is a Transfer Facility:	No
Mexican Facility:	Does not represent a Maquiladora (Mexican Facility)
Facility Status:	Inactive
Type of Generator:	Non-industrial and/or municipal, CESQG
Company Name:	Exxon Company, U.S.A.
Facility County:	Not reported
TNRCC Region:	Not reported
Mailing Address:	Room 2753X P.O. Box 2180 Houston, TX 77252 - 2180
Mailing County:	USA
Contact:	Alda S. Pool
Contact Telephone Number:	713-656-7709

Additional detail may be available for this site. Please contact your EDR Account Executive for more information

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47 **EXXON STATION #6-4692** **LUST** **S103499821**
5028 BROADWAY **N/A**
GALVESTON, TX 77550

LUST:

Facility ID:	0026669	Discovery Date:	7/12/93
Data Entry Date:	8/3/93	Lead Office:	1/2
PST Coordinator:	JES/MCL/KGM/UII	RPR Coordinator:	JES
Region:	12	Region City ID:	HOUSTON
Leaking Tank #:	106926		
Responsible Party:	EXXON COMPANY USA		
RP Contact:	DEBBIE H. HUNTER		
RP Address:	PO BOX 2180 HOUSTON, TX 77252 - 2180		
RP Telephone:	713/656-2312		
County Code:	084		
Priority:	GW IMPACTED, NO APPARENT THREATS OR IMPACTS TO RECEPTORS		
Status:	PHASE 3 IN PROGRESS		

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48 **LUST** **S103812812**
1370 E 40TH ST **N/A**
HOUSTON, TX

(Continued) **S103812812**

LUST:

Facility ID:	Not reported	Discovery Date:	5/1/86
Data Entry Date:	5/14/87	Lead Office:	CENTRAL OFFICE LEAD
PST Coordinator:	KC	RPR Coordinator:	Not reported
Region:	12	Region City ID:	HOUSTON
Leaking Tank #:	091305		
Responsible Party:	CHILDERS PRODUCTS		
RP Contact:	JIMMY TRAYLOR		
RP Address:	1370 E 40TH ST HOUSTON, TX 77022		
RP Telephone:	713/691-3661		
County Code:	101		
Priority:	SOIL CONTAMINATION ONLY, REQUIRES FULL SITE ASSESSMENT & RAP		
Status:	FINAL CONCURRENCE ISSUED, CASE CLOSED		

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49 **#701** **UST** **U001260867**
5315 BROADWAY ST **N/A**
GALVESTON, TX 77550

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50 **BROADWAY GAS STATION** **UST** **U001271214**
5411 BROADWAY ST **N/A**
GALVESTON, TX 77550

UST:

Facility ID:	0038596	Customer ID:	00101
Tank ID:	1	Installation Date:	01/01/71
Tank Installer:	Not reported	Tank Tested:	No
Tank Emptied:	No	Status Date:	Not reported
Capacity:	12000	Unit ID:	48928

Tank Material of Construction:	Steel
Pipe Material of Construction:	Steel
Other Materials of Construction:	Not reported
Tank Status:	In Use
Tank Construction & Containment:	Not reported
Pipe Construction & Containment:	Not reported
Other Construction & Containment:	Not reported
Tank Substance Stored:	Gasoline
Other Substance Stored:	Not reported
Tank Release Detection:	None
Pipe Release Detection:	None
Other Release Detection:	Not reported
Tank Corrosion Protection:	Not reported
Pipe Corrosion Protection:	None
Pipe Corrosion Protection II:	Noncorrodible Material (c.g. FRP)
Other Corrosion Protection:	Not reported
Spill and Overfill Protection:	Unknown/None
Spill and Overfill Protection II:	Tight-Fill Fitting
Vapor Recovery Equipment Status:	Not reported
Equipment Installed Date:	Not reported
Equipment Installer:	Not reported
Contractor Registration Number:	Not reported
Tank Registration Date:	05/08/86
Installer License Number:	Not reported

Facility ID:	0038596	Customer ID:	00101
Tank ID:	3	Installation Date:	01/01/71

BROADWAY GAS STATION (Continued) **U001271214**

Tank Installer:	Not reported	Tank Tested:	No
Tank Emptied:	No	Status Date:	Not reported
Capacity:	8000	Unit ID:	48928

Tank Material of Construction:	Steel
Pipe Material of Construction:	Steel
Other Materials of Construction:	Not reported
Tank Status:	In Use
Tank Construction & Containment:	Not reported
Pipe Construction & Containment:	Not reported
Other Construction & Containment:	Not reported
Tank Substance Stored:	Gasoline
Other Substance Stored:	Not reported
Tank Release Detection:	None
Pipe Release Detection:	None
Other Release Detection:	Not reported
Tank Corrosion Protection:	Not reported
Pipe Corrosion Protection:	None
Pipe Corrosion Protection II:	Noncorrodible Material (c.g. FRP)
Other Corrosion Protection:	Not reported
Spill and Overfill Protection:	Unknown/None
Spill and Overfill Protection II:	Tight-Fill Fitting
Vapor Recovery Equipment Status:	Not reported
Equipment Installed Date:	Not reported
Equipment Installer:	Not reported
Contractor Registration Number:	Not reported
Tank Registration Date:	05/08/86
Installer License Number:	Not reported

Facility ID:	0038596	Customer ID:	00101
Tank ID:	2	Installation Date:	01/01/71
Tank Installer:	Not reported	Tank Tested:	No
Tank Emptied:	No	Status Date:	Not reported
Capacity:	12000	Unit ID:	48928

Tank Material of Construction:	Steel
Pipe Material of Construction:	Steel
Other Materials of Construction:	Not reported
Tank Status:	In Use
Tank Construction & Containment:	Not reported
Pipe Construction & Containment:	Not reported
Other Construction & Containment:	Not reported
Tank Substance Stored:	Gasoline
Other Substance Stored:	Not reported
Tank Release Detection:	None
Pipe Release Detection:	None
Other Release Detection:	Not reported
Tank Corrosion Protection:	Not reported
Pipe Corrosion Protection:	None
Pipe Corrosion Protection II:	Noncorrodible Material (c.g. FRP)
Other Corrosion Protection:	Not reported
Spill and Overfill Protection:	Unknown/None
Spill and Overfill Protection II:	Tight-Fill Fitting
Vapor Recovery Equipment Status:	Not reported
Equipment Installed Date:	Not reported
Equipment Installer:	Not reported
Contractor Registration Number:	Not reported
Tank Registration Date:	05/08/86
Installer License Number:	Not reported

Map ID Direction Distance Distance (ft.)	Site	Database(s)	EDR ID Number EPA ID Number
50	**STOP N GO #817** **5401 BROADWAY** **GALVESTON, TX 77550**	**LUST**	**S103499629** **N/A**

LUST:

Facility ID:	0039817	Discovery Date:	3/29/93
Data Entry Date:	4/20/93	Lead Office:	CENTRAL OFFICE LEAD
PST Coordinator:	RAS/LAS/KWW/KBS	RPR Coordinator:	RAS
Region:	12	Region City ID:	HOUSTON
Leaking Tank #:	106401		
Responsible Party:	NATIONAL CONVENIENCE STORES		
RP Contact:	JOHN WILLRODT		
RP Address:	PO BOX 758 HOUSTON, TX 77001 - 0758		
RP Telephone:	713/863-2318		
County Code:	084		
Priority:	SOIL CONTAMINATION ONLY, REQUIRES FULL SITE ASSESSMENT & RAP		
Status:	FINAL CONCURRENCE ISSUED, CASE CLOSED		

50	**STOP-N-GO #817** **5401 BROADWAY ST** **GALVESTON, TX 77550**	**UST**	**U001272354** **N/A**

UST:

Facility ID:	0039817	Customer ID:	00105
Tank ID:	1	Installation Date:	01/01/74
Tank Installer:	Not reported	Tank Tested:	No
Tank Emptied:	Yes	Status Date:	03/26/93
Capacity:	8000	Unit ID:	12307

Tank Material of Construction:	Steel
Pipe Material of Construction:	Steel
Other Materials of Construction:	Not reported
Tank Status:	Removed from the Ground
Tank Construction & Containment:	Not reported
Pipe Construction & Containment:	Not reported
Other Construction & Containment:	Not reported
Tank Substance Stored:	Gasoline
Other Substance Stored:	Not reported
Tank Release Detection:	None
Pipe Release Detection:	None
Other Release Detection:	Not reported
Tank Corrosion Protection:	None
Pipe Corrosion Protection:	None
Pipe Corrosion Protection II:	Noncorrodible Material (c.g. FRP)
Other Corrosion Protection:	Not reported
Spill and Overfill Protection:	Unknown/None
Spill and Overfill Protection II:	Tight-Fill Fitting
Vapor Recovery Equipment Status:	Not reported
Equipment Installed Date:	Not reported
Equipment Installer:	Not reported
Contractor Registration Number:	Not reported
Tank Registration Date:	05/08/86
Installer License Number:	Not reported

Facility ID:	0039817	Customer ID:	00105
Tank ID:	2	Installation Date:	01/01/74
Tank Installer:	Not reported	Tank Tested:	No
Tank Emptied:	Yes	Status Date:	03/26/93
Capacity:	8000	Unit ID:	12307

Tank Material of Construction:	Steel

STOP-N-GO #817 (Continued) **U001272354**

Pipe Material of Construction:	Steel
Other Materials of Construction:	Not reported
Tank Status:	Removed from the Ground
Tank Construction & Containment:	Not reported
Pipe Construction & Containment:	Not reported
Other Construction & Containment:	Not reported
Tank Substance Stored:	Gasoline
Other Substance Stored:	Not reported
Tank Release Detection:	None
Pipe Release Detection:	None
Other Release Detection:	Not reported
Tank Corrosion Protection:	None
Pipe Corrosion Protection:	None
Pipe Corrosion Protection II:	Noncorrodible Material (c.g. FRP)
Other Corrosion Protection:	Not reported
Spill and Overfill Protection:	Unknown/None
Spill and Overfill Protection II:	Tight-Fill Fitting
Vapor Recovery Equipment Status:	Not reported
Equipment Installed Date:	Not reported
Equipment Installer:	Not reported
Contractor Registration Number:	Not reported
Tank Registration Date:	05/08/86
Installer License Number:	Not reported

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51 **J.R. MCCONNELL** UST **U001269033**
5828 BROADWAY ST **N/A**
GALVESTON, TX 77550

UST:

Facility ID:	0036136	Customer ID:	00095
Tank ID:	1	Installation Date:	01/01/71
Tank Installer:	Not reported	Tank Tested:	No
Tank Emptied:	No	Status Date:	03/31/75
Capacity:	3000	Unit ID:	16658

Tank Material of Construction:	Not reported
Pipe Material of Construction:	Not reported
Other Materials of Construction:	Not reported
Tank Status:	Abandoned In-place
Tank Construction & Containment:	Not reported
Pipe Construction & Containment:	Not reported
Other Construction & Containment:	Not reported
Tank Substance Stored:	Gasoline
Other Substance Stored:	Not reported
Tank Release Detection:	None
Pipe Release Detection:	None
Other Release Detection:	Not reported
Tank Corrosion Protection:	None
Pipe Corrosion Protection:	None
Pipe Corrosion Protection II:	Noncorrodible Material (c.g. FRP)
Other Corrosion Protection:	Not reported
Spill and Overfill Protection:	Unknown/None
Spill and Overfill Protection II:	Tight-Fill Fitting
Vapor Recovery Equipment Status:	Not reported
Equipment Installed Date:	Not reported
Equipment Installer:	Not reported
Contractor Registration Number:	Not reported
Tank Registration Date:	05/08/86
Installer License Number:	Not reported

J.R. MCCONNELL (Continued) **U001269033**

Facility ID:	0036136	Customer ID:	00095
Tank ID:	3	Installation Date:	01/01/71
Tank Installer:	Not reported	Tank Tested:	No
Tank Emptied:	No	Status Date:	03/31/75
Capacity:	12000	Unit ID:	16658

Tank Material of Construction:	Not reported
Pipe Material of Construction:	Not reported
Other Materials of Construction:	Not reported
Tank Status:	Abandoned In-place
Tank Construction & Containment:	Not reported
Pipe Construction & Containment:	Not reported
Other Construction & Containment:	Not reported
Tank Substance Stored:	Used Oil
Other Substance Stored:	Not reported
Tank Release Detection:	None
Pipe Release Detection:	None
Other Release Detection:	Not reported
Tank Corrosion Protection:	None
Pipe Corrosion Protection:	None
Pipe Corrosion Protection II:	Noncorrodible Material (c.g. FRP)
Other Corrosion Protection:	Not reported
Spill and Overfill Protection:	Unknown/None
Spill and Overfill Protection II:	Tight-Fill Fitting
Vapor Recovery Equipment Status:	Not reported
Equipment Installed Date:	Not reported
Equipment Installer:	Not reported
Contractor Registration Number:	Not reported
Tank Registration Date:	05/08/86
Installer License Number:	Not reported

Facility ID:	0036136	Customer ID:	00095
Tank ID:	2	Installation Date:	01/01/71
Tank Installer:	Not reported	Tank Tested:	No
Tank Emptied:	No	Status Date:	03/31/75
Capacity:	12000	Unit ID:	16658

Tank Material of Construction:	Not reported
Pipe Material of Construction:	Not reported
Other Materials of Construction:	Not reported
Tank Status:	Abandoned In-place
Tank Construction & Containment:	Not reported
Pipe Construction & Containment:	Not reported
Other Construction & Containment:	Not reported
Tank Substance Stored:	Used Oil
Other Substance Stored:	Not reported
Tank Release Detection:	None
Pipe Release Detection:	None
Other Release Detection:	Not reported
Tank Corrosion Protection:	None
Pipe Corrosion Protection:	None
Pipe Corrosion Protection II:	Noncorrodible Material (c.g. FRP)
Other Corrosion Protection:	Not reported
Spill and Overfill Protection:	Unknown/None
Spill and Overfill Protection II:	Tight-Fill Fitting
Vapor Recovery Equipment Status:	Not reported
Equipment Installed Date:	Not reported
Equipment Installer:	Not reported

J.R. MCCONNELL (Continued) **U001269033**

Contractor Registration Number: Not reported
Tank Registration Date: 05/08/86
Installer License Number: Not reported

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51 **BROADWAY FUNERAL HOME** **UST** **U001287084**
5815 BROADWAY ST **N/A**
GALVESTON, TX 77551

UST:

Facility ID:	0057127	Customer ID:	00137
Tank ID:	1	Installation Date:	01/01/60
Tank Installer:	Not reported	Tank Tested:	Yes
Tank Emptied:	No	Status Date:	00/00/00
Capacity:	500	Unit ID:	31897

Tank Material of Construction: Not reported
Pipe Material of Construction: Not reported
Other Materials of Construction: Not reported
Tank Status: Temporarily Out of Service
Tank Construction & Containment: Single Wall
Pipe Construction & Containment: Not reported
Other Construction & Containment: Single Wall
Tank Substance Stored: Gasoline
Other Substance Stored: Not reported
Tank Release Detection: None
Pipe Release Detection: None
Other Release Detection: Not reported
Tank Corrosion Protection: None
Pipe Corrosion Protection: None
Pipe Corrosion Protection II: Noncorrodible Material (c.g. FRP)
Other Corrosion Protection: Not reported
Spill and Overfill Protection: Unknown/None
Spill and Overfill Protection II: Tight-Fill Fitting
Vapor Recovery Equipment Status: Not reported
Equipment Installed Date: Not reported
Equipment Installer: Not reported
Contractor Registration Number: Not reported
Tank Registration Date: 12/21/90
Installer License Number: Not reported

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52 **CHEVRON SS #108372** **LUST** **S103494386**
6027 BROADWAY **N/A**
GALVESTON, TX 77550

CHEVRON SS #108372 (Continued) **S103494386**

LUST:

Facility ID:	0028601	Discovery Date:	5/12/89
Data Entry Date:	5/23/89	Lead Office:	1P/1/2
PST Coordinator:	AES/OUE/REE/MAB	RPR Coordinator:	JBH
Region:	12	Region City ID:	HOUSTON
Leaking Tank #:	093006		
Responsible Party:	CHEVRON USA INC		
RP Contact:	MICHELLE COWHERD		
RP Address:	PO BOX 4256 HOUSTON, TX 77210		
RP Telephone:	713/219-5229		
County Code:	084		
Priority:	GW IMPACTED, NO APPARENT THREATS OR IMPACTS TO RECEPTORS		
Status:	FINAL CONCURRENCE PENDING DOCUMENTATION OF WELL PLUGGING		

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52 **FORMER A W QUINN DISTRIBUTING** **LUST** **S103499961**
6006 BROADWAY **N/A**
GALVESTON, TX 77550

LUST:

Facility ID:	0055543	Discovery Date:	9/8/93
Data Entry Date:	11/18/93	Lead Office:	DISTRICT LEAD
PST Coordinator:	RPR	RPR Coordinator:	RPR
Region:	12	Region City ID:	HOUSTON
Leaking Tank #:	107349		
Responsible Party:	UNITED STATES NATIONAL BANK		
RP Contact:	DAVID JONES		
RP Address:	2201 MARKET ST. GALVESTON, TX 77553		
RP Telephone:	409/770-7153		
County Code:	084		
Priority:	SOIL CONTAMINATION ONLY, REQUIRES FULL SITE ASSESSMENT & RAP		
Status:	FINAL CONCURRENCE ISSUED, CASE CLOSED		

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53 **CHEVRON FACILITY #108372** **LUST** **U001262238**
6027 BROADWAY ST # &61ST **UST** **N/A**
GALVESTON, TX 77550

CHEVRON FACILITY #108372 (Continued) **U001262238**

LUST:

Facility ID:	0028601	Discovery Date:	9/29/90
Data Entry Date:	12/10/90	Lead Office:	CENTRAL OFFICE LEAD
PST Coordinator:	SMO/RHH/DMN	RPR Coordinator:	RPR
Region:	12	Region City ID:	HOUSTON
Leaking Tank #:	097473		
Responsible Party:	CHEVRON USA INC		
RP Contact:	ANDREW SPECKHARD		
RP Address:	PO BOX 4256 HOUSTON, TX 77210		
RP Telephone:	713/754-3601		
County Code:	084		
Priority:	GW IMPACTED, NO APPARENT THREATS OR IMPACTS TO RECEPTORS		
Status:	FINAL CONCURRENCE ISSUED, CASE CLOSED		

UST:

Facility ID:	0028601	Customer ID:	00075
Tank ID:	1	Installation Date:	01/01/83
Tank Installer:	Not reported	Tank Tested:	No
Tank Emptied:	No	Status Date:	11/30/89
Capacity:	10000	Unit ID:	13675

Tank Material of Construction:	Fiberglass-Reinforced Plastic (FRP)
Pipe Material of Construction:	Fiberglass-Reinforced Plastic (FRP)
Other Materials of Construction:	Not reported
Tank Status:	Removed from the Ground
Tank Construction & Containment:	Not reported
Pipe Construction & Containment:	Not reported
Other Construction & Containment:	Not reported
Tank Substance Stored:	Diesel
Other Substance Stored:	Not reported
Tank Release Detection:	None
Pipe Release Detection:	None
Other Release Detection:	Not reported
Tank Corrosion Protection:	None
Pipe Corrosion Protection:	None
Pipe Corrosion Protection II:	Noncorrodible Material (c.g. FRP)
Other Corrosion Protection:	Not reported
Spill and Overfill Protection:	Unknown/None
Spill and Overfill Protection II:	Tight-Fill Fitting
Vapor Recovery Equipment Status:	Not reported
Equipment Installed Date:	Not reported
Equipment Installer:	Not reported
Contractor Registration Number:	Not reported
Tank Registration Date:	05/08/86
Installer License Number:	Not reported

Facility ID:	0028601	Customer ID:	00075
Tank ID:	2	Installation Date:	01/01/83
Tank Installer:	Not reported	Tank Tested:	No
Tank Emptied:	No	Status Date:	11/30/89
Capacity:	10000	Unit ID:	13675

Tank Material of Construction:	Fiberglass-Reinforced Plastic (FRP)
Pipe Material of Construction:	Fiberglass-Reinforced Plastic (FRP)
Other Materials of Construction:	Not reported
Tank Status:	Removed from the Ground
Tank Construction & Containment:	Not reported
Pipe Construction & Containment:	Not reported

CHEVRON FACILITY #108372 (Continued) **U001262238**

Other Construction & Containment:	Not reported
Tank Substance Stored:	Gasoline
Other Substance Stored:	Not reported
Tank Release Detection:	None
Pipe Release Detection:	None
Other Release Detection:	Not reported
Tank Corrosion Protection:	None
Pipe Corrosion Protection:	None
Pipe Corrosion Protection II:	Noncorrodible Material (c.g. FRP)
Other Corrosion Protection:	Not reported
Spill and Overfill Protection:	Unknown/None
Spill and Overfill Protection II:	Tight-Fill Fitting
Vapor Recovery Equipment Status:	Not reported
Equipment Installed Date:	Not reported
Equipment Installer:	Not reported
Contractor Registration Number:	Not reported
Tank Registration Date:	05/08/86
Installer License Number:	Not reported

Facility ID:	0028601	Customer ID:	00075
Tank ID:	4	Installation Date:	01/01/83
Tank Installer:	Not reported	Tank Tested:	No
Tank Emptied:	No	Status Date:	11/30/89
Capacity:	10000	Unit ID:	13675

Tank Material of Construction:	Fiberglass-Reinforced Plastic (FRP)
Pipe Material of Construction:	Fiberglass-Reinforced Plastic (FRP)
Other Materials of Construction:	Not reported
Tank Status:	Removed from the Ground
Tank Construction & Containment:	Not reported
Pipe Construction & Containment:	Not reported
Other Construction & Containment:	Not reported
Tank Substance Stored:	Gasoline
Other Substance Stored:	Not reported
Tank Release Detection:	None
Pipe Release Detection:	None
Other Release Detection:	Not reported
Tank Corrosion Protection:	None
Pipe Corrosion Protection:	None
Pipe Corrosion Protection II:	Noncorrodible Material (c.g. FRP)
Other Corrosion Protection:	Not reported
Spill and Overfill Protection:	Unknown/None
Spill and Overfill Protection II:	Tight-Fill Fitting
Vapor Recovery Equipment Status:	Not reported
Equipment Installed Date:	Not reported
Equipment Installer:	Not reported
Contractor Registration Number:	Not reported
Tank Registration Date:	05/08/86
Installer License Number:	Not reported

Facility ID:	0028601	Customer ID:	00075
Tank ID:	3	Installation Date:	01/01/83
Tank Installer:	Not reported	Tank Tested:	No
Tank Emptied:	No	Status Date:	11/30/89
Capacity:	10000	Unit ID:	13675

Tank Material of Construction:	Fiberglass-Reinforced Plastic (FRP)
Pipe Material of Construction:	Fiberglass-Reinforced Plastic (FRP)
Other Materials of Construction:	Not reported

CHEVRON FACILITY #108372 (Continued) **U001262238**

Tank Status:	Removed from the Ground
Tank Construction & Containment:	Not reported
Pipe Construction & Containment:	Not reported
Other Construction & Containment:	Not reported
Tank Substance Stored:	Gasoline
Other Substance Stored:	Not reported
Tank Release Detection:	None
Pipe Release Detection:	None
Other Release Detection:	Not reported
Tank Corrosion Protection:	None
Pipe Corrosion Protection:	None
Pipe Corrosion Protection II:	Noncorrodible Material (c.g. FRP)
Other Corrosion Protection:	Not reported
Spill and Overfill Protection:	Unknown/None
Spill and Overfill Protection II:	Tight-Fill Fitting
Vapor Recovery Equipment Status:	Not reported
Equipment Installed Date:	Not reported
Equipment Installer:	Not reported
Contractor Registration Number:	Not reported
Tank Registration Date:	05/08/86
Installer License Number:	Not reported

Facility ID:	0028601	Customer ID:	00075
Tank ID:	5	Installation Date:	Not reported
Tank Installer:	Not reported	Tank Tested:	No
Tank Emptied:	No	Status Date:	00/00/00
Capacity:	4000	Unit ID:	13675

Tank Material of Construction:	Not reported
Pipe Material of Construction:	Not reported
Other Materials of Construction:	Not reported
Tank Status:	Removed from the Ground
Tank Construction & Containment:	Not reported
Pipe Construction & Containment:	Not reported
Other Construction & Containment:	Not reported
Tank Substance Stored:	Not reported
Other Substance Stored:	Unknown
Tank Release Detection:	Not reported
Pipe Release Detection:	Not reported
Other Release Detection:	Not reported
Tank Corrosion Protection:	Not reported
Pipe Corrosion Protection:	Not reported
Pipe Corrosion Protection II:	Noncorrodible Material (c.g. FRP)
Other Corrosion Protection:	Not reported
Spill and Overfill Protection:	Not reported
Spill and Overfill Protection II:	Tight-Fill Fitting
Vapor Recovery Equipment Status:	Not reported
Equipment Installed Date:	Not reported
Equipment Installer:	Not reported
Contractor Registration Number:	Not reported
Tank Registration Date:	05/08/86
Installer License Number:	Not reported

Facility ID:	0028601	Customer ID:	00075
Tank ID:	6	Installation Date:	Not reported
Tank Installer:	Not reported	Tank Tested:	No
Tank Emptied:	No	Status Date:	00/00/00
Capacity:	4000	Unit ID:	13675

CHEVRON FACILITY #108372 (Continued) **U001262238**

Tank Material of Construction:	Not reported
Pipe Material of Construction:	Not reported
Other Materials of Construction:	Not reported
Tank Status:	Removed from the Ground
Tank Construction & Containment:	Not reported
Pipe Construction & Containment:	Not reported
Other Construction & Containment:	Not reported
Tank Substance Stored:	Not reported
Other Substance Stored:	Unknown
Tank Release Detection:	Not reported
Pipe Release Detection:	Not reported
Other Release Detection:	Not reported
Tank Corrosion Protection:	Not reported
Pipe Corrosion Protection:	Not reported
Pipe Corrosion Protection II:	Noncorrodible Material (c.g. FRP)
Other Corrosion Protection:	Not reported
Spill and Overfill Protection:	Not reported
Spill and Overfill Protection II:	Tight-Fill Fitting
Vapor Recovery Equipment Status:	Not reported
Equipment Installed Date:	Not reported
Equipment Installer:	Not reported
Contractor Registration Number:	Not reported
Tank Registration Date:	05/08/86
Installer License Number:	Not reported

Facility ID:	0028601	Customer ID:	00075
Tank ID:	7	Installation Date:	Not reported
Tank Installer:	Not reported	Tank Tested:	No
Tank Emptied:	No	Status Date:	00/00/00
Capacity:	4000	Unit ID:	13675

Tank Material of Construction:	Not reported
Pipe Material of Construction:	Not reported
Other Materials of Construction:	Not reported
Tank Status:	Removed from the Ground
Tank Construction & Containment:	Not reported
Pipe Construction & Containment:	Not reported
Other Construction & Containment:	Not reported
Tank Substance Stored:	Not reported
Other Substance Stored:	Unknown
Tank Release Detection:	Not reported
Pipe Release Detection:	Not reported
Other Release Detection:	Not reported
Tank Corrosion Protection:	Not reported
Pipe Corrosion Protection:	Not reported
Pipe Corrosion Protection II:	Noncorrodible Material (c.g. FRP)
Other Corrosion Protection:	Not reported
Spill and Overfill Protection:	Not reported
Spill and Overfill Protection II:	Tight-Fill Fitting
Vapor Recovery Equipment Status:	Not reported
Equipment Installed Date:	Not reported
Equipment Installer:	Not reported
Contractor Registration Number:	Not reported
Tank Registration Date:	05/08/86
Installer License Number:	Not reported

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)	Facility ID
GALVESTON	S103865045	FALSTAFF BREWING COMPANY	33RD STREET AND CHURCH STREET		TX VCP	337
GALVESTON	S103496869	GALVESTON FIRE FIGHTING TR GROUNDS	59TH ST	77550	LUST	
GALVESTON	S103502266	GOOD EARTH MATERIAL	16947 HWY 6		LUST	
GALVESTON	S103220385		71ST STREET-POST OFFICE RD		SWF/LF	174
GALVESTON	1000397024	WASTE CONTROL INC	2801 AVENUE C	77550	RCRIS-SQG, FINDS	
GALVESTON	S102758883	#108379	6102 AVENUE S # 61ST	77550	TX IHW	TXD
GALVESTON	S103610480	MOBIL OIL CORP. #00MXJ	1902 AVENUE J / 19TH STREET	77550	TX IHW	TXD
GALVESTON	S103612731	GALVESTON COUNTY HEALTH DEPARTMENT	4424 AVENUE N	77550	TX IHW	
GALVESTON	U003566566	UNKNOWN	2302 AVENUE O	77550	UST	0023310
GALVESTON	S103499526	PARKS DEPT	5720 AVENUE Q	77550	LUST	0023421
GALVESTON	1000454710	TINSE CHEMICAL CO	20 BRADNER ST	77550	RCRIS-SQG, FINDS, RCRIS-TSD	
GALVESTON	U003566569	SHELL OIL CO. RETAIL FACILITY	602 BROADWAY ST # &6TH	77550	UST	0033082
GALVESTON	S103496964	FISCA OIL SERVICE STATION #79	5411 BROADWAY	77550	LUST	0038596
GALVESTON	S103221441		1500'S OF FMH 1764, 1.5M SW OF IH 45, W OF LA MARQ		SWF/LF	1149
GALVESTON	98445328	GALVESTON LIGHTERING AREA	GALVESTON LIGHTERING AREA		ERNS	
GALVESTON	97406759	GALVESTON LIGHTERING AREA	GALVESTON LIGHTERING AREA		ERNS	
GALVESTON	94368616	GALVESTON LIGHTERING AREA	GALVESTON LIGHTERING AREA		ERNS	
GALVESTON	8871337	GALVESTON AREA 218 27-58-17.69 094-36-06.45	GALVESTON AREA 218 27-58-17.69 094-36-06.45		ERNS	
GALVESTON	99607446	GALVESTON LIGHTERING AREA	GALVESTON LIGHTERING AREA		ERNS	
GALVESTON	94360276	GALVESTON LIGHTERING AREA	GALVESTON LIGHTERING AREA		ERNS	
GALVESTON	93350277	GALVESTON LIGHTERING AREA	GALVESTON LIGHTERING AREA		ERNS	
GALVESTON	S103609019	NATIONAL COTTON, INC.	INDUSTRIAL BLVD / 45 SOUTH	77550	TX IHW	TXD
GALVESTON	90151972	LOITER AREA, APPROX 60 MI OFF GALVESTON LAT 28-32N LONG 094-	LOITER AREA, APPROX 60 MI OFF GALVESTON LAT 28-32N LONG 094-		ERNS	
GALVESTON	93313576	OFF GALVESTON LIGHTERING AREA	OFF GALVESTON LIGHTERING AREA		ERNS	
GALVESTON	90162813	OFFSHORE GALVESTON LIGHTERING AREA	OFFSHORE GALVESTON LIGHTERING AREA		ERNS	
GALVESTON	S103865332	SPTCO GALVESTON WHARVES SITE	4100 OLD PORT INDUSTRIAL BOULEVARD		TX VCP	977
GALVESTON	A100122670	QUALITY FUEL CORP	1200 PELICAN ISLAND	77550	AST	0054934
GALVESTON	S103452944	TATSUMI USA/TODD SHIPYARD FACILITY	PELICAN ISLAND		TX VCP	330
GALVESTON	S103864991	TATSAMI	PELICAN ISLAND		TX VCP	208
GALVESTON	1001391106	STAN BLAST ABRASIVES CO INC	5712 PORT INDUSTRIAL BLVD	77550	AIRS, FINDS	
GALVESTON	A100122671	AIMCOR-GALVESTON TERMINAL	4800 PORT INDUSTRIAL BLVD	77550	AST	0055172
GALVESTON	S103600482	PORT OF GALVESTON WATERFRONT	PORT OF GALVESTON	77550	TX IHW	TXD
GALVESTON	1001387782	MITCHELL ENERGY CORPORATION	4810 POST OFFICE ST	77551	AIRS, FINDS	
GALVESTON	S103607685	GALVESTON AREA COASTAL WATERS SPILL CLEA	601 ROSENBERG ROOM 301 PO BLDG	77550	TX IHW	TX0
GALVESTON	98428603	SHEEN SIZE: AREA OF 1/2 WIDE COLOR: BLACK/BROWN	SHEEN SIZE: AREA OF 1/2 WIDE COLOR: BLACK/BROWN	77551	ERNS	
GALVESTON	S103222355		AT THE 700 BLOCK OF PORT INDUSTRIAL, GALVESTON, TX		SWF/LF	2232
GALVESTON	A100122676	PIERCE DISTRIBUTING CO	1202 WATER ST	77550	AST	0056207
GALVESTON	S103865119	CHEVRON BULK PLANT #60165535	1802 WATER STREET		TX VCP	509

Site	Database(s)	EDR ID Number EPA ID Number
GALVESTON LIGHTERING AREA GALVESTON LIGHTERING AREA GALVESTON, TX	**ERNS**	**99607446 N/A**
GALVESTON LIGHTERING AREA GALVESTON LIGHTERING AREA GALVESTON, TX	**ERNS**	**94360276 N/A**
GALVESTON LIGHTERING AREA GALVESTON LIGHTERING AREA GALVESTON, TX	**ERNS**	**93350277 N/A**
NATIONAL COTTON, INC. INDUSTRIAL BLVD / 45 SOUTH GALVESTON, TX 77550	**TX IHW**	**S103609019 N/A**

TX IHW:

Registration Number:	74845
Registration Initial Notification Date:	Not reported
Registration Last Amendment Date:	11/20/1996
EPA Identification:	TXD
TNRCC Premit Number:	008429631
Description of Facility Site Location:	Industrial Blvd, & 45 South, Galveston, TX
Site Primary Standard Industrial Code:	Not reported
Registration is a Generator of Waste:	Yes
Registration is a Receivers of Waste:	No
Registration is a Transporter of Waste:	No
Registration is a Transfer Facility:	No
Mexican Facility:	Does not represent a Maquiladora (Mexican Facility)
Facility Status:	Inactive
Type of Generator:	Industrial, CESQG
Company Name:	National Cotton, Inc.
Facility County:	Not reported
TNRCC Region:	Not reported
Mailing Address:	P.O. Box 330 Galveston, TX 77553
Mailing County:	USA
Contact:	Andrew Dowdy
Contact Telephone Number:	409-740-0291

Additional detail may be available for this site. Please contact your EDR Account Executive for more information

LOITER AREA, APPROX 60 MI OFF GALVESTON LAT 28-32N LONG 094- LOITER AREA, APPROX 60 MI OFF GALVESTON LAT 28-32N LONG 094- GALVESTON, TX	**ERNS**	**90151972 N/A**
OFF GALVESTON LIGHTERING AREA OFF GALVESTON LIGHTERING AREA GALVESTON, TX	**ERNS**	**93313576 N/A**

Site	Database(s)	EDR ID Number EPA ID Number
OFFSHORE GALVESTON LIGHTERING AREA **OFFSHORE GALVESTON LIGHTERING AREA** **GALVESTON, TX**	**ERNS**	**90162813** **N/A**
SPTCO GALVESTON WHARVES SITE **4100 OLD PORT INDUSTRIAL BOULEVARD** **GALVESTON, TX**	**TX VCP**	**S103865332** **N/A**

TX VCP:

Facility ID:	977	Project Number:	318770
Type Lead:	Owner	PCA Number:	31877
Project Number:	Ekpo-Otu	Phase:	Investigation
Region:	12	Facility Type:	Creosote Distribution Facility
Media Affected:	Soil /Groundwater	Acres at Site:	22

Contaminant Categories:	SVOCs
Date Application Received at VCP:	5
Applicant:	Union Pacific Railroad Company 24125 Aldine-Westfield Road Spring, TX 77373
Applicant Contact:	Geoffrey B Reeder
Applicant Contact Title:	Manager, Env. Site Remediation
Applicant Phone:	281-350-7197
Applicant Fax:	281-350-7362
Consultant/Attorney:	ERM-Southwest, Inc. 16300 Katy Freeway, Suite 300 Houston, TX 77094
Consultant/Attorney Contact:	Peter J. Gagnon
Consultant/Attorney Contact Title:	Environmental Engineer
Consultant/Attorney Phone:	281-579-8999
Consultant/Attorney Fax:	281-579-8988
TNRCC Solid Waste Registration:	83895
Leaking Petroleum Storage Registration Tank:	Not reported
EPA Texas ID/CERCLIS Registration:	Not reported
EPA Registration:	Not reported
Application Signed By Applicant:	6/8/99
Risk Reduction or Petroleum Storage Tank:	RRR
Standards:	3
Certificate of Completion:	Not reported
Lat/long:	29-18-12 / 94-48-54

QUALITY FUEL CORP **1200 PELICAN ISLAND** **GALVESTON, TX 77550**	**AST**	**A100122670** **N/A**

Site	Database(s)	EDR ID Number EPA ID Number
QUALITY FUEL CORP (Continued)		A100122670

AST:

Facility ID:	0054934	Owner ID:	00161545
Tank ID:	G-1	Facility Type:	Wholesale
Number of USTs:	Not reported	Number of ASTs:	2
Capacity:	0008000	Tank Status:	In use
Customer ID:	29373		
Contact:	JIM GARCIA	Contact phone:	(409) 740-1931
Content:	Gasoline	Other content:	Not reported
Containment:	Concrete	Other Contain.:	Not reported
Material:	Not reported	Other material:	Not reported
Facility phone:	Not reported	Date Installed:	01/01/75
Facility Manager:	Not reported	Manager Title:	Not reported
Owner:	QUALITY FUEL CORPORATION		
Owner Address:	PO BOX 259 GALVESTON, TX 77553		

Date out of use:	Not reported
Date registration form was received:	07/11/90
Vapor recovery equipment status:	Not reported
State 2 equipment installed:	Not reported

Facility ID:	0054934	Owner ID:	00161546
Tank ID:	F-1	Facility Type:	Wholesale
Number of USTs:	Not reported	Number of ASTs:	2
Capacity:	0008000	Tank Status:	In use
Customer ID:	29373		
Contact:	JIM GARCIA	Contact phone:	(409) 740-1931
Content:	Diesel	Other content:	Not reported
Containment:	Earthen dike	Other Contain.:	Not reported
Material:	Not reported	Other material:	Not reported
Facility phone:	Not reported	Date Installed:	01/01/75
Facility Manager:	Not reported	Manager Title:	Not reported
Owner:	QUALITY FUEL CORPORATION		
Owner Address:	PO BOX 259 GALVESTON, TX 77553		

Date out of use:	Not reported
Date registration form was received:	07/11/90
Vapor recovery equipment status:	Not reported
State 2 equipment installed:	Not reported

TATSUMI USA/TODD SHIPYARD FACILITY **PELICAN ISLAND** **GALVESTON, TX**	**TX VCP**	**S103452944** **N/A**

Site	Database(s)	EDR ID Number EPA ID Number
TATSUMI USA/TODD SHIPYARD FACILITY (Continued)		S103452944

TX VCP:

Facility ID:	330	Project Number:	312400
Type Lead:	Purchaser	PCA Number:	38240
Project Number:	Ellington	Phase:	Withdrawal
Region:	12	Facility Type:	Ship Painting and Repair
Media Affected:	Not reported	Acres at Site:	23

Contaminant Categories:	Not reported
Date Application Received at VCP:	8
Applicant:	John Bludworth Marine, Inc. P.O. Box 6504 Pasadena, TX 77506
Applicant Contact:	John Bludworth
Applicant Contact Title:	Owner
Applicant Phone:	713-473-5561
Applicant Fax:	713-473-7077
Consultant/Attorney:	Lanier and Associates 4101 Magazine Street New Orleans, LA 70115
Consultant/Attorney Contact:	Mark Urback
Consultant/Attorney Contact Title:	Manager, Environmental Engin
Consultant/Attorney Phone:	504-895-0368
Consultant/Attorney Fax:	504-895-0566
TNRCC Solid Waste Registration:	Not reported
Leaking Petroleum Storage Registration Tank:	Not reported
EPA Texas ID/CERCLIS Registration:	P490132284
EPA Registration:	Not reported
Application Signed By Applicant:	Not reported
Risk Reduction or Petroleum Storage Tank:	Not reported
Standards:	Not reported
Certificate of Completion:	Not reported
Lat/long:	29-19-00 / 94-49-00

TATSAMI **PELICAN ISLAND** **GALVESTON, TX**	**TX VCP**	**S103864991** **N/A**

Site	Database(s)	EDR ID Number / EPA ID Number
TATSAMI (Continued)		S103864991

TX VCP:

Facility ID:	208	Project Number:	311180
Type Lead:	Owner	PCA Number:	38118
Project Number:	Ellington	Phase:	Completed
Region:	12	Facility Type:	Vacant Land/Former Equipment Storage Yard
Media Affected:	Soils	Acres at Site:	23

Contaminant Categories:	Metals, TPH
Date Application Received at VCP:	3
Applicant:	Tatsami USA, Inc. P.O. Drawer 872 Texas City, TX 77592
Applicant Contact:	Charles R. Herback
Applicant Contact Title:	Attorney
Applicant Phone:	409-948-4466
Applicant Fax:	Not reported
Consultant/Attorney:	Tatsami USA, Inc. P.O. Drawer 872 Texas City, TX 77592
Consultant/Attorney Contact:	H. Wakasa
Consultant/Attorney Contact Title:	Agent
Consultant/Attorney Phone:	713-486-8087
Consultant/Attorney Fax:	Not reported
TNRCC Solid Waste Registration:	Not reported
Leaking Petroleum Storage Registration Tank:	Not reported
EPA Texas ID/CERCLIS Registration:	Not reported
EPA Registration:	Not reported
Application Signed By Applicant:	3/8/96
Risk Reduction or Petroleum Storage Tank:	RRR
Standards:	2
Certificate of Completion:	6/24/96
Lat/long:	29-18-75 / 94-49-50

STAN BLAST ABRASIVES CO INC
5712 PORT INDUSTRIAL BLVD
GALVESTON, TX 77550

AIRS	**1001391106**
FINDS	**06-97-0100-0**

TX AIR:

TNRCC Account Number:	GB0132B
Region:	Corpus Christi
SIC Code:	3291
EPA Emission Amount Class:	B
Company Contact:	GUY BOLDUC
Account Telephone:	(713) 534-2013
Mailing Address:	5601 HWY 517 EAST APT #30 GALVESTON, TX 77550
Date of Last Emission Inventory:	Not reported
Total Suspected Pariculate Actuals:	0.0
Pariculate Matter 10 Microns or Less Actuals:	5.4
Sulfur Dioxide Actual Emission Amounts:	0.0
Nitrogen Oxide Actual Emission Amounts:	0.0
Non-Methane Organic Coumpound Actuals:	0.0
Cabon Monoxide Actual Emission Amounts:	5.4
Lead Actual emission Amounts:	0.0

Site	Database(s)	EDR ID Number EPA ID Number

STAN BLAST ABRASIVES CO INC (Continued) — 1001391106

FINDS:
Other Pertinent Environmental Activity Identified at Site:
AIRS Facility System (AIRS/AFS)
Enforcement Docket System (DOCKET)

AIMCOR-GALVESTON TERMINAL — **AST** — **A100122671**
4800 PORT INDUSTRIAL BLVD — **N/A**
GALVESTON, TX 77550

AST:

Facility ID:	0055172	Owner ID:	00161685
Tank ID:	1	Facility Type:	Fleet refueling
Number of USTs:	Not reported	Number of ASTs:	1
Capacity:	0002000	Tank Status:	In use
Customer ID:	45716		
Contact:	Pitts, Danny	Contact phone:	409-945-7210
Content:	Diesel	Other content:	Not reported
Containment:	Earthen dike	Other Contain.:	Not reported
Material:	Not reported	Other material:	Not reported
Facility phone:	Not reported	Date Installed:	00/00/00
Facility Manager:	Not reported	Manager Title:	Not reported
Owner:	AIMCOR		
Owner Address:	Marine Ter TEXAS CITY, TX 77592		

Date out of use:	Not reported
Date registration form was received:	02/14/95
Vapor recovery equipment status:	Not reported
State 2 equipment installed:	Not reported

PORT OF GALVESTON WATERFRONT — **TX IHW** — **S103600482**
PORT OF GALVESTON — **N/A**
GALVESTON, TX 77550

TX IHW:

Registration Number:	32255
Registration Initial Notification Date:	12/31/1981
Registration Last Amendment Date:	12/01/1997
EPA Identification:	TXD
TNRCC Premit Number:	020819694
Description of Facility Site Location:	Galveston, TX
Site Primary Standard Industrial Code:	47890 Transportation Services, nec Trans. & Utilities
Registration is a Generator of Waste:	Yes
Registration is a Receivers of Waste:	No
Registration is a Transporter of Waste:	No
Registration is a Transfer Facility:	No
Mexican Facility:	Does not represent a Maquiladora (Mexican Facility)
Facility Status:	Inactive
Type of Generator:	Non-industrial and/or municipal, CESQG
Company Name:	Galveston Wharves
Facility County:	Not reported
TNRCC Region:	Not reported
Mailing Address:	PO Box 329 Galveston, TX 77553
Mailing County:	USA
Contact:	B. C. Read

Site	Database(s)	EDR ID Number EPA ID Number

PORT OF GALVESTON WATERFRONT (Continued) S103600482

Contact Telephone Number: 713-766-6172

Additional detail may be available for this site. Please contact your EDR Account Executive for more information

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MITCHELL ENERGY CORPORATION
4810 POST OFFICE ST
GALVESTON, TX 77551

AIRS **1001387782**
FINDS **TX0854919**

TX AIR:

TNRCC Account Number:	GB0337E
Region:	Corpus Christi
SIC Code:	1311
EPA Emission Amount Class:	A
Company Contact:	GLENN SMITH
Account Telephone:	(713) 377-5982
Mailing Address:	P. O. BOX 4000 THE WOODLANDS, TX 77387
Date of Last Emission Inventory:	12/31/1997
Total Suspected Pariculate Actuals:	0.0
Pariculate Matter 10 Microns or Less Actuals:	0.0
Sulfur Dioxide Actual Emission Amounts:	0.0
Nitrogen Oxide Actual Emission Amounts:	0.0
Non-Methane Organic Coumpound Actuals:	0.0
Cabon Monoxide Actual Emission Amounts:	0.0
Lead Actual emission Amounts:	5.6

FINDS:

Other Pertinent Environmental Activity Identified at Site:
AIRS Facility System (AIRS/AFS)

GALVESTON AREA COASTAL WATERS SPILL CLEA
601 ROSENBERG ROOM 301 PO BLDG
GALVESTON, TX 77550

TX IHW **S103607685**
N/A

TX IHW:

Registration Number:	70609
Registration Initial Notification Date:	09/01/1986
Registration Last Amendment Date:	03/12/1997
EPA Identification:	TX0
TNRCC Premit Number:	690308374
Description of Facility Site Location:	601 Rosenberg, Room 301 PO Bldg, Galveston, TX
Site Primary Standard Industrial Code:	Not reported
Registration is a Generator of Waste:	Yes
Registration is a Receivers of Waste:	No
Registration is a Transporter of Waste:	No
Registration is a Transfer Facility:	No
Mexican Facility:	Does not represent a Maquiladora (Mexican Facility)
Facility Status:	Inactive
Type of Generator:	Non-industrial and/or municipal,
Company Name:	U.S. Coast Guard Marine Safety Office
Facility County:	Not reported
TNRCC Region:	Not reported
Mailing Address:	601 Rosenberg Room 301 PO Bldg Galveston, TX 77550 - 1705
Mailing County:	USA
Contact:	Monica Rochester
Contact Telephone Number:	409-766-3688

Site	Database(s)	EDR ID Number EPA ID Number
GALVESTON AREA COASTAL WATERS SPILL CLEA (Continued)		S103607685

Additional detail may be available for this site. Please contact your EDR Account Executive for more information

SHEEN SIZE: AREA OF 1/2 WIDE COLOR: BLACK/BROWN SHEEN SIZE: AREA OF 1/2 WIDE COLOR: BLACK/BROWN GALVESTON, TX 77551	**ERNS**	**98428603 N/A**

AT THE 700 BLOCK OF PORT INDUSTRIAL, GALVESTON, TX GALVESTON, TX	**SWF/LF**	**S103222355 N/A**

LF:

Facility ID:	2232
Population Served:	300000
Area Served:	Not reported
Tons per Day:	36
Yards per Day:	0.00
Estimated Cleanup Date:	Not reported
Removal Status:	Not reported
Engineer:	TLC
Status Date:	02/17/1995
Business Type:	CITY
Organic Acres:	0.00
Facility Status:	Not reported
Amendment:	Not reported
Recieved Date:	07/08/1993
Region:	STATE
Region Code:	12
Extra Territorial Jurisdiction:	Not reported
Lat/Long:	29˚ 18.44' 0" / 94˚ 46.40' 0"
Applicant Name:	UT MEDICAL BRANCH
Applicant Address:	700 BLOCK OF PORT INDUSTRIAL GALVESTON, TX 77555 - 1049
Applicant Telephone:	(409) 772-3694
River Basin Code:	11
Responsible Engenier:	TLC
Start Date:	02/17/1995
County Code:	84
Owner Name:	UT MEDICAL BRANCH -GALVEST
Owner Address:	700 BLOCK OF PORT INDUSTRIAL GALVESTON, TX 77555 - 1049
Facility Type:	SOLID WASTE INCINERATION FACILITY WITHOUT ENERGY RECOVERY
Permit Status:	Permit Issued

PIERCE DISTRIBUTING CO 1202 WATER ST GALVESTON, TX 77550	**AST**	**A100122676 N/A**

Site	Database(s)	EDR ID Number EPA ID Number
PIERCE DISTRIBUTING CO (Continued)		A100122676

AST:

Facility ID:	0056207	Owner ID:	00162261
Tank ID:	7	Facility Type:	Wholesale
Number of USTs:	Not reported	Number of ASTs:	3
Capacity:	0008800	Tank Status:	Not in use
Customer ID:	06297		
Contact:	Pierce, Ken	Contact phone:	409-935-4091
Content:	Diesel	Other content:	Not reported
Containment:	Concrete	Other Contain.:	Not reported
Material:	Steel	Other material:	Not reported
Facility phone:	Not reported	Date Installed:	01/01/89
Facility Manager:	Not reported	Manager Title:	Not reported
Owner:	KEN PIERCE ENTERPRISES INC		
Owner Address:	600 TRAVI HOUSTON, TX 77002		
Date out of use:	12/31/90		
Date registration form was received:	09/03/90		
Vapor recovery equipment status:	Not reported		
State 2 equipment installed:	Not reported		

Facility ID:	0056207	Owner ID:	00162262
Tank ID:	8	Facility Type:	Wholesale
Number of USTs:	Not reported	Number of ASTs:	3
Capacity:	0002000	Tank Status:	Not in use
Customer ID:	06297		
Contact:	Pierce, Ken	Contact phone:	409-935-4091
Content:	Gasoline	Other content:	Not reported
Containment:	Concrete	Other Contain.:	Not reported
Material:	Steel	Other material:	Not reported
Facility phone:	Not reported	Date Installed:	01/01/89
Facility Manager:	Not reported	Manager Title:	Not reported
Owner:	KEN PIERCE ENTERPRISES INC		
Owner Address:	600 TRAVI HOUSTON, TX 77002		
Date out of use:	12/31/90		
Date registration form was received:	09/03/90		
Vapor recovery equipment status:	Not reported		
State 2 equipment installed:	Not reported		

Site	Database(s)	EDR ID Number EPA ID Number
FALSTAFF BREWING COMPANY **33RD STREET AND CHURCH STREET** **GALVESTON, TX**	**TX VCP**	**S103865045** **N/A**

TX VCP:

Facility ID:	337	Project Number:	312470
Type Lead:	Owner	PCA Number:	38247
Project Number:	Ekpo Otu	Phase:	Investigation
Region:	12	Facility Type:	PCB Contaminated Transformer Pads
Media Affected:	Soils/Groundwater	Acres at Site:	13

Contaminant Categories:	PCB, TPH, Metals
Date Application Received at VCP:	9
Applicant:	Falstaff Brewing Company 312 Pearl Parkway San Antonio, TX 78215
Applicant Contact:	Syl Dew
Applicant Contact Title:	Corporate Director, Safety
Applicant Phone:	210-226-0231
Applicant Fax:	210-242-1836
Consultant/Attorney:	Extra Environmental, Inc. 2426 Freedom Drive San Antonio, TX 78217
Consultant/Attorney Contact:	Peter V. Schram
Consultant/Attorney Contact Title:	Project Manager
Consultant/Attorney Phone:	210-829-7137
Consultant/Attorney Fax:	210-829-8271
TNRCC Solid Waste Registration:	Not reported
Leaking Petroleum Storage Registration Tank:	Not reported
EPA Texas ID/CERCLIS Registration:	Not reported
EPA Registration:	Not reported
Application Signed By Applicant:	11/1/96
Risk Reduction or Petroleum Storage Tank:	RRR
Standards:	3
Certificate of Completion:	Not reported
Lat/long:	29-18-03 / 94-48-22

GALVESTON FIRE FIGHTING TR GROUNDS **59TH ST** **GALVESTON, TX 77550**	**LUST**	**S103496869** **N/A**

LUST:

Facility ID:	Not reported	Discovery Date:	6/20/91
Data Entry Date:	6/28/91	Lead Office:	1/2
PST Coordinator:	ZJL/HMW	RPR Coordinator:	DELONDA ALEXANDER
Region:	12	Region City ID:	HOUSTON
Leaking Tank #:	099366		
Responsible Party:	CITY OF GALVESTON		
RP Contact:	BARBARA E. ROBERTS		
RP Address:	P.O. Box 779 GALVESTON, TX 77553		
RP Telephone:	409/766-3368		
County Code:	084		
Priority:	GW IMPACTED, NO APPARENT THREATS OR IMPACTS TO RECEPTORS		
Status:	PHASE 2 IN PROGRESS		

Site	Database(s)	EDR ID Number EPA ID Number
GOOD EARTH MATERIAL **16947 HWY 6** **GALVESTON, TX**	**LUST**	**S103502266** **N/A**

LUST:

Facility ID:	Not reported	Discovery Date:	Not reported
Data Entry Date:	1/8/99	Lead Office:	CENTRAL OFFICE LEAD
PST Coordinator:	XYZ	RPR Coordinator:	XYZ
Region:	12	Region City ID:	HOUSTON
Leaking Tank #:	113726		
Responsible Party:	ROGER MCCORMICK		
RP Contact:	ROGER MCCORMICK		
RP Address:	16947 HWY 6 SANTA FE, TX 77517		
RP Telephone:	409/925-2334		
County Code:	084		
Priority:	4.0		
Status:	INCIDENT REPORTED, INITIAL DIRECTIVES NOT YET ISSUED		

71ST STREET-POST OFFICE RD **GALVESTON, TX**	**SWF/LF**	**S103220385** **N/A**

LF:

Facility ID:	174
Population Served:	5000
Area Served:	GALVESTON
Tons per Day:	0
Yards per Day:	0.00
Estimated Cleanup Date:	Not reported
Removal Status:	REFERED TO TDWR 102875
Engineer:	Not reported
Status Date:	10/28/1975
Business Type:	CITY
Organic Acres:	10.00
Facility Status:	PROPOSED SITE
Amendment:	Not reported
Recieved Date:	10/24/1975
Region:	STATE
Region Code:	12
Extra Territorial Jurisdiction:	GALVESTON
Lat/Long:	0° 0.00′ 0″ / 0° 0.00′ 0″
Applicant Name:	ISLAND CITY IRON & SUPPLY
Applicant Address:	7100 AND POS OFFICE GALVESTON, TX 77550
Applicant Telephone:	(713) 744-3695
River Basin Code:	11
Responsible Engenier:	Not reported
Start Date:	10/28/1975
County Code:	84
Owner Name:	ISLAND CITY IRON & SUPPLY
Owner Address:	7100 E GALVESTON, TX 77550
Facility Type:	SOLID WASTE INCINERATION FACILITY WITHOUT ENERGY RECOVERY
Permit Status:	Application Withdrawn

Site	Database(s)	EDR ID Number EPA ID Number
WASTE CONTROL INC **2801 AVENUE C** **GALVESTON, TX 77550**	**RCRIS-SQG** **FINDS**	**1000397024** **TXD093968618**

RCRIS:

Owner: RONALD B GREBER & A D LASELL
(000) 000-0000

Contact: RONALD-B GRABER
(713) 763-3050

Record Date: 08/18/1980

Classification: Hazardous Waste Transporter

Used Oil Recyc: No

Violation Status: No violations found

#108379 **6102 AVENUE S # 61ST** **GALVESTON, TX 77550**	**TX IHW**	**S102758883** **N/A**

TX IHW:

Registration Number:	79185
Registration Initial Notification Date:	10/27/1992
Registration Last Amendment Date:	07/28/1997
EPA Identification:	TXD
TNRCC Premit Number:	988035127
Description of Facility Site Location:	6102 Avenue S @ 61st, Galveston, TX
Site Primary Standard Industrial Code:	Not reported
Registration is a Generator of Waste:	Yes
Registration is a Receivers of Waste:	No
Registration is a Transporter of Waste:	No
Registration is a Transfer Facility:	No
Mexican Facility:	Does not represent a Maquiladora (Mexican Facility)
Facility Status:	Inactive
Type of Generator:	Non-industrial and/or municipal, SQG
Company Name:	Chevron
Facility County:	Not reported
TNRCC Region:	Not reported
Mailing Address:	P.O. Box 4256 Houston, TX 77210
Mailing County:	USA
Contact:	Kathryn Minter
Contact Telephone Number:	713-754-3500

Additional detail may be available for this site. Please contact your EDR Account Executive for more information

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MOBIL OIL CORP. #00MXJ **1902 AVENUE J / 19TH STREET** **GALVESTON, TX 77550**	**TX IHW**	**S103610480** **N/A**

TX IHW:

Registration Number:	80268
Registration Initial Notification Date:	07/28/1992
Registration Last Amendment Date:	07/31/1997
EPA Identification:	TXD
TNRCC Premit Number:	988037404
Description of Facility Site Location:	1902 Ave J & 19th St Galveston, TX 77550

Site	Database(s)	EDR ID Number EPA ID Number

MOBIL OIL CORP. #00MXJ (Continued) S103610480

Site Primary Standard Industrial Code:	Not reported
Registration is a Generator of Waste:	Yes
Registration is a Receivers of Waste:	No
Registration is a Transporter of Waste:	No
Registration is a Transfer Facility:	No
Mexican Facility:	Does not represent a Maquiladora (Mexican Facility)
Facility Status:	Inactive
Type of Generator:	Non-industrial and/or municipal, SQG
Company Name:	Mobil Oil Corp.
Facility County:	Not reported
TNRCC Region:	Not reported
Mailing Address:	3225 Gallows Rd Fairfax, VA 22037
Mailing County:	USA
Contact:	Robin A. Bunn
Contact Telephone Number:	703-849-3330

Additional detail may be available for this site. Please contact your EDR Account Executive for more information

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GALVESTON COUNTY HEALTH DEPARTMENT **TX IHW** **S103612731**
4424 AVENUE N **N/A**
GALVESTON, TX 77550

TX IHW:

Registration Number:	83155
Registration Initial Notification Date:	01/10/1995
Registration Last Amendment Date:	Not reported
EPA Identification:	Not reported
TNRCC Premit Number:	Not reported
Description of Facility Site Location:	4424 Avenue N, Galveston, TX
Site Primary Standard Industrial Code:	27410 Miscellaneous Publishing Manufacturing
Registration is a Generator of Waste:	Yes
Registration is a Receivers of Waste:	No
Registration is a Transporter of Waste:	No
Registration is a Transfer Facility:	No
Mexican Facility:	Does not represent a Maquiladora (Mexican Facility)
Facility Status:	Active
Type of Generator:	Non-industrial and/or municipal, CESQG
Company Name:	Galveston County Health Department
Facility County:	Not reported
TNRCC Region:	Not reported
Mailing Address:	P.O. Box 939 La Marque, TX 77568
Mailing County:	USA
Contact:	Leta Melancon
Contact Telephone Number:	409-938-2256

Additional detail may be available for this site. Please contact your EDR Account Executive for more information

Site	Database(s)	EDR ID Number EPA ID Number
UNKNOWN **2302 AVENUE O** **GALVESTON, TX 77550**	**UST**	**U003566566** **N/A**

UST:

Facility ID:	0023310	Customer ID:	00060
Tank ID:	1	Installation Date:	01/01/62
Tank Installer:	Not reported	Tank Tested:	No
Tank Emptied:	No	Status Date:	01/31/76
Capacity:	550	Unit ID:	11480

Tank Material of Construction:	Steel
Pipe Material of Construction:	Steel
Other Materials of Construction:	Not reported
Tank Status:	Abandoned In-place
Tank Construction & Containment:	Not reported
Pipe Construction & Containment:	Not reported
Other Construction & Containment:	Not reported
Tank Substance Stored:	Used Oil
Other Substance Stored:	Not reported
Tank Release Detection:	None
Pipe Release Detection:	None
Other Release Detection:	Not reported
Tank Corrosion Protection:	Not reported
Pipe Corrosion Protection:	None
Pipe Corrosion Protection II:	Noncorrodible Material (c.g. FRP)
Other Corrosion Protection:	Not reported
Spill and Overfill Protection:	Unknown/None
Spill and Overfill Protection II:	Tight-Fill Fitting
Vapor Recovery Equipment Status:	Not reported
Equipment Installed Date:	Not reported
Equipment Installer:	Not reported
Contractor Registration Number:	Not reported
Tank Registration Date:	05/08/86
Installer License Number:	Not reported

Facility ID:	0023310	Customer ID:	00060
Tank ID:	3	Installation Date:	01/01/62
Tank Installer:	Not reported	Tank Tested:	No
Tank Emptied:	No	Status Date:	01/31/76
Capacity:	3000	Unit ID:	11480

Tank Material of Construction:	Steel
Pipe Material of Construction:	Steel
Other Materials of Construction:	Not reported
Tank Status:	Abandoned In-place
Tank Construction & Containment:	Not reported
Pipe Construction & Containment:	Not reported
Other Construction & Containment:	Not reported
Tank Substance Stored:	Gasoline
Other Substance Stored:	Not reported
Tank Release Detection:	None
Pipe Release Detection:	None
Other Release Detection:	Not reported
Tank Corrosion Protection:	Not reported
Pipe Corrosion Protection:	None
Pipe Corrosion Protection II:	Noncorrodible Material (c.g. FRP)
Other Corrosion Protection:	Not reported
Spill and Overfill Protection:	Unknown/None
Spill and Overfill Protection II:	Tight-Fill Fitting
Vapor Recovery Equipment Status:	Not reported

Site	Database(s)	EDR ID Number EPA ID Number
UNKNOWN (Continued)		U003566566

Equipment Installed Date: Not reported
Equipment Installer: Not reported
Contractor Registration Number: Not reported
Tank Registration Date: 05/08/86
Installer License Number: Not reported

Facility ID: 0023310 | Customer ID: 00060
Tank ID: 2 | Installation Date: 01/01/62
Tank Installer: Not reported | Tank Tested: No
Tank Emptied: No | Status Date: 01/31/76
Capacity: 3000 | Unit ID: 11480
Tank Material of Construction: Steel
Pipe Material of Construction: Steel
Other Materials of Construction: Not reported
Tank Status: Abandoned In-place
Tank Construction & Containment: Not reported
Pipe Construction & Containment: Not reported
Other Construction & Containment: Not reported
Tank Substance Stored: Gasoline
Other Substance Stored: Not reported
Tank Release Detection: None
Pipe Release Detection: None
Other Release Detection: Not reported
Tank Corrosion Protection: Not reported
Pipe Corrosion Protection: None
Pipe Corrosion Protection II: Noncorrodible Material (c.g. FRP)
Other Corrosion Protection: Not reported
Spill and Overfill Protection: Unknown/None
Spill and Overfill Protection II: Tight-Fill Fitting
Vapor Recovery Equipment Status: Not reported
Equipment Installed Date: Not reported
Equipment Installer: Not reported
Contractor Registration Number: Not reported
Tank Registration Date: 05/08/86
Installer License Number: Not reported

Facility ID: 0023310 | Customer ID: 00060
Tank ID: 4 | Installation Date: 01/01/62
Tank Installer: Not reported | Tank Tested: No
Tank Emptied: No | Status Date: 01/31/76
Capacity: 3000 | Unit ID: 11480
Tank Material of Construction: Steel
Pipe Material of Construction: Steel
Other Materials of Construction: Not reported
Tank Status: Abandoned In-place
Tank Construction & Containment: Not reported
Pipe Construction & Containment: Not reported
Other Construction & Containment: Not reported
Tank Substance Stored: Gasoline
Other Substance Stored: Not reported
Tank Release Detection: None
Pipe Release Detection: None
Other Release Detection: Not reported
Tank Corrosion Protection: Not reported
Pipe Corrosion Protection: None
Pipe Corrosion Protection II: Noncorrodible Material (c.g. FRP)
Other Corrosion Protection: Not reported

Site	Database(s)	EDR ID Number EPA ID Number

UNKNOWN (Continued) U003566566

Spill and Overfill Protection:	Unknown/None
Spill and Overfill Protection II:	Tight-Fill Fitting
Vapor Recovery Equipment Status:	Not reported
Equipment Installed Date:	Not reported
Equipment Installer:	Not reported
Contractor Registration Number:	Not reported
Tank Registration Date:	05/08/86
Installer License Number:	Not reported

Facility ID:	0023310	Customer ID:	00060
Tank ID:	5	Installation Date:	01/01/71
Tank Installer:	Not reported	Tank Tested:	No
Tank Emptied:	No	Status Date:	01/31/76
Capacity:	4000	Unit ID:	11480

Tank Material of Construction:	Fiberglass-Reinforced Plastic (FRP)
Pipe Material of Construction:	Fiberglass-Reinforced Plastic (FRP)
Other Materials of Construction:	Not reported
Tank Status:	Abandoned In-place
Tank Construction & Containment:	Not reported
Pipe Construction & Containment:	Not reported
Other Construction & Containment:	Not reported
Tank Substance Stored:	Gasoline
Other Substance Stored:	Not reported
Tank Release Detection:	None
Pipe Release Detection:	None
Other Release Detection:	Not reported
Tank Corrosion Protection:	None
Pipe Corrosion Protection:	None
Pipe Corrosion Protection II:	Noncorrodible Material (c.g. FRP)
Other Corrosion Protection:	Not reported
Spill and Overfill Protection:	Unknown/None
Spill and Overfill Protection II:	Tight-Fill Fitting
Vapor Recovery Equipment Status:	Not reported
Equipment Installed Date:	Not reported
Equipment Installer:	Not reported
Contractor Registration Number:	Not reported
Tank Registration Date:	05/08/86
Installer License Number:	Not reported

PARKS DEPT **LUST** **S103499526**
5720 AVENUE Q **N/A**
GALVESTON, TX 77550

Site	Database(s)	EDR ID Number / EPA ID Number
PARKS DEPT (Continued)		S103499526

LUST:

Facility ID:	0023421	Discovery Date:	2/19/93
Data Entry Date:	3/16/93	Lead Office:	CENTRAL OFFICE LEAD
PST Coordinator:	HLN/RRY	RPR Coordinator:	RPR
Region:	12	Region City ID:	HOUSTON
Leaking Tank #:	106172		
Responsible Party:	GALVESTON COUNTY		
RP Contact:	MIKE FITZGERALD		
RP Address:	123 ROSENBERG 4157 GALVESTON, TX 77550		
RP Telephone:	409/766-2260		
County Code:	084		
Priority:	MINOR SOIL CONTAMINATION - DOES NOT REQUIRE A RAP		
Status:	FINAL CONCURRENCE ISSUED, CASE CLOSED		

TINSE CHEMICAL CO **20 BRADNER ST** **GALVESTON, TX 77550**	**RCRIS-SQG** **FINDS** **RCRIS-TSD**	**1000454710** **TXT982813727**

RCRIS:

Owner:	TINSE CHEMICAL CO (000) 000-0000
Contact:	UNKNOWN UNKNOWN (000) 000-0000
Record Date:	09/26/1990
Classification:	TSDF
Used Oil Recyc:	No
TSDF Activities:	Not reported
Violation Status:	No violations found

SHELL OIL CO. RETAIL FACILITY **602 BROADWAY ST # &6TH** **GALVESTON, TX 77550**	**UST**	**U003566569** **N/A**

UST:

Facility ID:	0033082	Customer ID:	00087
Tank ID:	1	Installation Date:	01/01/72
Tank Installer:	Not reported	Tank Tested:	No
Tank Emptied:	No	Status Date:	Not reported
Capacity:	1000	Unit ID:	52374

Tank Material of Construction:	Fiberglass-Reinforced Plastic (FRP)
Pipe Material of Construction:	Fiberglass-Reinforced Plastic (FRP)
Other Materials of Construction:	Not reported
Tank Status:	In Use
Tank Construction & Containment:	Single Wall
Pipe Construction & Containment:	Single Wall
Other Construction & Containment:	Single Wall
Tank Substance Stored:	Used Oil
Other Substance Stored:	Not reported
Tank Release Detection:	Inventory Control
Tank Release Detection II:	Tightness Testing
Pipe Release Detection:	Tightness Testing
Other Release Detection:	Not reported

Site	Database(s)	EDR ID Number EPA ID Number
SHELL OIL CO. RETAIL FACILITY (Continued)		U003566569

Tank Corrosion Protection: Noncorrodible Material (c.g. FRP)
Tank Corrosion Protection II: Noncorrodible Material (c.g. FRP)
Pipe Corrosion Protection: Noncorrodible Material (c.g. FRP)
Pipe Corrosion Protection II: Noncorrodible Material (c.g. FRP)
Other Corrosion Protection: Not reported
Spill and Overfill Protection: Tight-Fill Fitting
Spill and Overfill Protection II: Tight-Fill Fitting
Vapor Recovery Equipment Status: Not reported
Equipment Installed Date: Not reported
Equipment Installer: Not reported
Contractor Registration Number: Not reported
Tank Registration Date: 05/08/86
Installer License Number: Not reported

Facility ID: 0033082 Customer ID: 00087
Tank ID: 4 Installation Date: 01/01/72
Tank Installer: Not reported Tank Tested: No
Tank Emptied: No Status Date: Not reported
Capacity: 12000 Unit ID: 52374
Tank Material of Construction: Fiberglass-Reinforced Plastic (FRP)
Pipe Material of Construction: Fiberglass-Reinforced Plastic (FRP)
Other Materials of Construction: Not reported
Tank Status: In Use
Tank Construction & Containment: Single Wall
Pipe Construction & Containment: Single Wall
Other Construction & Containment: Single Wall
Tank Substance Stored: Gasoline
Other Substance Stored: Not reported
Tank Release Detection: Automatic In-Tank Monitoring & Inventory Control
Tank Release Detection II: Inventory Control
Pipe Release Detection: Line Leak Detectors
Pipe Release Detection II: Tightness Testing
Other Release Detection: Tightness Testing
Tank Corrosion Protection: Noncorrodible Material (c.g. FRP)
Tank Corrosion Protection II: Noncorrodible Material (c.g. FRP)
Pipe Corrosion Protection: Noncorrodible Material (c.g. FRP)
Pipe Corrosion Protection II: Noncorrodible Material (c.g. FRP)
Other Corrosion Protection: Not reported
Spill and Overfill Protection: Automatic Overfill Device - Shut-Off Valve
Spill and Overfill Protection II: Tight-Fill Fitting
Vapor Recovery Equipment Status: Stage 2 Vapor Recovery Equipment Installed
Equipment Installed Date: 01/10/95
Equipment Installer: Not reported
Contractor Registration Number: Not reported
Tank Registration Date: 05/08/86
Installer License Number: Not reported

Facility ID: 0033082 Customer ID: 00087
Tank ID: 3 Installation Date: 01/01/72
Tank Installer: Not reported Tank Tested: No
Tank Emptied: No Status Date: Not reported
Capacity: 12000 Unit ID: 52374
Tank Material of Construction: Fiberglass-Reinforced Plastic (FRP)
Pipe Material of Construction: Fiberglass-Reinforced Plastic (FRP)
Other Materials of Construction: Not reported
Tank Status: In Use
Tank Construction & Containment: Single Wall

Site	Database(s)	EDR ID Number EPA ID Number
SHELL OIL CO. RETAIL FACILITY (Continued)		U003566569

Pipe Construction & Containment: Single Wall
Other Construction & Containment: Single Wall
Tank Substance Stored: Gasoline
Other Substance Stored: Not reported
Tank Release Detection: Automatic In-Tank Monitoring & Inventory Control
Tank Release Detection II: Inventory Control
Pipe Release Detection: Line Leak Detectors
Pipe Release Detection II: Tightness Testing
Other Release Detection: Tightness Testing
Tank Corrosion Protection: Noncorrodible Material (c.g. FRP)
Tank Corrosion Protection II: Noncorrodible Material (c.g. FRP)
Pipe Corrosion Protection: Noncorrodible Material (c.g. FRP)
Pipe Corrosion Protection II: Noncorrodible Material (c.g. FRP)
Other Corrosion Protection: Not reported
Spill and Overfill Protection: Automatic Overfill Device - Shut-Off Valve
Spill and Overfill Protection II: Tight-Fill Fitting
Vapor Recovery Equipment Status: Stage 2 Vapor Recovery Equipment Installed
Equipment Installed Date: 01/10/95
Equipment Installer: Not reported
Contractor Registration Number: Not reported
Tank Registration Date: 05/08/86
Installer License Number: Not reported

Facility ID: 0033082 Customer ID: 00087
Tank ID: 2 Installation Date: 01/01/72
Tank Installer: Not reported Tank Tested: No
Tank Emptied: No Status Date: Not reported
Capacity: 12000 Unit ID: 52374
Tank Material of Construction: Fiberglass-Reinforced Plastic (FRP)
Pipe Material of Construction: Fiberglass-Reinforced Plastic (FRP)
Other Materials of Construction: Not reported
Tank Status: In Use
Tank Construction & Containment: Single Wall
Pipe Construction & Containment: Single Wall
Other Construction & Containment: Single Wall
Tank Substance Stored: Gasoline
Other Substance Stored: Not reported
Tank Release Detection: Automatic In-Tank Monitoring & Inventory Control
Tank Release Detection II: Inventory Control
Pipe Release Detection: Line Leak Detectors
Pipe Release Detection II: Tightness Testing
Other Release Detection: Tightness Testing
Tank Corrosion Protection: Noncorrodible Material (c.g. FRP)
Tank Corrosion Protection II: Noncorrodible Material (c.g. FRP)
Pipe Corrosion Protection: Noncorrodible Material (c.g. FRP)
Pipe Corrosion Protection II: Noncorrodible Material (c.g. FRP)
Other Corrosion Protection: Not reported
Spill and Overfill Protection: Automatic Overfill Device - Shut-Off Valve
Spill and Overfill Protection II: Tight-Fill Fitting
Vapor Recovery Equipment Status: Stage 2 Vapor Recovery Equipment Installed
Equipment Installed Date: 01/10/95
Equipment Installer: Not reported
Contractor Registration Number: Not reported
Tank Registration Date: 05/08/86
Installer License Number: Not reported

Facility ID: 0033082 Customer ID: 00169

Site	Database(s)	EDR ID Number EPA ID Number
SHELL OIL CO. RETAIL FACILITY (Continued)		U003566569

Tank ID:	6	Installation Date:	01/01/67
Tank Installer:	Not reported	Tank Tested:	No
Tank Emptied:	No	Status Date:	Not reported
Capacity:	44	Unit ID:	52374

Tank Material of Construction:	Steel
Pipe Material of Construction:	Steel
Other Materials of Construction:	Not reported
Tank Status:	In Use
Tank Construction & Containment:	Not reported
Pipe Construction & Containment:	Not reported
Other Construction & Containment:	Not reported
Tank Substance Stored:	Not reported
Other Substance Stored:	Hydraulic Lift Oil
Tank Release Detection:	Not reported
Pipe Release Detection:	Not reported
Other Release Detection:	Not reported
Tank Corrosion Protection:	None
Pipe Corrosion Protection:	Not reported
Pipe Corrosion Protection II:	Noncorrodible Material (c.g. FRP)
Other Corrosion Protection:	Not reported
Spill and Overfill Protection:	Not reported
Spill and Overfill Protection II:	Tight-Fill Fitting
Vapor Recovery Equipment Status:	Not reported
Equipment Installed Date:	Not reported
Equipment Installer:	Not reported
Contractor Registration Number:	Not reported
Tank Registration Date:	05/08/86
Installer License Number:	Not reported

Facility ID:	0033082	Customer ID:	00169
Tank ID:	5	Installation Date:	01/01/67
Tank Installer:	Not reported	Tank Tested:	No
Tank Emptied:	No	Status Date:	Not reported
Capacity:	44	Unit ID:	52374

Tank Material of Construction:	Steel
Pipe Material of Construction:	Steel
Other Materials of Construction:	Not reported
Tank Status:	In Use
Tank Construction & Containment:	Not reported
Pipe Construction & Containment:	Not reported
Other Construction & Containment:	Not reported
Tank Substance Stored:	Not reported
Other Substance Stored:	Hydraulic Lift Oil
Tank Release Detection:	Not reported
Pipe Release Detection:	Not reported
Other Release Detection:	Not reported
Tank Corrosion Protection:	None
Pipe Corrosion Protection:	Not reported
Pipe Corrosion Protection II:	Noncorrodible Material (c.g. FRP)
Other Corrosion Protection:	Not reported
Spill and Overfill Protection:	Not reported
Spill and Overfill Protection II:	Tight-Fill Fitting
Vapor Recovery Equipment Status:	Not reported
Equipment Installed Date:	Not reported
Equipment Installer:	Not reported
Contractor Registration Number:	Not reported
Tank Registration Date:	05/08/86

Site	Database(s)	EDR ID Number EPA ID Number
SHELL OIL CO. RETAIL FACILITY (Continued)		U003566569

Installer License Number: Not reported

FISCA OIL SERVICE STATION #79
5411 BROADWAY
GALVESTON, TX 77550

LUST **S103496964**
N/A

LUST:

Facility ID:	0038596	Discovery Date:	6/21/91
Data Entry Date:	7/22/91	Lead Office:	CENTRAL OFFICE LEAD
PST Coordinator:	MJM/DRR	RPR Coordinator:	RPR
Region:	12	Region City ID:	HOUSTON
Leaking Tank #:	099598		
Responsible Party:	FISCA OIL CO INC		
RP Contact:	MICHAEL SZABO		
RP Address:	PO BOX 3363 KANSAS CITY, KS 66103		
RP Telephone:	913/236-7000		
County Code:	084		
Priority:	GROUP 1 GROUNDWATER, PLUME HAS/LIKELY TO MIGRATE OFF-SITE		
Status:	FINAL CONCURRENCE ISSUED, CASE CLOSED		

1500'S OF FMH 1764, 1.5M SW OF IH 45, W OF LA MARQ
GALVESTON, TX

SWF/LF **S103221441**
N/A

Site	Database(s)	EDR ID Number EPA ID Number
(Continued)		S103221441

LF:

Facility ID:	1149
Population Served:	170000
Area Served:	GALVESTON COUNTY
Tons per Day:	450
Yards per Day:	0.00
Estimated Cleanup Date:	19010101
Removal Status:	Not reported
Engineer:	Not reported
Status Date:	12/02/1987
Business Type:	CITY
Organic Acres:	60.00
Facility Status:	RENEWAL LICENSE
Amendment:	Not reported
Recieved Date:	09/15/1977
Region:	STATE
Region Code:	12
Extra Territorial Jurisdiction:	N/A
Lat/Long:	29' 23.25' 0" / 95' 3.30' 0"
Applicant Name:	BROWNING-FERRIS INC
Applicant Address:	ROUTE 3 BOX 810 HOUSTON, TX 77045
Applicant Telephone:	(713) 666-0758
River Basin Code:	11
Responsible Engenier:	Not reported
Start Date:	12/02/1987
County Code:	84
Owner Name:	BROWNING-FERRIS INC
Owner Address:	ROUTE 3 BOX 810 HOUSTON, TX 77045
Facility Type:	SANITARY LANDFILL, DAILY COVER REQUIRED (POPULATION EQUIVALENT SERVED EXCEEDS 5000 PEOPLE)
Permit Status:	Permit Combined With Another Permit

Site	Database(s)	EDR ID Number EPA ID Number
(Continued)		S103221441

Facility ID:	1149
Population Served:	195540
Area Served:	GALVESTON COUNTY
Tons per Day:	1350
Yards per Day:	0.00
Estimated Cleanup Date:	19010101
Removal Status:	ISSD,12-2-87PH I&IIN PC END 00
Engineer:	Not reported
Status Date:	07/12/1995
Business Type:	CITY
Organic Acres:	319.67
Facility Status:	PREVIOUSLY APPROVED SITE
Amendment:	A
Recieved Date:	05/27/1986
Region:	STATE
Region Code:	12
Extra Territorial Jurisdiction:	N/A
Lat/Long:	29˚ 22.75´ 0˝ / 95˚ 3.05´ 0˝
Applicant Name:	BFI WASTE SYS OF N AMER
Applicant Address:	PO BOX 79622 HOUSTON, TX 77079
Applicant Telephone:	(713) 870-8111
River Basin Code:	11
Responsible Engenier:	Not reported
Start Date:	07/12/1995
County Code:	84
Owner Name:	BROWNING-FERRIS INC
Owner Address:	PO BOX 3151 HOUSTON, TX 77253 - 3151
Facility Type:	SANITARY LANDFILL, DAILY COVER REQUIRED (POPULATION EQUIVALENT SERVED EXCEEDS 5000 PEOPLE)
Permit Status:	IP

GALVESTON LIGHTERING AREA GALVESTON LIGHTERING AREA GALVESTON, TX	**ERNS**	**98445328 N/A**
GALVESTON LIGHTERING AREA GALVESTON LIGHTERING AREA GALVESTON, TX	**ERNS**	**97406759 N/A**
GALVESTON LIGHTERING AREA GALVESTON LIGHTERING AREA GALVESTON, TX	**ERNS**	**94368616 N/A**
GALVESTON AREA 218 27-58-17.69 094-36-06.45 GALVESTON AREA 218 27-58-17.69 094-36-06.45 GALVESTON, TX	**ERNS**	**8871337 N/A**

Site	Database(s)	EDR ID Number / EPA ID Number
PIERCE DISTRIBUTING CO (Continued)		A100122676

Facility ID:	0056207	Owner ID:	00162263
Tank ID:	10	Facility Type:	Wholesale
Number of USTs:	Not reported	Number of ASTs:	3
Capacity:	0008800	Tank Status:	Not in use
Customer ID:	06297		
Contact:	Pierce, Ken	Contact phone:	409-935-4091
Content:	Gasoline	Other content:	Not reported
Containment:	Concrete	Other Contain.:	Not reported
Material:	Steel	Other material:	Not reported
Facility phone:	Not reported	Date Installed:	01/01/90
Facility Manager:	Not reported	Manager Title:	Not reported
Owner:	KEN PIERCE ENTERPRISES INC		
Owner Address:	600 TRAVI HOUSTON, TX 77002		

Date out of use:	12/31/90
Date registration form was received:	09/03/90
Vapor recovery equipment status:	Not reported
State 2 equipment installed:	Not reported

CHEVRON BULK PLANT #60165535 — **TX VCP** — **S103865119**
1802 WATER STREET — **N/A**
GALVESTON, TX

TX VCP:

Facility ID:	509	Project Number:	314190
Type Lead:	Purchaser	PCA Number:	38419
Project Number:	Smith	Phase:	Completed
Region:	12	Facility Type:	Leaking Petroleum Storage Tank
Media Affected:	Soils/Groundwater	Acres at Site:	1

Contaminant Categories:	Hydrocarbons
Date Application Received at VCP:	4
Applicant:	University of Texas Medical Branch 301 University Boulevard Galveston, TX 77555
Applicant Contact:	Richard Moore
Applicant Contact Title:	Vice President for Business Affairs
Applicant Phone:	409-772-6454
Applicant Fax:	409-772-1724
Consultant/Attorney:	Woodward-Clyde Consultants 7600 West Tidwell, Suite 600 Houston, TX 77040
Consultant/Attorney Contact:	Peeyush Varshney
Consultant/Attorney Contact Title:	Senior Staff Engineer
Consultant/Attorney Phone:	713-690-0700
Consultant/Attorney Fax:	713-744-9099
TNRCC Solid Waste Registration:	Not reported
Leaking Petroleum Storage Registration Tank:	107603
EPA Texas ID/CERCLIS Registration:	Not reported
EPA Registration:	Not reported
Application Signed By Applicant:	7/2/97
Risk Reduction or Petroleum Storage Tank:	PST
Standards:	B
Certificate of Completion:	12/15/97
Lat/long:	29-18-06 / 94-47-03

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Elapsed ASTM days: Provides confirmation that this EDR report meets or exceeds the 90-day updating requirement of the ASTM standard.

FEDERAL ASTM RECORDS:

CERCLIS: Comprehensive Environmental Response, Compensation, and Liability Information System
Source: EPA
Telephone: 703-413-0223
CERCLIS contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). CERCLIS contains sites which are either proposed to or on the National Priorities List (NPL) and sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 04/21/99
Date Made Active at EDR: 06/09/99
Database Release Frequency: Quarterly
Date of Data Arrival at EDR: 05/14/99
Elapsed ASTM days: 26
Date of Last EDR Contact: 05/14/99

ERNS: Emergency Response Notification System
Source: EPA/NTIS
Telephone: 202-260-2342
Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 12/31/98
Date Made Active at EDR: 01/18/99
Database Release Frequency: Quarterly
Date of Data Arrival at EDR: 01/13/99
Elapsed ASTM days: 5
Date of Last EDR Contact: 05/12/99

NPL: National Priority List
Source: EPA
Telephone: N/A
National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC).

Date of Government Version: 05/10/99
Date Made Active at EDR: 06/09/99
Database Release Frequency: Semi-Annually
Date of Data Arrival at EDR: 05/12/99
Elapsed ASTM days: 28
Date of Last EDR Contact: 05/12/99

RCRIS: Resource Conservation and Recovery Information System
Source: EPA/NTIS
Telephone: 800-424-9346
Resource Conservation and Recovery Information System. RCRIS includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA).

Date of Government Version: 07/01/99
Date Made Active at EDR: 08/11/99
Database Release Frequency: Semi-Annually
Date of Data Arrival at EDR: 07/07/99
Elapsed ASTM days: 35
Date of Last EDR Contact: 05/14/99

CORRACTS: *Corrective Action Report*
Source: EPA
Telephone: 800-424-9346
CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 03/01/99
Date Made Active at EDR: 04/16/99
Database Release Frequency: Semi-Annually
Date of Data Arrival at EDR: 03/17/99
Elapsed ASTM days: 30
Date of Last EDR Contact: 06/21/99

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

AIRS: Current Emission Inventory Data
Source: Texas Natural Resource Conservation Commission
Telephone: N/A
The database lists by company, along with their actual emissions, the TNRCC air accounts that emit EPA criteria pollutants.

Date of Government Version: 10/01/98
Database Release Frequency: N/A
Date of Last EDR Contact: 04/20/99
Date of Next Scheduled EDR Contact: 07/19/99

AST: Petroleum Storage Tank Database
Source: Texas Natural Resource Conservation Commission
Telephone: 512-239-2160
Registered Aboveground Storage Tanks.

Date of Government Version: 04/01/99
Database Release Frequency: Quarterly
Date of Last EDR Contact: 05/04/99
Date of Next Scheduled EDR Contact: 08/02/99

IHW: Industrial & Hazardous Waste Database
Source: Texas Natural Resource Conservation Commission
Telephone: 512-239-0985
Summary reports reported by waste handlers, generators and shippers in Texas.

Date of Government Version: 12/31/98
Database Release Frequency: Annually
Date of Last EDR Contact: 05/10/99
Date of Next Scheduled EDR Contact: 08/09/99

MM: Multi Media Enforcement Cases
Source: Texas Natural Resource Conservation Commission
Telephone: 512-239-6012
Any enforcement case with more than one media (water, waste, etc.) violation.

Date of Government Version: 08/31/98
Database Release Frequency: Semi-Annually
Date of Last EDR Contact: 06/15/99
Date of Next Scheduled EDR Contact: 09/13/99

SPILLS: Spills Database
Source: Texas Natural Resource Conservation Commission
Telephone: 512-239-0983

Date of Government Version: 04/01/98
Database Release Frequency: Quarterly
Date of Last EDR Contact: 03/30/99
Date of Next Scheduled EDR Contact: 06/28/99

VCP: Texas Natural Resource Conservation Commission
Source: Voluntary Cleanup Program Sites
Telephone: 512-239-1948
The Texas Voluntary Cleanup Program was established to provide administrative, technical, and legal incentives to encourage the cleanup of contaminated sites in Texas.

Date of Government Version: 06/23/99
Database Release Frequency: Quarterly
Date of Last EDR Contact: 06/22/99
Date of Next Scheduled EDR Contact: 09/20/99

WASTEMGT: Commercial Hazardous & Solid Waste Management Facilities
Source: Texas Natural Resource Consevation Commission
Telephone: 512-239-2920
This list contains commercial recycling facilities and facilities permitted or authorized (interim status) by the Texas Natural Resource Conservation Commission.

Date of Government Version: 06/01/98
Database Release Frequency: Annually
Date of Last EDR Contact: 05/11/99
Date of Next Scheduled EDR Contact: 08/09/99

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

FEDERAL NON-ASTM RECORDS:

BRS: Biennial Reporting System
Source: EPA/NTIS
Telephone: 800-424-9346
The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/95
Database Release Frequency: Biennially
Date of Last EDR Contact: 03/25/99
Date of Next Scheduled EDR Contact: 06/21/99

CONSENT: Superfund (CERCLA) Consent Decrees
Source: EPA Regional Offices
Telephone: Varies
Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: Varies
Database Release Frequency: Varies
Date of Last EDR Contact: Varies
Date of Next Scheduled EDR Contact: N/A

FINDS: Facility Index System/Facility Identification Initiative Program Summary Report
Source: EPA
Telephone: N/A
Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 04/01/99
Database Release Frequency: Quarterly
Date of Last EDR Contact: 04/16/99
Date of Next Scheduled EDR Contact: 07/12/99

HMIRS: Hazardous Materials Information Reporting System
Source: U.S. Department of Transportation
Telephone: 202-366-4526
Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 12/31/98
Database Release Frequency: Annually
Date of Last EDR Contact: 03/24/99
Date of Next Scheduled EDR Contact: 07/26/99

MLTS: Material Licensing Tracking System
Source: Nuclear Regulatory Commission
Telephone: 301-415-7169
MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 12/08/98
Database Release Frequency: Quarterly
Date of Last EDR Contact: 04/13/99
Date of Next Scheduled EDR Contact: 07/12/99

NPL LIENS: Federal Superfund Liens
Source: EPA
Telephone: 205-564-4267
Federal Superfund Liens. Under the authority granted the USEPA by the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner receives notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/91
Database Release Frequency: No Update Planned
Date of Last EDR Contact: 05/28/98
Date of Next Scheduled EDR Contact: 08/23/99

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

PADS: PCB Activity Database System
Source: EPA
Telephone: 202-260-3936
PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 09/22/97
Database Release Frequency: No Update Planned
Date of Last EDR Contact: 05/27/99
Date of Next Scheduled EDR Contact: 08/16/99

RAATS: RCRA Administrative Action Tracking System
Source: EPA
Telephone: 202-564-4104
RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/95
Database Release Frequency: No Update Planned
Date of Last EDR Contact: 06/14/99
Date of Next Scheduled EDR Contact: 09/13/99

ROD: Records Of Decision
Source: NTIS
Telephone: 703-416-0223
Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 01/31/99
Database Release Frequency: Annually
Date of Last EDR Contact: 05/25/99
Date of Next Scheduled EDR Contact: 07/19/99

TRIS: Toxic Chemical Release Inventory System
Source: EPA
Telephone: 202-260-1531
Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/97
Database Release Frequency: Annually
Date of Last EDR Contact: 05/07/99
Date of Next Scheduled EDR Contact: 06/28/99

TSCA: Toxic Substances Control Act
Source: EPA
Telephone: 202-260-1444
Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/94
Database Release Frequency: Every 4 Years
Date of Last EDR Contact: 04/26/99
Date of Next Scheduled EDR Contact: 07/26/99

MINES: Mines Master Index File
Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959

Date of Government Version: 08/01/98
Database Release Frequency: Semi-Annually
Date of Last EDR Contact: 04/08/99
Date of Next Scheduled EDR Contact: 07/05/99

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

STATE OF TEXAS ASTM RECORDS:

CLI: Closed Landfill Inventory
Source: Texas Natural Resource Conservation Commission
Telephone: 512-239-6016
Closed and abandoned landfills (permitted as well as unauthorized) across the state of Texas.

Date of Government Version: 10/01/97
Date Made Active at EDR: 12/09/98
Database Release Frequency: Annually
Date of Data Arrival at EDR: 10/09/98
Elapsed ASTM days: 61
Date of Last EDR Contact: 05/10/99

LUST: Leaking Petroleum Storage Tank Database
Source: Texas Natural Resource Conservation Commission
Telephone: 512-239-2200
Leaking Underground Storage Tank Incident Reports. LUST records contain an inventory of reported leaking underground storage tank incidents. Not all states maintain these records, and the information stored varies by state.

Date of Government Version: 04/01/99
Date Made Active at EDR: 06/09/99
Database Release Frequency: Quarterly
Date of Data Arrival at EDR: 05/10/99
Elapsed ASTM days: 30
Date of Last EDR Contact: 05/04/99

SHWS: State Superfund Registry
Source: Texas Natural Resource Conservation Commission
Telephone: 512-239-5680
State Hazardous Waste Sites. State hazardous waste site records are the states' equivalent to CERCLIS. These sites may or may not already be listed on the federal CERCLIS list. Priority sites planned for cleanup using state funds (state equivalent of Superfund) are identified along with sites where cleanup will be paid for by potentially responsible parties. Available information varies by state.

Date of Government Version: 09/30/97
Date Made Active at EDR: 04/15/99
Database Release Frequency: Semi-Annually
Date of Data Arrival at EDR: 03/18/99
Elapsed ASTM days: 28
Date of Last EDR Contact: 06/23/99

LF: Permitted Solid Waste Facilities
Source: Texas Natural Resource Conservation Commission
Telephone: 512-239-6786
Solid Waste Facilities/Landfill Sites. SWF/LF type records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. Depending on the state, these may be active or inactive facilities or open dumps that failed to meet RCRA Subtitle D Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 06/01/99
Date Made Active at EDR: 07/12/99
Database Release Frequency: Quarterly
Date of Data Arrival at EDR: 06/14/99
Elapsed ASTM days: 28
Date of Last EDR Contact: 06/01/99

UST: Petroleum Storage Tank Database
Source: Texas Natural Resource Conservation Commission
Telephone: 512-239-2160
Registered Underground Storage Tanks. UST's are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA) and must be registered with the state department responsible for administering the UST program. Available information varies by state program.

Date of Government Version: 04/01/99
Date Made Active at EDR: 06/09/99
Database Release Frequency: Quarterly
Date of Data Arrival at EDR: 05/10/99
Elapsed ASTM days: 30
Date of Last EDR Contact: 05/04/99

STATE OF TEXAS NON-ASTM RECORDS:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Historical and Other Database(s)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

Former Manufactured Gas (Coal Gas) Sites: The existence and location of Coal Gas sites is provided exclusively to EDR by Real Property Scan, Inc. ©Copyright 1993 Real Property Scan, Inc. For a technical description of the types of hazards which may be found at such sites, contact your EDR customer service representative.

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DELISTED NPL: NPL Deletions
Source: EPA
Telephone: N/A
The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 04/23/99
Date Made Active at EDR: 06/09/99
Database Release Frequency: Semi-Annually
Date of Data Arrival at EDR: 05/12/99
Elapsed ASTM days: 28
Date of Last EDR Contact: 02/08/99

NFRAP: No Further Remedial Action Planned
Source: EPA
Telephone: 703-413-0223
As of February 1995, CERCLIS sites designated "No Further Remedial Action Planned" (NFRAP) have been removed from CERCLIS. NFRAP sites may be sites where, following an initial investigation, no contamination was found, contamination was removed quickly without the need for the site to be placed on the NPL, or the contamination was not serious enough to require Federal Superfund action or NPL consideration. EPA has removed approximately 25,000 NFRAP sites to lift the unintended barriers to the redevelopment of these properties and has archived them as historical records so EPA does not needlessly repeat the investigations in the future. This policy change is part of the EPA's Brownfields Redevelopment Program to help cities, states, private investors and affected citizens to promote economic redevelopment of unproductive urban sites.

Date of Government Version: 04/21/99
Date Made Active at EDR: 06/09/99
Database Release Frequency: Quarterly
Date of Data Arrival at EDR: 05/14/99
Elapsed ASTM days: 26
Date of Last EDR Contact: 05/14/99

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-260-2805
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-260-2805
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SWDIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Area Radon Information: The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones: Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

Oil/Gas Pipelines/Electrical Transmission Lines: This data was obtained by EDR from the USGS in 1994. It is referred to by USGS as GeoData Digital Line Graphs from 1:100,000-Scale Maps. It was extracted from the transportation category including some oil, but primarily gas pipelines and electrical transmission lines.

Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

USGS Water Wells: In November 1971 the United States Geological Survey (USGS) implemented a national water resource information tracking system. This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on more than 900,000 wells, springs, and other sources of groundwater.

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 1999 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in March 1997 from the U.S. Fish and Wildlife Service.

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

Water Dams: National Inventory of Dams
Source: Federal Emergency Management Agency
Telephone: 202-646-2801
National computer database of more than 74,000 dams maintained by the Federal Emergency Management Agency.

Texas Groundwater Database
Source: Texas Water Development Board
Telephone: 512-936-0837

Texas Oil and Gas Wells: Inventory of oil and gas wells in select Texas counties
Source: Texas Railroad Commission

Texas Public Water Supply Database on Ground and Surface Water
Source: Texas Natural Resource Conservation Commission

Texas Harris-Galveston Coastal Subsidence District Water Well Database
Source: Harris-Galveston Coastal Subsidence District

Texas Water Development Board Groundwater Database
Source: Texas Water Development Board
Telephone: 512-936-0833

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

Disclaimer

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No warranty of merchantability or of fitness for a particular purpose, expressed or implied, shall apply and EDR specifically disclaims the making of such warranties. In no event shall EDR be liable to anyone for special, incidental, consequential or exemplary damages.

APPENDIX C

MGP No Further Action Letters

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 6
1445 ROSS AVENUE, SUITE 1200
DALLAS, TX 75202-2733

DEC 30 1996

Interested Party
GALVESTON GAS COMPANY
33RD & AVENUE D
GALVESTON, TX 77550

Re: Galveston Gas Company TXD981910318

Dear Interested Party:

The Environmental Protection Agency (EPA) and the State of Texas have recently dedicated resources to a new and dynamic program known as the Brownfields Economic Redevelopment Initiative (the Brownfields Initiative). The Brownfields Initiative is a commitment by EPA to help states and communities revitalize idled or under-used industrial and commercial facilities where redevelopment is complicated by real or perceived environmental contamination. This program is being implemented through the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), or as it is more commonly known - Superfund.

As part of its effort to encourage cities, states, and private investors to clean-up and redevelop previously used property, EPA has removed approximately 29,000 sites from its inventory of potential and confirmed hazardous waste sites, the Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS). Following an investigation, sites are removed from the CERCLIS database if any one of the following circumstances exist:

- no contamination was found at the site;
- contamination was quickly removed without the need for the site to be placed on the Superfund National Priorities List (NPL), and associated cost recovery is complete;
- the site, while contaminated, did not require any Federal Superfund response action; or
- EPA is deferring the site to the state or Federal Resource Conservation Recovery Act program.

Based upon current information, EPA anticipates no need to take either enforcement or cleanup action at the above-referenced site, and has removed the site from the CERCLIS database.

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Removal of a site from the CERCLIS database does not preclude future action should new information warranting further Superfund consideration or conditions not previously known regarding the site be discovered.

Historically, EPA has kept all sites in the CERCLIS inventory regardless of status. Even sites where no action was needed or taken remain in the inventory as part of EPA's tracking mechanism. The EPA will continue to retain information on the above referenced site in its inventory to preclude the possibility of evaluations being repeated needlessly.

If you are interested in receiving assurances from the State of Texas for your property, you should contact the Texas Natural Resource Conservation Commission' (TNRCC) Voluntary Cleanup Program (VCP). The TNRCC's VCP provides future lenders and landowners a release from all liability to the State for the cleanup of properties issued a certificate of completion by the VCP.

Created by State law (HB 2296), the VCP was established on September 1, 1995, to provide administrative, technical, and legal incentives to encourage the cleanup of contaminated sites in Texas. Since future lenders and landowners receive release from liability to the State of Texas for cleanup, many of the lenders' and developers' constraints for completing real estate transactions at those sites are eliminated. As a result, many unused or under-used properties may be restored to economically productive or other uses beneficial to the community.

If you have any questions about EPA's Brownfields program, please contact Mr. Stan Hitt at (214) 665-6735, or if you want more information about the Texas VCP, please contact Mr. Chuck Epperson of the TNRCC at (512) 239-2498.

Sincerely yours,

Myron O. Knudson

Myron O. Knudson, P.E.
Director
Superfund Division

cc: Mr. Chuck Epperson
Texas Natural Resource
Conservation Commission

TEXAS WATER COMMISSION

B. J. Wynne, III, Chairman
Paul Hopkins, Commissioner
John O. Houchins, Commissioner

Allen Beinke, Executive Director
Michael E. Field, General Counsel
Brenda W. Foster, Chief Clerk

August 15, 1989

Re: Town Gas Site Property Ownership

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Dear Sir or Madam:

The Texas Water Commission (TWC) through a cooperative agreement with the U.S. Environmental Protection Agency (EPA) has conducted a study throughout Texas to locate and evaluate historic town gas (also called coal gasification) plants. These town gas plants were used in the 1800's and early 1900's to manufacture gas for lighting, heating and cooking purposes. By-products from these sites may have resulted in hazardous substances being generated.

Based upon available information, the particular site for which you are listed as an owner did not appear at the time of our inspection to pose an apparent threat to the public or the environment. Due to the fact that most of the sites in this study were covered by buildings or pavement, we were not able to collect subsurface samples to ascertain whether hazardous substances are present in the subsoil. Therefore, our evaluation that the site did not present an apparent problem at the time of our inspection is based upon limited information. However, the low potential for direct contact with any waste that may be present and the lack of ground water drinking supplies near these sites indicate no apparent threat to human health, safety or the environment.

As a property owner, you should be aware that there may or may not be hazardous substances buried on your property. Because hazardous substances may be present at your site, you are potentially liable for the remediation and/or removal activities that could be required if new facts come to light which indicate that these substances may present a threat to human health, safety or the environment, pursuant to the Texas Solid Waste Disposal Act, TEX. REV. CIV. STAT. ANN. Art. 44777 (Vernon Supp. 1988). You should take this possibility into account should site conditions change (e.g., property development, excavation) so as to prevent any possible endangerment to the public or the environment. We further recommend that you notify any prospective purchaser of the property of the potential presence of hazardous substances buried at the site.

A brief report describing this program, along with a listing of the 33 Texas town gas sites, is enclosed with this letter. Also enclosed is a copy of the Preliminary Assessment conducted on this site.

If you have any questions regarding this information or if you have information regarding the town gas site itself, please do not hesitate to call Ms. Patricia Curl in our Contracts Remedial Activities Section at (512)463-7800.

Sincerely,

Daniel J. Eden

Daniel J. Eden, Director
Hazardous and Solid Waste Division

PC:bh

Enclosures

APPENDIX D

MGP Risk Assessment Report

RECEIVED
NOV 17 1997
OFFICE OF
CITY MANAGER

GEI Consultants, Inc.

RISK ASSESSMENT
33rd STREET PROPERTY
GALVESTON, TEXAS

Submitted to:

The City of Galveston
Galveston, Texas

2232 Welsch Industrial Court
St. Louis, MO 63146-4222
(314) 569-9994

November 13, 1997
Project 97521

GEI Consultants, Inc.

ATLANTIC
ENVIRONMENTAL DIVISION

2232 Welsch Industrial Court
St. Louis, MO 63146-4222
(314) 569-9994
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208 South LaSalle Street
Suite 1340
Chicago, IL 60604-1003
(312) 346-0800
(312) 346-0816 Fax

November 13, 1997
GEI Project 97521

Mr. Steven LeBlanc
City Manager
City of Galveston
P.O. Box 779
Galveston, Texas 77553-0779

Dear Mr. LeBlanc:

Re: **Risk Assessment**
33rd Street Property
Galveston, Texas

GEI Consultants, Inc., Atlantic Environmental Division (GEI/Atlantic) is pleased to provide the city of Galveston with the 33rd Street Property (Site) Risk Assessment (RA) Report. The report presents the outcome of the evaluation of surface soils and air quality at the Site and an assessment of potential health risks associated with the use of the Site as a paved parking lot. The Site surface soil sampling and air quality assessment were conducted in September 1997; the outcome of the Field Sampling Program (FSP) was utilized to complete the assessment of health risks for the Site for a future utilization under consideration by the city of Galveston as a paved parking lot for city-owned vehicles.

The Site, which is owned by the city, is currently a fenced, limited access site in a mixed neighborhood of commercial, industrial, and residential properties. The Site is almost entirely grass- and soil-covered. A city vehicle maintenance facility is located immediately east of the Site. It is the understanding of GEI/Atlantic that the city is considering altering the Site for use as a paved parking lot for city vehicles.

The Site was historically a portion of the Galveston Gas Works, a facility which manufactured gas for lighting, heating, and cooking in the era prior to the availability of natural gas through the interstate pipeline system. Our assessment of the history of the Site indicated that gas storage tanks were present on site between approximately 1870 and 1950.

The Site soil and air assessment included collecting samples of surface soils and the sampling of air quality for chemical analysis. Surface soils were collected to a depth of 0.5 feet on a systematic basis across the Site to characterize the nature or impacts to surface soils due to the past use as a gas works facility. Air quality was assessed by conducting air sampling at several points on the Site perimeter for approximately 8 hours per day over three consecutive days; air samples were also evaluated for the presence of chemical compounds due to the past use as a gas works facility.

The air quality assessment of the Site indicated no impacts were occurring to air quality as a result of volatile aromatics, a group of chemical compounds associated with gas works facilities. The soil assessment results indicate the presence of minor amounts of some chemical compounds which have been associated with gas plants in surface soils.

The outcome of the health risk evaluation indicates that the Site would be safe for use as a paved parking lot. An important assumption in the health risk evaluation described in the report is that the parking lot surface is paved (*i.e.*, asphalt, concrete, or caliche) and will be maintained in good condition. It was concluded in the health risk evaluation, however, that areas of the Site can be landscaped to enhance the aesthetic value of the Site. Landscaped areas were assumed incorporated in the property redevelopment in the RA; however, landscaped areas were constructed with imported top soil in the assessment.

It is the understanding of GEI/Atlantic that the city is evaluating whether portions of the Site can be utilized for basketball courts. The health risk evaluation conclusions indicate that the construction of basketball courts on the paved surface would be safe given that the surface is maintained in good condition. The outcome of the evaluation indicated that a paved parking lot and landscaped areas constructed with imported top soil would be safe for Site visitors, including children.

It is GEI/Atlantic's professional opinion that the city consider implementing institutional controls and deed restrictions for the Site in order to ensure utilization of the Site consistent with use studied in this evaluation and to ensure that appropriate maintenance of the Site continues. The report presents other conclusions, recommendations, and assumptions. Should questions or concerns arise during and after your review of the report, please feel free to contact us at (314) 569-9994.

GEI/Atlantic wishes to thank the city for the opportunity to assist you with this evaluation of future site development.

Sincerely,

GEI CONSULTANTS, INC.,
ATLANTIC ENVIRONMENTAL DIVISION

for David R. Pluhar
Project Manager

DRP/car
Enclosures - 3 copies of report
[I:\GEI\PROJECTS\S_UNION\97521\LEBL1113.LTR]

RISK ASSESSMENT

33rd STREET PROPERTY

GALVESTON, TEXAS

November 13, 1997

Submitted to:

Mr. Steve LeBlanc
City of Galveston
P.O. Box 779
Galveston, Texas 77553-0779

Prepared by:

GEI Consultants, Inc.,
Atlantic Environmental Division
2232 Welsch Industrial Court
St. Louis, MO 63146-4222
(314) 569-9994

Project 97521

for David R. Pluhar
Project Manager

1.0 INTRODUCTION

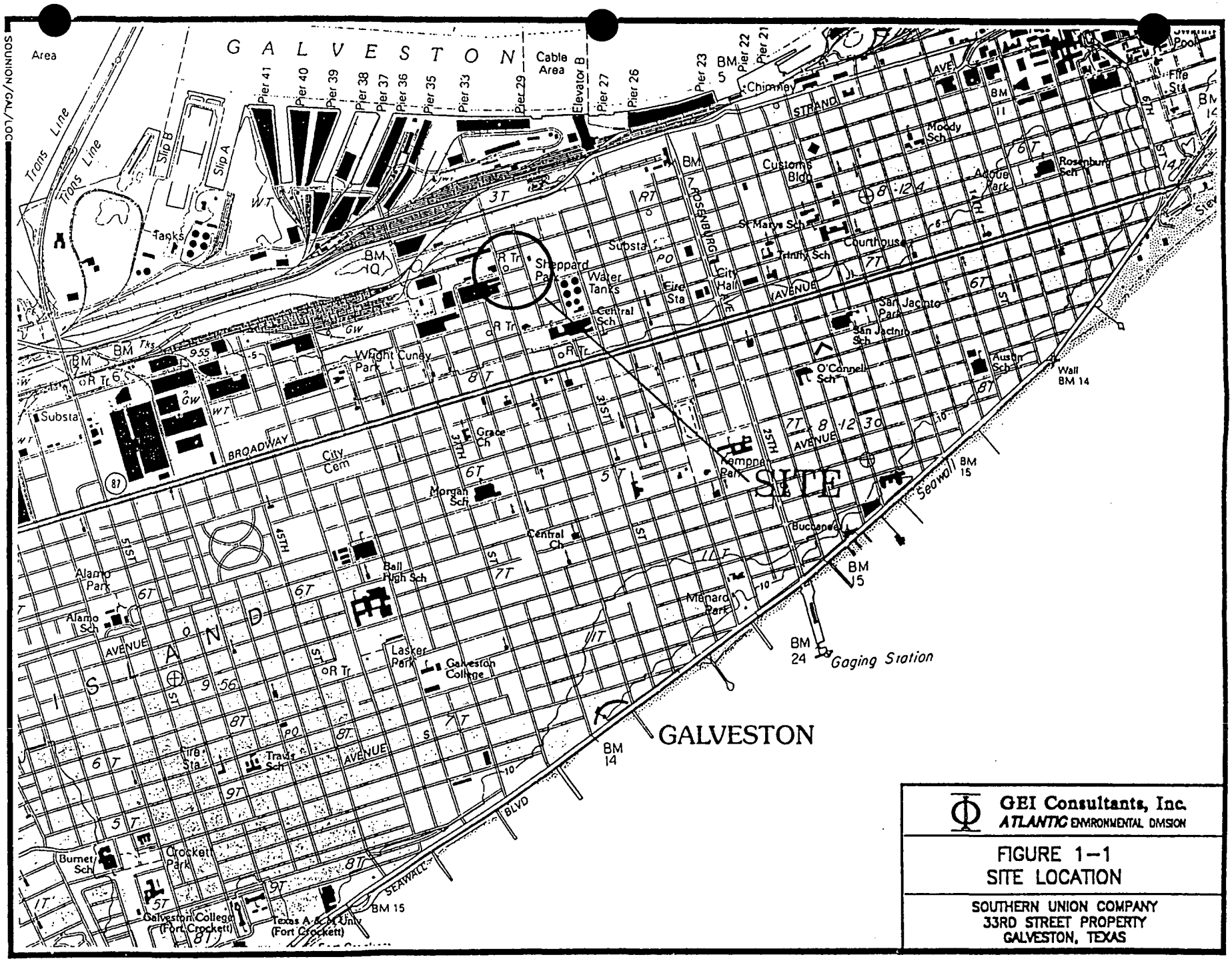
GEI Consultants, Inc., Atlantic Environmental Division (GEI/Atlantic) was retained by Southern Union Company (Southern Union) on behalf of the City of Galveston, Texas, to conduct an assessment of surface soils and air quality (site assessment or SA) at the property located at 33rd Street and Avenue E (Site) in Galveston, Texas (Figure 1-1). The assessment of Site surface soils and air quality was conducted in accordance with the *Work Plan for Surface Soils and Air Assessment, 33rd Street Property, Galveston, Texas* (GEI/Atlantic, 1997) (Work Plan). The site assessment field sampling segment was completed during September 1997. The results of the field sampling segment were utilized to support completion of a risk assessment (RA) to evaluate risks to human health associated with the future use of the Site as a paved parking lot. This report presents the results of the field sampling program (FSP) and the RA.

The Site is currently a fenced, limited access property owned by the city of Galveston, adjacent to a city vehicle maintenance facility. However, the Site was formerly part of the Galveston Gas Works, a facility which manufactured gas for distribution in Galveston for lighting, heating, and cooking prior to the availability of natural gas. The Site housed several gas holders (gas storage tanks) during operation of the gas works or manufactured gas plant (MGP).

The purpose of the site assessment was to evaluate site conditions relative to the future use of the Site as a paved parking lot by the city of Galveston. The objectives of the site assessment were to:

- collect surface soil samples both on site and off site for chemical analysis;
- analyze soil samples to determine levels of MGP chemical constituents of interest (CCIs) present in Site soils and to establish "background" levels of these constituents in soils in the surrounding community;
- conduct time-averaged air monitoring on site for a three-day period in order to establish air quality at the Site and to establish whether former MGP activities at the Site are affecting Site air quality;
- analyze air sampling traps to establish levels of MGP CCIs present in ambient air at the Site;
- conduct modeling of air quality conditions for MGP CCIs at the Site based on the results of surface soil sampling and analyses; and
- complete a quantitative assessment of risks associated with the use of the Site as a paved (caleche, asphalt, or other impermeable surface) parking lot.

In order to complete the objectives of the site assessment, GEI/Atlantic collected 17 grab and composite soil samples between the ground surface and to a depth of 6 inches below ground surface (bgs) on site; and three grab and composite soil samples at three off-site locations. Soil grab samples (discrete samples collected at single locations across the Site and at the off-site



GEI Consultants, Inc.
ATLANTIC ENVIRONMENTAL DIVISION

FIGURE 1-1
SITE LOCATION

SOUTHERN UNION COMPANY
33RD STREET PROPERTY
GALVESTON, TEXAS

SOUNION/GAL/LOC

locations) were analyzed for aromatic volatile organic compound (VOC) content according to USEPA SW-846 Method 8020. The composite samples (samples created by combining soil collected from five locations within defined subareas of the Site) were analyzed for semi-volatile organic compounds (SVOCs) cyanide and metals according to USEPA SW-846 Method 8270, 9010, and Series 6000/7000, respectively.

In addition to the soil samples collected, air sampling was conducted at the Site on three consecutive days to evaluate for the presence of aromatic hydrocarbons in accordance with National Institute of Occupational Safety and Health (NIOSH) Method 1501. Air sampling was carried out over approximately 8-hour periods of time at each of four sampling locations situated on the perimeter of the Site.

Additional details concerning the Site sampling program are presented in Section 3.0 of this report. Based on the outcome of the Site soil and air sampling, GEI/Atlantic completed a quantitative assessment of potential health risks associated with the future use of the Site as a paved parking lot for city of Galveston vehicles.

Using the outcome of the Site soil and air sampling, GEI/Atlantic completed a quantitative assessment of potential health risks associated with use of the Site as a parking lot. Several important assumptions were incorporated into this assessment: the Site is converted to a paved parking lot used for parking city vehicles; the parking lot is constructed with an impermeable material (*i.e.*, asphalt, caleche, or concrete); unpaved areas are landscaped (*i.e.*, grass or other ground cover) which involve only shallow soil disturbance; the landscaped areas are provided with approximately a 1-foot layer of new top soil brought to the Site or more as required for landscaping needs; access to the Site would not be controlled (*i.e.*, trespassing by children is possible); and exposure to Site soils is limited. The paved parking lot and landscaped areas serve as a "cap" for the Site, reducing or eliminating potential exposures to Site soils and emissions from the Site in addition to their primary functions as a parking lot and landscaped areas.

The RA evaluated potential health risks for the following groups or types of populations:

- city vehicle drivers;
- groundskeepers;
- children trespassing on site;
- children living nearby — not visiting the Site;
- adults living nearby — not visiting the Site; and
- utility workers.

For the purposes of the RA, certain conclusions were drawn concerning the use of the Site, Site activities and maintenance, condition of the Site, and the groups that would presumably visit the Site.

It was assumed that city employees going to the Site to retrieve or return vehicles from the parking lot would potentially be exposed to vapors from surface soils. It was assumed that these employees might perform this task on a daily basis for a full working career (25 years).

It was assumed that a groundskeeper(s) would visit the Site on a weekly basis to maintain landscaped areas. It was assumed that the groundskeeper(s) would perform these tasks for as long as a full working career (25 years). While performing groundskeeping activities, it is assumed that the groundskeeper would be potentially exposed to surface soils as deep as have been assessed (1.5 feet with the 1.0-foot cover of new top soil).

Utility workers were also included in the RA since it is possible that these workers might periodically work on or adjacent to the Site performing maintenance of utility equipment. It was assumed for the RA model that a utility worker(s) would visit the Site periodically for a day or two at a time to perform various activities, that the worker(s) might carry out these activities at the Site throughout their working career, and that the aggregate of these visits would amount to 25 days of work at the Site. The assessment for utility workers was limited to evaluation of exposure to the top 6 inches of surface soils as characterized in addition to any clean top soil or fill added for landscaping and parking lot construction.

An adult resident living near the Site was modeled in the RA. It was assumed that although the adult resident would not visit the Site, they may be exposed to vapor air emissions (chemical constituents) migrating from the Site. It was assumed that this exposure by a nearby adult resident might be 24 hours per day, 50 weeks per year, for a 70-year lifetime.

As a population group known to be more susceptible to environmental exposures, children were modeled as a distinct group in two scenarios: as nearby residents that do not visit the Site and as visitors to the Site playing in landscaped areas and on the parking lot. It was assumed that children residing in the area that do not visit the Site might be exposed to air emissions migrating from the Site as was assumed for adult residents. It was assumed that children that visit the Site (playing on site) would also be exposed to possible vapors from surface soils. It was assumed, however, that children playing on site would not disturb soils to depths in excess of 12 inches during their activities. It was assumed for the RA model that children might visit the Site on a daily basis.

The Texas Natural Resource Conservation Commission (TNRCC) has established under their Risk Reduction Program an acceptable level of carcinogenic risk due to environmental exposures of 1.0×10^{-5}. This value equates to a risk level that an individual exposed to an environmental impact would have an increase in their risk of developing cancer equivalent to 1 in 100,000. Based on this value of acceptable environmental exposure risk for the exposure scenarios modeled. No group analyzed exceeded the acceptable risk level.

It should be noted that in conducting any quantitative assessment of health risk to environmental exposures that numerous assumptions and uncertainties combine, the net result being that the value of risk calculated cannot be considered an absolute or precise calculation of risk; the value represents a reasonable estimate based on the assumptions and conservative estimates. Numerous variables will differ from individual to individual concerning exposures to environmental conditions (*i.e.*, exposure frequency, dose, physiological effect to the dose of the chemical, etc.). The results of this RA, therefore, should be viewed as a relative estimate of risk rather than an absolute calculation of risk.

Conclusions drawn from the RA included the following points:

- Risk due to exposure to chemical constituents in the air at the Site or in nearby off-site areas was determined to be at acceptable levels without altering current Site conditions.

- Paving the Site completely would eliminate unacceptable risks due to exposure to chemical constituents at the Site by all pathways (soil and air) for all populations groups.

- Constructing a paved parking lot with incorporated landscaped areas (*i.e.*, grass and other ground cover, etc.) would accomplish a significant level of risk reduction if top soil were brought to the Site for use in landscaping areas (*i.e.*, the Site surface soils are not used in landscaped areas).

Based on the results of the site assessment and risk evaluation, GEI/Atlantic concludes that the Site is considered "safe" for use as a parking lot if all areas are paved. However, the city can accomplish the similar result while creating a more attractive property with landscaped areas if top soil for the landscaped areas is imported to the Site for these areas and the integrity of the paved and landscaped areas is regularly inspected and maintained.

The evaluation was limited to use as a paved parking lot and only surface soils and air quality were assessed. GEI/Atlantic, therefore, cannot warranty the conditions at the Site or the appropriateness of other uses for the Site. Furthermore, it is GEI/Atlantic's professional opinion that institutional controls and deed restrictions be implemented for the Site in order to ensure appropriate maintenance of the Site, use consistent with this type evaluated herein, and to ensure that appropriate management standards and controls are employed if non-evaluated activities are required on site (*i.e.*, excavation of deeper soils).

This report is organized in seven sections. Section 2.0 discusses the Site background information. Section 3.0 presents the FSP approach and methods. Section 4.0 presents the laboratory analytical methods utilized to evaluate samples collected during the FSP. Section 5.0 presents the results of the laboratory analytical program. Section 6.0 presents the approach used to

evaluate health risks associated with the use of the Site as a parking lot and the outcome of that assessment, and Section 7.0 presents the conclusions of this site assessment.

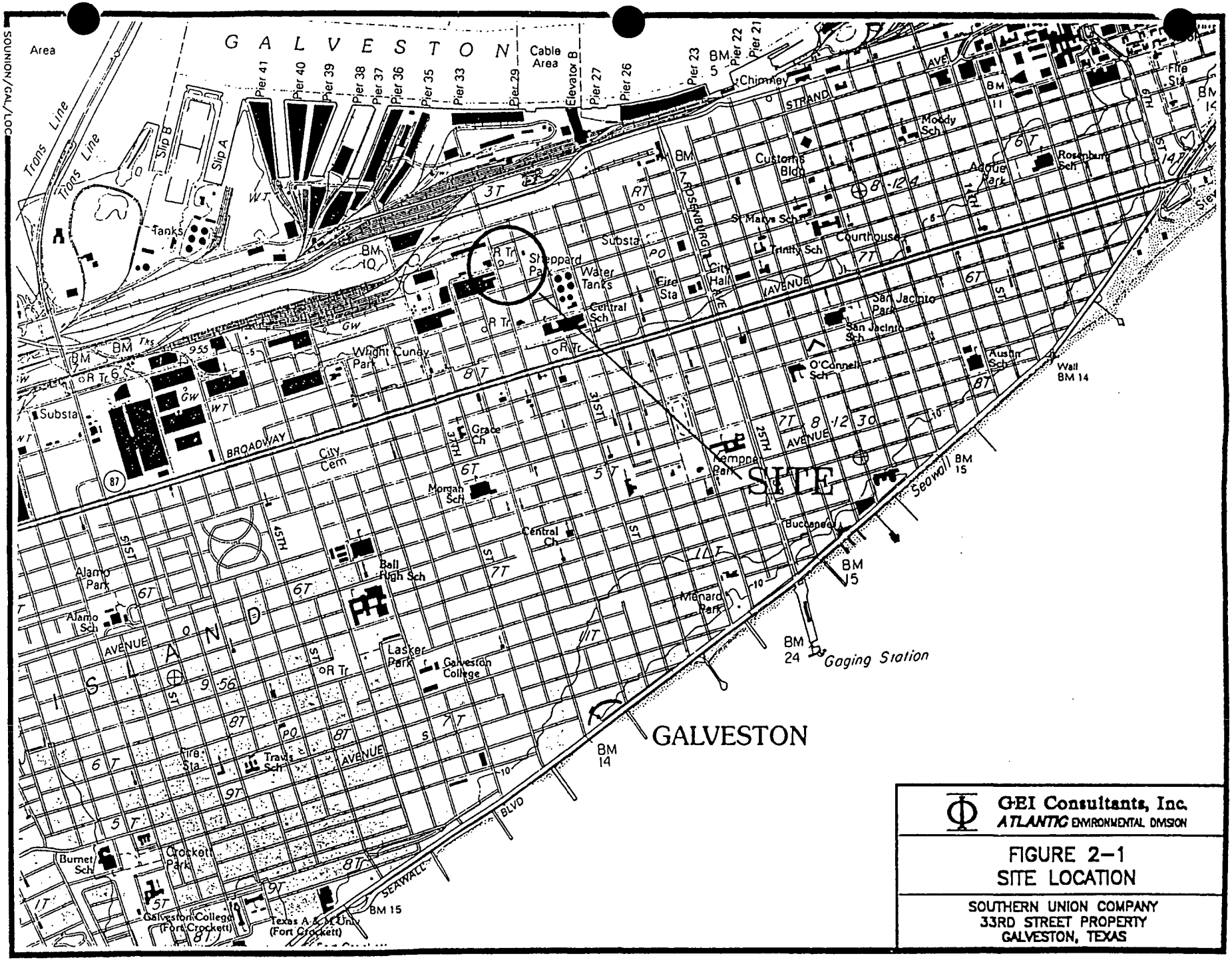
2.0 SITE SETTING AND HISTORY

The Site for this assessment is located at 33rd Street and Avenue E in Galveston, Texas. The Site, an area of one city block, is bounded by Avenue E to the north, 32nd Street to the east, Avenue F to the south, and 33rd Street to the west and is approximately 1.9 acres. The Site is currently a fenced, limited access property owned by the city of Galveston. The surrounding area is a mixture of residential, commercial, and industrial properties typical of this part of the city of Galveston. The property immediately north of the Site is a gas utility service center. Areas further north of the Site are commercial or vacant to the wharf area and the Galveston shipping channel. The property east of the Site is a city vehicle maintenance facility, areas further east are a mixture of commercial and residential properties. The property south of the Site is residential. Areas west of the Site area include a mixture of abandoned commercial, commercial, and vacant properties. Figure 2-1 illustrates the location of the Site in Galveston.

The Site is nearly flat lying, sloping slightly toward a stormwater drainage swale along the eastern fence line. With the exception of a small paved (concrete) area along the northern side of the Site near Avenue E, the Site is entirely grass or soil-covered. Site soils sampled during the site assessment were a mixture of silty to sandy loam similar to other off-site areas sampled in Galveston and/or fill and debris attributed to the former presence and operation of the MGP at the Site. The Site soils were extremely dry and generally friable, and varied in color from tan to brown and dark gray. Fill and debris materials included coal ash and cinders believed to have originated from the gas manufacturing equipment; demolition debris (*i.e.*, pieces of brick, concrete, glass, wood, and metal); and small amounts of gas production byproducts or production residues (*i.e.*, gas purification materials and tars). In most instances where fill materials were encountered, these were present below a surface layer of the silty/sandy loam materials (soils were collected to a depth of 6 inches bgs).

The Site as previously mentioned was a portion of the Galveston Gas Works. The gas manufacturing facilities of the plant were located north of Avenue E. Gas storage vessels, known as gas holders, were located on the Site. The earliest records available indicate the presence of a gas holder on the Site in the 1870s. Several gas holders were eventually constructed on the Site. With the availability of natural gas in Galveston, a cheaper gas alternative, the gas system in town eventually was converted from manufactured gas to natural gas, and the gas plant facilities were retired and dismantled. The last gas holder on the Site survived into the 1950s.

The Site was acquired by the Falstaff Brewing Corporation in June 1963 and was conveyed to the city of Galveston by Falstaff in June 1993.



GEI Consultants, Inc.
ATLANTIC ENVIRONMENTAL DIVISION

FIGURE 2-1
SITE LOCATION

SOUTHERN UNION COMPANY
33RD STREET PROPERTY
GALVESTON, TEXAS

3.0 FIELD SAMPLING PROGRAM

This section describes the specific aspects of the site assessment associated with the collection of Site soil and air samples, including the sampling procedures or methods, and the specific approaches as applied at this Site. The field sampling tasks included the collection of surface soil samples (0 to 6 inches bgs) and conducting time-averaged air monitoring. Specific procedures for these activities are presented below and also in the project Work Plan.

The field sampling plan tasks described below were limited to the Site and nearby surrounding areas for surface soil sampling or to the Site for air monitoring. The objectives of the FSP were:

- to determine the levels of MGP CCIs present at the Site in surface soils;
- to determine background levels of the same CCIs in surface soils at nearby off-site locations in soils similar to those on site; and
- to determine levels of volatile CCIs in ambient air on site on a time-averaged basis.

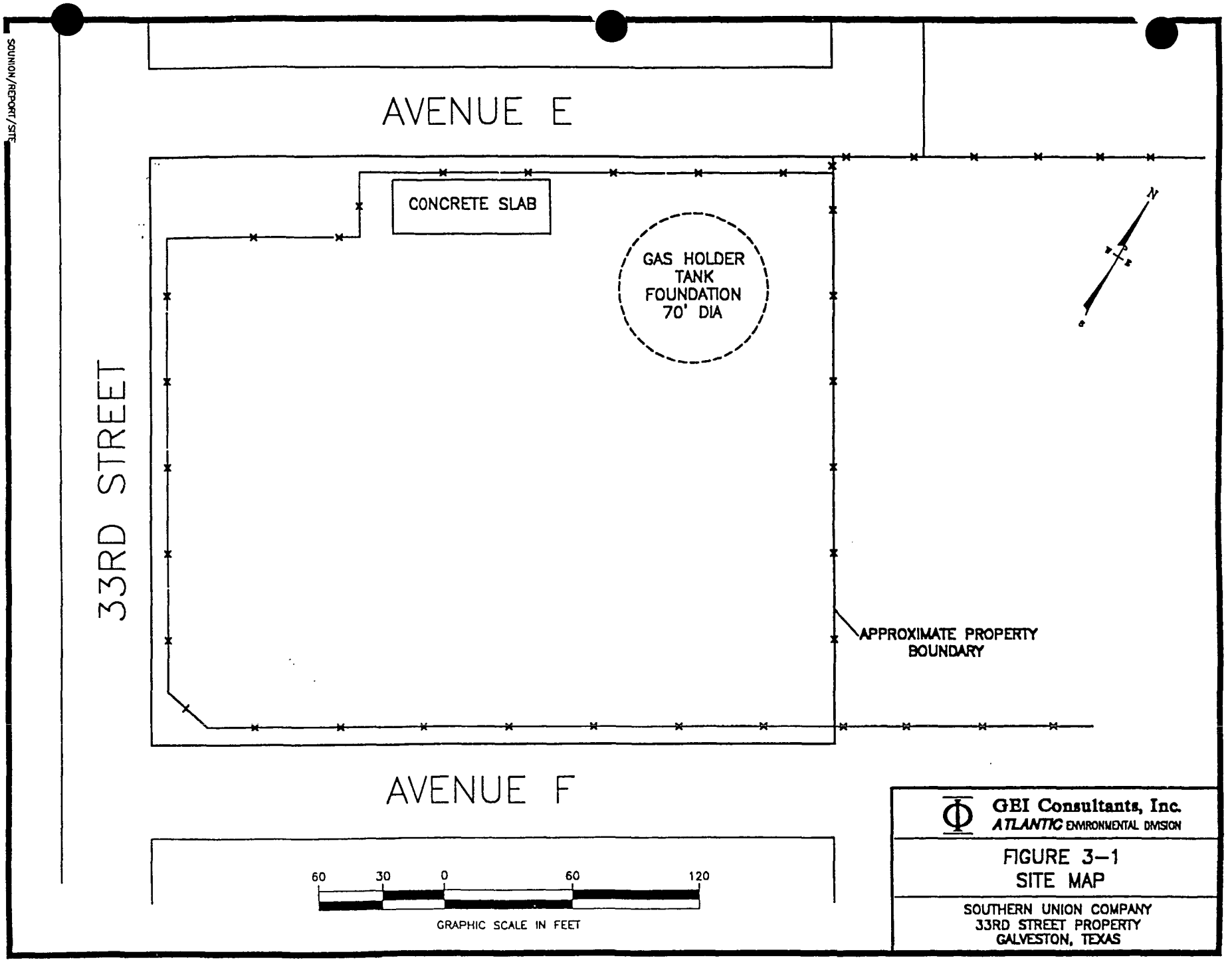
3.1 Surface Soil Sampling

Twenty surface soil samples were collected during the FSP. Seventeen samples were collected at the Site and three were collected at off-site locations as "background" samples. Soil samples were collected from the depth interval from 0 to 6 inches bgs in order to characterize surface soils. Soil sampling was carried out on September 7, 1997.

In order to generate representative data for the characterization of surface soil levels of CCIs on site, the Site was subdivided into sampling grids or zones of approximate equal areas. The Site dimensions from fence line to fence line as measured in the field were 313 feet by 257 feet. Soil sampling on site was restricted to the area within the fence. The layout of the Site, including the fenced area, is illustrated on Figure 3-1.

As indicated on Figure 3-1, the fence line along the northern side of the Site makes a jog south approximately 90 feet east of the west fence line; however, the layout of sampling grid areas was not altered to reflect this fence line jog. In order to collect representative surface soil samples across the Site, the Site was divided into 16 areas, which, excluding the northwest corner of the Site, generated sampling areas of approximate equal size. A seventeenth set of samples were collected in grid area number 9 and designated as samples from grid area number 20. These samples were collected as duplicates to the grid area 9 samples for quality assurance/quality control (QA/QC) purposes. The sampling grid layout used during the FSP is depicted on Figure 3-2.

Except for areas 3 and 4 in the northwest corner of the Site, each grid was approximately 5,000 square feet. The grid areas were laid out on site by the field sampling team utilizing field



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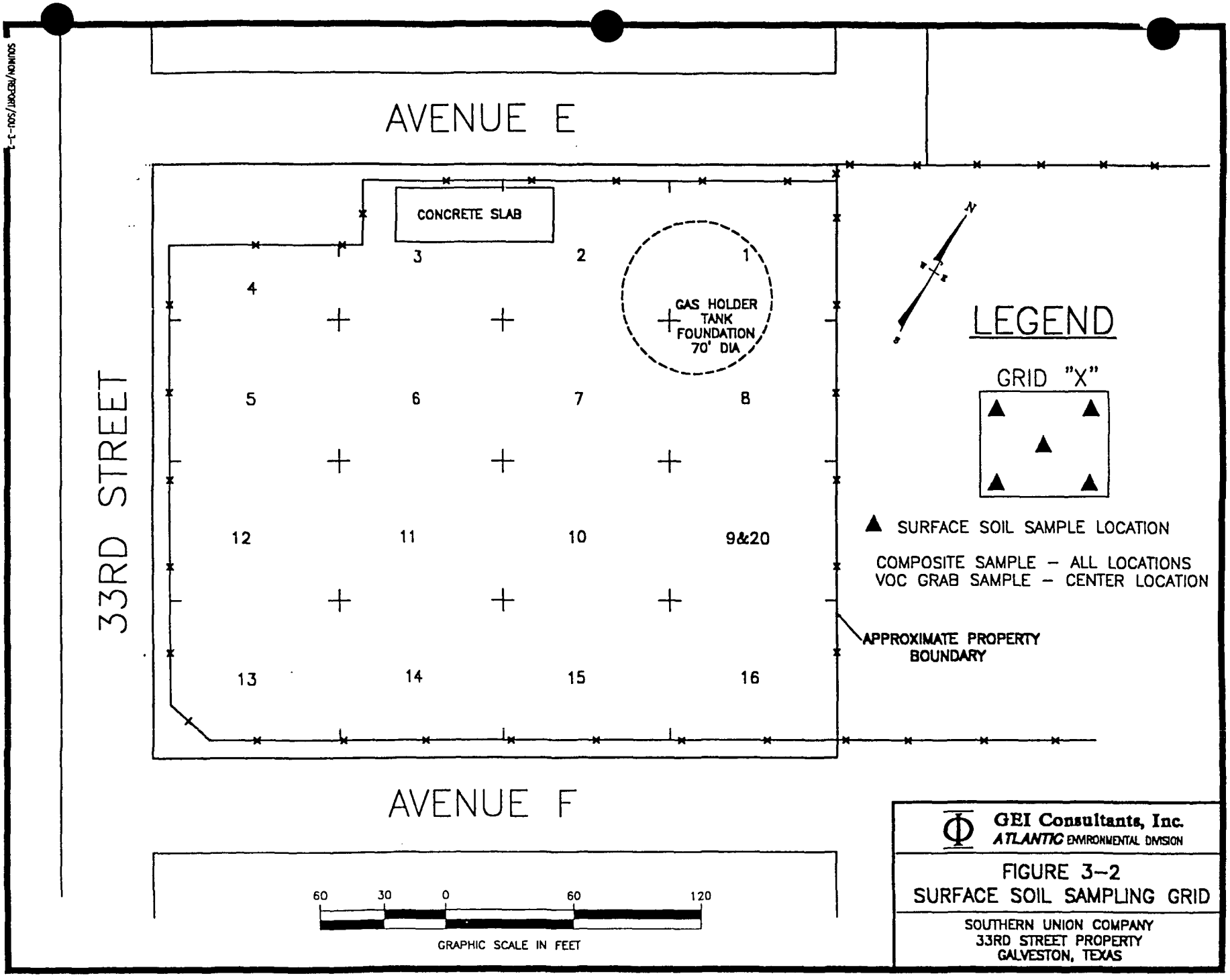

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measurements. Grid corners and centers were marked by survey flags and stakes, respectively. Each grid center stake was numbered designating the grid area number illustrated on Figure 3-2 and affixed to soil sample container labels.

Due to the analytical parameters selected for this FSP, two sampling approaches were utilized in each sampling grid area. Individual grab samples, one per grid, were collected for VOC analysis. The grab sample for VOC analysis was collected near the center of the grid areas. Individual grab samples were selected for generating samples for VOC analysis in accordance with USEPA sampling procedures, which do not recommend compositing multiple samples, involving mixing and the potential loss of volatile constituents from the soil sample during compositing. For analysis of SVOCs, cyanides, and metals, composite samples were generated representing each grid area. Five samples or aliquots were collected within the grid area and homogenized to create a single composite sample for each grid area. Aliquots were collected from near the center of the grid and from locations approximately equal distance from the center of the grid and each corner of the grid.

Soil samples were collected in the depth interval from the ground surface to a depth of 6 inches at all locations sampled. Soil samples were collected with a stainless steel hand "bucket" style auger. The auger sides were marked to indicate sampler penetration depth of 6 inches. Collected samples were placed in clean stainless steel bowls and transferred from the bowls to sample containers. Homogenization of the composite samples was accomplished in these bowls; soils were mixed and transferred to the sample containers with stainless steel spoons.

All sampling equipment was decontaminated between sampling locations in accordance with Atlantic Technical Procedure No. 1060 (Appendix A) of the Field Sampling Work Plan. The decontamination sequence consisted of:

- Alconox® and tap water wash/scrub;
- tap water rinse;
- distilled water rinse;
- diluted nitric acid rinse;
- alcohol rinse; and
- final distilled water rinse.

Off-site "background" samples were collected at three locations near the Site in order to determine the levels of CCI occurring in soils in Galveston as background levels from all anthropogenic sources (*i.e.*, vehicle exhaust, etc.). Non-developed areas were selected, from publicly-owned locations in order to avoid the potential for chemical constituents from other sources of industrial activity. Off-site soil samples were collected along street medians in grass-covered areas at the following locations:

- Broadway Avenue and 33rd Street;
- Rosenburg Avenue, one block south of Broadway; and
- Rosenburg Avenue, three blocks north of Broadway.

At each off-site location, single grab samples were collected for VOC analysis and composite samples were generated by combining five aliquots. Off-site soil sampling locations are depicted on Figure 3-3.

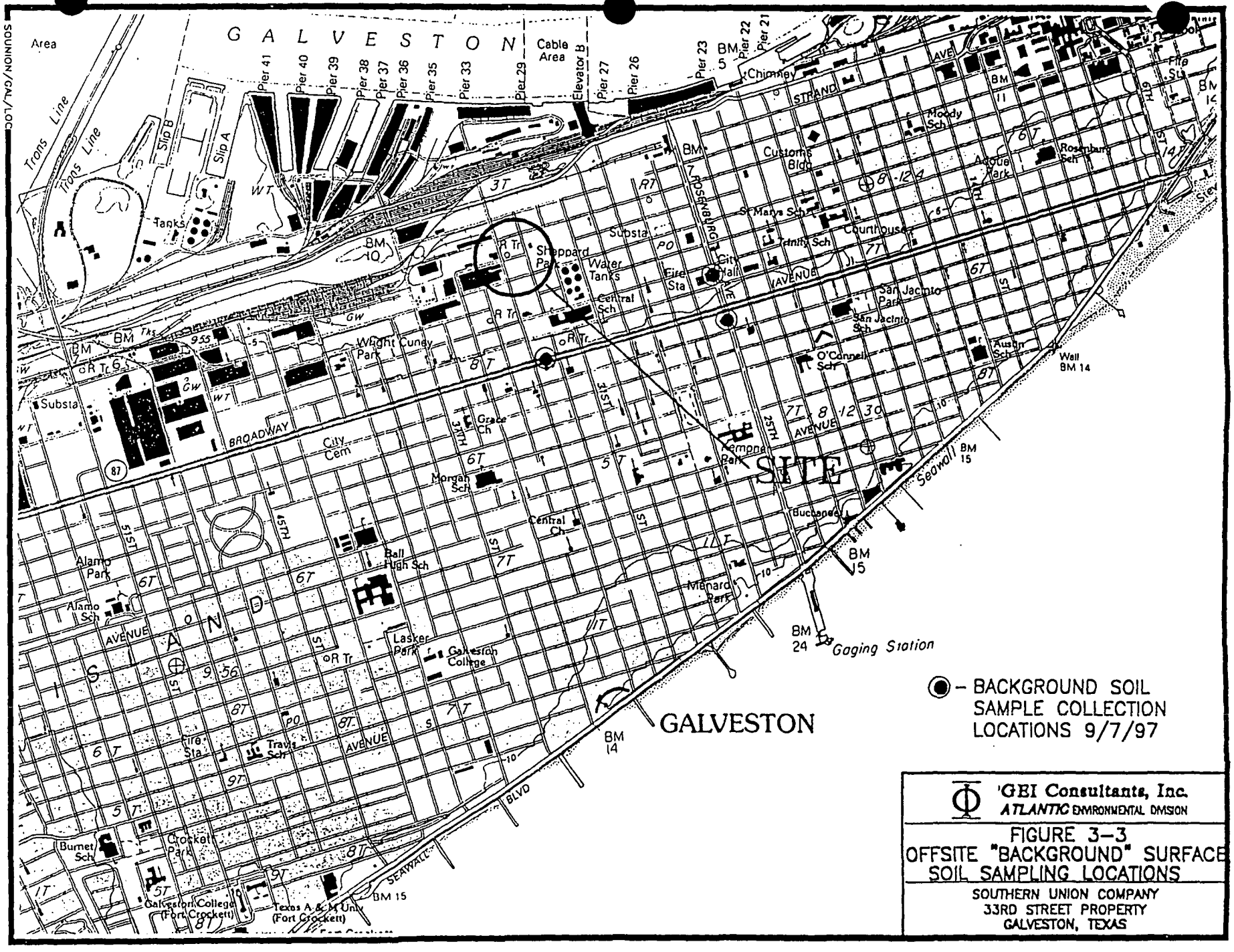
Each soil sample collected was identified by the sample location and sample type (grab or composite). Sample containers were labeled with the sample location, date of collection, and analytical parameter information included on container labels. Collected samples were maintained in an insulated shipping container and chilled to approximately 4°C. The entire group of soil samples collected were shipped overnight in the insulated container to the analytical laboratory on September 8, 1997.

3.2 Time-Averaged Air Sampling

In order to characterize air quality at the Site relative to levels of VOCs and to establish whether residues from operation of the MGP are affecting air quality at the Site, air monitoring was conducted during the FSP. Four air sampling stations were established on the Site perimeter along the fence line, aligned approximately with the four cardinal points of the compass. The approximate locations of the air sampling stations are illustrated on Figure 3-4.

Air sampling was conducted over a three-day period between September 6 and 8, 1997. Sampling was conducted on each day for approximately 8 hours. Due to sampling pump malfunctions, the duplicate samples planned, as called for in the Field Sampling Work Plan, were not collected. However, air samples were collected at each of the four stations each day. In addition to the samples generated by air monitoring, additional field blank and trip blank samples were forwarded to the laboratory for analysis.

Air sampling was conducted in accordance with NIOSH Method 1501 (Aromatic Hydrocarbons) in accordance with the *NIOSH Manual of Analytical Methods (NMAM), Fourth Edition* dated August 1994. Air sampling was conducted utilizing low-flow [0.005 to 5.0 liters per minute (lpm) pumps] "Alpha-1" air sampling pumps manufactured by Ametek. The sampling rate of each pump was set at a flow rate between 0.025 and 0.05 lpm in order to avoid breakthrough potential for any of the chemical constituents analyzed for according to the method. Sample pumps were calibrated before and after sampling each day in order to set appropriate flow rates and to determine the final flow rate for flow-rate averaging purposes. The Alpha-1 pumps are adjustable fixed sampling rate pumps. However, flow rates of the pumps did vary slightly over

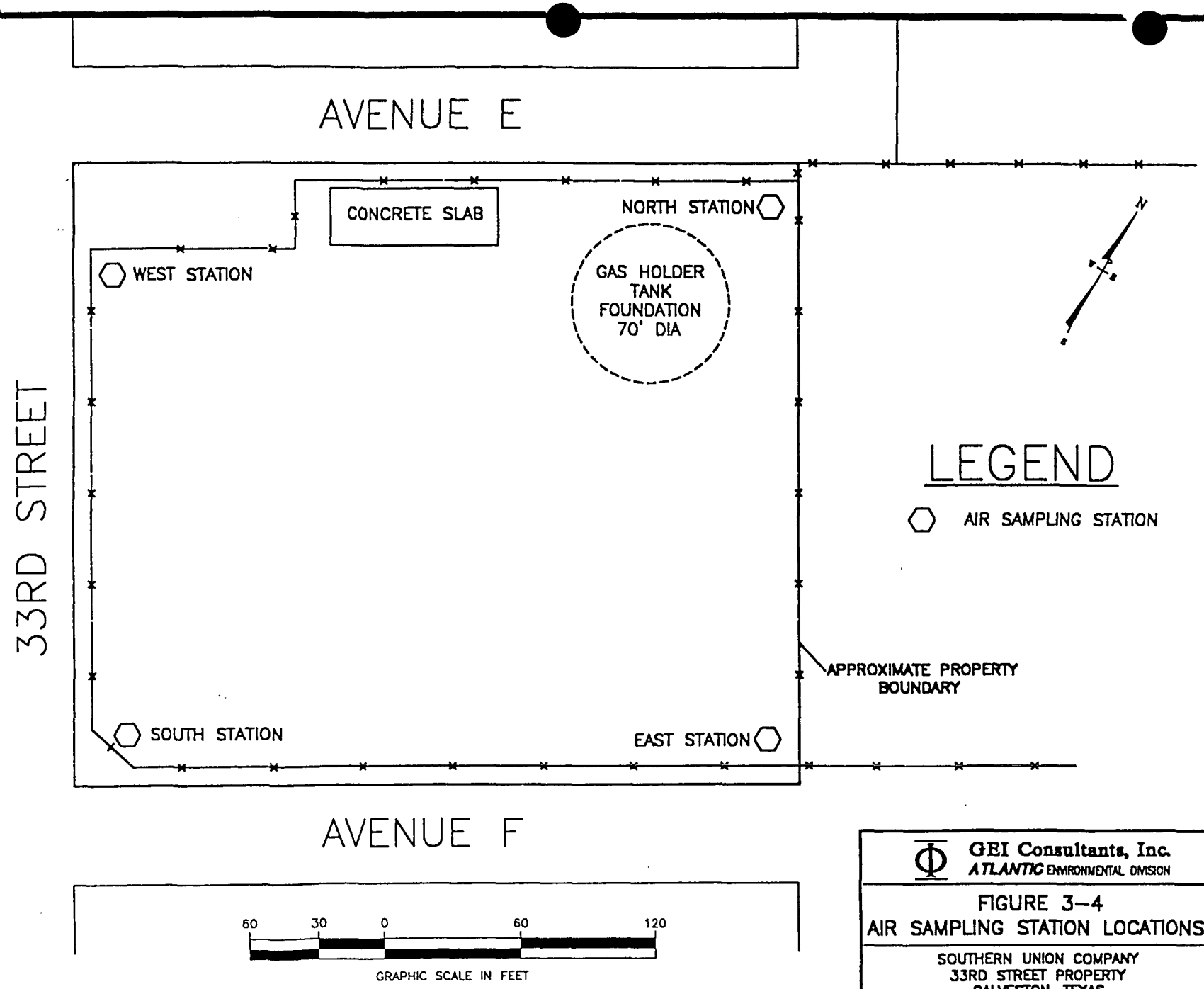


● – BACKGROUND SOIL SAMPLE COLLECTION LOCATIONS 9/7/97

GBI Consultants, Inc.
ATLANTIC ENVIRONMENTAL DIVISION

FIGURE 3–3
OFFSITE "BACKGROUND" SURFACE SOIL SAMPLING LOCATIONS

SOUTHERN UNION COMPANY
33RD STREET PROPERTY
GALVESTON, TEXAS



GEI Consultants, Inc.
ATLANTIC ENVIRONMENTAL DIVISION

FIGURE 3–4
AIR SAMPLING STATION LOCATIONS

SOUTHERN UNION COMPANY
33RD STREET PROPERTY
GALVESTON, TEXAS

SOUNION/REPORT/SOU 3-4

the 8-hour sampling period. Generally, flow rates did not vary by more than 10 percent between days of sampling. Air sampling pump flow calibration data is presented in Table 3-1. Air sampling was completed utilizing the Alpha-1 pumps and charcoal sorbent tubes. Charcoal tubes were connected to the sampling pumps with tygon tubing. The sample sorbent tubes were placed at approximately 3 to 6 feet above the ground surface in order to sample within the breathing zone. Tygon tubing was replaced for sampling on each day during the FSP.

In addition to recording sample pump numbers, start and stop times for sampling, and flow rates as determined by the calibrator, weather conditions, including air temperatures, wind speed, wind direction, and precipitation, were recorded periodically during each day on which air sampling was conducted. Following the completion of sampling, sampling tubes were resealed in protective containers and maintained at approximately 4°C in an insulated shipping container. The air sampling tubes were stored and shipped to the analytical laboratory separate from the soil samples. At the conclusion of air sampling activities on September 8, the sorbent tubes were shipped overnight to the analytical laboratory.

TABLE 3-1
AIR SAMPLING PUMP FLOW CALIBRATION DATA

	September 6, 1997			September 7, 1997			September 8, 1997		
	Calibration Data								
	a.m.	p.m.	average	a.m.	p.m.	average	a.m.	p.m.	average
Pump No. 1	0.04000	0.04037	0.04018	0.04224	0.04179	0.04201	0.04339	0.04401	0.04370
Pump No. 2	0.02678	0.02834	0.02756	0.02763	Note 2			Note 2	
Pump No. 3	0.02806	0.02927	0.02866	0.02874	0.02847	0.02860	0.02727	0.02785	0.02756
Pump No. 4	0.03641	0.03466	0.03553	0.03747	0.03319	0.03531	0.03690	0.03326	0.03508
Pump No. 5		Note 1		0.03571	0.04369	0.03970	0.04517	0.04134	0.04325
	Sampling Data								
	avg. flow rate	run time (hours)	vol. sampled (liters)	avg. flow rate	run time (hours)	vol. sampled (liters)	avg. flow rate	run time (hours)	vol. sampled (liters)
Pump No. 1	0.04018	7:58	19.2060	0.04201	8:00	20.1648	0.04370	7:33	19.7961
Pump No. 2	0.02756	8:01	13.2564		Note 2			Note 2	
Pump No. 3	0.02866	8:04	13.8714	0.02860	7:54	13.5564	0.02756	7:32	12.4572
Pump No. 4	0.03553	8:09	17.3742	0.03531	7:43	16.3485	0.03508	7:30	15.7860
Pump No. 5		Note 1		0.03970	8:00	19.0560	0.04325	7:31	19.5057

NOTES:

Flow Rate (liters/minute)
Note 1 Pump no. 5 not operable on September 6; repaired on September 7.
Note 2 Pump no. 2 computer malfunction on September 7.

4.0 LABORATORY ANALYTICAL PROGRAM

This section describes the analytical methods utilized to evaluate soil and air samples collected during the FSP. A total of 40 soil samples, two per sampling location, were generated during the program. A total of 15 air sampling tubes were forwarded to the laboratory, including four daily air monitoring samples, a sampling duplicate, a field blank, and a trip blank. Both soil and air sampling tubes were analyzed by Specialized Assays, Inc. of Nashville, Tennessee.

The list of analytical parameters selected for inclusion in the site assessment program was compiled based on GEI/Atlantic's experience evaluating impacts to the environment as a result of the operation of MGPs. Our experience indicates that there are specific residues and byproducts generated during the operation of MGPs which may have caused impacts to various media by specific chemical compounds or groups of chemical compounds. Those compounds most likely to be present and which may affect the outcome of a health risk assessment have been included in this assessment of surface soils and air quality at the Site.

4.1 Soil Samples

As described in Section 3.0, two soil samples were collected at each sampling location, both on site and off site. A discrete grab sample was collected for analysis of volatile aromatic hydrocarbons, including benzene, toluene, ethylbenzene, and xylene (BTEX).

A composite soil sample was generated at each sampling location as a combination of five aliquots. The composite soil samples were analyzed for SVOCs, cyanide, and metals. The specific chemical constituents or analytes included in the analyses of SVOCs and metals are presented in Table 4-1.

Analysis for volatile aromatic compounds was conducted according to USEPA SW-846 Method 8020. SVOC analysis was conducted according to USEPA SW-846 Method 8270. Analysis for cyanide was conducted according to USEPA SW-846 Method 9010. The various metals species included in the analysis of metals were determined according to USEPA SW-846 Method Series 6000/7000.

4.2 Air Sample Sorbent Tubes

The air sampling sorbent tubes utilized for air monitoring at the Site were analyzed in accordance with NIOSH Method 1501 for aromatic hydrocarbons. The sorbent tubes employed activated carbon as the media on which gaseous-state aromatic hydrocarbons were collected. The compounds included in the analysis of aromatic hydrocarbons are listed in Table 4-2.

TABLE 4-1
SPECIFIC CHEMICAL CONSTITUENTS FOR SOIL ANALYSIS
SVOCS AND METALS

SVOCs:		**Metals:**
Acenaphthene	2,4-Dinitrophenol	Antimony
Acenaphthylene	2,4-Dinotrotoluene	Arsenic
Anthracene	2,6-Dinitrotoluene	Barium
Benzo(a)anthracene	Di-n-octylphthalate	Beryllium
Benzo(a)pyrene	bis(2-Ethylhexyl)phthalate	Cadmium
Benzo(b)fluoranthene	Fluoranthene	Chromium
Benzo(g,h,i)perylene	Fluorene	Lead
Benzo(k)fluoranthene	Hexachlorobenzene	Mercury
4-Bromophenylphenylether	Hexachlorobutadiene	Nickel
Butylbenzylphenylether	Hexachlorocyclopentadiene	Selenium
Carbazole	Hexachloroethane	Silver
4-Chloro-3-methylphenol	Indeno(1,2,3-cd)pyrene	Thallium
4-Chloroaniline	Isophyrone	Vanadium
bis(2-Chloroethoxy)methane	2-Methylnaphthalene	
bis(2-Chloroethyl)ether	2-Methylphenol	
bis(2-Chloroisopropyl)ether	m,p-Methylphenol	
2-Chloronaphthalene	Naphthalene	
2-Chlorophenol	2-Nitroaniline	
4-Chlorophenylphenylether	3-Nitroaniline	
Chrysene	4-Nitroaniline	
Dibenzofuran	Nitrobenzene	
Dibenzo(a,h)anthracene	2-Nitrophenol	
1,2-Dichlorobenzene	4-Nitrophenol	
1,3-Dichlorobenzene	N-nitrosodi-n-propylamine	
1,4-Dichlorobenzene	N-nitrosodiphenylamine	
3,3-Dichlorobenzidine	Pentachlorophenol	
2,4-Dichlorophenol	Phenanthrene	
Diethylphthalate	Phenol	
2,4-Dimethylphenol	Pyrene	
Dimethylphthalate	1,2,4-Trichlorobenzene	
Di-n-butylphthalate	2,4,5-Trichlorophenol	
4,6-Dinitro-2-methylphenol	2,4,6-Trichlorophenol	

TABLE 4-2
SPECIFIC CHEMICAL CONSTITUENTS FOR
AIR ANALYSIS
AROMATIC HYDROCARBONS

Benzene	Naphthalene
Cumene	Styrene
4-tert-butyltoluene	Toluene
Ethylbenzene	Vinyl Chloride
a-methylstyrene	Xylenes

5.0 LABORATORY SAMPLE RESULTS

5.1 Soil Analysis Results

5.1.1 Volatile Aromatic Compounds

Volatile aromatic compounds were detected above the minimum reported detection limits in four samples collected on site, but also were detected in two of the three off-site locations. Benzene was detected at a concentration of 0.008 milligrams per kilogram (mg/kg) at two locations on site in areas 13 and 15. These levels are only slightly above the reported detection limit of 0.005 mg/kg. Benzene was not detected in soils from any of the off-site locations sampled.

Toluene was also detected at areas 13 and 15 on site above the reported detection limit, but was also found in soils at two of the three off-site locations at similar concentrations. Levels at the Site detected were 0.036 mg/kg and 0.01 mg/kg. Off-site levels detected were 0.022 mg/kg and 0.02 mg/kg. The minimum detection limit reported by the laboratory for toluene was 0.0050 mg/kg.

Ethylbenzene was detected at area 13 on site at a level of 0.008 mg/kg and at one off-site location at a concentration of 0.02 mg/kg. The minimum detection limit reported by the laboratory for ethylbenzene was 0.0050 mg/kg.

Total xylenes were detected in three samples on site and in two off-site locations. On-site levels reported were 0.01, 0.02, and 0.044 mg/kg. Off-site levels reported were 0.024 and 0.096 mg/kg.

With the exception of the very low levels of benzene detected in Site soils but not in off-site locations, it can be concluded from the laboratory data that volatile aromatic compounds are not present in surface soils on site at concentrations statistically different from the off-site locations evaluated. It is the experience of GEI/Atlantic that the results observed for volatile aromatic hydrocarbons are consistent with observations at most properties we have evaluated in the past.

The results of analyses of volatile aromatic compounds for all sample locations are presented in Table 5-1. The laboratory reports for volatile aromatic compound analysis are presented in Appendix A.

TABLE 5-1
VOC ANALYTICAL RESULTS - COMPOUNDS DETECTED
SURFACE SOILS

Compound	Sample Number																			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Benzene	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.008	<0.0050	0.008	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Ethylbenzene	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.008	<0.0050	<0.0050	<0.0050	0.02	<0.0050	<0.0050	<0.0050
Toluene	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.036	<0.0050	0.01	<0.0050	0.022	<0.0050	0.02	<0.0050
Total Xylenes	<0.0050	<0.0050	<0.0050	0.02	<0.0050	<0.0050	<0.0050	0.01	<0.0050	<0.0050	<0.0050	<0.0050	0.044	<0.0050	<0.0050	<0.0050	0.096	<0.0050	0.024	<0.0050

NOTE:

Concentration Units = milligrams per kilograms (mg/kg)

5.1.2 Semi-Volatile Organic Compounds

Several SVOCs were detected above the reported detection limits at several locations on site. None of the SVOCs were detected above the reported detection limits at the off-site locations sampled. All of the SVOC constituents detected are compounds associated, but not exclusively, with MGP sites. A total of 16 compounds were detected at levels above the laboratory reporting detection limits. Fourteen of these compounds belong to a general class of chemical compounds known as polyaromatic hydrocarbons. Two other compounds, carbazole and bis(2-ethylhexyl)phthalate, were detected.

Levels of individual polynuclear aromatic hydrocarbon (PAH) compounds detected ranged from 2 mg/kg to 180 mg/kg. Levels of total PAHs detected ranged from less than the combined reported detection limits to 4.49 mg/kg to 969.7 mg/kg. Results for the PAH compounds, carbazole and bis(2-ethylhexyl)phthalate detected are presented in Table 5-2; tabular results for all SVOC analyses are presented in Appendix A.

5.1.3 Cyanide

Cyanide was not detected above the reported laboratory detection limit in any of the 20 soil samples analyzed.

5.1.4 Metals

A total of 13 specific metal species were included in the analysis for metals levels in the soils collected on and off site. Generally, varying levels of specific metal species will be present as naturally occurring elements in soils. In the soil samples analyzed during this program, no metals were detected at levels considered statistically different from the range of values for all samples for each metal. Of note in these analyses was mercury, which was detected above the laboratory detection limit in some samples but not all samples. However, samples with levels of mercury above the laboratory reported detection limit included two of the three off-site locations. It is concluded, therefore, that no impact to surface soils relative to metals contamination for the metals included in this analysis was detected at the Site. Table 5-3 presents the results of metals analysis for soils.

5.2 Air Analytical Results

Air sampling sorbent tubes utilized during the time-averaged air monitoring program at the Site were analyzed for aromatic hydrocarbons consistent with NIOSH Method 1501. A total of 15

TABLE 5-2
SVOC ANALYTICAL RESULTS - COMPOUNDS DETECTED
SURFACE SOILS

Compound	Sample Number																			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Acenaphthylene	<3.33	<1.66	<1.66	<1.66	<3.33	<1.66	<6.66	<1.66	<1.66	<33.3	<33.3	4	<6.66	<3.33	<3.33	<3.33	<1.66	<1.66	<3.33	<3.33
Anthracene	<3.33	<1.66	<1.66	<1.66	<3.33	<1.66	<6.66	<1.66	<1.66	<33.3	43.3	<3.33	7.33	7.99	<3.33	<3.33	<1.66	<1.66	<3.33	<3.33
Benzo(a)anthracene	5.33	<1.66	<1.66	<1.66	<3.33	2.33	<6.66	4.5	4.5	<33.3	96.7	9.66	18	23.6	5	8.32	<1.66	<1.66	<3.33	3.66
Benzo(a)pyrene	<3.33	<1.66	<1.66	<1.66	<3.33	<1.66	<6.66	5.16	4.66	<33.3	96.7	8.99	14	26	5	<3.33	<1.66	<1.66	<3.33	4.33
Benzo(b)fluoranthene	4	<1.66	<1.66	<1.66	<3.33	2.83	<6.66	5.83	4.66	<33.3	83.3	7.33	12.7	26.3	3.33	6.66	<1.66	<1.66	<3.33	4
Benzo(g,h,i)perylene	<3.33	<1.66	<1.66	<1.66	<3.33	<1.66	<6.66	2.16	<1.66	<33.3	<3.33	<3.33	<1.66	<3.33	<3.33	<3.33	<1.66	<1.66	<3.33	<3.33
Benzo(k)fluoranthene	<3.33	<1.66	<1.66	<1.66	<3.33	3	<6.66	2.83	3.83	<33.3	66.7	9.32	13.3	26	5	8.32	<1.66	<1.66	<3.33	5.33
Carbazole	<3.33	<1.66	<1.66	<1.66	<3.33	<1.66	<6.66	<1.66	<1.66	<33.3	<33.3	<3.33	<6.66	5.33	<3.33	<3.33	<1.66	<1.66	<3.33	<3.33
Chrysene	<3.33	<1.66	<1.66	<1.66	<3.33	<1.66	<6.66	<1.66	<1.66	<33.3	100	9.32	20	25.3	5	9.99	<1.66	<1.66	<3.33	4
Fluoranthene	<3.33	2.16	<1.66	<1.66	4	<1.66	<6.66	7.33	7.66	43.3	180	15	40	46.6	8.32	9.99	<1.66	<1.66	<3.33	7.33
Fluorene	<3.33	<1.66	<1.66	<1.66	<3.33	<1.66	<6.66	<1.66	<1.66	<33.3	<33.3	<3.33	<6.66	4	<3.33	<3.33	<1.66	<1.66	<3.33	<3.33
Indeno(1,2,3-cd)pyrene	<3.33	<1.66	<1.66	<1.66	<3.33	<1.66	<6.66	2	<1.66	<33.3	<33.3	3.33	<6.66	6.33	<3.33	<3.33	<1.66	<1.66	<3.33	<3.33
Naphthalene	<3.33	<1.66	<1.66	<1.66	<3.33	<1.66	<6.66	<1.66	<1.66	<33.3	<33.3	<3.33	<6.66	4	<3.33	3.33	<1.66	<1.66	<3.33	<3.33
Phenathrene	<3.33	<1.66	<1.66	<1.66	<3.33	2.16	<6.66	<1.66	<1.66	<33.3	153	11	31.3	40	<3.33	5	<1.66	<1.66	<3.33	5
Pyrene	10.3	2.33	<1.66	<1.66	3.66	4.5	<6.66	8.49	7.83	36.7	150	19	33.3	43.3	8.32	15	<1.66	<1.66	<3.33	<3.33
bis(2-Ethylhexyl)phthalate	<3.33	2	2.83	<1.66	<3.33	<1.66	<6.66	<1.66	<1.66	<33.3	<33.3	<3.33	<6.66	<3.33	<3.33	<3.33	<1.66	<1.66	<3.33	<3.33

NOTE:

Concentration Units = milligrams per kilograms (mg/kg)

Results indicated for compounds detected only; all other SVOC analytes were below reported detection limits at all locations.

TABLE 5-3
METALS ANALYTICAL RESULTS - COMPOUNDS DETECTED
SURFACE SOILS

	Sample Number																			
Compound	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Antimony	<9.4	<9.94	<9.77	<10.2	<10.1	<9.94	<10.0	<9.94	<10.1	<9.62	<10.0	<10.1	<9.60	<9.68	<10.2	<9.76	<9.82	<9.86	<10.2	<9.62
Arsenic	5.53	3.58	7.62	1.42	3.84	1.39	5.21	7.75	8.48	3.46	14.2	17.4	20.9	17.2	4.68	7.27	2.16	1.78	2.03	7.88
Barium	64.3	49.5	39.1	29.9	38.4	27.4	64.3	75.3	60.8	56.2	59.2	62.1	68.5	48.7	56.4	90	117	93.5	79.7	59
Beryllium	<0.95	<0.99	<0.98	<1.02	<1.01	<0.99	<1.00	<0.99	<1.01	<0.96	<1.00	<1.01	<0.96	<0.99	<1.02	<0.98	<0.98	<0.99	<1.02	<0.96
Cadmium	<0.95	<0.99	<0.98	<1.02	<1.01	<0.99	1.2	1.39	<1.01	<0.96	<1.00	<1.01	<0.96	<0.99	<1.02	1.17	<0.98	<0.99	<1.02	<0.96
Chromium	4.96	4.57	4.1	3.66	7.07	2.98	7.21	8.35	8.26	5.58	6	5.48	5.57	4.14	6.11	5.48	5.89	5.92	5.69	6.54
Lead	267	152	91	34.6	118	60	267	362	141	171	200	74.8	72.2	130	162	276	583	95.9	299	145
Mercury	0.11	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.21	<0.10	<0.10	0.12	<0.10	<0.10	0.14	<0.10	<0.10	0.28	<0.10	0.25	0.11
Nickel	12.8	4.97	3.52	2.85	4.65	10.3	13	10.9	11.1	12.1	7.8	5.88	4.99	11	12.2	10.6	5.89	4.93	5.28	10.4
Selenium	<0.95	<0.99	<0.98	<1.02	<1.01	<0.99	<1.00	<0.99	<1.01	<0.96	<1.00	<1.01	<0.96	<0.99	<1.02	<0.98	<0.98	<0.99	<1.02	<0.96
Silver	<0.95	<0.99	<0.98	<1.02	<1.01	<0.99	<1.00	<0.99	<1.01	<0.96	<1.00	<1.01	<0.96	<0.99	<1.02	<0.98	<0.98	<0.99	<1.02	<0.96
Thallium	<0.95	<0.99	<0.98	<1.02	<1.01	<0.99	<1.00	<0.99	<1.01	<0.96	<1.00	<1.01	<0.96	<0.99	<1.02	<0.98	<0.98	<0.99	<1.02	<0.96
Vanadium	17	<9.94	<9.77	<10.2	<10.1	11.5	14.2	21.7	20.8	34	<10.0	<10.1	<9.60	18.9	29.1	49.3	<9.82	<9.86	<10.2	19.8

NOTE:

Concentration Units = milligrams per kilograms (mg/kg)

sorbent tubes were analyzed; this total included 13 monitoring "runs" (including a duplicate), a field blank, and a trip blank. The duplicate sample was a second sorbent tube utilized on a second air sampling pump at the "west" station on September 7, 1997. The field blank sample tube was prepared by breaking the glass seals on both end of the sorbent tube.

None of the aromatic hydrocarbons analyzed for on the sorbent tubes were detected at or above the minimum reported laboratory detection limits in any of the sorbent tubes. Because air monitoring was performed over 8-hour periods for three consecutive days, it can be reasonably presumed that the results of the air monitoring are representative of air quality conditions on site.

Since air monitoring was also conducted at four site perimeter locations, both upwind and downwind areas on site were monitored. The results indicate, therefore, that no aromatic hydrocarbons, the volatile compounds most likely to be detected from MGP residues, are affecting the air quality at detectable levels on site or in the surrounding neighborhood. The results of the air sample tube analyses are presented in Table 5-4; the complete analytical report for the air sampling tube analyses is presented in Appendix B.

TABLE 5-4

AIR SAMPLING SORBENT TUBE ANALYTICAL RESULTS

Compound	Sampling Date: September 6, 1997 Stations				September 7, 1997 Stations				September 8, 1997 Stations				Duplicate Sep. 7, 1997	Field Blank	Trip Blank
	North	East	South	West	North	East	South	West	North	East	South	West	West		
Styrene	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
Toluene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Benzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Xylene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Naphthalene	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
Ethylbenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Cumene	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
a-Methylstyrene	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
Vinyl Toluene	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
4-tert-Butyltoluene	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0

NOTE:

Concentration Units = micrograms per tube (ug/tube)

6.0 RISK ASSESSMENT

This section presents a quantitative RA which addresses health risks to persons who may be exposed to compounds associated with the Site. This RA was performed at the request of Southern Union and the city of Galveston. The RA will provide a guideline as to the risk associated with the intended use of the Site. The primary objectives of the RA are:

- to identify the COIs for the risk analysis;
- to identify the current and future receptors who may be exposed to Site COIs;
- to examine the pathways by which the COIs can reach humans;
- to predict the concentrations of the COIs at the exposure points;
- to quantify the toxicological effects of the COIs; and
- the assess the risks, if any, associated with exposure to these concentrations.

The RA uses chemical analytical data, and toxicological benchmarks to estimate noncarcinogenic and carcinogenic risks at the Site. This RA follows USEPA Superfund guidance (*Risk Assessment Guidance for Superfund, Volume I - Human Health Evaluation Manual (Part A), Interim Final, 1989*) (RAGS) (USEPA, 1989) and *Texas Risk Reduction Program (TRRP) Guidance* (Texas, 1996) as well as associated supplemental guidance. The RA is organized into the following subsections:

- **6.1 - Hazard Identification** - This subsection identifies important Site characteristics and background, the extent to which environmental impacts due to the CCIs are present, and the chemicals of interest (COIs) for the RA.

- **6.2 - Exposure Assessment** - This subsection identifies on- and off-site receptors and the exposure point concentrations for each receptor.

- **6.3 - Toxicity Assessment** - This subsection examines the effects of the compounds of concern on humans.

- **6.4 - Risk Characterization** - This subsection integrates the exposure and toxicity assessments into a quantitative characterization of human health risk estimates. Site risks are compared to benchmarks for evaluating noncarcinogenic and carcinogenic risks.

- **6.5 - Risk Comparisons** - This subsection presents risk data for comparison purposes.

6.1 Hazard Identification

6.1.1 Site Description and Background

The Site for this assessment is located at 33rd Street and Avenue E in Galveston, Texas. The Site is bounded by Avenue E to the north, 32nd Street to the east, Avenue F to the south, and 33rd Street to the west. The Site, currently a fenced, limited access property, was formerly part of the MGP in Galveston. The Site housed several gas holders during operation of the MGP. The Site, which is now owned by the city of Galveston, is slightly over an acre in area and is bordered by a Southern Union Company service center, a city of Galveston vehicle maintenance facility, a residential area, and a closed brewery.

6.1.2 Extent of Impact on Surface Soil

As described in Section 5.0, volatile organic compounds (BTEX), SVOCs, and various metals species were detected above the laboratory-reported Method Detection Limits (MDLs) in Site surface soils. The chemical compounds detected are typically found at sites which have historically been utilized as MGPs, although these compounds are certainly not unique to MGP sites.

The CCIs were not detected in all areas of the Site. The distribution of "detects" does not appear to coincide with certain past activities at those specific locations on site based on our review of historic site information. It is assumed that the distribution of detects is more likely associated with the depth to which sampling was conducted, the distribution of fill associated with the MGP on site, and whether these fill materials were collected in samples collected.

The levels of CCIs detected were also generally quite low as compared to levels of these same compounds as measured at other MGP sites which have been evaluated. These relatively low levels also explain the apparent random distribution of "detects" on site. It can be concluded that low levels of CCIs are dispersed in surface and near-surface soils on site; however, based on the characterization approach utilized for surface soils on site, it can be concluded that no significant areas of CCIs are present at levels in surface soils substantially higher than the levels measured.

As noted in Section 5.0, BTEX compounds were detected in Site surface soils but were also detected at similar levels at off-site "background" locations as well. This suggests that levels of VOCs in surface soils on site are comparable to other undeveloped areas of the city. Metals species assessed were also present in Site surface soils at levels typical at the off-site locations assessed. No cyanides were detected in Site surface soils.

PAHs were detected in Site surface soils at levels which ranged from below the laboratory-reported detection limit to greater than 90 mg/kg. The significance of these levels and the compounds detected are relative to this site assessment as these compounds relate to the site screening approach described in the following subsection.

6.1.3 Selection of Chemicals of Interest

The analytical data for the surface soil and air samples collected on site have been evaluated via a risk-based scenario approach to identify COIs for the purposes of the quantitative RA. COIs are a subgroup of CCIs, which have been selected via the screening approach for further assessment.

The risk-based screening approach relies on the Tier 1 Commercial Industrial Protective Concentration Levels (PCLs) for mandatory pathways as presented by the state of Texas in the *Texas Risk Reduction Program Concept* dated December 12, 1996 (Texas, 1996). The PCLs are risk-based numbers developed by the state of Texas using default exposure scenarios. The PCLs assume exposure is occurring at the source of industrial residues creating an environmental impact. These values represent concentrations that will not pose a risk at the point of exposure. Tables 6-1, 6-2, and 6-3 present the PCLs and the analytical results for the VOCs, SVOCs, and metals, respectively. Because there were no detected constituents found in the air analytical data, a PCL screening was not necessary, and they were immediately eliminated as CCIs.

As each constituent was evaluated, its concentration was compared to the Texas PCL. A concentration greater than the Texas PCL rendered the constituent a COI. For those constituents whose analysis indicated nondetects, the respective MDL was compared to the respective PCL. If the MDL was greater than the PCL, the constituent was considered a potential COI pursuant to further qualitative review. The surface soil constituents detected at either concentrations greater than their respective PCLs or with quantitation limits greater than their PCLs are summarized in Table 6-4.

Table 6-1

VOC Analytical Results and Texas PCLs

Surface Soils

		Sample Number																			
Compound	PCL	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17****	18****	19****	20
Benzene	4.10E+01	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	0.008	< 0.0050	0.008	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Toluene	4.40E+05	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	0.036	< 0.0050	0.01	< 0.0050	0.022	< 0.0050	0.02	< 0.0050
Ethylbenzene	8.90E+04	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	0.008	< 0.0050	< 0.0050	< 0.0050	0.02	< 0.0050	< 0.0050	< 0.0050
Xylenes, total	2.20E+02	< 0.005	< 0.005	< 0.005	0.02	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	0.044	< 0.005	< 0.005	< 0.005	0.096	< 0.005	0.024	< 0.005

Notes:
All Concentrations are in mg/kg
The PCL is the Texas Protective Concentration Limit for Industrial Commercial Mandatory Pathway exposure.
****: Background samples

Table 6-2
SVOC Analytical Results and Texas PCLs
Surface Soils

Compound	PCL	Sample Number 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17****	18****	19****	20
Acenaphthene	2.70E+04	< 3.33	< 1.66	< 1.66	< 1.66	< 3.33	< 1.66	< 6.66	< 1.66	< 1.66	< 33.3	< 33.3	< 3.33	< 6.66	< 3.33	< 3.33	< 3.33	< 1.66	< 1.66	< 3.33	< 3.33
Acenaphthylene	2.70E+04	< 3.33	< 1.66	< 1.66	< 1.66	< 3.33	< 1.66	< 6.66	< 1.66	< 1.66	< 33.3	< 33.3	4	< 6.66	< 3.33	< 3.33	< 3.33	< 1.66	< 1.66	< 3.33	< 3.33
Anthracene	2.20E+05	< 3.33	< 1.66	< 1.66	< 1.66	< 3.33	< 1.66	< 6.66	< 1.66	< 1.66	< 33.3	43.3	< 3.33	7.33	7.99	< 3.33	< 3.33	< 1.66	< 1.66	< 3.33	< 3.33
Benzo(a)anthracene	1.50E+01	5.33	< 1.66	< 1.66	< 1.66	< 3.33	2.33	< 6.66	4.5	4.5	< 33.3	96.7	9.66	18	23.6	5	8.32	< 1.66	< 1.66	< 3.33	3.66
Benzo(a)pyrene	4.00E-01	< 3.33	< 1.66	< 1.66	< 1.66	< 3.33	< 1.66	< 6.66	5.16	4.66	< 33.3	96.7	8.99	14	26	5	< 3.33	< 1.66	< 1.66	< 3.33	4.33
Benzo(b)fluoranthene	1.50E+01	4	< 1.66	< 1.66	< 1.66	< 3.33	2.83	< 6.66	5.83	4.66	< 33.3	83.3	7.33	12.7	26.3	3.33	6.66	< 1.66	< 1.66	< 3.33	4
Benzo(g,h,i)perylene	2.60E+04	< 3.33	< 1.66	< 1.66	< 1.66	< 3.33	< 1.66	< 6.66	2.16	< 1.66	< 33.3	< 33.3	< 3.33	< 6.66	< 3.33	< 3.33	< 3.33	< 1.66	< 1.66	< 3.33	< 3.33
Benzo(k)fluoranthene	1.50E+02	< 3.33	< 1.66	< 1.66	< 1.66	< 3.33	3	< 6.66	2.83	3.83	< 33.3	66.7	9.32	13.3	26	5	8.32	< 1.66	< 1.66	< 3.33	5.33
4-Bromophenylphenylether	NA	< 3.33	< 1.66	< 1.66	< 1.66	< 3.33	< 1.66	< 6.66	< 1.66	< 1.66	< 33.3	< 33.3	< 3.33	< 6.66	< 3.33	< 3.33	< 3.33	< 1.66	< 1.66	< 3.33	< 3.33
Butylbenzylphthalate	1.50E+05	< 3.33	< 1.66	< 1.66	< 1.66	< 3.33	< 1.66	< 6.66	< 1.66	< 1.66	< 33.3	< 33.3	< 3.33	< 6.66	< 3.33	< 3.33	< 3.33	< 1.66	< 1.66	< 3.33	< 3.33
Carbazole	1.00E+03	< 3.33	< 1.66	< 1.66	< 1.66	< 3.33	< 1.66	< 6.66	< 1.66	< 1.66	< 33.3	< 33.3	< 3.33	< 6.66	5.33	< 3.33	< 3.33	< 1.66	< 1.66	< 3.33	< 3.33
4-Chloro-3-methylphenol	NA	< 3.33	< 1.66	< 1.66	< 1.66	< 3.33	< 1.66	< 6.66	< 1.66	< 1.66	< 33.3	< 33.3	< 3.33	< 6.66	< 3.33	< 3.33	< 3.33	< 1.66	< 1.66	< 3.33	< 3.33
4-Chloroaniline	2.90E+03	< 3.33	< 1.66	< 1.66	< 1.66	< 3.33	< 1.66	< 6.66	< 1.66	< 1.66	< 33.3	< 33.3	< 3.33	< 6.66	< 3.33	< 3.33	< 3.33	< 1.66	< 1.66	< 3.33	< 3.33
bis(2-Chloroethoxy)methane	NA	< 3.33	< 1.66	< 1.66	< 1.66	< 3.33	< 1.66	< 6.66	< 1.66	< 1.66	< 33.3	< 33.3	< 3.33	< 6.66	< 3.33	< 3.33	< 3.33	< 1.66	< 1.66	< 3.33	< 3.33
bis(2-Chloroethyl)ether	3.00E+00	< 3.33	< 1.66	< 1.66	< 1.66	< 3.33	< 1.66	< 6.66	< 1.66	< 1.66	< 33.3	< 33.3	< 3.33	< 6.66	< 3.33	< 3.33	< 3.33	< 1.66	< 1.66	< 3.33	< 3.33
bis(2-Chloroisopropyl)ether	8.20E+01	< 3.33	< 1.66	< 1.66	< 1.66	< 3.33	< 1.66	< 6.66	< 1.66	< 1.66	< 33.3	< 33.3	< 3.33	< 6.66	< 3.33	< 3.33	< 3.33	< 1.66	< 1.66	< 3.33	< 3.33
2-Chloronaphthalene	5.90E+04	< 3.33	< 1.66	< 1.66	< 1.66	< 3.33	< 1.66	< 6.66	< 1.66	< 1.66	< 33.3	< 33.3	< 3.33	< 6.66	< 3.33	< 3.33	< 3.33	< 1.66	< 1.66	< 3.33	< 3.33
2-Chlorophenol	4.40E+03	< 3.33	< 1.66	< 1.66	< 1.66	< 3.33	< 1.66	< 6.66	< 1.66	< 1.66	< 33.3	< 33.3	< 3.33	< 6.66	< 3.33	< 3.33	< 3.33	< 1.66	< 1.66	< 3.33	< 3.33
4-Chlorophenylphenylether	NA	< 3.33	< 1.66	< 1.66	< 1.66	< 3.33	< 1.66	< 6.66	< 1.66	< 1.66	< 33.3	< 33.3	< 3.33	< 6.66	< 3.33	< 3.33	< 3.33	< 1.66	< 1.66	< 3.33	< 3.33
Chrysene	1.50E+03	< 3.33	< 1.66	< 1.66	< 1.66	< 3.33	< 1.66	< 6.66	< 1.66	< 1.66	< 33.3	100	9.32	20	25.3	5	9.99	< 1.66	< 1.66	< 3.33	4
Dibenzofuran	NA	< 3.33	< 1.66	< 1.66	< 1.66	< 3.33	< 1.66	< 6.66	< 1.66	< 1.66	< 33.3	< 33.3	< 3.33	< 6.66	< 3.33	< 3.33	< 3.33	< 1.66	< 1.66	< 3.33	< 3.33
Dibenz(a,h)anthracene	1.00E+00	< 3.33	< 1.66	< 1.66	< 1.66	< 3.33	< 1.66	< 6.66	< 1.66	< 1.66	< 33.3	< 33.3	< 3.33	< 6.66	< 3.33	< 3.33	< 3.33	< 1.66	< 1.66	< 3.33	< 3.33
1,2-Dichlorobenzene	8.00E+04	< 3.33	< 1.66	< 1.66	< 1.66	< 3.33	< 1.66	< 6.66	< 1.66	< 1.66	< 33.3	< 33.3	< 3.33	< 6.66	< 3.33	< 3.33	< 3.33	< 1.66	< 1.66	< 3.33	< 3.33
1,3-Dichlorobenzene	7.90E+04	< 3.33	< 1.66	< 1.66	< 1.66	< 3.33	< 1.66	< 6.66	< 1.66	< 1.66	< 33.3	< 33.3	< 3.33	< 6.66	< 3.33	< 3.33	< 3.33	< 1.66	< 1.66	< 3.33	< 3.33
1,4-Dichlorobenzene	1.20E+03	< 3.33	< 1.66	< 1.66	< 1.66	< 3.33	< 1.66	< 6.66	< 1.66	< 1.66	< 33.3	< 33.3	< 3.33	< 6.66	< 3.33	< 3.33	< 3.33	< 1.66	< 1.66	< 3.33	< 3.33
3,3'-Dichlorobenzidine	4.60E+01	< 6.66	< 3.33	< 3.33	< 3.33	< 6.66	< 3.33	< 13.3	< 3.33	< 3.33	< 66.7	< 66.7	< 6.66	< 13.3	< 6.66	< 6.66	< 6.66	< 3.33	< 3.33	< 6.66	< 6.66
2,4-Dichlorophenol	2.20E+03	< 3.33	< 1.66	< 1.66	< 1.66	< 3.33	< 1.66	< 6.66	< 1.66	< 1.66	< 33.3	< 33.3	< 3.33	< 6.66	< 3.33	< 3.33	< 3.33	< 1.66	< 1.66	< 3.33	< 3.33
Diethylphthalate	5.90E+05	< 3.33	< 1.66	< 1.66	< 1.66	< 3.33	< 1.66	< 6.66	< 1.66	< 1.66	< 33.3	< 33.3	< 3.33	< 6.66	< 3.33	< 3.33	< 3.33	< 1.66	< 1.66	< 3.33	< 3.33
2,4-Dimethylphenol	1.40E+05	< 3.33	< 1.66	< 1.66	< 1.66	< 3.33	< 1.66	< 6.66	< 1.66	< 1.66	< 33.3	< 33.3	< 3.33	< 6.66	< 3.33	< 3.33	< 3.33	< 1.66	< 1.66	< 3.33	< 3.33
Dimethylphthalate	7.30E+06	< 3.33	< 1.66	< 1.66	< 1.66	< 3.33	< 1.66	< 6.66	< 1.66	< 1.66	< 33.3	< 33.3	< 3.33	< 6.66	< 3.33	< 3.33	< 3.33	< 1.66	< 1.66	< 3.33	< 3.33
Di-n-butylphthalate	NA	< 3.33	< 1.66	< 1.66	< 1.66	< 3.33	< 1.66	< 6.66	< 1.66	< 1.66	< 33.3	< 33.3	< 3.33	< 6.66	< 3.33	< 3.33	< 3.33	< 1.66	< 1.66	< 3.33	< 3.33
4,6-Dinitro-2-methylphenol	NA	< 8.32	< 4.16	< 4.16	< 4.16	< 8.32	< 4.16	< 16.6	< 4.16	< 4.16	< 83.3	< 83.3	< 8.32	< 16.6	< 8.32	< 8.32	< 8.32	< 4.16	< 4.16	< 8.32	< 8.32
2,4-Dinitrophenol	1.50E+03	< 8.32	< 4.16	< 4.16	< 4.16	< 8.32	< 4.16	< 16.6	< 4.16	< 4.16	< 83.3	< 83.3	< 8.32	< 16.6	< 8.32	< 8.32	< 8.32	< 4.16	< 4.16	< 8.32	< 8.32
2,4-dinitrotoluene	3.00E+01	< 3.33	< 1.66	< 1.66	< 1.66	< 3.33	< 1.66	< 6.66	< 1.66	< 1.66	< 33.3	< 33.3	< 3.33	< 6.66	< 3.33	< 3.33	< 3.33	< 1.66	< 1.66	< 3.33	< 3.33
2,6-Dinitrotoluene	3.00E+01	< 3.33	< 1.66	< 1.66	< 1.66	< 3.33	< 1.66	< 6.66	< 1.66	< 1.66	< 33.3	< 33.3	< 3.33	< 6.66	< 3.33	< 3.33	< 3.33	< 1.66	< 1.66	< 3.33	< 3.33
Di-n-octylphthalate	NA	< 3.33	< 1.66	< 1.66	< 1.66	< 3.33	< 1.66	< 6.66	< 1.66	< 1.66	< 33.3	< 33.3	< 3.33	< 6.66	< 3.33	< 3.33	< 3.33	< 1.66	< 1.66	< 3.33	< 3.33
Fluoranthene	1.80E+04	< 3.33	2.16	< 1.66	< 1.66	4	< 1.66	< 6.66	7.33	7.66	43.3	180	15	40	46.6	8.32	9.99	< 1.66	< 1.66	< 3.33	7.33
Fluorene	2.90E+04	< 3.33	< 1.66	< 1.66	< 1.66	< 3.33	< 1.66	< 6.66	< 1.66	< 1.66	< 33.3	< 33.3	< 3.33	< 6.66	4	< 3.33	< 3.33	< 1.66	< 1.66	< 3.33	< 3.33
Hexachlorobenzene	6.00E+00	< 3.33	< 1.66	< 1.66	< 1.66	< 3.33	< 1.66	< 6.66	< 1.66	< 1.66	< 33.3	< 33.3	< 3.33	< 6.66	< 3.33	< 3.33	< 3.33	< 1.66	< 1.66	< 3.33	< 3.33
Hexachlorobutadiene	1.50E+01	< 3.33	< 1.66	< 1.66	< 1.66	< 3.33	< 1.66	< 6.66	< 1.66	< 1.66	< 33.3	< 33.3	< 3.33	< 6.66	< 3.33	< 3.33	< 3.33	< 1.66	< 1.66	< 3.33	< 3.33
Hexachlorocyclopentadiene	3.00E+00	< 3.33	< 1.66	< 1.66	< 1.66	< 3.33	< 1.66	< 6.66	< 1.66	< 1.66	< 33.3	< 33.3	< 3.33	< 6.66	< 3.33	< 3.33	< 3.33	< 1.66	< 1.66	< 3.33	< 3.33
Hexachloroethane	3.90E+02	< 3.33	< 1.66	< 1.66	< 1.66	< 3.33	< 1.66	< 6.66	< 1.66	< 1.66	< 33.3	< 33.3	< 3.33	< 6.66	< 3.33	< 3.33	< 3.33	< 1.66	< 1.66	< 3.33	< 3.33
Indeno(1,2,3-cd)pyrene	1.50E+01	< 3.33	< 1.66	< 1.66	< 1.66	< 3.33	< 1.66	< 6.66	2	< 1.66	< 33.3	< 33.3	3.33	< 6.66	6.33	< 3.33	< 3.33	< 1.66	< 1.66	< 3.33	< 3.33
Isophorone	2.20E+04	< 3.33	< 1.66	< 1.66	< 1.66	< 3.33	< 1.66	< 6.66	< 1.66	< 1.66	< 33.3	< 33.3	< 3.33	< 6.66	< 3.33	< 3.33	< 3.33	< 1.66	< 1.66	< 3.33	< 3.33
2-Methylnaphthalene	NA	< 3.33	< 1.66	< 1.66	< 1.66	< 3.33	< 1.66	< 6.66	< 1.66	< 1.66	< 33.3	< 33.3	< 3.33	< 6.66	< 3.33	< 3.33	< 3.33	< 1.66	< 1.66	< 3.33	< 3.33
2-Methylphenol	NA	< 3.33	< 1.66	< 1.66	< 1.66	< 3.33	< 1.66	< 6.66	< 1.66	< 1.66	< 33.3	< 33.3	< 3.33	< 6.66	< 3.33	< 3.33	< 3.33	< 1.66	< 1.66	< 3.33	< 3.33
m,p-Methylphenol	NA	< 3.33	< 1.66	< 1.66	< 1.66	< 3.33	< 1.66	< 6.66	< 1.66	< 1.66	< 33.3	< 33.3	< 3.33	< 6.66	< 3.33	< 3.33	< 3.33	< 1.66	< 1.66	< 3.33	< 3.33
Naphthalene	2.90E+04	< 3.33	< 1.66	< 1.66	< 1.66	< 3.33	< 1.66	< 6.66	< 1.66	< 1.66	< 33.3	< 33.3	< 3.33	< 6.66	4	< 3.33	3.33	< 1.66	< 1.66	< 3.33	< 3.33
2-Nitroaniline	1.00E+01	< 8.32	< 4.16	< 4.16	< 4.16	< 8.32	< 4.16	< 16.6	< 4.16	< 4.16	< 83.3	< 83.3	< 8.32	< 16.6	< 8.32	< 8.32	< 8.32	< 4.16	< 4.16	< 8.32	< 8.32
3-Nitroaniline	NA	< 8.32	< 4.16	< 4.16	< 4.16	< 8.32	< 4.16	< 16.6	< 4.16	< 4.16	< 83.3	< 83.3	< 8.32	< 16.6	< 8.32	< 8.32	< 8.32	< 4.16	< 4.16	< 8.32	< 8.32
4-Nitroaniline	NA	< 8.32	< 4.16	< 4.16	< 4.16	< 8.32	< 4.16	< 16.6	< 4.16	< 4.16	< 83.3	< 83.3	< 8.32	< 16.6	< 8.32	< 8.32	< 8.32	< 4.16	< 4.16	< 8.32	< 8.32
Nitrobenzene	*	< 3.33	< 1.66	< 1.66	< 1.66	< 3.33	< 1.66	< 6.66	< 1.66	< 1.66	< 33.3	< 33.3	< 3.33	< 6.66	< 3.33	< 3.33	< 3.33	< 1.66	< 1.66	< 3.33	< 3.33
2-Nitrophenol	NA	< 3.33	< 1.66	< 1.66	< 1.66	< 3.33	< 1.66	< 6.66	< 1.66	< 1.66	< 33.3	< 33.3	< 3.33	< 6.66	< 3.33	< 3.33	< 3.33	< 1.66	< 1.66	< 3.33	< 3.33
4-Nitrophenol	NA	< 8.32	< 4.16	< 4.16	< 4.16	< 8.32	< 4.16	< 16.6	< 4.16	< 4.16	< 83.3	< 83.3	< 8.32	< 16.6	< 8.32	< 8.32	< 8.32	< 4.16	< 4.16	< 8.32	< 8.32
N-nitrosodi-n-propylamine	4.00E+00	< 3.33	< 1.66	< 1.66	< 1.66	< 3.33	< 1.66	< 6.66	< 1.66	< 1.66	< 33.3	< 33.3	< 3.33	< 6.66	< 3.33	< 3.33	< 3.33	< 1.66	< 1.66	< 3.33	< 3.33
N-nitrosodiphenylamine	4.00E-01	< 3.33	< 1.66	< 1.66	< 1.66	< 3.33	< 1.66	< 6.66	< 1.66	< 1.66	< 33.3	< 33.3	< 3.33	< 6.66	< 3.33	< 3.33	< 3.33	< 1.66	< 1.66	< 3.33	< 3.33
Pentachlorophenol	7.90E+01	< 8.32	< 4.16	< 4.16	< 4.16	< 8.32	< 4.16	< 16.6	< 4.16	< 4.16	< 83.3	< 83.3	< 8.32	< 16.6	< 8.32	< 8.32	< 8.32	< 4.16	< 4.16	< 8.32	< 8.32
Phenanthrene	1.20E+02	< 3.33	< 1.66	< 1.66	< 1.66	< 3.33	2.16	< 6.66	< 1.66	< 1.66	< 33.3	153	11	31.3	40	< 3.33	5	< 1.66	< 1.66	< 3.33	5
Phenol	2.20E+04	< 3.33	< 1.66	< 1.66	< 1.66	< 3.33	< 1.66	< 6.66	< 1.66	< 1.66	< 33.3	< 33.3	< 3.33	< 6.66	< 3.33	< 3.33	< 3.33	< 1.66	< 1.66	< 3.33	< 3.33
Pyrene	5.30E+01	10.3	2.33	< 1.66	< 1.66	3.66	4.5	< 6.66	8.49	7.83	36.7	150	19	33.3	43.3	8.32	15	< 1.66	< 1.66	< 3.33	< 3.33
Bis(2-ethylhexyl)phthalate	6.60E+02	< 3.33	2	2.83	< 1.66	< 3.33	< 1.66	< 6.66	< 1.66	< 1.66	< 33.3	< 33.3	< 3.33	< 6.66	< 3.33	< 3.33	< 3.33	< 1.66	< 1.66	< 3.33	< 3.33
1,2,4-Trichlorobenzene	2.70E+07	< 3.33	< 1.66	< 1.66	< 1.66	< 3.33	< 1.66	< 6.66	< 1.66	< 1.66	< 33.3	< 33.3	< 3.33	< 6.66	< 3.33	< 3.33	< 3.33	< 1.66	< 1.66	< 3.33	< 3.33
2,4,5-Trichlorophenol	2.70E+05	< 8.32	< 4.16	< 4.16	< 4.16	< 8.32	< 4.16	< 16.6	< 4.16	< 4.16	< 83.3	< 83.3	< 8.32	< 16.6	< 8.32	< 8.32	< 8.32	< 4.16	< 4.16	< 8.32	< 8.32
2,4,6-Trichlorophenol	7.30E+04	< 3.33	< 1.66	< 1.66	< 1.66	< 3.33	< 1.66	< 6.66	< 1.66	< 1.66	< 33.3	< 33.3	< 3.33	< 6.66	< 3.33	< 3.33	< 3.33	< 1.66	< 1.66	< 3.33	< 3.33

Note:

All Concentrations are in mg/kg
The PCL is the Texas Protective Concentration Limit for Industrial Commercial Mandatory Pathway exposure.
*: Under Review
NA: Information on this constituent is not available from the TRRP Table V.b.
****: Background samples

Table 6-3
Analytical Results and Texas PCLs for Metals and Cyanide
Surface Soils

		Sample Number																			
Compound	PCL	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17****	18****	19****	20
Arsenic	2.10E+02	5.53	3.58	7.62	1.42	3.84	1.39	5.21	7.75	8.48	3.46	14.2	17.4	20.9	17.2	4.68	7.24	2.16	1.78	2.03	7.88
Barium	4.10E+04	64.3	49.5	39.1	29.9	38.4	27.4	64.3	75.3	60.8	56.2	59.2	62.1	68.5	48.7	56.4	90	117	93.5	79.7	59
Beryllium	*	< 0.95	< 0.99	< 0.98	< 1.02	< 1.01	< 0.99	< 1.00	< 0.99	< 1.01	< 0.96	< 1.00	< 1.01	< 0.96	< 0.99	< 1.02	< 0.98	< 0.98	< 0.99	< 1.02	< 0.96
Cadmium	8.60E+02	< 0.95	< 0.99	< 0.98	< 1.02	< 1.01	< 0.99	1.2	1.39	< 1.01	< 0.96	< 1.00	< 1.01	< 0.96	< 0.99	< 1.02	1.17	< 0.98	< 0.99	< 1.02	< 0.96
Chromium	1.50E+03	4.96	4.57	4.1	3.66	7.07	2.98	7.21	8.35	6.26	5.58	8	5.48	5.57	4.14	6.11	5.48	5.69	5.92	5.69	6.54
Lead	1.00E+03	267	152	91	34.8	118	60	267	362	141	171	200	74.8	72.2	130	162	276	583	95.9	299	145
Mercury	5.00E+00	0.11	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	0.21	< 0.10	< 0.10	0.12	< 0.10	< 0.10	0.14	< 0.10	< 0.10	0.28	< 0.10	0.25	0.11
Nickel	*	12.8	4.97	3.52	2.85	4.65	10.3	13	10.9	11.1	12.1	7.8	5.88	4.99	11	12.2	10.8	5.89	4.93	5.28	10.4
Selenium	4.40E+03	< 0.95	< 0.99	< 0.98	< 1.02	< 1.01	< 0.99	< 1.00	< 0.99	< 1.01	< 0.96	< 1.00	< 1.01	< 0.96	< 0.99	< 1.02	< 0.98	< 0.98	< 0.99	< 1.02	< 0.96
Silver	4.40E+03	< 0.95	< 0.99	< 0.98	< 1.02	< 1.01	< 0.99	< 1.00	< 0.99	< 1.01	< 0.96	< 1.00	< 1.01	< 0.96	< 0.99	< 1.02	< 0.98	< 0.98	< 0.99	< 1.02	< 0.96
Thallium	7.00E-02	< 0.95	< 0.99	< 0.98	< 1.02	< 1.01	< 0.99	< 1.00	< 0.99	< 1.01	< 0.96	< 1.00	< 1.01	< 0.96	< 0.99	< 1.02	< 0.98	< 0.98	< 0.99	< 1.02	< 0.96
Vanadium	2.60E+03	17	< 9.94	< 9.77	< 10.2	< 10.1	11.5	14.2	21.7	20.8	34	< 10.0	< 10.1	< 9.60	18.9	29.1	49.3	< 9.82	< 9.86	< 10.2	19.8
Cyanide	6.10E+03	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00

Note:

All Concentrations are in mg/kg

The PCL is the Texas Protective Concentration Limit for Industrial Commercial Mandatory Pathway exposure.

* Under Review

****: Background samples

TABLE 6-4
POTENTIAL COIs

Compounds Detected at Concentrations Greater than the PCLs	Compounds with Quantitation Limits Greater than the PCLs
Benzo(a)anthracene	bis(2-chloroethyl)ether
Benzo(a)pyrene	Dibenzo(a,h)anthracene
Benzo(b)fluoranthene	3,3-Dichlorobenzidine
Phenanthrene	2,4-Dinitrotoluene
Pyrene	2,6-Dinitrotoluene
	Hexachlorobenzene
	Hexachlorobutadiene
	Hexachlorocyclopentadiene
	Ideno(1,2,3-cd)pyrene
	N-nitrosodi-n-propylamine
	N-nitrosodiphenulamine
	Thallium

Prior experience with MGP sites and their associated environmental impacts provided a basis for a qualitative evaluation of the potential COIs due to MDL exceedances in order to establish whether these potential COIs should be retained as COIs for further exposure and risk evaluation. If the potential COIs were typical of those found at MGP sites, they were retained as COIs. If experience indicated that there was no relation between the constituent and the MGP process, they were eliminated as COIs. Inorganics on the list were compared to background levels; if the level was less than or equal to background (±5 percent), the constituents were not selected. The final list of COIs is presented in Table 6-5.

TABLE 6-5
CHEMICALS OF INTEREST (COIs)

Benzo(a)anthracene
Benzo(a)pyrene
Benzo(a)fluoranthene
Dibenzo(a,h)anthracene*
2,4-Dinitrotoluene*
2,6-Dinitrotoluene*
Indeno(1,2,3-cd)pyrene*
Phenanthrene
Pyrene

NOTE:

* Nondetects included as COIs due to MDLs greater than PCLs.

6.2 Exposure Assessment

An exposure assessment consists of both qualitative and quantitative components. During the qualitative portion, receptors are identified in addition to the pathways and routes by which each receptor might be exposed. The quantitative portion of the exposure assessment involves identification and estimation of the appropriate exposure point concentrations and combining that concentration with the appropriate exposure factors to calculate an intake for the particular receptor-chemical-pathway-route combination.

6.2.1 Identification of Potential Receptors

City Vehicle Drivers

City employees going to and from the Site to retrieve and return vehicles could potentially be exposed to vapors from surface soils at the Site.

Groundskeeper

A groundskeeper periodically maintaining the Site landscape could potentially be exposed to surface soils and vapors and dust from surface soils.

Nearby Residents

Residents (adults and children) living near the Site could potentially be exposed to airborne dust and vapors from the Site.

Children

Children trespassing on the Site to play could potentially be exposed to vapors from surface soils.

Utility Workers

Utility workers could potentially be exposed to surface soils and surface soil dust and vapors during possible future installation, maintenance, or repair activities.

6.2.2 Identification of Potential Exposure Pathways and Routes

The potentially exposed populations described in the previous section were selected due to exposures that could be reasonably expected to occur at the Site based on its utilization

as a city parking lot. The applicable exposure routes for the potentially exposed populations include dermal contact with surface soil, incidental ingestion of surface soil, inhalation of soil vapors, and inhalation of fugitive dust. In order for a potentially exposed population to be exposed by a given route of exposure, a complete pathway must be available for the COI to reach the route and corresponding population. Because the Site will be paved and landscaped (with an additional 1 foot of clean soil placed on the landscaped areas), several exposure pathways are rendered incomplete. Therefore, the route and population are not considered any further in the RA. If there is no exposure to the COIs, there is no risk from the COIs. The pathways which are eliminated are:

- ingestion of COIs via ingestion of surface soils for:
  - child trespassing on site, and
  - city worker(s); and

- exposure to COI via particulate inhalation for:
  - city worker(s),
  - child trespassing on site, and
  - nearby residents (adults and children).

Eliminating these pathways leaves the following to be considered in the quantitative assessment:

Pathway	Exposed Population
• Inhalation of COIs via Particulates	Groundskeeper Utility Worker
• Inhalation of COIs via Vapor Emissions from Surface Soils	Groundskeeper Utility Worker Children On Site Nearby Residents: Adults and Children
• Exposure to COIs via Ingestion of and Dermal Contact with Surface Soils	Groundskeeper Utility Worker

6.2.3 Exposure Concentration

The concentration of chemicals to which a potential receptor may be exposed is referred to as the exposure concentration. In preparing the RA, exposure concentrations for each

COI were determined by averaging the analytical results, treating the nondetects as one-half of the MDL for the averaging method. For the constituents which were nondetects yet had detection limits greater than their Texas TIER 1 PCLs, a value of one-half of the MDL for each sample was used for averaging. Table 6-6 presents the exposure concentrations used in the assessment.

TABLE 6-6
COI EXPOSURE CONCENTRATIONS (mg/kg)

Constituent	Representative COI Exposure Concentration in Surface Soil
	Value
Benzo(a)fluoranthene	11
Benzo(a)anthracene	12
Benzo(a)pyrene	11
Dibenzo(a,h)anthracene	3.3
2,4-Dinotrotoluene	3.3
2,6-Dinitrotoluene	3.3
Indeno(1,2,3,-cd)pyrene	3.8
Phenanthrene	16
Pyrene	21

6.2.4 Exposure Factors

Tables 6-7 through 6-12 represent the exposure factor assumptions used to calculate the intake for each exposure scenario. The parameters utilized are either default parameters for the particular exposed population provided by the state of Texas in their Texas Risk Reduction Program or, in the case of exposure frequency and time, case-specific numbers depending on the exposed population and the activity which places them at risk for exposure.

6.2.5 Intake Calculation

To reasonably determine the risk an exposed population may encounter at a site, the dose (intake) a member of the population may receive must be determined. This dose will vary according to exposure concentration, the population, and the population characteristics. The general form of the equation multiplies the exposure concentration of the chemical in the media multiplied by a series of exposure factors as described above.

6.3 Toxicity Assessment

The toxicity assessment provides the second of the two major components needed to characterize human health risk. Information on the potential effects of the contaminants developed in the toxicity assessment is combined with the information developed in the exposure assessment to quantitatively estimate human health risks associated with the Site.

The evaluation of the potential toxic effects of a compound involves the examination of available data that relates its observed toxic effects to doses at which these effects occur. Generally, there are two major categories of information considered in the toxicity assessment:

1. potential noncarcinogenic health effects of the compound; and
2. potential carcinogenic health effects of the compound.

6.3.1 Toxicity Assessment for Noncarcinogenic Effects

The contaminants detected at the Site may have potential effects that are noncarcinogenic in nature. When evaluating noncarcinogenic health risks, all compounds for which the noncarcinogenic toxic effects have been described by the use of a threshold dose, referred to as the reference dose (RfD), have been included in the analysis.

The RfD values will serve as benchmarks for assessing the potential for noncarcinogenic health effects due to the COI. RfDs represent "threshold" levels below which no adverse health effects are anticipated due to lifetime exposure. To ensure that these benchmarks are set low enough, uncertainties in the supporting database are taken into account through the application of factors which account for uncertainty. The TNRCC RRP has published both inhalation and ingestion RfD values for some, but not all, chemicals; these values are used where applicable in equations to calculate noncarcinogenic health risks.

6.3.2 Toxicity Assessment for Carcinogenic Effects

Cancer potency factors (CPFs) have been developed by USEPA to describe quantitatively the potential carcinogenicity of a compound. State databases and the USEPA's IRIS are the primary sources of information on the cancer potencies of selected compounds. The CPFs, combined with the aforementioned data on exposure assessment, have been used to make quantitative estimates of potential cancer risks. The CPFs, as given by the state of Texas (TRRP, 1996), have been used where applicable.

TABLE 6-7
EXPOSURE ASSUMPTIONS - GALVESTON, TEXAS
SCENARIO 1: CITY EMPLOYEE

Exposure Scenario:	Worker Exposed to Vapors During the Course of Parking Refuse Trucks
Case/Timing:	Current Site Conditions, Future Land Use
Primary Activity:	Parking Lot
Exposed People:	Adult Workers Driving Refuse Trucks

Variable	Units	Values	Notes and References
	Physical Attribute of Population		
Average Body Weight	kg	70	Texas, 1996
Average Lifetime	years	70	Texas, 1996
	Total Exposure Duration		
Exposure Time	hours/day	1	Case-Specific
Exposure Frequency	days/year	250	Texas, 1996
Exposure Duration	years	25	Texas, 1996
	Inhalation (Potential Exposure)		
Inhalation Rate	m^3/day	20	Texas, 1996

NOTE:

Texas, 1996 *Texas Risk Reduction Program Concept, Document 2, Volumes 1-3*, December 16, 1996.

TABLE 6-8
EXPOSURE ASSUMPTIONS - GALVESTON, TEXAS
SCENARIO 2: GROUNDSKEEPER

Exposure Scenario:	Groundskeeper Exposure to Surface Soils
Case/Timing:	Current Site Conditions, Future Land Use
Primary Activity:	Parking Lot
Exposed People:	Groundskeeper

Variable	Units	Values	Notes and References
		Physical Attribute of Population	
Average Body Weight	kg	70	Texas, 1996
Average Lifetime	years	70	Texas, 1996
		Total Exposure Duration	
Exposure Time	hours/day	1.5	Case-Specific
Exposure Frequency	days/year	50	Case-Specific
Exposure Frequency (Dermal)	days/year	50	Case-Specific
Exposure Duration	years	25	Texas, 1996
Averaging Time: Carcinogenic	years	70	Texas, 1996
Noncarcinogenic	years	25	Texas, 1996
		Ingestion of Surface Soil (Potential Exposure)	
Ingestion Rate	mg/day	100	Texas, 1996
		Dermal Adsorption of Surface Soil (Potential Exposure)	
Soil Adherence	mg/cm^2	0.03	Texas, 1996
Surface Area of Skin	cm^2	5,700	Texas, 1996 - Head, Hands, Forearms, Lower Legs
		Inhalation (Potential Exposure)	
Inhalation Rate	m^3/day	20	Texas, 1996

NOTE:

Texas, 1996 *Texas Risk Reduction Program Concept, Document 2, Volumes 1-3*, December 16, 1996.

TABLE 6-9
EXPOSURE ASSUMPTIONS - GALVESTON, TEXAS
SCENARIO 3: ADULT RESIDENT

Exposure Scenario:	Adult Resident Off-Site Exposure to Vapor from Surface Soils
Case/Timing:	Current Site Conditions, Future Land Use
Primary Activity:	Parking Lot
Exposed People:	Adult Residents

Variable	Units	Values	Notes and References
		Physical Attribute of Population	
Average Body Weight	kg	70	Texas, 1996
Average Lifetime	years	70	Texas, 1996
		Total Exposure Duration	
Exposure Time	hours/day	24	Standard
Exposure Frequency	days/year	350	Texas, 1996
Exposure Duration	years	33	Texas, 1996
Averaging Time: Carcinogenic	years	70	Texas, 1996
Noncarcinogenic	years	33	Texas, 1996
		Inhalation (Potential Exposure)	
Inhalation Rate	m^3/day	20	Texas, 1996

NOTE:

Texas, 1996 *Texas Risk Reduction Program Concept, Document 2, Volumes 1-3*, December 16, 1996.

TABLE 6-10
EXPOSURE ASSUMPTIONS - GALVESTON, TEXAS
SCENARIO 4A: CHILD, ON SITE

Exposure Scenario:	Child On-Site Air Vapor Exposure to Vapors from Surface Soils
Case/Timing:	Current Site Conditions, Future Land Use
Primary Activity:	Parking Lot
Exposed People:	Children (ages 0-6) Trespassing On Site

Variable	Units	Values	Notes and References
		Physical Attribute of Population	
Average Body Weight	kg	15	Texas, 1996
Average Lifetime	years	70	Texas, 1996
		Total Exposure Duration	
Exposure Time	hours/day	2	Case-Specific
Exposure Frequency	days/year	350	Texas, 1996
Exposure Duration	years	6	Texas, 1996
Averaging Time: Carcinogenic	years	70	Texas, 1996
Noncarcinogenic	years	6	Texas, 1996
		Inhalation (Potential Exposure)	
Inhalation Rate	m^3/day	20	Texas, 1996

NOTE:

Texas, 1996 *Texas Risk Reduction Program Concept, Document 2, Volumes 1-3*, December 16, 1996.

TABLE 6-11
EXPOSURE ASSUMPTIONS - GALVESTON, TEXAS
SCENARIO 4B: CHILD, OFF-SITE

Exposure Scenario:	Child Resident Off-Site Inhalation Exposure to Vapor from Surface Soils
Case/Timing:	Current Site Conditions, Future Land Use
Primary Activity:	Parking Lot
Exposed People:	Children (ages 0-6)

Variable	Units	Values	Notes and References
		Physical Attribute of Population	
Average Body Weight	kg	15	Texas, 1996
Average Lifetime	years	70	Texas, 1996
		Total Exposure Duration	
Exposure Time	hours/day	24	Standard
Exposure Frequency	days/year	350	Texas, 1996
Exposure Duration	years	6	Texas, 1996
Averaging Time: Carcinogenic	years	70	Texas, 1996
Noncarcinogenic	years	6	Texas, 1996
		Inhalation (Potential Exposure)	
Inhalation Rate	m^3/day	20	Texas, 1996

NOTE:

Texas, 1996 *Texas Risk Reduction Program Concept, Document 2, Volumes 1-3*, December 16, 1996.

TABLE 6-12
EXPOSURE ASSUMPTIONS - GALVESTON, TEXAS
SCENARIO 5: UTILITY WORKER

Exposure Scenario:	Worker Exposure to Surface Soils During Utility Line Repair, Maintenance
Case/Timing:	Current Site Conditions, Future Land Use
Primary Activity:	Parking Lot
Exposed People:	Utility Workers

Variable	Units	Values	Notes and References
		Physical Attribute of Population	
Average Body Weight	kg	70	Texas, 1996
Average Lifetime	years	70	Texas, 1996
		Total Exposure Duration	
Exposure Time	hours/day	1	Case-Specific
Exposure Frequency	days/year	1	Case-Specific
Exposure Duration	years	25	Texas, 1996
Averaging Time: Carcinogenic	years	70	Texas, 1996
Noncarcinogenic	years	25	Texas, 1996
		Ingestion of Surface Soil (Potential Exposure)	
Ingestion Rate	mg/day	480	Texas, 1996 - Construction Worker
		Dermal Adsorption of Surface Soil (Potential Exposure)	
Soil Adherence	mg/cm^2	0.12	Texas, 1996
Surface Area of Skin	cm^2	3,300	Texas, 1996 - Head, Hands, Forearms
		Inhalation (Potential Exposure)	
Inhalation Rate	m^3/day	20	Texas, 1996

NOTE:

Texas, 1996 — *Texas Risk Reduction Program Concept, Document 2, Volumes 1-3*, December 16, 1996.

6.4 Risk Characterization

Once the exposure for a population is determined (the intake or the amount of the chemical accessible) and the toxicity information for the COI is determined (measured by the RfD for noncarcinogens and the cancer potency factor for carcinogens) the risk to a certain population can be determined. This determination is referred to as risk characterization.

Risk characterization involves the integration of estimates of exposure developed as part of the exposure assessment with health effects information developed as part of the toxicity assessment. Potential noncarcinogenic effects are characterized by comparisons between the determined exposure dose (average daily dose or ADD) and the RfDs, which result in the calculation of a hazard index. To characterize potential carcinogenic effects, probabilities that an individual will develop cancer over a lifetime of exposure are calculated using average lifetime doses and CPFs.

Risk characterization includes assessment of the sources of uncertainty associated with the risk estimates. Uncertainty associated with the key variables that influences the risk estimates have been discussed qualitatively.

6.4.1 Estimating Noncarcinogenic Human Health Risks

The potential for noncarcinogenic health effects has been evaluated by comparing an exposure dose to an RfD. This ratio of exposure to toxicity is termed a Hazard Quotient. The equation used for estimating Hazard Quotients is as follows:

$$\text{HAZARD QUOTIENT} = \frac{\text{AVERAGE DAILY DOSE}}{\text{RfD}}$$

For each exposure scenario, Hazard Quotients are estimated for the COIs present in each exposure route (dermal, ingestion, inhalation). To assess the overall potential for noncarcinogenic effects, a Hazard Index is calculated for each exposure route by summing the Hazard Quotients due to each individual chemical. The dermal and ingestion exposure route Hazard Indices were combined into one index by adding the two respective Hazard Indices. Hazard Index values in excess of 1 indicate the *potential* for some (generally sublethal) adverse health effects. A Hazard Index less than 1 will indicate that it is unlikely for even sensitive subpopulations to experience adverse health effects.

6.4.2 Estimating Carcinogenic Human Health Risks

The potential for carcinogenic effects are estimated by calculating the incremental probability of an individual developing cancer during their lifetime. The equation used for estimating Incremental Lifetime Cancer Risk (ILCR) is as follows:

*ILCR = (LIFETIME AVERAGE DAILY DOSE) * (CANCER POTENCY FACTOR)*

For each exposure scenario, ILCRs are estimated for carcinogenic COIs. To assess the overall potential for carcinogenic effects, an ILCR is calculated for each COI. The cancer risks for each COI are then summed to provide an ILCR for each exposure route. The dermal and ingestion exposure route ICLR were then summed to create one risk for these two pathways.

The ICLR for each exposure route will be compared to the 1.0E-05 risk criteria. A risk of 1.0E-05 indicates an incremental increase above the background cancer risk that an individual will develop cancer due to exposure to chemical constituents at the Site. Risks greater than 1.0E-05 are generally considered unacceptable by the state of Texas for *environmental* risks. The word "environmental" is italicized because often in an occupational setting, risks are viewed differently than in settings in which exposures are not work-related or are involuntary.

6.4.3 Site-Specific Calculated Human Health Risks

Table 6-12 summarizes the quantitative calculations of risk determined for each population potentially exposed to surface soils. The Hazard Index and Cancer Risk numbers are cumulative risks. This cumulative risk is the sum of the risks posed by each different COI as discussed in the above subsections.

TABLE 6-13
QUANTITATIVE RESULTS FOR HAZARDOUS AND NONHAZARDOUS RISK

	Ingestion of and Dermal Exposure to Soils		On-Site Inhalation of Vapors and Particulates		On-Site Inhalation of Vapors		Off-Site Inhalation of Vapors	
	HI	CR	HI	CR	HI	CR	HI	CR
City Vehicle Driver	NE	NE	NE	NE	1.1E-5	1.5E-9	NA	NA
Groundskeeper	2.8E-4	2.2E-6	3.2E-6	4.6E-10	NA	NA	NA	NA
Utility Worker	1.2E-4	3.9E-7	8.5E-7	1.2E-10	NA	NA	NA	NA
Child Trespassing	NE	NE	NE	NE	3.5E-3	1.2E-7	NA	NA
Child Living Across Street	NE	NE	NE	NE	NE	NE	3.5E-3	1.2E-7
Adult Resident Living Across Street	NE	NE	NE	NE	NE	NE	3.2E-4	6.2E-8

NOTES:

HI Hazard Index
CR Cancer Risk
NE No Exposure
NA Not Applicable

As discussed above, a Hazard Index of less than 1 indicates that it is unlikely for even sensitive subpopulations to experience adverse health effects. None of the Hazard Indices for any subpopulation was 1 or greater indicating no significant noncarcinogenic risks. As discussed, a value of 1.0E-05 is typically used as a benchmark when evaluating carcinogenic risks. None of the CR values for any exposed population was greater than 1E-5, indicating no significant carcinogenic risks exist for the Site used as a parking lot as described previously.

6.4.4 Uncertainty in Risk Characterization

It should be reemphasized that in conducting any quantitative assessment of health risk to environmental exposures that numerous assumptions and uncertainties combine, the net result being that the value of risk calculated cannot be considered an absolute or precise calculation of risk; the value represents a reasonable estimate based on the assumptions and conservative estimates. Numerous variables will differ from individual to individual concerning exposures to environmental conditions (*i.e.*, exposure frequency, dose, physiological effect to the dose of the chemical, etc.). The results of this RA, therefore, should be viewed as a relative estimate of risk rather than an absolute calculation of risk.

6.5 Risk Comparisons

Comparing the estimated risk for potential Site receptors to other estimated risks can be useful in gaining perspective on the magnitude of the Site risk by providing benchmarks for unfamiliar

numbers. The goal of "putting the numbers in perspective" is to provide the public a means to evaluate RA results, often presented as unfamiliar statistical data, in order to make informed decisions regarding risks to health and safety.

The incrementation lifetime cancer risks estimated for the Site ranged from 2.2E-6 to 1.2E-10. The following is a list of various estimates of annual risks of death associated with common activities (Wilson and Crouch, 1987).

TABLE 6-14
RISKS OF COMMON ACTIVITIES

Action	Annual Risk	Uncertainty
Motor Vehicle Accident (total)	2.4E-04	10%
Motor Vehicle Accident (pedestrian only)	4.2E-05	10%
Home Accidents	1.1E-04	5%
Electrocution	5.3E-06	5%
Air Pollution, eastern U.S.	2.0E-04	Factor of 20 (downward only)
Cigarette Smoking (one pack/day)	3.6E-05	Factor of 3
Sea-Level Background Radiation (except radon)	2.0E-05	Factor of 3
All Cancers	2.8E-03	10%
4 Tablespoons of Peanut Butter per Day	8.0E-06	Factor of 3
Drinking Water with USEPA Limit of Chloroform	6.0E-07	Factor of 10
Drinking Water with USEPA Limit of Trichloroethylene	2.0E-09	Factor of 10
Alcohol, Light Drinker	2.0E-05	Factor of 10
Police Killer in Line of Duty (total)	2.2E-04	20%
Police Killed in Line of Duty (by felons)	1.3E-04	10%
Frequent Flying	5.0E-05	50%

TABLE 6-14
RISKS OF COMMON ACTIVITIES

Action	Annual Risk	Uncertainty
Mountaineering (mountaineers)	6.0E-04	50%

In general, the risk estimates associated with the subject Site are similar to those of the listed common activities. It should be noted, however, that the risks listed in Table 6-14 were estimated using various methods of calculation that are likely to be different than the methods used to calculate risk at the Site.

Listed below are other common events/activities and the estimated time needed for each to accumulate a 1.0E-06 (1 in 1,000,000) risk of death (Menzie, *et.al.*, 1994).

TABLE 6-15
ACCUMULATION OF RISK FOR COMMON ACTIVITIES

Event	Time Needed to Accumulate 1.0E-06 Risk to Death
Non-Occupational	
Automobile Accident	1.5 days
Background Radiation	2 days
Tornado	20 months
Lightening Strike	2 years
Occupational	
Heavy Construction/Mining	14 hours
Agricultural/Farming	15 hours
Police Officer	3.5 days
Factory Worker	4.5 days

As illustrated in the above tables, individuals are often willing to take large risks in everyday activities and occupations, but are unwilling to assume risks of the same magnitude for other activities. This is attributed to the fact that when risks are viewed as voluntary, and individuals feel they have some control or say in decisions regarding the risk, the risk may be viewed as more acceptable. Risks associated with common activities and events are often well known and documented, and individuals may have experienced the risks involved to some extent. Occupational risks used in these comparisons usually involve compensation to offset some of the assumed risks. Risks with unknown or "dreaded" outcomes, or that have been imposed on an individual or group involuntarily, are more likely to be viewed negatively.

The risk comparisons should be used with caution. The comparisons may be misleading if dissimilar risks are used and the comparison may also inappropriately imply that large risks will justify small risks. By providing information and attempting to educate the public about unfamiliar risks, it is intended that these unfamiliar risks will be viewed as less dreaded or unacceptable. However, there is little quantitative data regarding public perception and decision making with respect to risks to health, safety, and the environment. One recent study (Freudenburg and Rursch, 1994) indicated that using the comparison approach may have the opposite of the intended effect, and increase negative public reaction to a risk. The study reported that the use of comparisons was viewed as an attempt to downplay the risks and to further the agenda of those creating the risk. The problem of effectively communicating the magnitude of unfamiliar risks that are often presented through RAs is complex and is currently the subject of ongoing research and debate.

7.0 CONCLUSIONS AND RECOMMENDATIONS

At the request of Southern Union and the city of Galveston, GEI/Atlantic conducted an assessment of surface soil and air quality conditions at the property located at 33rd Street and Avenue E (Site) in Galveston, Texas. The outcome of the SA was utilized to support completion of a quantitative RA of health risks associated with the use of the Site as a paved parking lot. The FSP, including the collection of surface soil (0 to 0.5 feet bgs) and air quality monitoring samples, was performed in September 1997.

The results of the FSP and subsequent sample analyses indicate that certain SVOC compounds which have been associated with other MGP sites were present in surface soils. Air monitoring indicated that there are no effects to the air quality due to aromatic hydrocarbons at the Site.

A quantitative RA of health risks was completed utilizing the outcome of the SA, including potential impacts to human health associated with environmental exposures at the Site. The RA was conducted consistent with RAGS and TNRCC TRPP guidance. The assumed use of the Site for the RA was as a paved parking lot for city-owned vehicles. The quantitative assessment indicated that given the Site use as a paved parking lot, the carcinogenic and noncarcinogenic risks at the Site do not exceed acceptable limits as provided by the state of Texas. In other words, the use of the Site as a paved parking lot should not create excess risks for the on-site workers or nearby residents (adults and children) as described previously. The RA also concluded that comparable results for protection of human health can be accomplished by utilizing clean imported top soil in landscaped areas of the Site which are not paved. The RA also assumes that the parking lot surface will be maintained to ensure the integrity of the surface and that landscaped areas will be designed to maintain the top soil cover and ground cover intact.

In order to ensure the appropriate maintenance and future utilization of the Site consistent with the use as evaluated, it is GEI/Atlantic's professional opinion that institutional controls and deed restrictions be implemented. Finally, GEI/Atlantic was hired to evaluate surface soil and air quality at the Site and to assess health risks associated with the potential use of the Site as a paved parking lot. GEI/Atlantic cannot warranty the nature of other non-evaluated media at the Site or use of the Site for uses other than as a paved parking lot.

[I:\GEI\PROJECTS\S_UNION\97521\RA.DOC]

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APPENDIX A

Soil Analytical Reports

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

PROJECT QUALITY CONTROL DATA

Matrix Spike Recoverg

Analgte	units	Orig. Val.	MS Val	Spike Conc	Recovery	Target Range	Q.C. Batch
Benzene	mg/kg	< 0.0010	0.0500	0.0500	100.00	76. - 130.	4166
Toluene	mg/kg	< 0.0010	0.0480	0.0500	96.00	69. - 126.	4166
Ethylbenzene	mg/kg	< 0.0010	0.0510	0.0500	102.00	68. - 127.	4166
Xylenes, total	mg/kg	< 0.001	0.151	0.150	100.67	61. - 138.	4166

Matrix Spike Duplicate

Analgte	units	Orig. Val.	Duplicate	RPD	Limit	Q.C. Batch
Benzene	mg/kg	0.0500	0.0510	1.98	14.	4166
Toluene	mg/kg	0.0480	0.0500	4.08	19.	4166
Ethylbenzene	mg/kg	0.0510	0.0530	3.85	16.	4166
Xylenes, total	mg/kg	0.151	0.157	3.90	25.	4166

Laboratory Control Data

Analgte	units	Known Val.	Analyzed Val	% Recovery	Target Range	Q.C. Batch
Benzene	mg/kg	0.0500	0.0520	104.	76. - 130.	4166
Toluene	mg/kg	0.0500	0.0500	100.	69. - 126.	4166
Ethylbenzene	mg/kg	0.0500	0.0540	108.	68. - 127.	4166
Xylenes, total	mg/kg	0.150	0.159	106.	61. - 138.	4166

Blank Data

Analgte	Blank Value	Units	Q.C. Batch
Benzene	< 0.0010	mg/kg	4166
Toluene	< 0.0010	mg/kg	4166
Ethylbenzene	< 0.0010	mg/kg	4166
Xylenes, total	< 0.001	mg/kg	4166

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

ATLANTIC ENVIRONMENTAL SERV. 6043
ATTN. TOM HELFICH
2232 WELSCH IND. COURT
ST. LOUIS, MO 63146

Lab Number: 97-A076095

Sample ID: #1

Date Collected: 9/ 7/97

Project: 97521

Time Collected:

Project Name: 33RD ST. SITE

Date Received: 9/ 9/97

Sampler: DAVID PLUHAR

Time Received: 9:00

State Certification:

Sample Type: Soil

Site I.D.:

Analyte	Result	Units	Report Limit	Avgn Limit	Dil Factor	Date	Time	Analyst	Method	Batch
EXTRACTABLE ORGANICS										
Acenaphthene	ND	mg/kg	3.33	0.333	10	9/22/97	6:07	M.Goodrich	8270C	3714
Acenaphthylene	ND	mg/kg	3.33	0.333	10	9/22/97	6:07	M.Goodrich	8270C	3714
Anthracene	ND	mg/kg	3.33	0.333	10	9/22/97	6:07	M.Goodrich	8270C	3714
Benzo(a)anthracene	5.33	mg/kg	3.33	0.333	10	9/22/97	6:07	M.Goodrich	8270C	3714
Benzo(a)pyrene	ND	mg/kg	3.33	0.333	10	9/22/97	6:07	M.Goodrich	8270C	3714
Benzo(b)fluoranthene	4.00	mg/kg	3.33	0.333	10	9/22/97	6:07	M.Goodrich	8270C	3714
Benzo(g,h,i)perylene	ND	mg/kg	3.33	0.333	10	9/22/97	6:07	M.Goodrich	8270C	3714
Benzo(k)fluoranthene	ND	mg/kg	3.33	0.333	10	9/22/97	6:07	M.Goodrich	8270C	3714
4-Bromophenylphenylether	ND	mg/kg	3.33	0.333	10	9/22/97	6:07	M.Goodrich	8270C	3714
Butylbenzylphthalate	ND	mg/kg	3.33	0.333	10	9/22/97	6:07	M.Goodrich	8270C	3714
Carbazole	ND	mg/kg	3.33	0.333	10	9/22/97	6:07	M.Goodrich	8270C	3714
4-Chloro-3-methylphenol	ND	mg/kg	3.33	0.333	10	9/22/97	6:07	M.Goodrich	8270C	3714
4-Chloroaniline	ND	mg/kg	3.33	0.333	10	9/22/97	6:07	M.Goodrich	8270C	3714
bis(2-Chloroethoxy)methane	ND	mg/kg	3.33	0.333	10	9/22/97	6:07	M.Goodrich	8270C	3714
bis(2-Chloroethyl)ether	ND	mg/kg	3.33	0.333	10	9/22/97	6:07	M.Goodrich	8270C	3714
bis(2-Chloroisopropyl)ether	ND	mg/kg	3.33	0.333	10	9/22/97	6:07	M.Goodrich	8270C	3714
2-Chloronaphthalene	ND	mg/kg	3.33	0.333	10	9/22/97	6:07	M.Goodrich	8270C	3714
2-Chlorophenol	ND	mg/kg	3.33	0.333	10	9/22/97	6:07	M.Goodrich	8270C	3714
4-Chlorophenylphenylether	ND	mg/kg	3.33	0.333	10	9/22/97	6:07	M.Goodrich	8270C	3714
Chrysene	ND	mg/kg	3.33	0.333	10	9/22/97	6:07	M.Goodrich	8270C	3714
Dibenzofuran	ND	mg/kg	3.33	0.333	10	9/22/97	6:07	M.Goodrich	8270C	3714
Dibenz(a,h)anthracene	ND	mg/kg	3.33	0.333	10	9/22/97	6:07	M.Goodrich	8270C	3714
1,2-Dichlorobenzene	ND	mg/kg	3.33	0.333	10	9/22/97	6:07	M.Goodrich	8270C	3714
1,3-Dichlorobenzene	ND	mg/kg	3.33	0.333	10	9/22/97	6:07	M.Goodrich	8270C	3714
1,4-Dichlorobenzene	ND	mg/kg	3.33	0.333	10	9/22/97	6:07	M.Goodrich	8270C	3714
3,3'-Dichlorobenzidine	ND	mg/kg	6.66	0.666	10	9/22/97	6:07	M.Goodrich	8270C	3714
2,4-Dichlorophenol	ND	mg/kg	3.33	0.333	10	9/22/97	6:07	M.Goodrich	8270C	3714
Diethylphthalate	ND	mg/kg	3.33	0.333	10	9/22/97	6:07	M.Goodrich	8270C	3714

COPY 1

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

Laboratory Number: 97-A076095
Sample ID: #1

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
2,4-Dimethylphenol	ND	mg/kg	3.33	0.333	10	9/22/97	6:07	M.Goodrich	8270C	3714
Dimethylphthalate	ND	mg/kg	3.33	0.333	10	9/22/97	6:07	M.Goodrich	8270C	3714
Di-n-butylphthalate	ND	mg/kg	3.33	0.333	10	9/22/97	6:07	M.Goodrich	8270C	3714
4,6-Dinitro-2-methylphenol	ND	mg/kg	8.32	0.830	10	9/22/97	6:07	M.Goodrich	8270C	3714
2,4-Dinitrophenol	ND	mg/kg	8.32	0.830	10	9/22/97	6:07	M.Goodrich	8270C	3714
2,4-dinitrotoluene	ND	mg/kg	3.33	0.333	10	9/22/97	6:07	M.Goodrich	8270C	3714
2,6-Dinitrotoluene	ND	mg/kg	3.33	0.333	10	9/22/97	6:07	M.Goodrich	8270C	3714
Di-n-octylphthalate	ND	mg/kg	3.33	0.333	10	9/22/97	6:07	M.Goodrich	8270C	3714
Fluoranthene	ND	mg/kg	3.33	0.333	10	9/22/97	6:07	M.Goodrich	8270C	3714
Fluorene	ND	mg/kg	3.33	0.333	10	9/22/97	6:07	M.Goodrich	8270C	3714
Hexachlorobenzene	ND	mg/kg	3.33	0.333	10	9/22/97	6:07	M.Goodrich	8270C	3714
Hexachlorobutadiene	ND	mg/kg	3.33	0.333	10	9/22/97	6:07	M.Goodrich	8270C	3714
Hexachlorocyclopentadiene	ND	mg/kg	3.33	0.333	10	9/22/97	6:07	M.Goodrich	8270C	3714
Hexachloroethane	ND	mg/kg	3.33	0.333	10	9/22/97	6:07	M.Goodrich	8270C	3714
[illegible]eno(1,2,3-cd)pyrene	ND	mg/kg	3.33	0.333	10	9/22/97	6:07	M.Goodrich	8270C	3714
[illegible]horone	ND	mg/kg	3.33	0.333	10	9/22/97	6:07	M.Goodrich	8270C	3714
2-[illegible]thylnaphthalene	ND	mg/kg	3.33	0.333	10	9/22/97	6:07	M.Goodrich	8270C	3714
2-Methylphenol	ND	mg/kg	3.33	0.333	10	9/22/97	6:07	M.Goodrich	8270C	3714
m,p-Methylphenol	ND	mg/kg	3.33	0.333	10	9/22/97	6:07	M.Goodrich	8270C	3714
Naphthalene	ND	mg/kg	3.33	0.333	10	9/22/97	6:07	M.Goodrich	8270C	3714
2-Nitroaniline	ND	mg/kg	8.32	0.830	10	9/22/97	6:07	M.Goodrich	8270C	3714
3-Nitroaniline	ND	mg/kg	8.32	0.830	10	9/22/97	6:07	M.Goodrich	8270C	3714
4-Nitroaniline	ND	mg/kg	8.32	0.830	10	9/22/97	6:07	M.Goodrich	8270C	3714
Nitrobenzene	ND	mg/kg	3.33	0.333	10	9/22/97	6:07	M.Goodrich	8270C	3714
2-Nitrophenol	ND	mg/kg	3.33	0.333	10	9/22/97	6:07	M.Goodrich	8270C	3714
4-Nitrophenol	ND	mg/kg	8.32	0.830	10	9/22/97	6:07	M.Goodrich	8270C	3714
N-nitrosodi-n-propylamine	ND	mg/kg	3.33	0.333	10	9/22/97	6:07	M.Goodrich	8270C	3714
N-nitrosodiphenylamine	ND	mg/kg	3.33	0.333	10	9/22/97	6:07	M.Goodrich	8270C	3714
Pentachlorophenol	ND	mg/kg	8.32	0.830	10	9/22/97	6:07	M.Goodrich	8270C	3714
Phenanthrene	ND	mg/kg	3.33	0.333	10	9/22/97	6:07	M.Goodrich	8270C	3714
Phenol	ND	mg/kg	3.33	0.333	10	9/22/97	6:07	M.Goodrich	8270C	3714
Pyrene	10.3	mg/kg	3.33	0.333	10	9/22/97	6:07	M.Goodrich	8270C	3714
Bis(2-ethylhexyl)phthalate	ND	mg/kg	3.33	0.333	10	9/22/97	6:07	M.Goodrich	8270C	3714
1,2,4-Trichlorobenzene	ND	mg/kg	3.33	0.333	10	9/22/97	6:07	M.Goodrich	8270C	3714
2,4,5-Trichlorophenol	ND	mg/kg	8.32	0.830	10	9/22/97	6:07	M.Goodrich	8270C	3714
2,4,6-Trichlorophenol	ND	mg/kg	3.33	0.333	10	9/22/97	6:07	M.Goodrich	8270C	3714
METALS										
Antimony	ND	mg/kg	9.54	9.54	1	9/14/97	0:45	R.Street	6010B	2714
[illegible]enic	5.53	mg/kg	0.95	0.95	1	9/14/97	0:45	R.Street	6010B	2714
[illegible]um	64.3	mg/kg	0.95	0.95	1	9/14/97	0:45	R.Street	6010B	2714
B[illegible]llium	ND	mg/kg	0.95	0.95	1	9/14/97	0:45	R.Street	6010B	2714
Cadmium	ND	mg/kg	0.95	0.95	1	9/14/97	0:45	R.Street	6010B	2714
Chromium	4.96	mg/kg	0.95	0.95	1	9/14/97	0:45	R.Street	6010B	2714

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

Laboratory Number: 97-A076095
Sample ID: #1

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
Lead	267.	mg/kg	0.95	0.95	1	9/14/97	0:45	R.Street	6010B	2714
Mercury	0.11	mg/kg	0.10	0.10	1	9/11/97	15:18	R.Street	7471	2507
Nickel	12.8	mg/kg	0.95	0.95	1	9/14/97	0:45	R.Street	6010B	2714
Selenium	ND	mg/kg	0.95	0.95	1	9/14/97	0:45	R.Street	6010B	2714
Silver	ND	mg/kg	0.95	0.95	1	9/14/97	0:45	R.Street	6010B	2714
Thallium	ND	mg/kg	0.95	0.95	1	9/14/97	0:45	R.Street	6010B	2714
Vanadium	17.0	mg/kg	9.54	9.54	1	9/14/97	0:45	R.Street	6010B	2714
GENERAL CHEMISTRY PARAMETERS										
Cyanide	ND	mg/kg	2.00	2.00	1	9/13/97	8:03	A Hardison	9012A	3863

ND = Not detected at the report limit.

Sample Extraction Data

BNA's Extracted 9/11/97 Wt extracted: 30.0 gm Extract Volume: 1.0 ml C.Gereaser

** SURROGATE RECOVERIES **

Surrogate	% Recovery	Target Range
BNA Surr., Nitrobenzene-d5	55.0	23. - 120.
BNA Surr., 2-Fluorobiphenyl	51.0	30. - 115.
BNA Surrogate, Terphenyl d14	79.0	18. - 140.
BNA Surrogate, Phenol d5	50.0	10. - 115.
BNA Surrogate, 2-Fluorophenol	43.0	20. - 121.
BNA Surrogate, 2,4,6-Tribromophenol	79.0	19. - 122.

Report Approved By: Michael H. Dunn Report Date: 9/22/97

Theodore J. Duello, Ph.D., Q.A. Officer
Michael H. Dunn, M.S., Technical Director
Danny B. Hale, M.S., Laboratory Director

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

'LANTIC ENVIRONMENTAL SERV. 6043
TTN. TOM HELFICH
'232 WELSCH IND. COURT
'. LOUIS, MO 63146

Lab Number: 97-A076096

ample ID: #2

Date Collected: 9/ 7/97

·oject: 97521

Time Collected:

-oject Name: 33RD ST. SITE

Date Received: 9/ 9/97

ampler: DAVID PLUHAR

Time Received: 9:00

:ate Certification:

Sample Type: Soil

ite I.D.:

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
SACTABLE ORGANICS*										
A aphthene	ND	mg/kg	1.66	0.333	5	9/17/97	11:17	M.Goodrich	8270C	3714
Acenaphthylene	ND	mg/kg	1.66	0.333	5	9/17/97	11:17	M.Goodrich	8270C	3714
Anthracene	ND	mg/kg	1.66	0.333	5	9/17/97	11:17	M.Goodrich	8270C	3714
Benzo(a)anthracene	ND	mg/kg	1.66	0.333	5	9/17/97	11:17	M.Goodrich	8270C	3714
Benzo(a)pyrene	ND	mg/kg	1.66	0.333	5	9/17/97	11:17	M.Goodrich	8270C	3714
Benzo(b)fluoranthene	ND	mg/kg	1.66	0.333	5	9/17/97	11:17	M.Goodrich	8270C	3714
Benzo(g,h,i)perylene	ND	mg/kg	1.66	0.333	5	9/17/97	11:17	M.Goodrich	8270C	3714
Benzo(k)fluoranthene	ND	mg/kg	1.66	0.333	5	9/17/97	11:17	M.Goodrich	8270C	3714
4-Bromophenylphenylether	ND	mg/kg	1.66	0.333	5	9/17/97	11:17	M.Goodrich	8270C	3714
Butylbenzylphthalate	ND	mg/kg	1.66	0.333	5	9/17/97	11:17	M.Goodrich	8270C	3714
Carbazole	ND	mg/kg	1.66	0.333	5	9/17/97	11:17	M.Goodrich	8270C	3714
4-Chloro-3-methylphenol	ND	mg/kg	1.66	0.333	5	9/17/97	11:17	M.Goodrich	8270C	3714
4-Chloroaniline	ND	mg/kg	1.66	0.333	5	9/17/97	11:17	M.Goodrich	8270C	3714
bis(2-Chloroethoxy)methane	ND	mg/kg	1.66	0.333	5	9/17/97	11:17	M.Goodrich	8270C	3714
bis(2-Chloroethyl)ether	ND	mg/kg	1.66	0.333	5	9/17/97	11:17	M.Goodrich	8270C	3714
bis(2-Chloroisopropyl)ether	ND	mg/kg	1.66	0.333	5	9/17/97	11:17	M.Goodrich	8270C	3714
2-Chloronaphthalene	ND	mg/kg	1.66	0.333	5	9/17/97	11:17	M.Goodrich	8270C	3714
2-Chlorophenol	ND	mg/kg	1.66	0.333	5	9/17/97	11:17	M.Goodrich	8270C	3714
4-Chlorophenylphenylether	ND	mg/kg	1.66	0.333	5	9/17/97	11:17	M.Goodrich	8270C	3714
Chrysene	ND	mg/kg	1.66	0.333	5	9/17/97	11:17	M.Goodrich	8270C	3714
Dibenzofuran	ND	mg/kg	1.66	0.333	5	9/17/97	11:17	M.Goodrich	8270C	3714
Dibenz(a,h)anthracene	ND	mg/kg	1.66	0.333	5	9/17/97	11:17	M.Goodrich	8270C	3714
1,2-Dichlorobenzene	ND	mg/kg	1.66	0.333	5	9/17/97	11:17	M.Goodrich	8270C	3714
1,3-Dichlorobenzene	ND	mg/kg	1.66	0.333	5	9/17/97	11:17	M.Goodrich	8270C	3714
1,4-Dichlorobenzene	ND	mg/kg	1.66	0.333	5	9/17/97	11:17	M.Goodrich	8270C	3714
3,3-Dichlorobenzidine	ND	mg/kg	3.33	0.666	5	9/17/97	11:17	M.Goodrich	8270C	3714
2,4-Dichlorophenol	ND	mg/kg	1.66	0.333	5	9/17/97	11:17	M.Goodrich	8270C	3714
Diethylphthalate	ND	mg/kg	1.66	0.333	5	9/17/97	11:17	M.Goodrich	8270C	3714

COPY 1

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

Laboratory Number: 97-A076096
Sample ID: #2

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
2,4-Dimethylphenol	ND	mg/kg	1.66	0.333	5	9/17/97	11:17	M.Goodrich	8270C	3714
Dimethylphthalate	ND	mg/kg	1.66	0.333	5	9/17/97	11:17	M.Goodrich	8270C	3714
Di-n-butylphthalate	ND	mg/kg	1.66	0.333	5	9/17/97	11:17	M.Goodrich	8270C	3714
4,6-Dinitro-2-methylphenol	ND	mg/kg	4.16	0.830	5	9/17/97	11:17	M.Goodrich	8270C	3714
2,4-Dinitrophenol	ND	mg/kg	4.16	0.830	5	9/17/97	11:17	M.Goodrich	8270C	3714
2,4-dinitrotoluene	ND	mg/kg	1.66	0.333	5	9/17/97	11:17	M.Goodrich	8270C	3714
2,6-Dinitrotoluene	ND	mg/kg	1.66	0.333	5	9/17/97	11:17	M.Goodrich	8270C	3714
Di-n-octylphthalate	ND	mg/kg	1.66	0.333	5	9/17/97	11:17	M.Goodrich	8270C	3714
Fluoranthene	2.16	mg/kg	1.66	0.333	5	9/17/97	11:17	M.Goodrich	8270C	3714
Fluorene	ND	mg/kg	1.66	0.333	5	9/17/97	11:17	M.Goodrich	8270C	3714
Hexachlorobenzene	ND	mg/kg	1.66	0.333	5	9/17/97	11:17	M.Goodrich	8270C	3714
Hexachlorobutadiene	ND	mg/kg	1.66	0.333	5	9/17/97	11:17	M.Goodrich	8270C	3714
Hexachlorocyclopentadiene	ND	mg/kg	1.66	0.333	5	9/17/97	11:17	M.Goodrich	8270C	3714
Hexachloroethane	ND	mg/kg	1.66	0.333	5	9/17/97	11:17	M.Goodrich	8270C	3714
Indeno(1,2,3-cd)pyrene	ND	mg/kg	1.66	0.333	5	9/17/97	11:17	M.Goodrich	8270C	3714
Isophorone	ND	mg/kg	1.66	0.333	5	9/17/97	11:17	M.Goodrich	8270C	3714
2-Methylnaphthalene	ND	mg/kg	1.66	0.333	5	9/17/97	11:17	M.Goodrich	8270C	3714
2-Methylphenol	ND	mg/kg	1.66	0.333	5	9/17/97	11:17	M.Goodrich	8270C	3714
m,p-Methylphenol	ND	mg/kg	1.66	0.333	5	9/17/97	11:17	M.Goodrich	8270C	3714
Naphthalene	ND	mg/kg	1.66	0.333	5	9/17/97	11:17	M.Goodrich	8270C	3714
2-Nitroaniline	ND	mg/kg	4.16	0.830	5	9/17/97	11:17	M.Goodrich	8270C	3714
3-Nitroaniline	ND	mg/kg	4.16	0.830	5	9/17/97	11:17	M.Goodrich	8270C	3714
4-Nitroaniline	ND	mg/kg	4.16	0.830	5	9/17/97	11:17	M.Goodrich	8270C	3714
Nitrobenzene	ND	mg/kg	1.66	0.333	5	9/17/97	11:17	M.Goodrich	8270C	3714
2-Nitrophenol	ND	mg/kg	1.66	0.333	5	9/17/97	11:17	M.Goodrich	8270C	3714
4-Nitrophenol	ND	mg/kg	4.16	0.830	5	9/17/97	11:17	M.Goodrich	8270C	3714
N-nitrosodi-n-propylamine	ND	mg/kg	1.66	0.333	5	9/17/97	11:17	M.Goodrich	8270C	3714
N-nitrosodiphenylamine	ND	mg/kg	1.66	0.333	5	9/17/97	11:17	M.Goodrich	8270C	3714
Pentachlorophenol	ND	mg/kg	4.16	0.830	5	9/17/97	11:17	M.Goodrich	8270C	3714
Phenanthrene	ND	mg/kg	1.66	0.333	5	9/17/97	11:17	M.Goodrich	8270C	3714
Phenol	ND	mg/kg	1.66	0.333	5	9/17/97	11:17	M.Goodrich	8270C	3714
Pyrene	2.33	mg/kg	1.66	0.333	5	9/17/97	11:17	M.Goodrich	8270C	3714
Bis(2-ethylhexyl)phthalate	2.00	mg/kg	1.66	0.333	5	9/17/97	11:17	M.Goodrich	8270C	3714
1,2,4-Trichlorobenzene	ND	mg/kg	1.66	0.333	5	9/17/97	11:17	M.Goodrich	8270C	3714
2,4,5-Trichlorophenol	ND	mg/kg	4.16	0.830	5	9/17/97	11:17	M.Goodrich	8270C	3714
2,4,6-Trichlorophenol	ND	mg/kg	1.66	0.333	5	9/17/97	11:17	M.Goodrich	8270C	3714
METALS										
Antimony	ND	mg/kg	9.94	9.94	1	9/14/97	0:45	R.Street	6010B	2714
Arsenic	3.58	mg/kg	0.99	0.99	1	9/14/97	0:45	R.Street	6010B	2714
Barium	49.5	mg/kg	0.99	0.99	1	9/14/97	0:45	R.Street	6010B	2714
Beryllium	ND	mg/kg	0.99	0.99	1	9/14/97	0:45	R.Street	6010B	2714
Cadmium	ND	mg/kg	0.99	0.99	1	9/14/97	0:45	R.Street	6010B	2714
Chromium	4.57	mg/kg	0.99	0.99	1	9/14/97	0:45	R.Street	6010B	2714

COPY 1

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

Laboratory Number: 97-A076096
Sample ID: #2

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
Lead	152.	mg/kg	0.99	0.99	1	9/14/97	0:45	R.Street	6010B	2714
Mercury	ND	mg/kg	0.10	0.10	1	9/11/97	15:18	R.Street	7471	2507
Nickel	4.97	mg/kg	0.99	0.99	1	9/14/97	0:45	R.Street	6010B	2714
Selenium	ND	mg/kg	0.99	0.99	1	9/14/97	0:45	R.Street	6010B	2714
Silver	ND	mg/kg	0.99	0.99	1	9/14/97	0:45	R.Street	6010B	2714
Thallium	ND	mg/kg	0.99	0.99	1	9/14/97	0:45	R.Street	6010B	2714
Vanadium	ND	mg/kg	9.94	9.94	1	9/14/97	0:45	R.Street	6010B	2714
GENERAL CHEMISTRY PARAMETERS										
Cyanide	ND	mg/kg	2.00	2.00	1	9/13/97	8:05	A Hardison	9012A	3863

ND = Not detected at the report limit.

Sample Extraction Data

BNA's Extracted 9/11/97 Wt extracted: 30.0 gm Extract Volume: 1.0 ml C.Gerasser

** SURROGATE RECOVERIES **

Surrogate	% Recovery	Target Range
BNA Surr., Nitrobenzene-d5	65.0	23. - 120.
BNA Surr., 2-Fluorobiphenyl	70.0	30. - 115.
BNA Surrogate, Terphenyl d14	70.0	18. - 140.
BNA Surrogate, Phenol d5	65.0	10. - 115.
BNA Surrogate, 2-Fluorophenol	55.0	20. - 121.
BNA Surrogate, 2,4,6-Tribromophenol	50.0	19. - 122.

Report Approved By: Michael D. Dunn Report Date: 9/22/97

Theodore J. Duello, Ph.D., Q.A. Officer
Michael H. Dunn, M.S., Technical Director
Danny B. Hale, M.S., Laboratory Director

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

ATLANTIC ENVIRONMENTAL SERV. 6043
ATTN. TOM HELFICH
2232 WELSCH IND. COURT
ST. LOUIS, MO 63146

Lab Number: 97-A076097

Sample ID: #3

Date Collected: 9/ 7/97

Project: 97521

Time Collected:

Project Name: 33RD ST. SITE

Date Received: 9/ 9/97

Sampler: DAVID PLUHAR

Time Received: 9:00

State Certification:

Sample Type: Soil

Site I.D.:

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
EXTRACTABLE ORGANICS										
Acenaphthene	ND	mg/kg	1.66	0.333	5	9/17/97	11:53	M.Goodrich	8270C	3714
Acenaphthylene	ND	mg/kg	1.66	0.333	5	9/17/97	11:53	M.Goodrich	8270C	3714
Anthracene	ND	mg/kg	1.66	0.333	5	9/17/97	11:53	M.Goodrich	8270C	3714
Benzo(a)anthracene	ND	mg/kg	1.66	0.333	5	9/17/97	11:53	M.Goodrich	8270C	3714
Benzo(a)pyrene	ND	mg/kg	1.66	0.333	5	9/17/97	11:53	M.Goodrich	8270C	3714
Benzo(b)fluoranthene	ND	mg/kg	1.66	0.333	5	9/17/97	11:53	M.Goodrich	8270C	3714
Benzo(g,h,i)perylene	ND	mg/kg	1.66	0.333	5	9/17/97	11:53	M.Goodrich	8270C	3714
Benzo(k)fluoranthene	ND	mg/kg	1.66	0.333	5	9/17/97	11:53	M.Goodrich	8270C	3714
4-Bromophenylphenylether	ND	mg/kg	1.66	0.333	5	9/17/97	11:53	M.Goodrich	8270C	3714
Butylbenzylphthalate	ND	mg/kg	1.66	0.333	5	9/17/97	11:53	M.Goodrich	8270C	3714
Carbazole	ND	mg/kg	1.66	0.333	5	9/17/97	11:53	M.Goodrich	8270C	3714
4-Chloro-3-methylphenol	ND	mg/kg	1.66	0.333	5	9/17/97	11:53	M.Goodrich	8270C	3714
4-Chloroaniline	ND	mg/kg	1.66	0.333	5	9/17/97	11:53	M.Goodrich	8270C	3714
bis(2-Chloroethoxy)methane	ND	mg/kg	1.66	0.333	5	9/17/97	11:53	M.Goodrich	8270C	3714
bis(2-Chloroethyl)ether	ND	mg/kg	1.66	0.333	5	9/17/97	11:53	M.Goodrich	8270C	3714
bis(2-Chloroisopropyl)ether	ND	mg/kg	1.66	0.333	5	9/17/97	11:53	M.Goodrich	8270C	3714
2-Chloronaphthalene	ND	mg/kg	1.66	0.333	5	9/17/97	11:53	M.Goodrich	8270C	3714
2-Chlorophenol	ND	mg/kg	1.66	0.333	5	9/17/97	11:53	M.Goodrich	8270C	3714
4-Chlorophenylphenylether	ND	mg/kg	1.66	0.333	5	9/17/97	11:53	M.Goodrich	8270C	3714
Chrysene	ND	mg/kg	1.66	0.333	5	9/17/97	11:53	M.Goodrich	8270C	3714
Dibenzofuran	ND	mg/kg	1.66	0.333	5	9/17/97	11:53	M.Goodrich	8270C	3714
Dibenz(a,h)anthracene	ND	mg/kg	1.66	0.333	5	9/17/97	11:53	M.Goodrich	8270C	3714
1,2-Dichlorobenzene	ND	mg/kg	1.66	0.333	5	9/17/97	11:53	M.Goodrich	8270C	3714
1,3-Dichlorobenzene	ND	mg/kg	1.66	0.333	5	9/17/97	11:53	M.Goodrich	8270C	3714
1,4-Dichlorobenzene	ND	mg/kg	1.66	0.333	5	9/17/97	11:53	M.Goodrich	8270C	3714
3,3'-Dichlorobenzidine	ND	mg/kg	3.33	0.666	5	9/17/97	11:53	M.Goodrich	8270C	3714
2,4-Dichlorophenol	ND	mg/kg	1.66	0.333	5	9/17/97	11:53	M.Goodrich	8270C	3714
Diethylphthalate	ND	mg/kg	1.66	0.333	5	9/17/97	11:53	M.Goodrich	8270C	3714

COPY 1

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

Laboratory Number: 97-A076097
Sample ID: #3

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
2,4-Dimethylphenol	ND	mg/kg	1.66	0.333	5	9/17/97	11:53	M.Goodrich	8270C	3714
Dimethylphthalate	ND	mg/kg	1.66	0.333	5	9/17/97	11:53	M.Goodrich	8270C	3714
Di-n-butylphthalate	ND	mg/kg	1.66	0.333	5	9/17/97	11:53	M.Goodrich	8270C	3714
4,6-Dinitro-2-methylphenol	ND	mg/kg	4.16	0.830	5	9/17/97	11:53	M.Goodrich	8270C	3714
2,4-Dinitrophenol	ND	mg/kg	4.16	0.830	5	9/17/97	11:53	M.Goodrich	8270C	3714
2,4-dinitrotoluene	ND	mg/kg	1.66	0.333	5	9/17/97	11:53	M.Goodrich	8270C	3714
2,6-Dinitrotoluene	ND	mg/kg	1.66	0.333	5	9/17/97	11:53	M.Goodrich	8270C	3714
Di-n-octylphthalate	ND	mg/kg	1.66	0.333	5	9/17/97	11:53	M.Goodrich	8270C	3714
Fluoranthene	ND	mg/kg	1.66	0.333	5	9/17/97	11:53	M.Goodrich	8270C	3714
Fluorene	ND	mg/kg	1.66	0.333	5	9/17/97	11:53	M.Goodrich	8270C	3714
Hexachlorobenzene	ND	mg/kg	1.66	0.333	5	9/17/97	11:53	M.Goodrich	8270C	3714
Hexachlorobutadiene	ND	mg/kg	1.66	0.333	5	9/17/97	11:53	M.Goodrich	8270C	3714
Hexachlorocyclopentadiene	ND	mg/kg	1.66	0.333	5	9/17/97	11:53	M.Goodrich	8270C	3714
Hexachloroethane	ND	mg/kg	1.66	0.333	5	9/17/97	11:53	M.Goodrich	8270C	3714
Indeno(1,2,3-cd)pyrene	ND	mg/kg	1.66	0.333	5	9/17/97	11:53	M.Goodrich	8270C	3714
Isophorone	ND	mg/kg	1.66	0.333	5	9/17/97	11:53	M.Goodrich	8270C	3714
2-Methylnaphthalene	ND	mg/kg	1.66	0.333	5	9/17/97	11:53	M.Goodrich	8270C	3714
2-Methylphenol	ND	mg/kg	1.66	0.333	5	9/17/97	11:53	M.Goodrich	8270C	3714
m,p-Methylphenol	ND	mg/kg	1.66	0.333	5	9/17/97	11:53	M.Goodrich	8270C	3714
Naphthalene	ND	mg/kg	1.66	0.333	5	9/17/97	11:53	M.Goodrich	8270C	3714
2-Nitroaniline	ND	mg/kg	4.16	0.830	5	9/17/97	11:53	M.Goodrich	8270C	3714
3-Nitroaniline	ND	mg/kg	4.16	0.830	5	9/17/97	11:53	M.Goodrich	8270C	3714
4-Nitroaniline	ND	mg/kg	4.16	0.830	5	9/17/97	11:53	M.Goodrich	8270C	3714
Nitrobenzene	ND	mg/kg	1.66	0.333	5	9/17/97	11:53	M.Goodrich	8270C	3714
2-Nitrophenol	ND	mg/kg	1.66	0.333	5	9/17/97	11:53	M.Goodrich	8270C	3714
4-Nitrophenol	ND	mg/kg	4.16	0.830	5	9/17/97	11:53	M.Goodrich	8270C	3714
N-nitrosodi-n-propylamine	ND	mg/kg	1.66	0.333	5	9/17/97	11:53	M.Goodrich	8270C	3714
N-nitrosodiphenylamine	ND	mg/kg	1.66	0.333	5	9/17/97	11:53	M.Goodrich	8270C	3714
Pentachlorophenol	ND	mg/kg	4.16	0.830	5	9/17/97	11:53	M.Goodrich	8270C	3714
Phenanthrene	ND	mg/kg	1.66	0.333	5	9/17/97	11:53	M.Goodrich	8270C	3714
Phenol	ND	mg/kg	1.66	0.333	5	9/17/97	11:53	M.Goodrich	8270C	3714
Pyrene	ND	mg/kg	1.66	0.333	5	9/17/97	11:53	M.Goodrich	8270C	3714
Bis(2-ethylhexyl)phthalate	2.83	mg/kg	1.66	0.333	5	9/17/97	11:53	M.Goodrich	8270C	3714
1,2,4-Trichlorobenzene	ND	mg/kg	1.66	0.333	5	9/17/97	11:53	M.Goodrich	8270C	3714
2,4,5-Trichlorophenol	ND	mg/kg	4.16	0.830	5	9/17/97	11:53	M.Goodrich	8270C	3714
2,4,6-Trichlorophenol	ND	mg/kg	1.66	0.333	5	9/17/97	11:53	M.Goodrich	8270C	3714
METALS										
Antimony	ND	mg/kg	9.77	9.77	1	9/14/97	0:45	R.Street	6010B	2714
Arsenic	7.62	mg/kg	0.98	0.98	1	9/14/97	0:45	R.Street	6010B	2714
Barium	39.1	mg/kg	0.98	0.98	1	9/14/97	0:45	R.Street	6010B	2714
Beryllium	ND	mg/kg	0.98	0.98	1	9/14/97	0:45	R.Street	6010B	2714
Cadmium	ND	mg/kg	0.98	0.98	1	9/14/97	0:45	R.Street	6010B	2714
Chromium	4.10	mg/kg	0.98	0.98	1	9/14/97	0:45	R.Street	6010B	2714

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

Laboratory Number: 97-A076097
Sample ID: #3

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
Lead	91.0	mg/kg	0.98	0.98	1	9/14/97	0:45	R.Street	6010B	2714
Mercury	ND	mg/kg	0.10	0.10	1	9/11/97	15:18	R.Street	7471	2507
Nickel	3.52	mg/kg	0.98	0.98	1	9/14/97	0:45	R.Street	6010B	2714
Selenium	ND	mg/kg	0.98	0.98	1	9/14/97	0:45	R.Street	6010B	2714
Silver	ND	mg/kg	0.98	0.98	1	9/14/97	0:45	R.Street	6010B	2714
Thallium	ND	mg/kg	0.98	0.98	1	9/14/97	0:45	R.Street	6010B	2714
Vanadium	ND	mg/kg	9.77	9.77	1	9/14/97	0:45	R.Street	6010B	2714
GENERAL CHEMISTRY PARAMETERS										
Cyanide	ND	mg/kg	2.00	2.00	1	9/13/97	8:06	A Hardison	9012A	3863

ND = Not detected at the report limit.

Sample Extraction Data

BNA's Extracted 9/11/97 Wt extracted: 30.0 gm Extract Volume: 1.0 ml C.Gereuser

** SURROGATE RECOVERIES **

Surrogate	% Recovery	Target Range
BNA Surr., Nitrobenzene-d5	60.0	23. - 120.
BNA Surr., 2-Fluorobiphenyl	70.0	30. - 115.
BNA Surrogate, Terphenyl d14	75.0	18. - 140.
BNA Surrogate, Phenol d5	65.0	10. - 115.
BNA Surrogate, 2-Fluorophenol	50.0	20. - 121.
BNA Surrogate, 2,4,6-Tribromophenol	55.0	19. - 122.

Report Approved By: Michael H. Dunn Report Date: 9/22/97

Theodore J. Duello, Ph.D., Q.A. Officer
Michael H. Dunn, M.S., Technical Director
Danny R. Hale, M.S., Laboratory Director

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

/ 'LANTIC ENVIRONMENTAL SERV. 6043
ATTN. TOM HELFICH
2232 WELSCH IND. COURT
S T. LOUIS, MO 63146

Lab Number: 97-A076098

Sample ID: #4

Date Collected: 9/ 7/97

Project: 97521

Time Collected:

Project Name: 33RD ST. SITE

Date Received: 9/ 9/97

Sampler: DAVID PLUHAR

Time Received: 9:00

State Certification:

Sample Type: Soil

Site I.D.:

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
EXTRACTABLE ORGANICS*										
Acenaphthene	ND	mg/kg	1.66	0.333	5	9/17/97	13:04	M.Goodrich	8270C	3714
Acenaphthylene	ND	mg/kg	1.66	0.333	5	9/17/97	13:04	M.Goodrich	8270C	3714
Anthracene	ND	mg/kg	1.66	0.333	5	9/17/97	13:04	M.Goodrich	8270C	3714
Benzo(a)anthracene	ND	mg/kg	1.66	0.333	5	9/17/97	13:04	M.Goodrich	8270C	3714
Benzo(a)pyrene	ND	mg/kg	1.66	0.333	5	9/17/97	13:04	M.Goodrich	8270C	3714
Benzo(b)fluoranthene	ND	mg/kg	1.66	0.333	5	9/17/97	13:04	M.Goodrich	8270C	3714
Benzo(g,h,i)perylene	ND	mg/kg	1.66	0.333	5	9/17/97	13:04	M.Goodrich	8270C	3714
Benzo(k)fluoranthene	ND	mg/kg	1.66	0.333	5	9/17/97	13:04	M.Goodrich	8270C	3714
4-Bromophenylphenylether	ND	mg/kg	1.66	0.333	5	9/17/97	13:04	M.Goodrich	8270C	3714
Butylbenzylphthalate	ND	mg/kg	1.66	0.333	5	9/17/97	13:04	M.Goodrich	8270C	3714
Carbazole	ND	mg/kg	1.66	0.333	5	9/17/97	13:04	M.Goodrich	8270C	3714
4-Chloro-3-methylphenol	ND	mg/kg	1.66	0.333	5	9/17/97	13:04	M.Goodrich	8270C	3714
4-Chloroaniline	ND	mg/kg	1.66	0.333	5	9/17/97	13:04	M.Goodrich	8270C	3714
bis(2-Chloroethoxy)methane	ND	mg/kg	1.66	0.333	5	9/17/97	13:04	M.Goodrich	8270C	3714
bis(2-Chloroethyl)ether	ND	mg/kg	1.66	0.333	5	9/17/97	13:04	M.Goodrich	8270C	3714
bis(2-Chloroisopropyl)ether	ND	mg/kg	1.66	0.333	5	9/17/97	13:04	M.Goodrich	8270C	3714
2-Chloronaphthalene	ND	mg/kg	1.66	0.333	5	9/17/97	13:04	M.Goodrich	8270C	3714
2-Chlorophenol	ND	mg/kg	1.66	0.333	5	9/17/97	13:04	M.Goodrich	8270C	3714
4-Chlorophenylphenylether	ND	mg/kg	1.66	0.333	5	9/17/97	13:04	M.Goodrich	8270C	3714
Chrysene	ND	mg/kg	1.66	0.333	5	9/17/97	13:04	M.Goodrich	8270C	3714
Dibenzofuran	ND	mg/kg	1.66	0.333	5	9/17/97	13:04	M.Goodrich	8270C	3714
Dibenz(a,h)anthracene	ND	mg/kg	1.66	0.333	5	9/17/97	13:04	M.Goodrich	8270C	3714
1,2-Dichlorobenzene	ND	mg/kg	1.66	0.333	5	9/17/97	13:04	M.Goodrich	8270C	3714
1,3-Dichlorobenzene	ND	mg/kg	1.66	0.333	5	9/17/97	13:04	M.Goodrich	8270C	3714
1,4-Dichlorobenzene	ND	mg/kg	1.66	0.333	5	9/17/97	13:04	M.Goodrich	8270C	3714
3,3'-Dichlorobenzidine	ND	mg/kg	3.33	0.666	5	9/17/97	13:04	M.Goodrich	8270C	3714
2,4-Dichlorophenol	ND	mg/kg	1.66	0.333	5	9/17/97	13:04	M.Goodrich	8270C	3714
Diethylphthalate	ND	mg/kg	1.66	0.333	5	9/17/97	13:04	M.Goodrich	8270C	3714

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SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

Laboratory Number: 97-A076098
Sample ID: #4

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
2,4-Dimethylphenol	ND	mg/kg	1.66	0.333	5	9/17/97	13:04	M.Goodrich	8270C	3714
Dimethylphthalate	ND	mg/kg	1.66	0.333	5	9/17/97	13:04	M.Goodrich	8270C	3714
Di-n-butylphthalate	ND	mg/kg	1.66	0.333	5	9/17/97	13:04	M.Goodrich	8270C	3714
4,6-Dinitro-2-methylphenol	ND	mg/kg	4.16	0.830	5	9/17/97	13:04	M.Goodrich	8270C	3714
2,4-Dinitrophenol	ND	mg/kg	4.16	0.830	5	9/17/97	13:04	M.Goodrich	8270C	3714
2,4-dinitrotoluene	ND	mg/kg	1.66	0.333	5	9/17/97	13:04	M.Goodrich	8270C	3714
2,6-Dinitrotoluene	ND	mg/kg	1.66	0.333	5	9/17/97	13:04	M.Goodrich	8270C	3714
Di-n-octylphthalate	ND	mg/kg	1.66	0.333	5	9/17/97	13:04	M.Goodrich	8270C	3714
Fluoranthene	ND	mg/kg	1.66	0.333	5	9/17/97	13:04	M.Goodrich	8270C	3714
Fluorene	ND	mg/kg	1.66	0.333	5	9/17/97	13:04	M.Goodrich	8270C	3714
Hexachlorobenzene	ND	mg/kg	1.66	0.333	5	9/17/97	13:04	M.Goodrich	8270C	3714
Hexachlorobutadiene	ND	mg/kg	1.66	0.333	5	9/17/97	13:04	M.Goodrich	8270C	3714
Hexachlorocyclopentadiene	ND	mg/kg	1.66	0.333	5	9/17/97	13:04	M.Goodrich	8270C	3714
Hexachloroethane	ND	mg/kg	1.66	0.333	5	9/17/97	13:04	M.Goodrich	8270C	3714
Indeno(1,2,3-cd)pyrene	ND	mg/kg	1.66	0.333	5	9/17/97	13:04	M.Goodrich	8270C	3714
Isophorone	ND	mg/kg	1.66	0.333	5	9/17/97	13:04	M.Goodrich	8270C	3714
2-Methylnaphthalene	ND	mg/kg	1.66	0.333	5	9/17/97	13:04	M.Goodrich	8270C	3714
2-Methylphenol	ND	mg/kg	1.66	0.333	5	9/17/97	13:04	M.Goodrich	8270C	3714
m,p-Methylphenol	ND	mg/kg	1.66	0.333	5	9/17/97	13:04	M.Goodrich	8270C	3714
Naphthalene	ND	mg/kg	1.66	0.333	5	9/17/97	13:04	M.Goodrich	8270C	3714
2-Nitroaniline	ND	mg/kg	4.16	0.830	5	9/17/97	13:04	M.Goodrich	8270C	3714
3-Nitroaniline	ND	mg/kg	4.16	0.830	5	9/17/97	13:04	M.Goodrich	8270C	3714
4-Nitroaniline	ND	mg/kg	4.16	0.830	5	9/17/97	13:04	M.Goodrich	8270C	3714
Nitrobenzene	ND	mg/kg	1.66	0.333	5	9/17/97	13:04	M.Goodrich	8270C	3714
2-Nitrophenol	ND	mg/kg	1.66	0.333	5	9/17/97	13:04	M.Goodrich	8270C	3714
4-Nitrophenol	ND	mg/kg	4.16	0.830	5	9/17/97	13:04	M.Goodrich	8270C	3714
N-nitrosodi-n-propylamine	ND	mg/kg	1.66	0.333	5	9/17/97	13:04	M.Goodrich	8270C	3714
N-nitrosodiphenylamine	ND	mg/kg	1.66	0.333	5	9/17/97	13:04	M.Goodrich	8270C	3714
Pentachlorophenol	ND	mg/kg	4.16	0.830	5	9/17/97	13:04	M.Goodrich	8270C	3714
Phenanthrene	ND	mg/kg	1.66	0.333	5	9/17/97	13:04	M.Goodrich	8270C	3714
Phenol	ND	mg/kg	1.66	0.333	5	9/17/97	13:04	M.Goodrich	8270C	3714
Pyrene	ND	mg/kg	1.66	0.333	5	9/17/97	13:04	M.Goodrich	8270C	3714
Bis(2-ethylhexyl)phthalate	ND	mg/kg	1.66	0.333	5	9/17/97	13:04	M.Goodrich	8270C	3714
1,2,4-Trichlorobenzene	ND	mg/kg	1.66	0.333	5	9/17/97	13:04	M.Goodrich	8270C	3714
2,4,5-Trichlorophenol	ND	mg/kg	4.16	0.830	5	9/17/97	13:04	M.Goodrich	8270C	3714
2,4,6-Trichlorophenol	ND	mg/kg	1.66	0.333	5	9/17/97	13:04	M.Goodrich	8270C	3714
METALS										
Antimony	ND	mg/kg	10.2	10.0	1	9/14/97	0:45	R.Street	6010B	2714
Arsenic	1.42	mg/kg	1.02	1.00	1	9/14/97	0:45	R.Street	6010B	2714
Barium	29.9	mg/kg	1.02	1.00	1	9/14/97	0:45	R.Street	6010B	2714
Beryllium	ND	mg/kg	1.02	1.00	1	9/14/97	0:45	R.Street	6010B	2714
Cadmium	ND	mg/kg	1.02	1.00	1	9/14/97	0:45	R.Street	6010B	2714
Chromium	3.66	mg/kg	1.02	1.00	1	9/14/97	0:45	R.Street	6010B	2714

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

Laboratory Number: 97-A076098
Sample ID: #4

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
Lead	34.6	mg/kg	1.02	1.00	1	9/14/97	0:45	R.Street	6010B	2714
Mercury	ND	mg/kg	0.10	0.10	1	9/11/97	15:18	R.Street	7471	2507
Nickel	2.85	mg/kg	1.02	1.00	1	9/14/97	0:45	R.Street	6010B	2714
Selenium	ND	mg/kg	1.02	1.00	1	9/14/97	0:45	R.Street	6010B	2714
Silver	ND	mg/kg	1.02	1.00	1	9/14/97	0:45	R.Street	6010B	2714
Thallium	ND	mg/kg	1.02	1.00	1	9/14/97	0:45	R.Street	6010B	2714
Vanadium	ND	mg/kg	10.2	10.0	1	9/14/97	0:45	R.Street	6010B	2714
GENERAL CHEMISTRY PARAMETERS										
Cyanide	ND	mg/kg	2.00	2.00	1	9/13/97	8:07	A Hardison	9012A	3863

ND = Not detected at the report limit.

Sample Extraction Data

BNA's Extracted 9/11/97 Wt extracted: 30.0 gm Extract Volume: 1.0 ml C.Gereaser

** SURROGATE RECOVERIES **

Surrogate	% Recovery	Target Range
BNA Surr., Nitrobenzene-d5	70.0	23. - 120.
BNA Surr., 2-Fluorobiphenyl	85.0	30. - 115.
BNA Surrogate, Terphenyl d14	85.0	18. - 140.
BNA Surrogate, Phenol d5	40.0	10. - 115.
BNA Surrogate, 2-Fluorophenol	60.0	20. - 121.
BNA Surrogate, 2,4,6-Tribromophenol	50.0	19. - 122.

Report Approved By: Michael H. Dunn Report Date: 9/22/97

Theodore J. Duello, Ph.D., Q.A. Officer
Michael H. Dunn, M.S., Technical Director
Danny B. Hale, M.S., Laboratory Director

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

ATLANTIC ENVIRONMENTAL SERV. 6043
ATTN. TOM HELFICH
2232 WELSCH IND. COURT
ST. LOUIS, MO 63146

Lab Number: 97-A076099

Sample ID: #5

Date Collected: 9/ 7/97

Project: 97521

Time Collected:

Project Name: 33RD ST. SITE

Date Received: 9/ 9/97

Sampler: DAVID PLUHAR

Time Received: 9:00

State Certification:

Sample Type: Soil

Site I.D.:

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
EXTRACTABLE ORGANICS										
Acenaphthene	ND	mg/kg	3.33	0.333	10	9/17/97	13:41	M.Goodrich	8270C	3714
Acenaphthylene	ND	mg/kg	3.33	0.333	10	9/17/97	13:41	M.Goodrich	8270C	3714
Anthracene	ND	mg/kg	3.33	0.333	10	9/17/97	13:41	M.Goodrich	8270C	3714
Benzo(a)anthracene	ND	mg/kg	3.33	0.333	10	9/17/97	13:41	M.Goodrich	8270C	3714
Benzo(a)pyrene	ND	mg/kg	3.33	0.333	10	9/17/97	13:41	M.Goodrich	8270C	3714
Benzo(b)fluoranthene	ND	mg/kg	3.33	0.333	10	9/17/97	13:41	M.Goodrich	8270C	3714
Benzo(g,h,i)perylene	ND	mg/kg	3.33	0.333	10	9/17/97	13:41	M.Goodrich	8270C	3714
Benzo(k)fluoranthene	ND	mg/kg	3.33	0.333	10	9/17/97	13:41	M.Goodrich	8270C	3714
4-Bromophenylphenylether	ND	mg/kg	3.33	0.333	10	9/17/97	13:41	M.Goodrich	8270C	3714
Butylbenzylphthalate	ND	mg/kg	3.33	0.333	10	9/17/97	13:41	M.Goodrich	8270C	3714
Carbazole	ND	mg/kg	3.33	0.333	10	9/17/97	13:41	M.Goodrich	8270C	3714
4-Chloro-3-methylphenol	ND	mg/kg	3.33	0.333	10	9/17/97	13:41	M.Goodrich	8270C	3714
4-Chloroaniline	ND	mg/kg	3.33	0.333	10	9/17/97	13:41	M.Goodrich	8270C	3714
bis(2-Chloroethoxy)methane	ND	mg/kg	3.33	0.333	10	9/17/97	13:41	M.Goodrich	8270C	3714
bis(2-Chloroethyl)ether	ND	mg/kg	3.33	0.333	10	9/17/97	13:41	M.Goodrich	8270C	3714
bis(2-Chloroisopropyl)ether	ND	mg/kg	3.33	0.333	10	9/17/97	13:41	M.Goodrich	8270C	3714
2-Chloronaphthalene	ND	mg/kg	3.33	0.333	10	9/17/97	13:41	M.Goodrich	8270C	3714
2-Chlorophenol	ND	mg/kg	3.33	0.333	10	9/17/97	13:41	M.Goodrich	8270C	3714
4-Chlorophenylphenylether	ND	mg/kg	3.33	0.333	10	9/17/97	13:41	M.Goodrich	8270C	3714
Chrysene	ND	mg/kg	3.33	0.333	10	9/17/97	13:41	M.Goodrich	8270C	3714
Dibenzofuran	ND	mg/kg	3.33	0.333	10	9/17/97	13:41	M.Goodrich	8270C	3714
Dibenz(a,h)anthracene	ND	mg/kg	3.33	0.333	10	9/17/97	13:41	M.Goodrich	8270C	3714
1,2-Dichlorobenzene	ND	mg/kg	3.33	0.333	10	9/17/97	13:41	M.Goodrich	8270C	3714
1,3-Dichlorobenzene	ND	mg/kg	3.33	0.333	10	9/17/97	13:41	M.Goodrich	8270C	3714
1,4-Dichlorobenzene	ND	mg/kg	3.33	0.333	10	9/17/97	13:41	M.Goodrich	8270C	3714
3,3'-Dichlorobenzidine	ND	mg/kg	6.66	0.666	10	9/17/97	13:41	M.Goodrich	8270C	3714
2,4-Dichlorophenol	ND	mg/kg	3.33	0.333	10	9/17/97	13:41	M.Goodrich	8270C	3714
Diethylphthalate	ND	mg/kg	3.33	0.333	10	9/17/97	13:41	M.Goodrich	8270C	3714

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SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

Laboratory Number: 97-A076099
Sample ID: #5

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
2,4-Dimethylphenol	ND	mg/kg	3.33	0.333	10	9/17/97	13:41	M.Goodrich	8270C	3714
Dimethylphthalate	ND	mg/kg	3.33	0.333	10	9/17/97	13:41	M.Goodrich	8270C	3714
Di-n-butylphthalate	ND	mg/kg	3.33	0.333	10	9/17/97	13:41	M.Goodrich	8270C	3714
4,6-Dinitro-2-methylphenol	ND	mg/kg	8.32	0.830	10	9/17/97	13:41	M.Goodrich	8270C	3714
2,4-Dinitrophenol	ND	mg/kg	8.32	0.830	10	9/17/97	13:41	M.Goodrich	8270C	3714
2,4-dinitrotoluene	ND	mg/kg	3.33	0.333	10	9/17/97	13:41	M.Goodrich	8270C	3714
2,6-Dinitrotoluene	ND	mg/kg	3.33	0.333	10	9/17/97	13:41	M.Goodrich	8270C	3714
Di-n-octylphthalate	ND	mg/kg	3.33	0.333	10	9/17/97	13:41	M.Goodrich	8270C	3714
Fluoranthene	4.00	mg/kg	3.33	0.333	10	9/17/97	13:41	M.Goodrich	8270C	3714
Fluorene	ND	mg/kg	3.33	0.333	10	9/17/97	13:41	M.Goodrich	8270C	3714
Hexachlorobenzene	ND	mg/kg	3.33	0.333	10	9/17/97	13:41	M.Goodrich	8270C	3714
Hexachlorobutadiene	ND	mg/kg	3.33	0.333	10	9/17/97	13:41	M.Goodrich	8270C	3714
Hexachlorocyclopentadiene	ND	mg/kg	3.33	0.333	10	9/17/97	13:41	M.Goodrich	8270C	3714
Hexachloroethane	ND	mg/kg	3.33	0.333	10	9/17/97	13:41	M.Goodrich	8270C	3714
Indeno(1,2,3-cd)pyrene	ND	mg/kg	3.33	0.333	10	9/17/97	13:41	M.Goodrich	8270C	3714
Isophorone	ND	mg/kg	3.33	0.333	10	9/17/97	13:41	M.Goodrich	8270C	3714
2-Methylnaphthalene	ND	mg/kg	3.33	0.333	10	9/17/97	13:41	M.Goodrich	8270C	3714
2-Methylphenol	ND	mg/kg	3.33	0.333	10	9/17/97	13:41	M.Goodrich	8270C	3714
m,p-Methylphenol	ND	mg/kg	3.33	0.333	10	9/17/97	13:41	M.Goodrich	8270C	3714
Naphthalene	ND	mg/kg	3.33	0.333	10	9/17/97	13:41	M.Goodrich	8270C	3714
2-Nitroaniline	ND	mg/kg	8.32	0.830	10	9/17/97	13:41	M.Goodrich	8270C	3714
3-Nitroaniline	ND	mg/kg	8.32	0.830	10	9/17/97	13:41	M.Goodrich	8270C	3714
4-Nitroaniline	ND	mg/kg	8.32	0.830	10	9/17/97	13:41	M.Goodrich	8270C	3714
Nitrobenzene	ND	mg/kg	3.33	0.333	10	9/17/97	13:41	M.Goodrich	8270C	3714
2-Nitrophenol	ND	mg/kg	3.33	0.333	10	9/17/97	13:41	M.Goodrich	8270C	3714
4-Nitrophenol	ND	mg/kg	8.32	0.830	10	9/17/97	13:41	M.Goodrich	8270C	3714
N-nitrosodi-n-propylamine	ND	mg/kg	3.33	0.333	10	9/17/97	13:41	M.Goodrich	8270C	3714
N-nitrosodiphenylamine	ND	mg/kg	3.33	0.333	10	9/17/97	13:41	M.Goodrich	8270C	3714
Pentachlorophenol	ND	mg/kg	8.32	0.830	10	9/17/97	13:41	M.Goodrich	8270C	3714
Phenanthrene	ND	mg/kg	3.33	0.333	10	9/17/97	13:41	M.Goodrich	8270C	3714
Phenol	ND	mg/kg	3.33	0.333	10	9/17/97	13:41	M.Goodrich	8270C	3714
Pyrene	3.66	mg/kg	3.33	0.333	10	9/17/97	13:41	M.Goodrich	8270C	3714
Bis(2-ethylhexyl)phthalate	ND	mg/kg	3.33	0.333	10	9/17/97	13:41	M.Goodrich	8270C	3714
1,2,4-Trichlorobenzene	ND	mg/kg	3.33	0.333	10	9/17/97	13:41	M.Goodrich	8270C	3714
2,4,5-Trichlorophenol	ND	mg/kg	8.32	0.830	10	9/17/97	13:41	M.Goodrich	8270C	3714
2,4,6-Trichlorophenol	ND	mg/kg	3.33	0.333	10	9/17/97	13:41	M.Goodrich	8270C	3714
METALS										
Antimony	ND	mg/kg	10.1	10.0	1	9/14/97	0:45	R.Street	6010B	2714
Arsenic	3.84	mg/kg	1.01	1.00	1	9/14/97	0:45	R.Street	6010B	2714
Barium	38.4	mg/kg	1.01	1.00	1	9/14/97	0:45	R.Street	6010B	2714
Beryllium	ND	mg/kg	1.01	1.00	1	9/14/97	0:45	R.Street	6010B	2714
Cadmium	ND	mg/kg	1.01	1.00	1	9/14/97	0:45	R.Street	6010B	2714
Chromium	7.07	mg/kg	1.01	1.00	1	9/14/97	0:45	R.Street	6010B	2714

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SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

Laboratory Number: 97-A076099
Sample ID: #5

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
Lead	118.	mg/kg	1.01	1.00	1	9/14/97	0:45	R.Street	6010B	2714
Mercury	ND	mg/kg	0.10	0.10	1	9/11/97	15:18	R.Street	7471	2507
Nickel	4.65	mg/kg	1.01	1.00	1	9/14/97	0:45	R.Street	6010B	2714
Selenium	ND	mg/kg	1.01	1.00	1	9/14/97	0:45	R.Street	6010B	2714
Silver	ND	mg/kg	1.01	1.00	1	9/14/97	0:45	R.Street	6010B	2714
Thallium	ND	mg/kg	1.01	1.00	1	9/14/97	0:45	R.Street	6010B	2714
Vanadium	ND	mg/kg	10.1	10.0	1	9/14/97	0:45	R.Street	6010B	2714
GENERAL CHEMISTRY PARAMETERS										
Cyanide	ND	mg/kg	2.00	2.00	1	9/13/97	8:08	A Hardison	9012A	3863

ND = Not detected at the report limit.

Sample Extraction Data

BNA's Extracted 9/11/97 Wt extracted: 30.0 gm Extract Volume: 1.0 ml C.Gerenser

** SURROGATE RECOVERIES **

Surrogate	% Recovery	Target Range
BNA Surr., Nitrobenzene-d5	60.0	23. - 120.
BNA Surr., 2-Fluorobiphenyl	65.0	30. - 115.
BNA Surrogate, Terphenyl d14	75.0	18. - 140.
BNA Surrogate, Phenol d5	70.0	10. - 115.
BNA Surrogate, 2-Fluorophenol	55.0	20. - 121.
BNA Surrogate, 2,4,6-Tribromophenol	40.0	19. - 122.

Report Approved By: Michael H. Dunn Report Date: 9/22/97

Theodore J. Duello, Ph.D., Q.A. Officer
Michael H. Dunn, M.S., Technical Director
Danny B. Hale, M.S., Laboratory Director

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

ATLANTIC ENVIRONMENTAL SERV. 6043
ATTN. TOM HELFICH
2232 WELSCH IND. COURT
ST. LOUIS, MO 63146

Lab Number: 97-A076100

Sample ID: #6

Date Collected: 9/ 7/97

Project: 97521

Time Collected:

Project Name: 33RD ST. SITE

Date Received: 9/ 9/97

Sampler: DAVID PLUHAR

Time Received: 9:00

State Certification:

Sample Type: Soil

Site I.D.:

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
EXTRACTABLE ORGANICS										
Acenaphthene	ND	mg/kg	1.66	0.333	5	9/17/97	14:17	M.Goodrich	8270C	3714
Acenaphthylene	ND	mg/kg	1.66	0.333	5	9/17/97	14:17	M.Goodrich	8270C	3714
Anthracene	ND	mg/kg	1.66	0.333	5	9/17/97	14:17	M.Goodrich	8270C	3714
Benzo(a)anthracene	2.33	mg/kg	1.66	0.333	5	9/17/97	14:17	M.Goodrich	8270C	3714
Benzo(a)pyrene	ND	mg/kg	1.66	0.333	5	9/17/97	14:17	M.Goodrich	8270C	3714
Benzo(b)fluoranthene	2.83	mg/kg	1.66	0.333	5	9/17/97	14:17	M.Goodrich	8270C	3714
Benzo(g,h,i)perylene	ND	mg/kg	1.66	0.333	5	9/17/97	14:17	M.Goodrich	8270C	3714
Benzo(k)fluoranthene	3.00	mg/kg	1.66	0.333	5	9/17/97	14:17	M.Goodrich	8270C	3714
4-Bromophenylphenylether	ND	mg/kg	1.66	0.333	5	9/17/97	14:17	M.Goodrich	8270C	3714
Butylbenzylphthalate	ND	mg/kg	1.66	0.333	5	9/17/97	14:17	M.Goodrich	8270C	3714
Carbazole	ND	mg/kg	1.66	0.333	5	9/17/97	14:17	M.Goodrich	8270C	3714
4-Chloro-3-methylphenol	ND	mg/kg	1.66	0.333	5	9/17/97	14:17	M.Goodrich	8270C	3714
4-Chloroaniline	ND	mg/kg	1.66	0.333	5	9/17/97	14:17	M.Goodrich	8270C	3714
bis(2-Chloroethoxy)methane	ND	mg/kg	1.66	0.333	5	9/17/97	14:17	M.Goodrich	8270C	3714
bis(2-Chloroethyl)ether	ND	mg/kg	1.66	0.333	5	9/17/97	14:17	M.Goodrich	8270C	3714
bis(2-Chloroisopropyl)ether	ND	mg/kg	1.66	0.333	5	9/17/97	14:17	M.Goodrich	8270C	3714
2-Chloronaphthalene	ND	mg/kg	1.66	0.333	5	9/17/97	14:17	M.Goodrich	8270C	3714
2-Chlorophenol	ND	mg/kg	1.66	0.333	5	9/17/97	14:17	M.Goodrich	8270C	3714
4-Chlorophenylphenylether	ND	mg/kg	1.66	0.333	5	9/17/97	14:17	M.Goodrich	8270C	3714
Chrysene	ND	mg/kg	1.66	0.333	5	9/17/97	14:17	M.Goodrich	8270C	3714
Dibenzofuran	ND	mg/kg	1.66	0.333	5	9/17/97	14:17	M.Goodrich	8270C	3714
Dibenz(a,h)anthracene	ND	mg/kg	1.66	0.333	5	9/17/97	14:17	M.Goodrich	8270C	3714
1,2-Dichlorobenzene	ND	mg/kg	1.66	0.333	5	9/17/97	14:17	M.Goodrich	8270C	3714
1,3-Dichlorobenzene	ND	mg/kg	1.66	0.333	5	9/17/97	14:17	M.Goodrich	8270C	3714
1,4-Dichlorobenzene	ND	mg/kg	1.66	0.333	5	9/17/97	14:17	M.Goodrich	8270C	3714
3,3'-Dichlorobenzidine	ND	mg/kg	3.33	0.666	5	9/17/97	14:17	M.Goodrich	8270C	3714
2,4-Dichlorophenol	ND	mg/kg	1.66	0.333	5	9/17/97	14:17	M.Goodrich	8270C	3714
Diethylphthalate	ND	mg/kg	1.66	0.333	5	9/17/97	14:17	M.Goodrich	8270C	3714

COPY 1

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

Laboratory Number: 97-A076100
Sample ID: #6

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
2,4-Dimethylphenol	ND	mg/kg	1.66	0.333	5	9/17/97	14:17	M.Goodrich	8270C	3714
Dimethylphthalate	ND	mg/kg	1.66	0.333	5	9/17/97	14:17	M.Goodrich	8270C	3714
Di-n-butylphthalate	ND	mg/kg	1.66	0.333	5	9/17/97	14:17	M.Goodrich	8270C	3714
4,6-Dinitro-2-methylphenol	ND	mg/kg	4.16	0.830	5	9/17/97	14:17	M.Goodrich	8270C	3714
2,4-Dinitrophenol	ND	mg/kg	4.16	0.830	5	9/17/97	14:17	M.Goodrich	8270C	3714
2,4-dinitrotoluene	ND	mg/kg	1.66	0.333	5	9/17/97	14:17	M.Goodrich	8270C	3714
2,6-Dinitrotoluene	ND	mg/kg	1.66	0.333	5	9/17/97	14:17	M.Goodrich	8270C	3714
Di-n-octylphthalate	ND	mg/kg	1.66	0.333	5	9/17/97	14:17	M.Goodrich	8270C	3714
Fluoranthene	ND	mg/kg	1.66	0.333	5	9/17/97	14:17	M.Goodrich	8270C	3714
Fluorene	ND	mg/kg	1.66	0.333	5	9/17/97	14:17	M.Goodrich	8270C	3714
Hexachlorobenzene	ND	mg/kg	1.66	0.333	5	9/17/97	14:17	M.Goodrich	8270C	3714
Hexachlorobutadiene	ND	mg/kg	1.66	0.333	5	9/17/97	14:17	M.Goodrich	8270C	3714
Hexachlorocyclopentadiene	ND	mg/kg	1.66	0.333	5	9/17/97	14:17	M.Goodrich	8270C	3714
Hexachloroethane	ND	mg/kg	1.66	0.333	5	9/17/97	14:17	M.Goodrich	8270C	3714
Indeno(1,2,3-cd)pyrene	ND	mg/kg	1.66	0.333	5	9/17/97	14:17	M.Goodrich	8270C	3714
Isophorone	ND	mg/kg	1.66	0.333	5	9/17/97	14:17	M.Goodrich	8270C	3714
2-Methylnaphthalene	ND	mg/kg	1.66	0.333	5	9/17/97	14:17	M.Goodrich	8270C	3714
2-Methylphenol	ND	mg/kg	1.66	0.333	5	9/17/97	14:17	M.Goodrich	8270C	3714
m,p-Methylphenol	ND	mg/kg	1.66	0.333	5	9/17/97	14:17	M.Goodrich	8270C	3714
Naphthalene	ND	mg/kg	1.66	0.333	5	9/17/97	14:17	M.Goodrich	8270C	3714
2-Nitroaniline	ND	mg/kg	4.16	0.830	5	9/17/97	14:17	M.Goodrich	8270C	3714
3-Nitroaniline	ND	mg/kg	4.16	0.830	5	9/17/97	14:17	M.Goodrich	8270C	3714
4-Nitroaniline	ND	mg/kg	4.16	0.830	5	9/17/97	14:17	M.Goodrich	8270C	3714
Nitrobenzene	ND	mg/kg	1.66	0.333	5	9/17/97	14:17	M.Goodrich	8270C	3714
2-Nitrophenol	ND	mg/kg	1.66	0.333	5	9/17/97	14:17	M.Goodrich	8270C	3714
4-Nitrophenol	ND	mg/kg	4.16	0.830	5	9/17/97	14:17	M.Goodrich	8270C	3714
N-nitrosodi-n-propylamine	ND	mg/kg	1.66	0.333	5	9/17/97	14:17	M.Goodrich	8270C	3714
N-nitrosodiphenylamine	ND	mg/kg	1.66	0.333	5	9/17/97	14:17	M.Goodrich	8270C	3714
Pentachlorophenol	ND	mg/kg	4.16	0.830	5	9/17/97	14:17	M.Goodrich	8270C	3714
Phenanthrene	2.16	mg/kg	1.66	0.333	5	9/17/97	14:17	M.Goodrich	8270C	3714
Phenol	ND	mg/kg	1.66	0.333	5	9/17/97	14:17	M.Goodrich	8270C	3714
Pyrene	4.50	mg/kg	1.66	0.333	5	9/17/97	14:17	M.Goodrich	8270C	3714
Bis(2-ethylhexyl)phthalate	ND	mg/kg	1.66	0.333	5	9/17/97	14:17	M.Goodrich	8270C	3714
1,2,4-Trichlorobenzene	ND	mg/kg	1.66	0.333	5	9/17/97	14:17	M.Goodrich	8270C	3714
2,4,5-Trichlorophenol	ND	mg/kg	4.16	0.830	5	9/17/97	14:17	M.Goodrich	8270C	3714
2,4,6-Trichlorophenol	ND	mg/kg	1.66	0.333	5	9/17/97	14:17	M.Goodrich	8270C	3714
METALS										
Antimony	ND	mg/kg	9.94	9.94	1	9/14/97	0:45	R.Street	6010B	2714
Arsenic	1.39	mg/kg	0.99	0.99	1	9/14/97	0:45	R.Street	6010B	2714
Barium	27.4	mg/kg	0.99	0.99	1	9/14/97	0:45	R.Street	6010B	2714
Beryllium	ND	mg/kg	0.99	0.99	1	9/14/97	0:45	R.Street	6010B	2714
Cadmium	ND	mg/kg	0.99	0.99	1	9/14/97	0:45	R.Street	6010B	2714
Chromium	2.98	mg/kg	0.99	0.99	1	9/14/97	0:45	R.Street	6010B	2714

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

Laboratory Number: 97-A076100
Sample ID: #6

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
Lead	60.0	mg/kg	0.99	0.99	1	9/14/97	0:45	R.Street	6010B	2714
Mercury	ND	mg/kg	0.10	0.10	1	9/11/97	15:18	R.Street	7471	2507
Nickel	10.3	mg/kg	0.99	0.99	1	9/14/97	0:45	R.Street	6010B	2714
Selenium	ND	mg/kg	0.99	0.99	1	9/14/97	0:45	R.Street	6010B	2714
Silver	ND	mg/kg	0.99	0.99	1	9/14/97	0:45	R.Street	6010B	2714
Thallium	ND	mg/kg	0.99	0.99	1	9/14/97	0:45	R.Street	6010B	2714
Vanadium	11.5	mg/kg	9.94	9.94	1	9/14/97	0:45	R.Street	6010B	2714
GENERAL CHEMISTRY PARAMETERS										
Cyanide	ND	mg/kg	2.00	2.00	1	9/13/97	8:08	A Hardison	9012A	3863

ND = Not detected at the report limit.

Sample Extraction Data

BNA's Extracted 9/11/97 Wt extracted: 30.0 gm Extract Volume: 1.0 ml C.Gerenser

** SURROGATE RECOVERIES **

Surrogate	% Recovery	Target Range
BNA Surr., Nitrobenzene-d5	60.0	23. - 120.
BNA Surr., 2-Fluorobiphenyl	70.0	30. - 115.
BNA Surrogate, Terphenyl d14	85.0	18. - 140.
BNA Surrogate, Phenol d5	70.0	10. - 115.
BNA Surrogate, 2-Fluorophenol	55.0	20. - 121.
BNA Surrogate, 2,4,6-Tribromophenol	45.0	19. - 122.

Report Approved By: Michael H. Dunn Report Date: 9/22/97

Theodore J. Duello, Ph.D., Q.A. Officer
Michael H. Dunn, M.S., Technical Director
Danny B. Hale, M.S., Laboratory Director

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

ATLANTIC ENVIRONMENTAL SERV. 6043
ATTN. TOM HELFICH
2232 WELSCH IND. COURT
ST. LOUIS, MO 63146

Lab Number: 97-A076101

Sample ID: #7

Date Collected: 9/ 7/97

Project: 97521

Time Collected:

Project Name: 33RD ST. SITE

Date Received: 9/ 9/97

Sampler: DAVID PLUHAR

Time Received: 9:00

State Certification:

Sample Type: Soil

Site I.D.:

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
EXTRACTABLE ORGANICS										
Acenaphthene	ND	mg/kg	6.66	0.333	20	9/22/97	8:29	M.Goodrich	8270C	3714
Acenaphthylene	ND	mg/kg	6.66	0.333	20	9/22/97	8:29	M.Goodrich	8270C	3714
Anthracene	ND	mg/kg	6.66	0.333	20	9/22/97	8:29	M.Goodrich	8270C	3714
Benzo(a)anthracene	ND	mg/kg	6.66	0.333	20	9/22/97	8:29	M.Goodrich	8270C	3714
Benzo(a)pyrene	ND	mg/kg	6.66	0.333	20	9/22/97	8:29	M.Goodrich	8270C	3714
Benzo(b)fluoranthene	ND	mg/kg	6.66	0.333	20	9/22/97	8:29	M.Goodrich	8270C	3714
Benzo(g,h,i)perylene	ND	mg/kg	6.66	0.333	20	9/22/97	8:29	M.Goodrich	8270C	3714
Benzo(k)fluoranthene	ND	mg/kg	6.66	0.333	20	9/22/97	8:29	M.Goodrich	8270C	3714
4-Bromophenylphenylether	ND	mg/kg	6.66	0.333	20	9/22/97	8:29	M.Goodrich	8270C	3714
Butylbenzylphthalate	ND	mg/kg	6.66	0.333	20	9/22/97	8:29	M.Goodrich	8270C	3714
Carbazole	ND	mg/kg	6.66	0.333	20	9/22/97	8:29	M.Goodrich	8270C	3714
4-Chloro-3-methylphenol	ND	mg/kg	6.66	0.333	20	9/22/97	8:29	M.Goodrich	8270C	3714
4-Chloroaniline	ND	mg/kg	6.66	0.333	20	9/22/97	8:29	M.Goodrich	8270C	3714
bis(2-Chloroethoxy)methane	ND	mg/kg	6.66	0.333	20	9/22/97	8:29	M.Goodrich	8270C	3714
bis(2-Chloroethyl)ether	ND	mg/kg	6.66	0.333	20	9/22/97	8:29	M.Goodrich	8270C	3714
bis(2-Chloroisopropyl)ether	ND	mg/kg	6.66	0.333	20	9/22/97	8:29	M.Goodrich	8270C	3714
2-Chloronaphthalene	ND	mg/kg	6.66	0.333	20	9/22/97	8:29	M.Goodrich	8270C	3714
2-Chlorophenol	ND	mg/kg	6.66	0.333	20	9/22/97	8:29	M.Goodrich	8270C	3714
4-Chlorophenylphenylether	ND	mg/kg	6.66	0.333	20	9/22/97	8:29	M.Goodrich	8270C	3714
Chrysene	ND	mg/kg	6.66	0.333	20	9/22/97	8:29	M.Goodrich	8270C	3714
Dibenzofuran	ND	mg/kg	6.66	0.333	20	9/22/97	8:29	M.Goodrich	8270C	3714
Dibenz(a,h)anthracene	ND	mg/kg	6.66	0.333	20	9/22/97	8:29	M.Goodrich	8270C	3714
1,2-Dichlorobenzene	ND	mg/kg	6.66	0.333	20	9/22/97	8:29	M.Goodrich	8270C	3714
1,3-Dichlorobenzene	ND	mg/kg	6.66	0.333	20	9/22/97	8:29	M.Goodrich	8270C	3714
1,4-Dichlorobenzene	ND	mg/kg	6.66	0.333	20	9/22/97	8:29	M.Goodrich	8270C	3714
3,3'-Dichlorobenzidine	ND	mg/kg	13.3	0.666	20	9/22/97	8:29	M.Goodrich	8270C	3714
2,4-Dichlorophenol	ND	mg/kg	6.66	0.333	20	9/22/97	8:29	M.Goodrich	8270C	3714
Diethylphthalate	ND	mg/kg	6.66	0.333	20	9/22/97	8:29	M.Goodrich	8270C	3714

COPY 1

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

Laboratory Number: 97-A076101
Sample ID: #7

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
2,4-Dimethylphenol	ND	mg/kg	6.66	0.333	20	9/22/97	8:29	M.Goodrich	8270C	3714
Dimethylphthalate	ND	mg/kg	6.66	0.333	20	9/22/97	8:29	M.Goodrich	8270C	3714
Di-n-butylphthalate	ND	mg/kg	6.66	0.333	20	9/22/97	8:29	M.Goodrich	8270C	3714
4,6-Dinitro-2-methylphenol	ND	mg/kg	16.6	0.830	20	9/22/97	8:29	M.Goodrich	8270C	3714
2,4-Dinitrophenol	ND	mg/kg	16.6	0.830	20	9/22/97	8:29	M.Goodrich	8270C	3714
2,4-dinitrotoluene	ND	mg/kg	6.66	0.333	20	9/22/97	8:29	M.Goodrich	8270C	3714
2,6-Dinitrotoluene	ND	mg/kg	6.66	0.333	20	9/22/97	8:29	M.Goodrich	8270C	3714
Di-n-octylphthalate	ND	mg/kg	6.66	0.333	20	9/22/97	8:29	M.Goodrich	8270C	3714
Fluoranthene	ND	mg/kg	6.66	0.333	20	9/22/97	8:29	M.Goodrich	8270C	3714
Fluorene	ND	mg/kg	6.66	0.333	20	9/22/97	8:29	M.Goodrich	8270C	3714
Hexachlorobenzene	ND	mg/kg	6.66	0.333	20	9/22/97	8:29	M.Goodrich	8270C	3714
Hexachlorobutadiene	ND	mg/kg	6.66	0.333	20	9/22/97	8:29	M.Goodrich	8270C	3714
Hexachlorocyclopentadiene	ND	mg/kg	6.66	0.333	20	9/22/97	8:29	M.Goodrich	8270C	3714
Hexachloroethane	ND	mg/kg	6.66	0.333	20	9/22/97	8:29	M.Goodrich	8270C	3714
Indeno(1,2,3-cd)pyrene	ND	mg/kg	6.66	0.333	20	9/22/97	8:29	M.Goodrich	8270C	3714
Isophorone	ND	mg/kg	6.66	0.333	20	9/22/97	8:29	M.Goodrich	8270C	3714
2-Methylnaphthalene	ND	mg/kg	6.66	0.333	20	9/22/97	8:29	M.Goodrich	8270C	3714
2-Methylphenol	ND	mg/kg	6.66	0.333	20	9/22/97	8:29	M.Goodrich	8270C	3714
m,p-Methylphenol	ND	mg/kg	6.66	0.333	20	9/22/97	8:29	M.Goodrich	8270C	3714
Naphthalene	ND	mg/kg	6.66	0.333	20	9/22/97	8:29	M.Goodrich	8270C	3714
2-Nitroaniline	ND	mg/kg	16.6	0.830	20	9/22/97	8:29	M.Goodrich	8270C	3714
3-Nitroaniline	ND	mg/kg	16.6	0.830	20	9/22/97	8:29	M.Goodrich	8270C	3714
4-Nitroaniline	ND	mg/kg	16.6	0.830	20	9/22/97	8:29	M.Goodrich	8270C	3714
Nitrobenzene	ND	mg/kg	6.66	0.333	20	9/22/97	8:29	M.Goodrich	8270C	3714
2-Nitrophenol	ND	mg/kg	6.66	0.333	20	9/22/97	8:29	M.Goodrich	8270C	3714
4-Nitrophenol	ND	mg/kg	16.6	0.830	20	9/22/97	8:29	M.Goodrich	8270C	3714
N-nitrosodi-n-propylamine	ND	mg/kg	6.66	0.333	20	9/22/97	8:29	M.Goodrich	8270C	3714
N-nitrosodiphenylamine	ND	mg/kg	6.66	0.333	20	9/22/97	8:29	M.Goodrich	8270C	3714
Pentachlorophenol	ND	mg/kg	16.6	0.830	20	9/22/97	8:29	M.Goodrich	8270C	3714
Phenanthrene	ND	mg/kg	6.66	0.333	20	9/22/97	8:29	M.Goodrich	8270C	3714
Phenol	ND	mg/kg	6.66	0.333	20	9/22/97	8:29	M.Goodrich	8270C	3714
Pyrene	ND	mg/kg	6.66	0.333	20	9/22/97	8:29	M.Goodrich	8270C	3714
Bis(2-ethylhexyl)phthalate	ND	mg/kg	6.66	0.333	20	9/22/97	8:29	M.Goodrich	8270C	3714
1,2,4-Trichlorobenzene	ND	mg/kg	6.66	0.333	20	9/22/97	8:29	M.Goodrich	8270C	3714
2,4,5-Trichlorophenol	ND	mg/kg	16.6	0.830	20	9/22/97	8:29	M.Goodrich	8270C	3714
2,4,6-Trichlorophenol	ND	mg/kg	6.66	0.333	20	9/22/97	8:29	M.Goodrich	8270C	3714
METALS										
Antimony	ND	mg/kg	10.0	10.0	1	9/14/97	0:45	R.Street	6010B	2714
Arsenic	5.21	mg/kg	1.00	1.00	1	9/14/97	0:45	R.Street	6010B	2714
Barium	64.3	mg/kg	1.00	1.00	1	9/14/97	0:45	R.Street	6010B	2714
Beryllium	ND	mg/kg	1.00	1.00	1	9/14/97	0:45	R.Street	6010B	2714
Cadmium	1.20	mg/kg	1.00	1.00	1	9/14/97	0:45	R.Street	6010B	2714
Chromium	7.21	mg/kg	1.00	1.00	1	9/14/97	0:45	R.Street	6010B	2714

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

Laboratory Number: 97-A076101
Sample ID: #7

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
Lead	267.	mg/kg	1.00	1.00	1	9/14/97	0:45	R.Street	6010B	2714
Mercury	ND	mg/kg	0.10	0.10	1	9/11/97	15:18	R.Street	7471	2507
Nickel	13.0	mg/kg	1.00	1.00	1	9/14/97	0:45	R.Street	6010B	2714
Selenium	ND	mg/kg	1.00	1.00	1	9/14/97	0:45	R.Street	6010B	2714
Silver	ND	mg/kg	1.00	1.00	1	9/14/97	0:45	R.Street	6010B	2714
Thallium	ND	mg/kg	1.00	1.00	1	9/14/97	0:45	R.Street	6010B	2714
Vanadium	14.2	mg/kg	10.0	10.0	1	9/14/97	0:45	R.Street	6010B	2714
GENERAL CHEMISTRY PARAMETERS										
Cyanide	ND	mg/kg	2.00	2.00	1	9/13/97	8:09	A Hardison	9012A	3863

ND = Not detected at the report limit.

Sample Extraction Data

BNA's Extracted 9/11/97 Wt extracted: 30.0 gm Extract Volume: 1.0 ml C.Gerenser

BNA surrogates were diluted out due to sample matrix.

Report Approved By: Michael H. Dunn Report Date: 9/22/97

Theodore J. Duello, Ph.D., Q.A. Officer
Michael H. Dunn, M.S., Technical Director
Danny B. Hale, M.S., Laboratory Director

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

TLANTIC ENVIRONMENTAL SERV. 6043
ATTN. TOM HELFICH
2232 WELSCH IND. COURT
T. LOUIS, MO 63146

Lab Number: 97-A076102

Sample ID: #8

Date Collected: 9/ 7/97

roject: 97521

Time Collected:

Project Name: 33RD ST. SITE

Date Received: 9/ 9/97

Sampler: DAVID PLUHAR

Time Received: 9:00

tate Certification:

Sample Type: Soil

Site I.D.:

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
EXTRACTABLE ORGANICS*										
Acenaphthene	ND	mg/kg	1.66	0.333	5	9/16/97	11:31	M.Goodrich	8270C	3714
Acenaphthylene	ND	mg/kg	1.66	0.333	5	9/16/97	11:31	M.Goodrich	8270C	3714
Anthracene	ND	mg/kg	1.66	0.333	5	9/16/97	11:31	M.Goodrich	8270C	3714
Benzo(a)anthracene	4.50	mg/kg	1.66	0.333	5	9/16/97	11:31	M.Goodrich	8270C	3714
Benzo(a)pyrene	5.16	mg/kg	1.66	0.333	5	9/16/97	11:31	M.Goodrich	8270C	3714
Benzo(b)fluoranthene	5.83	mg/kg	1.66	0.333	5	9/16/97	11:31	M.Goodrich	8270C	3714
Benzo(g,h,i)perylene	2.16	mg/kg	1.66	0.333	5	9/16/97	11:31	M.Goodrich	8270C	3714
Benzo(k)fluoranthene	2.83	mg/kg	1.66	0.333	5	9/16/97	11:31	M.Goodrich	8270C	3714
4-Bromophenylphenylether	ND	mg/kg	1.66	0.333	5	9/16/97	11:31	M.Goodrich	8270C	3714
Butylbenzylphthalate	ND	mg/kg	1.66	0.333	5	9/16/97	11:31	M.Goodrich	8270C	3714
Carbazole	ND	mg/kg	1.66	0.333	5	9/16/97	11:31	M.Goodrich	8270C	3714
4-Chloro-3-methylphenol	ND	mg/kg	1.66	0.333	5	9/16/97	11:31	M.Goodrich	8270C	3714
4-Chloroaniline	ND	mg/kg	1.66	0.333	5	9/16/97	11:31	M.Goodrich	8270C	3714
bis(2-Chloroethoxy)methane	ND	mg/kg	1.66	0.333	5	9/16/97	11:31	M.Goodrich	8270C	3714
bis(2-Chloroethyl)ether	ND	mg/kg	1.66	0.333	5	9/16/97	11:31	M.Goodrich	8270C	3714
bis(2-Chloroisopropyl)ether	ND	mg/kg	1.66	0.333	5	9/16/97	11:31	M.Goodrich	8270C	3714
2-Chloronaphthalene	ND	mg/kg	1.66	0.333	5	9/16/97	11:31	M.Goodrich	8270C	3714
2-Chlorophenol	ND	mg/kg	1.66	0.333	5	9/16/97	11:31	M.Goodrich	8270C	3714
4-Chlorophenylphenylether	ND	mg/kg	1.66	0.333	5	9/16/97	11:31	M.Goodrich	8270C	3714
Chrysene	ND	mg/kg	1.66	0.333	5	9/16/97	11:31	M.Goodrich	8270C	3714
Dibenzofuran	ND	mg/kg	1.66	0.333	5	9/16/97	11:31	M.Goodrich	8270C	3714
Dibenz(a,h)anthracene	ND	mg/kg	1.66	0.333	5	9/16/97	11:31	M.Goodrich	8270C	3714
1,2-Dichlorobenzene	ND	mg/kg	1.66	0.333	5	9/16/97	11:31	M.Goodrich	8270C	3714
1,3-Dichlorobenzene	ND	mg/kg	1.66	0.333	5	9/16/97	11:31	M.Goodrich	8270C	3714
1,4-Dichlorobenzene	ND	mg/kg	1.66	0.333	5	9/16/97	11:31	M.Goodrich	8270C	3714
3,3'-Dichlorobenzidine	ND	mg/kg	3.33	0.666	5	9/16/97	11:31	M.Goodrich	8270C	3714
2,4-Dichlorophenol	ND	mg/kg	1.66	0.333	5	9/16/97	11:31	M.Goodrich	8270C	3714
Diethylphthalate	ND	mg/kg	1.66	0.333	5	9/16/97	11:31	M.Goodrich	8270C	3714

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2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

Laboratory Number: 97-A076102
Sample ID: #8

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
2,4-Dimethylphenol	ND	mg/kg	1.66	0.333	5	9/16/97	11:31	M.Goodrich	8270C	3714
Dimethylphthalate	ND	mg/kg	1.66	0.333	5	9/16/97	11:31	M.Goodrich	8270C	3714
Di-n-butylphthalate	ND	mg/kg	1.66	0.333	5	9/16/97	11:31	M.Goodrich	8270C	3714
4,6-Dinitro-2-methylphenol	ND	mg/kg	4.16	0.830	5	9/16/97	11:31	M.Goodrich	8270C	3714
2,4-Dinitrophenol	ND	mg/kg	4.16	0.830	5	9/16/97	11:31	M.Goodrich	8270C	3714
2,4-dinitrotoluene	ND	mg/kg	1.66	0.333	5	9/16/97	11:31	M.Goodrich	8270C	3714
2,6-Dinitrotoluene	ND	mg/kg	1.66	0.333	5	9/16/97	11:31	M.Goodrich	8270C	3714
Di-n-octylphthalate	ND	mg/kg	1.66	0.333	5	9/16/97	11:31	M.Goodrich	8270C	3714
Fluoranthene	7.33	mg/kg	1.66	0.333	5	9/16/97	11:31	M.Goodrich	8270C	3714
Fluorene	ND	mg/kg	1.66	0.333	5	9/16/97	11:31	M.Goodrich	8270C	3714
Hexachlorobenzene	ND	mg/kg	1.66	0.333	5	9/16/97	11:31	M.Goodrich	8270C	3714
Hexachlorobutadiene	ND	mg/kg	1.66	0.333	5	9/16/97	11:31	M.Goodrich	8270C	3714
Hexachlorocyclopentadiene	ND	mg/kg	1.66	0.333	5	9/16/97	11:31	M.Goodrich	8270C	3714
Hexachloroethane	ND	mg/kg	1.66	0.333	5	9/16/97	11:31	M.Goodrich	8270C	3714
Indeno(1,2,3-cd)pyrene	2.00	mg/kg	1.66	0.333	5	9/16/97	11:31	M.Goodrich	8270C	3714
Isophorone	ND	mg/kg	1.66	0.333	5	9/16/97	11:31	M.Goodrich	8270C	3714
2-Methylnaphthalene	ND	mg/kg	1.66	0.333	5	9/16/97	11:31	M.Goodrich	8270C	3714
2-Methylphenol	ND	mg/kg	1.66	0.333	5	9/16/97	11:31	M.Goodrich	8270C	3714
m,p-Methylphenol	ND	mg/kg	1.66	0.333	5	9/16/97	11:31	M.Goodrich	8270C	3714
Naphthalene	ND	mg/kg	1.66	0.333	5	9/16/97	11:31	M.Goodrich	8270C	3714
2-Nitroaniline	ND	mg/kg	4.16	0.830	5	9/16/97	11:31	M.Goodrich	8270C	3714
3-Nitroaniline	ND	mg/kg	4.16	0.830	5	9/16/97	11:31	M.Goodrich	8270C	3714
4-Nitroaniline	ND	mg/kg	4.16	0.830	5	9/16/97	11:31	M.Goodrich	8270C	3714
Nitrobenzene	ND	mg/kg	1.66	0.333	5	9/16/97	11:31	M.Goodrich	8270C	3714
2-Nitrophenol	ND	mg/kg	1.66	0.333	5	9/16/97	11:31	M.Goodrich	8270C	3714
4-Nitrophenol	ND	mg/kg	4.16	0.830	5	9/16/97	11:31	M.Goodrich	8270C	3714
N-nitrosodi-n-propylamine	ND	mg/kg	1.66	0.333	5	9/16/97	11:31	M.Goodrich	8270C	3714
N-nitrosodiphenylamine	ND	mg/kg	1.66	0.333	5	9/16/97	11:31	M.Goodrich	8270C	3714
Pentachlorophenol	ND	mg/kg	4.16	0.830	5	9/16/97	11:31	M.Goodrich	8270C	3714
Phenanthrene	ND	mg/kg	1.66	0.333	5	9/16/97	11:31	M.Goodrich	8270C	3714
Phenol	ND	mg/kg	1.66	0.333	5	9/16/97	11:31	M.Goodrich	8270C	3714
Pyrene	8.49	mg/kg	1.66	0.333	5	9/16/97	11:31	M.Goodrich	8270C	3714
Bis(2-ethylhexyl)phthalate	ND	mg/kg	1.66	0.333	5	9/16/97	11:31	M.Goodrich	8270C	3714
1,2,4-Trichlorobenzene	ND	mg/kg	1.66	0.333	5	9/16/97	11:31	M.Goodrich	8270C	3714
2,4,5-Trichlorophenol	ND	mg/kg	4.16	0.830	5	9/16/97	11:31	M.Goodrich	8270C	3714
2,4,6-Trichlorophenol	ND	mg/kg	1.66	0.333	5	9/16/97	11:31	M.Goodrich	8270C	3714
METALS										
Antimony	ND	mg/kg	9.94	9.94	1	9/14/97	0:45	R.Street	6010B	2714
Arsenic	7.75	mg/kg	0.99	0.99	1	9/14/97	0:45	R.Street	6010B	2714
Barium	75.3	mg/kg	0.99	0.99	1	9/14/97	0:45	R.Street	6010B	2714
Beryllium	ND	mg/kg	0.99	0.99	1	9/14/97	0:45	R.Street	6010B	2714
Cadmium	1.39	mg/kg	0.99	0.99	1	9/14/97	0:45	R.Street	6010B	2714
Chromium	8.35	mg/kg	0.99	0.99	1	9/14/97	0:45	R.Street	6010B	2714

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

Laboratory Number: 97-A076102
Sample ID: #8

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
Lead	362.	mg/kg	0.99	0.99	1	9/14/97	0:45	R.Street	6010B	2714
Mercury	0.21	mg/kg	0.10	0.10	1	9/11/97	15:18	R.Street	7471	2507
Nickel	10.9	mg/kg	0.99	0.99	1	9/14/97	0:45	R.Street	6010B	2714
Selenium	ND	mg/kg	0.99	0.99	1	9/14/97	0:45	R.Street	6010B	2714
Silver	ND	mg/kg	0.99	0.99	1	9/14/97	0:45	R.Street	6010B	2714
Thallium	ND	mg/kg	0.99	0.99	1	9/14/97	0:45	R.Street	6010B	2714
Vanadium	21.7	mg/kg	9.94	9.94	1	9/14/97	0:45	R.Street	6010B	2714
GENERAL CHEMISTRY PARAMETERS										
Cyanide	ND	mg/kg	2.00	2.00	1	9/13/97	8:10	A Hardison	9012A	3863

ND = Not detected at the report limit.

Sample Extraction Data

BNA's Extracted 9/11/97 Wt extracted: 30.0 gm Extract Volume: 1.0 ml C.Gerenser

** SURROGATE RECOVERIES **

Surrogate	% Recovery	Target Range
BNA Surr., Nitrobenzene-d5	50.0	23. - 120.
BNA Surr., 2-Fluorobiphenyl	60.0	30. - 115.
BNA Surrogate, Terphenyl d14	60.0	18. - 140.
BNA Surrogate, Phenol d5	50.0	10. - 115.
BNA Surrogate, 2-Fluorophenol	60.0	20. - 121.
BNA Surrogate, 2,4,6-Tribromophenol	40.0	19. - 122.

Report Approved By: Michael H. Dunn Report Date: 9/22/97

Theodore J. Duello, Ph.D., Q.A. Officer
Michael H. Dunn, M.S., Technical Director
Danny B. Hale, M.S., Laboratory Director

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

ATLANTIC ENVIRONMENTAL SERV. 6043
ATTN. TOM HELFICH
2232 WELSCH IND. COURT
ST. LOUIS, MO 63146

Lab Number: 97-A076103

Sample ID: #9

Date Collected: 9/ 7/97

Project: 97521

Time Collected:

Project Name: 33RD ST. SITE

Date Received: 9/ 9/97

Sampler: DAVID PLUHAR

Time Received: 9:00

State Certification:

Sample Type: Soil

Site I.D.:

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
EXTRACTABLE ORGANICS										
Acenaphthene	ND	mg/kg	1.66	0.333	5	9/16/97	12:08	M.Goodrich	8270C	3714
Acenaphthylene	ND	mg/kg	1.66	0.333	5	9/16/97	12:08	M.Goodrich	8270C	3714
Anthracene	ND	mg/kg	1.66	0.333	5	9/16/97	12:08	M.Goodrich	8270C	3714
Benzo(a)anthracene	4.50	mg/kg	1.66	0.333	5	9/16/97	12:08	M.Goodrich	8270C	3714
Benzo(a)pyrene	4.66	mg/kg	1.66	0.333	5	9/16/97	12:08	M.Goodrich	8270C	3714
Benzo(b)fluoranthene	4.66	mg/kg	1.66	0.333	5	9/16/97	12:08	M.Goodrich	8270C	3714
Benzo(g,h,i)perylene	ND	mg/kg	1.66	0.333	5	9/16/97	12:08	M.Goodrich	8270C	3714
Benzo(k)fluoranthene	3.83	mg/kg	1.66	0.333	5	9/16/97	12:08	M.Goodrich	8270C	3714
4-Bromophenylphenylether	ND	mg/kg	1.66	0.333	5	9/16/97	12:08	M.Goodrich	8270C	3714
Butylbenzylphthalate	ND	mg/kg	1.66	0.333	5	9/16/97	12:08	M.Goodrich	8270C	3714
Carbazole	ND	mg/kg	1.66	0.333	5	9/16/97	12:08	M.Goodrich	8270C	3714
4-Chloro-3-methylphenol	ND	mg/kg	1.66	0.333	5	9/16/97	12:08	M.Goodrich	8270C	3714
4-Chloroaniline	ND	mg/kg	1.66	0.333	5	9/16/97	12:08	M.Goodrich	8270C	3714
bis(2-Chloroethoxy)methane	ND	mg/kg	1.66	0.333	5	9/16/97	12:08	M.Goodrich	8270C	3714
bis(2-Chloroethyl)ether	ND	mg/kg	1.66	0.333	5	9/16/97	12:08	M.Goodrich	8270C	3714
bis(2-Chloroisopropyl)ether	ND	mg/kg	1.66	0.333	5	9/16/97	12:08	M.Goodrich	8270C	3714
2-Chloronaphthalene	ND	mg/kg	1.66	0.333	5	9/16/97	12:08	M.Goodrich	8270C	3714
2-Chlorophenol	ND	mg/kg	1.66	0.333	5	9/16/97	12:08	M.Goodrich	8270C	3714
4-Chlorophenylphenylether	ND	mg/kg	1.66	0.333	5	9/16/97	12:08	M.Goodrich	8270C	3714
Chrysene	ND	mg/kg	1.66	0.333	5	9/16/97	12:08	M.Goodrich	8270C	3714
Dibenzofuran	ND	mg/kg	1.66	0.333	5	9/16/97	12:08	M.Goodrich	8270C	3714
Dibenz(a,h)anthracene	ND	mg/kg	1.66	0.333	5	9/16/97	12:08	M.Goodrich	8270C	3714
1,2-Dichlorobenzene	ND	mg/kg	1.66	0.333	5	9/16/97	12:08	M.Goodrich	8270C	3714
1,3-Dichlorobenzene	ND	mg/kg	1.66	0.333	5	9/16/97	12:08	M.Goodrich	8270C	3714
1,4-Dichlorobenzene	ND	mg/kg	1.66	0.333	5	9/16/97	12:08	M.Goodrich	8270C	3714
3,3'-Dichlorobenzidine	ND	mg/kg	3.33	0.666	5	9/16/97	12:08	M.Goodrich	8270C	3714
2,4-Dichlorophenol	ND	mg/kg	1.66	0.333	5	9/16/97	12:08	M.Goodrich	8270C	3714
Diethylphthalate	ND	mg/kg	1.66	0.333	5	9/16/97	12:08	M.Goodrich	8270C	3714

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2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

Laboratory Number: 97-A076103
Sample ID: #9

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
2,4-Dimethylphenol	ND	mg/kg	1.66	0.333	5	9/16/97	12:08	M.Goodrich	8270C	3714
Dimethylphthalate	ND	mg/kg	1.66	0.333	5	9/16/97	12:08	M.Goodrich	8270C	3714
Di-n-butylphthalate	ND	mg/kg	1.66	0.333	5	9/16/97	12:08	M.Goodrich	8270C	3714
4,6-Dinitro-2-methylphenol	ND	mg/kg	4.16	0.830	5	9/16/97	12:08	M.Goodrich	8270C	3714
2,4-Dinitrophenol	ND	mg/kg	4.16	0.830	5	9/16/97	12:08	M.Goodrich	8270C	3714
2,4-dinitrotoluene	ND	mg/kg	1.66	0.333	5	9/16/97	12:08	M.Goodrich	8270C	3714
2,6-Dinitrotoluene	ND	mg/kg	1.66	0.333	5	9/16/97	12:08	M.Goodrich	8270C	3714
Di-n-octylphthalate	ND	mg/kg	1.66	0.333	5	9/16/97	12:08	M.Goodrich	8270C	3714
Fluoranthene	7.66	mg/kg	1.66	0.333	5	9/16/97	12:08	M.Goodrich	8270C	3714
Fluorene	ND	mg/kg	1.66	0.333	5	9/16/97	12:08	M.Goodrich	8270C	3714
Hexachlorobenzene	ND	mg/kg	1.66	0.333	5	9/16/97	12:08	M.Goodrich	8270C	3714
Hexachlorobutadiene	ND	mg/kg	1.66	0.333	5	9/16/97	12:08	M.Goodrich	8270C	3714
Hexachlorocyclopentadiene	ND	mg/kg	1.66	0.333	5	9/16/97	12:08	M.Goodrich	8270C	3714
Hexachloroethane	ND	mg/kg	1.66	0.333	5	9/16/97	12:08	M.Goodrich	8270C	3714
Indeno(1,2,3-cd)pyrene	ND	mg/kg	1.66	0.333	5	9/16/97	12:08	M.Goodrich	8270C	3714
Isophorone	ND	mg/kg	1.66	0.333	5	9/16/97	12:08	M.Goodrich	8270C	3714
2-Methylnaphthalene	ND	mg/kg	1.66	0.333	5	9/16/97	12:08	M.Goodrich	8270C	3714
2-Methylphenol	ND	mg/kg	1.66	0.333	5	9/16/97	12:08	M.Goodrich	8270C	3714
m,p-Methylphenol	ND	mg/kg	1.66	0.333	5	9/16/97	12:08	M.Goodrich	8270C	3714
Naphthalene	ND	mg/kg	1.66	0.333	5	9/16/97	12:08	M.Goodrich	8270C	3714
2-Nitroaniline	ND	mg/kg	4.16	0.830	5	9/16/97	12:08	M.Goodrich	8270C	3714
3-Nitroaniline	ND	mg/kg	4.16	0.830	5	9/16/97	12:08	M.Goodrich	8270C	3714
4-Nitroaniline	ND	mg/kg	4.16	0.830	5	9/16/97	12:08	M.Goodrich	8270C	3714
Nitrobenzene	ND	mg/kg	1.66	0.333	5	9/16/97	12:08	M.Goodrich	8270C	3714
2-Nitrophenol	ND	mg/kg	1.66	0.333	5	9/16/97	12:08	M.Goodrich	8270C	3714
4-Nitrophenol	ND	mg/kg	4.16	0.830	5	9/16/97	12:08	M.Goodrich	8270C	3714
N-nitrosodi-n-propylamine	ND	mg/kg	1.66	0.333	5	9/16/97	12:08	M.Goodrich	8270C	3714
N-nitrosodiphenylamine	ND	mg/kg	1.66	0.333	5	9/16/97	12:08	M.Goodrich	8270C	3714
Pentachlorophenol	ND	mg/kg	4.16	0.830	5	9/16/97	12:08	M.Goodrich	8270C	3714
Phenanthrene	ND	mg/kg	1.66	0.333	5	9/16/97	12:08	M.Goodrich	8270C	3714
Phenol	ND	mg/kg	1.66	0.333	5	9/16/97	12:08	M.Goodrich	8270C	3714
Pyrene	7.83	mg/kg	1.66	0.333	5	9/16/97	12:08	M.Goodrich	8270C	3714
Bis(2-ethylhexyl)phthalate	ND	mg/kg	1.66	0.333	5	9/16/97	12:08	M.Goodrich	8270C	3714
1,2,4-Trichlorobenzene	ND	mg/kg	1.66	0.333	5	9/16/97	12:08	M.Goodrich	8270C	3714
2,4,5-Trichlorophenol	ND	mg/kg	4.16	0.830	5	9/16/97	12:08	M.Goodrich	8270C	3714
2,4,6-Trichlorophenol	ND	mg/kg	1.66	0.333	5	9/16/97	12:08	M.Goodrich	8270C	3714
METALS										
Antimony	ND	mg/kg	10.1	10.0	1	9/14/97	0:45	R.Street	6010B	2714
Arsenic	8.48	mg/kg	1.01	1.00	1	9/14/97	0:45	R.Street	6010B	2714
Barium	60.8	mg/kg	1.01	1.00	1	9/14/97	0:45	R.Street	6010B	2714
Beryllium	ND	mg/kg	1.01	1.00	1	9/14/97	0:45	R.Street	6010B	2714
Cadmium	ND	mg/kg	1.01	1.00	1	9/14/97	0:45	R.Street	6010B	2714
Chromium	6.26	mg/kg	1.01	1.00	1	9/14/97	0:45	R.Street	6010B	2714

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SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

Laboratory Number: 97-A076103
Sample ID: #9

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
Lead	141.	mg/kg	1.01	1.00	1	9/14/97	0:45	R.Street	6010B	2714
Mercury	ND	mg/kg	0.10	0.10	1	9/11/97	15:18	R.Street	7471	2507
Nickel	11.1	mg/kg	1.01	1.00	1	9/14/97	0:45	R.Street	6010B	2714
Selenium	ND	mg/kg	1.01	1.00	1	9/14/97	0:45	R.Street	6010B	2714
Silver	ND	mg/kg	1.01	1.00	1	9/14/97	0:45	R.Street	6010B	2714
Thallium	ND	mg/kg	1.01	1.00	1	9/14/97	0:45	R.Street	6010B	2714
Vanadium	20.8	mg/kg	10.1	10.0	1	9/14/97	0:45	R.Street	6010B	2714
GENERAL CHEMISTRY PARAMETERS										
Cyanide	ND	mg/kg	2.00	2.00	1	9/13/97	8:12	A Hardison	9012A	3863

ND = Not detected at the report limit.

Sample Extraction Data

BNA's Extracted 9/11/97 Wt extracted: 30.0 gm Extract Volume: 1.0 ml C.Gerenser

** SURROGATE RECOVERIES **

Surrogate	% Recovery	Target Range
BNA Surr., Nitrobenzene-d5	50.0	23. - 120.
BNA Surr., 2-Fluorobiphenyl	55.0	30. - 115.
BNA Surrogate, Terphenyl d14	60.0	18. - 140.
BNA Surrogate, Phenol d5	40.0	10. - 115.
BNA Surrogate, 2-Fluorophenol	35.0	20. - 121.
BNA Surrogate, 2,4,6-Tribromophenol	35.0	19. - 122.

Report Approved By: Michael H. Dunn Report Date: 9/22/97

Theodore J. Duello, Ph.D., Q.A. Officer
Michael H. Dunn, M.S., Technical Director
Danny B. Hale, M.S., Laboratory Director

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

ATLANTIC ENVIRONMENTAL SERV. 6043
ATTN. TOM HELFICH
2232 WELSCH IND. COURT
ST. LOUIS, MO 63146

Lab Number: 97-A076104

Sample ID: #10

Date Collected: 9/ 7/97

Project: 97521

Time Collected:

Project Name: 33RD ST. SITE

Date Received: 9/ 9/97

Sampler: DAVID PLUHAR

Time Received: 9:00

State Certification:

Sample Type: Soil

Site I.D.:

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
EXTRACTABLE ORGANICS										
Acenaphthene	ND	mg/kg	33.3	0.333	50	9/22/97	5:09	M.Goodrich	8270C	3714
Acenaphthylene	ND	mg/kg	33.3	0.333	50	9/22/97	5:09	M.Goodrich	8270C	3714
Anthracene	ND	mg/kg	33.3	0.333	50	9/22/97	5:09	M.Goodrich	8270C	3714
Benzo(a)anthracene	ND	mg/kg	33.3	0.333	50	9/22/97	5:09	M.Goodrich	8270C	3714
Benzo(a)pyrene	ND	mg/kg	33.3	0.333	50	9/22/97	5:09	M.Goodrich	8270C	3714
Benzo(b)fluoranthene	ND	mg/kg	33.3	0.333	50	9/22/97	5:09	M.Goodrich	8270C	3714
Benzo(g,h,i)perylene	ND	mg/kg	33.3	0.333	50	9/22/97	5:09	M.Goodrich	8270C	3714
Benzo(k)fluoranthene	ND	mg/kg	33.3	0.333	50	9/22/97	5:09	M.Goodrich	8270C	3714
4-Bromophenylphenylether	ND	mg/kg	33.3	0.333	50	9/22/97	5:09	M.Goodrich	8270C	3714
Butylbenzylphthalate	ND	mg/kg	33.3	0.333	50	9/22/97	5:09	M.Goodrich	8270C	3714
Carbazole	ND	mg/kg	33.3	0.333	50	9/22/97	5:09	M.Goodrich	8270C	3714
4-Chloro-3-methylphenol	ND	mg/kg	33.3	0.333	50	9/22/97	5:09	M.Goodrich	8270C	3714
4-Chloroaniline	ND	mg/kg	33.3	0.333	50	9/22/97	5:09	M.Goodrich	8270C	3714
bis(2-Chloroethoxy)methane	ND	mg/kg	33.3	0.333	50	9/22/97	5:09	M.Goodrich	8270C	3714
bis(2-Chloroethyl)ether	ND	mg/kg	33.3	0.333	50	9/22/97	5:09	M.Goodrich	8270C	3714
bis(2-Chloroisopropyl)ether	ND	mg/kg	33.3	0.333	50	9/22/97	5:09	M.Goodrich	8270C	3714
2-Chloronaphthalene	ND	mg/kg	33.3	0.333	50	9/22/97	5:09	M.Goodrich	8270C	3714
2-Chlorophenol	ND	mg/kg	33.3	0.333	50	9/22/97	5:09	M.Goodrich	8270C	3714
4-Chlorophenylphenylether	ND	mg/kg	33.3	0.333	50	9/22/97	5:09	M.Goodrich	8270C	3714
Chrysene	ND	mg/kg	33.3	0.333	50	9/22/97	5:09	M.Goodrich	8270C	3714
Dibenzofuran	ND	mg/kg	33.3	0.333	50	9/22/97	5:09	M.Goodrich	8270C	3714
Dibenz(a,h)anthracene	ND	mg/kg	33.3	0.333	50	9/22/97	5:09	M.Goodrich	8270C	3714
1,2-Dichlorobenzene	ND	mg/kg	33.3	0.333	50	9/22/97	5:09	M.Goodrich	8270C	3714
1,3-Dichlorobenzene	ND	mg/kg	33.3	0.333	50	9/22/97	5:09	M.Goodrich	8270C	3714
1,4-Dichlorobenzene	ND	mg/kg	33.3	0.333	50	9/22/97	5:09	M.Goodrich	8270C	3714
3,3'-Dichlorobenzidine	ND	mg/kg	66.7	0.666	50	9/22/97	5:09	M.Goodrich	8270C	3714
2,4-Dichlorophenol	ND	mg/kg	33.3	0.333	50	9/22/97	5:09	M.Goodrich	8270C	3714
Diethylphthalate	ND	mg/kg	33.3	0.333	50	9/22/97	5:09	M.Goodrich	8270C	3714

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SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

Laboratory Number: 97-A076104
Sample ID: #10

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
2,4-Dimethylphenol	ND	mg/kg	33.3	0.333	50	9/22/97	5:09	M.Goodrich	8270C	3714
Dimethylphthalate	ND	mg/kg	33.3	0.333	50	9/22/97	5:09	M.Goodrich	8270C	3714
Di-n-butylphthalate	ND	mg/kg	33.3	0.333	50	9/22/97	5:09	M.Goodrich	8270C	3714
4,6-Dinitro-2-methylphenol	ND	mg/kg	83.3	0.830	50	9/22/97	5:09	M.Goodrich	8270C	3714
2,4-Dinitrophenol	ND	mg/kg	83.3	0.830	50	9/22/97	5:09	M.Goodrich	8270C	3714
2,4-dinitrotoluene	ND	mg/kg	33.3	0.333	50	9/22/97	5:09	M.Goodrich	8270C	3714
2,6-Dinitrotoluene	ND	mg/kg	33.3	0.333	50	9/22/97	5:09	M.Goodrich	8270C	3714
Di-n-octylphthalate	ND	mg/kg	33.3	0.333	50	9/22/97	5:09	M.Goodrich	8270C	3714
Fluoranthene	43.3	mg/kg	33.3	0.333	50	9/22/97	5:09	M.Goodrich	8270C	3714
Fluorene	ND	mg/kg	33.3	0.333	50	9/22/97	5:09	M.Goodrich	8270C	3714
Hexachlorobenzene	ND	mg/kg	33.3	0.333	50	9/22/97	5:09	M.Goodrich	8270C	3714
Hexachlorobutadiene	ND	mg/kg	33.3	0.333	50	9/22/97	5:09	M.Goodrich	8270C	3714
Hexachlorocyclopentadiene	ND	mg/kg	33.3	0.333	50	9/22/97	5:09	M.Goodrich	8270C	3714
Hexachloroethane	ND	mg/kg	33.3	0.333	50	9/22/97	5:09	M.Goodrich	8270C	3714
Indeno(1,2,3-cd)pyrene	ND	mg/kg	33.3	0.333	50	9/22/97	5:09	M.Goodrich	8270C	3714
Isophorone	ND	mg/kg	33.3	0.333	50	9/22/97	5:09	M.Goodrich	8270C	3714
2-Methylnaphthalene	ND	mg/kg	33.3	0.333	50	9/22/97	5:09	M.Goodrich	8270C	3714
2-Methylphenol	ND	mg/kg	33.3	0.333	50	9/22/97	5:09	M.Goodrich	8270C	3714
m,p-Methylphenol	ND	mg/kg	33.3	0.333	50	9/22/97	5:09	M.Goodrich	8270C	3714
Naphthalene	ND	mg/kg	33.3	0.333	50	9/22/97	5:09	M.Goodrich	8270C	3714
2-Nitroaniline	ND	mg/kg	83.3	0.830	50	9/22/97	5:09	M.Goodrich	8270C	3714
3-Nitroaniline	ND	mg/kg	83.3	0.830	50	9/22/97	5:09	M.Goodrich	8270C	3714
4-Nitroaniline	ND	mg/kg	83.3	0.830	50	9/22/97	5:09	M.Goodrich	8270C	3714
Nitrobenzene	ND	mg/kg	33.3	0.333	50	9/22/97	5:09	M.Goodrich	8270C	3714
2-Nitrophenol	ND	mg/kg	33.3	0.333	50	9/22/97	5:09	M.Goodrich	8270C	3714
4-Nitrophenol	ND	mg/kg	83.3	0.830	50	9/22/97	5:09	M.Goodrich	8270C	3714
N-nitrosodi-n-propylamine	ND	mg/kg	33.3	0.333	50	9/22/97	5:09	M.Goodrich	8270C	3714
N-nitrosodiphenylamine	ND	mg/kg	33.3	0.333	50	9/22/97	5:09	M.Goodrich	8270C	3714
Pentachlorophenol	ND	mg/kg	83.3	0.830	50	9/22/97	5:09	M.Goodrich	8270C	3714
Phenanthrene	ND	mg/kg	33.3	0.333	50	9/22/97	5:09	M.Goodrich	8270C	3714
Phenol	ND	mg/kg	33.3	0.333	50	9/22/97	5:09	M.Goodrich	8270C	3714
Pyrene	36.7	mg/kg	33.3	0.333	50	9/22/97	5:09	M.Goodrich	8270C	3714
Bis(2-ethylhexyl)phthalate	ND	mg/kg	33.3	0.333	50	9/22/97	5:09	M.Goodrich	8270C	3714
1,2,4-Trichlorobenzene	ND	mg/kg	33.3	0.333	50	9/22/97	5:09	M.Goodrich	8270C	3714
2,4,5-Trichlorophenol	ND	mg/kg	83.3	0.830	50	9/22/97	5:09	M.Goodrich	8270C	3714
2,4,6-Trichlorophenol	ND	mg/kg	33.3	0.333	50	9/22/97	5:09	M.Goodrich	8270C	3714
METALS										
Antimony	ND	mg/kg	9.62	9.62	1	9/14/97	0:45	R.Street	6010B	2714
Arsenic	3.46	mg/kg	0.96	0.96	1	9/14/97	0:45	R.Street	6010B	2714
Barium	56.2	mg/kg	0.96	0.96	1	9/14/97	0:45	R.Street	6010B	2714
Beryllium	ND	mg/kg	0.96	0.96	1	9/14/97	0:45	R.Street	6010B	2714
Cadmium	ND	mg/kg	0.96	0.96	1	9/14/97	0:45	R.Street	6010B	2714
Chromium	5.58	mg/kg	0.96	0.96	1	9/14/97	0:45	R.Street	6010B	2714

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

Laboratory Number: 97-A076104
Sample ID: #10

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
Lead	171.	mg/kg	0.96	0.96	1	9/14/97	0:45	R.Street	6010B	2714
Mercury	ND	mg/kg	0.10	0.10	1	9/11/97	15:18	R.Street	7471	2507
Nickel	12.1	mg/kg	0.96	0.96	1	9/14/97	0:45	R.Street	6010B	2714
Selenium	ND	mg/kg	0.96	0.96	1	9/14/97	0:45	R.Street	6010B	2714
Silver	ND	mg/kg	0.96	0.96	1	9/14/97	0:45	R.Street	6010B	2714
Thallium	ND	mg/kg	0.96	0.96	1	9/14/97	0:45	R.Street	6010B	2714
Vanadium	34.0	mg/kg	9.62	9.62	1	9/14/97	0:45	R.Street	6010B	2714
GENERAL CHEMISTRY PARAMETERS										
Cyanide	ND	mg/kg	2.00	2.00	1	9/13/97	8:13	A Hardison	9012A	3863

ND = Not detected at the report limit.

Sample Extraction Data

BNA's Extracted 9/11/97 Wt extracted: 30.0 gm Extract Volume: 2.0 ml C.Gerenser

BNA surrogates were diluted out due to sample matrix.

Report Approved By: Michael H. Dunn Report Date: 9/22/97

Theodore J. Duello, Ph.D., Q.A. Officer
Michael H. Dunn, M.S., Technical Director
Danny R. Hale, M.S., Laboratory Director

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

ATLANTIC ENVIRONMENTAL SERV. 6043
ATTN. TOM HELFICH
2232 WELSCH IND. COURT
ST. LOUIS, MO 63146

Lab Number: 97-A076105

Sample ID: #11

Date Collected: 9/ 7/97

Project: 97521

Time Collected:

Project Name: 33RD ST. SITE

Date Received: 9/ 9/97

Sampler: DAVID PLUHAR

Time Received: 9:00

State Certification:

Sample Type: Soil

Site I.D.:

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
EXTRACTABLE ORGANICS										
Acenaphthene	ND	mg/kg	33.3	0.333	50	9/22/97	5:45	M.Goodrich	8270C	3714
Acenaphthylene	ND	mg/kg	33.3	0.333	50	9/22/97	5:45	M.Goodrich	8270C	3714
Anthracene	43.3	mg/kg	33.3	0.333	50	9/22/97	5:45	M.Goodrich	8270C	3714
Benzo(a)anthracene	96.7	mg/kg	33.3	0.333	50	9/22/97	5:45	M.Goodrich	8270C	3714
Benzo(a)pyrene	96.7	mg/kg	33.3	0.333	50	9/22/97	5:45	M.Goodrich	8270C	3714
Benzo(b)fluoranthene	83.3	mg/kg	33.3	0.333	50	9/22/97	5:45	M.Goodrich	8270C	3714
Benzo(g,h,i)perylene	ND	mg/kg	33.3	0.333	50	9/22/97	5:45	M.Goodrich	8270C	3714
Benzo(k)fluoranthene	66.7	mg/kg	33.3	0.333	50	9/22/97	5:45	M.Goodrich	8270C	3714
4-Bromophenylphenylether	ND	mg/kg	33.3	0.333	50	9/22/97	5:45	M.Goodrich	8270C	3714
Butylbenzylphthalate	ND	mg/kg	33.3	0.333	50	9/22/97	5:45	M.Goodrich	8270C	3714
Carbazole	ND	mg/kg	33.3	0.333	50	9/22/97	5:45	M.Goodrich	8270C	3714
4-Chloro-3-methylphenol	ND	mg/kg	33.3	0.333	50	9/22/97	5:45	M.Goodrich	8270C	3714
4-Chloroaniline	ND	mg/kg	33.3	0.333	50	9/22/97	5:45	M.Goodrich	8270C	3714
bis(2-Chloroethoxy)methane	ND	mg/kg	33.3	0.333	50	9/22/97	5:45	M.Goodrich	8270C	3714
bis(2-Chloroethyl)ether	ND	mg/kg	33.3	0.333	50	9/22/97	5:45	M.Goodrich	8270C	3714
bis(2-Chloroisopropyl)ether	ND	mg/kg	33.3	0.333	50	9/22/97	5:45	M.Goodrich	8270C	3714
2-Chloronaphthalene	ND	mg/kg	33.3	0.333	50	9/22/97	5:45	M.Goodrich	8270C	3714
2-Chlorophenol	ND	mg/kg	33.3	0.333	50	9/22/97	5:45	M.Goodrich	8270C	3714
4-Chlorophenylphenylether	ND	mg/kg	33.3	0.333	50	9/22/97	5:45	M.Goodrich	8270C	3714
Chrysene	100.	mg/kg	33.3	0.333	50	9/22/97	5:45	M.Goodrich	8270C	3714
Dibenzofuran	ND	mg/kg	33.3	0.333	50	9/22/97	5:45	M.Goodrich	8270C	3714
Dibenz(a,h)anthracene	ND	mg/kg	33.3	0.333	50	9/22/97	5:45	M.Goodrich	8270C	3714
1,2-Dichlorobenzene	ND	mg/kg	33.3	0.333	50	9/22/97	5:45	M.Goodrich	8270C	3714
1,3-Dichlorobenzene	ND	mg/kg	33.3	0.333	50	9/22/97	5:45	M.Goodrich	8270C	3714
1,4-Dichlorobenzene	ND	mg/kg	33.3	0.333	50	9/22/97	5:45	M.Goodrich	8270C	3714
3,3'-Dichlorobenzidine	ND	mg/kg	66.7	0.666	50	9/22/97	5:45	M.Goodrich	8270C	3714
2,4-Dichlorophenol	ND	mg/kg	33.3	0.333	50	9/22/97	5:45	M.Goodrich	8270C	3714
Diethylphthalate	ND	mg/kg	33.3	0.333	50	9/22/97	5:45	M.Goodrich	8270C	3714

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SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

Laboratory Number: 97-A076105
Sample ID: #11

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
2,4-Dimethylphenol	ND	mg/kg	33.3	0.333	50	9/22/97	5:45	M.Goodrich	8270C	3714
Dimethylphthalate	ND	mg/kg	33.3	0.333	50	9/22/97	5:45	M.Goodrich	8270C	3714
Di-n-butylphthalate	ND	mg/kg	33.3	0.333	50	9/22/97	5:45	M.Goodrich	8270C	3714
4,6-Dinitro-2-methylphenol	ND	mg/kg	83.3	0.830	50	9/22/97	5:45	M.Goodrich	8270C	3714
2,4-Dinitrophenol	ND	mg/kg	83.3	0.830	50	9/22/97	5:45	M.Goodrich	8270C	3714
2,4-dinitrotoluene	ND	mg/kg	33.3	0.333	50	9/22/97	5:45	M.Goodrich	8270C	3714
2,6-Dinitrotoluene	ND	mg/kg	33.3	0.333	50	9/22/97	5:45	M.Goodrich	8270C	3714
Di-n-octylphthalate	ND	mg/kg	33.3	0.333	50	9/22/97	5:45	M.Goodrich	8270C	3714
Fluoranthene	180.	mg/kg	33.3	0.333	50	9/22/97	5:45	M.Goodrich	8270C	3714
Fluorene	ND	mg/kg	33.3	0.333	50	9/22/97	5:45	M.Goodrich	8270C	3714
Hexachlorobenzene	ND	mg/kg	33.3	0.333	50	9/22/97	5:45	M.Goodrich	8270C	3714
Hexachlorobutadiene	ND	mg/kg	33.3	0.333	50	9/22/97	5:45	M.Goodrich	8270C	3714
Hexachlorocyclopentadiene	ND	mg/kg	33.3	0.333	50	9/22/97	5:45	M.Goodrich	8270C	3714
Hexachloroethane	ND	mg/kg	33.3	0.333	50	9/22/97	5:45	M.Goodrich	8270C	3714
Indeno(1,2,3-cd)pyrene	ND	mg/kg	33.3	0.333	50	9/22/97	5:45	M.Goodrich	8270C	3714
Isophorone	ND	mg/kg	33.3	0.333	50	9/22/97	5:45	M.Goodrich	8270C	3714
2-Methylnaphthalene	ND	mg/kg	33.3	0.333	50	9/22/97	5:45	M.Goodrich	8270C	3714
2-Methylphenol	ND	mg/kg	33.3	0.333	50	9/22/97	5:45	M.Goodrich	8270C	3714
m,p-Methylphenol	ND	mg/kg	33.3	0.333	50	9/22/97	5:45	M.Goodrich	8270C	3714
Naphthalene	ND	mg/kg	33.3	0.333	50	9/22/97	5:45	M.Goodrich	8270C	3714
2-Nitroaniline	ND	mg/kg	83.3	0.830	50	9/22/97	5:45	M.Goodrich	8270C	3714
3-Nitroaniline	ND	mg/kg	83.3	0.830	50	9/22/97	5:45	M.Goodrich	8270C	3714
4-Nitroaniline	ND	mg/kg	83.3	0.830	50	9/22/97	5:45	M.Goodrich	8270C	3714
Nitrobenzene	ND	mg/kg	33.3	0.333	50	9/22/97	5:45	M.Goodrich	8270C	3714
2-Nitrophenol	ND	mg/kg	33.3	0.333	50	9/22/97	5:45	M.Goodrich	8270C	3714
4-Nitrophenol	ND	mg/kg	83.3	0.830	50	9/22/97	5:45	M.Goodrich	8270C	3714
N-nitrosodi-n-propylamine	ND	mg/kg	33.3	0.333	50	9/22/97	5:45	M.Goodrich	8270C	3714
N-nitrosodiphenylamine	ND	mg/kg	33.3	0.333	50	9/22/97	5:45	M.Goodrich	8270C	3714
Pentachlorophenol	ND	mg/kg	83.3	0.830	50	9/22/97	5:45	M.Goodrich	8270C	3714
Phenanthrene	153.	mg/kg	33.3	0.333	50	9/22/97	5:45	M.Goodrich	8270C	3714
Phenol	ND	mg/kg	33.3	0.333	50	9/22/97	5:45	M.Goodrich	8270C	3714
Pyrene	150.	mg/kg	33.3	0.333	50	9/22/97	5:45	M.Goodrich	8270C	3714
Bis(2-ethylhexyl)phthalate	ND	mg/kg	33.3	0.333	50	9/22/97	5:45	M.Goodrich	8270C	3714
1,2,4-Trichlorobenzene	ND	mg/kg	33.3	0.333	50	9/22/97	5:45	M.Goodrich	8270C	3714
2,4,5-Trichlorophenol	ND	mg/kg	83.3	0.830	50	9/22/97	5:45	M.Goodrich	8270C	3714
2,4,6-Trichlorophenol	ND	mg/kg	33.3	0.333	50	9/22/97	5:45	M.Goodrich	8270C	3714
METALS										
Antimony	ND	mg/kg	10.0	10.0	1	9/14/97	0:45	R.Street	6010B	2714
Arsenic	14.2	mg/kg	1.00	1.00	1	9/14/97	0:45	R.Street	6010B	2714
Barium	59.2	mg/kg	1.00	1.00	1	9/14/97	0:45	R.Street	6010B	2714
Beryllium	ND	mg/kg	1.00	1.00	1	9/14/97	0:45	R.Street	6010B	2714
Cadmium	ND	mg/kg	1.00	1.00	1	9/14/97	0:45	R.Street	6010B	2714
Chromium	6.00	mg/kg	1.00	1.00	1	9/14/97	0:45	R.Street	6010B	2714

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

Laboratory Number: 97-A076105
Sample ID: #11

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
Lead	200.	mg/kg	1.00	1.00	1	9/14/97	0:45	R.Street	6010B	2714
Mercury	0.12	mg/kg	0.10	0.10	1	9/11/97	15:18	R.Street	7471	2507
Nickel	7.80	mg/kg	1.00	1.00	1	9/14/97	0:45	R.Street	6010B	2714
Selenium	ND	mg/kg	1.00	1.00	1	9/14/97	0:45	R.Street	6010B	2714
Silver	ND	mg/kg	1.00	1.00	1	9/14/97	0:45	R.Street	6010B	2714
Thallium	ND	mg/kg	1.00	1.00	1	9/14/97	0:45	R.Street	6010B	2714
Vanadium	ND	mg/kg	10.0	10.0	1	9/14/97	0:45	R.Street	6010B	2714
GENERAL CHEMISTRY PARAMETERS										
Cyanide	ND	mg/kg	2.00	2.00	1	9/13/97	8:13	A Hardison	9012A	3863

ND = Not detected at the report limit.

Sample Extraction Data

BNA's Extracted 9/11/97 Wt extracted: 30.0 gm Extract Volume: 2.0 ml C.Gereaser

BNA surrogates were diluted out due to sample concentration.

Report Approved By: Michael H. Dunn Report Date: 9/22/97

Theodore J. Duello, Ph.D., Q.A. Officer
Michael H. Dunn, M.S., Technical Director
Danny B. Hale, M.S., Laboratory Director

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

TLANTIC ENVIRONMENTAL SERV. 6043
ATTN. TOM HELFICH
2232 WELSCH IND. COURT
T. LOUIS, MO 63146

Lab Number: 97-A076106

Sample ID: #12

Date Collected: 9/ 7/97

roject: 97521

Time Collected:

Project Name: 33RD ST. SITE

Date Received: 9/ 9/97

Sampler: DAVID PLUHAR

Time Received: 9:00

tate Certification:

Sample Type: Soil

Site I.D.:

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
EXTRACTABLE ORGANICS										
Acenaphthene	ND	mg/kg	3.33	0.333	10	9/17/97	10:51	M.Goodrich	8270C	3714
Acenaphthylene	4.00	mg/kg	3.33	0.333	10	9/17/97	10:51	M.Goodrich	8270C	3714
Anthracene	ND	mg/kg	3.33	0.333	10	9/17/97	10:51	M.Goodrich	8270C	3714
Benzo(a)anthracene	9.66	mg/kg	3.33	0.333	10	9/17/97	10:51	M.Goodrich	8270C	3714
Benzo(a)pyrene	8.99	mg/kg	3.33	0.333	10	9/17/97	10:51	M.Goodrich	8270C	3714
Benzo(b)fluoranthene	7.33	mg/kg	3.33	0.333	10	9/17/97	10:51	M.Goodrich	8270C	3714
Benzo(g,h,i)perylene	ND	mg/kg	3.33	0.333	10	9/17/97	10:51	M.Goodrich	8270C	3714
Benzo(k)fluoranthene	9.32	mg/kg	3.33	0.333	10	9/17/97	10:51	M.Goodrich	8270C	3714
4-Bromophenylphenylether	ND	mg/kg	3.33	0.333	10	9/17/97	10:51	M.Goodrich	8270C	3714
Butylbenzylphthalate	ND	mg/kg	3.33	0.333	10	9/17/97	10:51	M.Goodrich	8270C	3714
Carbazole	ND	mg/kg	3.33	0.333	10	9/17/97	10:51	M.Goodrich	8270C	3714
4-Chloro-3-methylphenol	ND	mg/kg	3.33	0.333	10	9/17/97	10:51	M.Goodrich	8270C	3714
4-Chloroaniline	ND	mg/kg	3.33	0.333	10	9/17/97	10:51	M.Goodrich	8270C	3714
bis(2-Chloroethoxy)methane	ND	mg/kg	3.33	0.333	10	9/17/97	10:51	M.Goodrich	8270C	3714
bis(2-Chloroethyl)ether	ND	mg/kg	3.33	0.333	10	9/17/97	10:51	M.Goodrich	8270C	3714
bis(2-Chloroisopropyl)ether	ND	mg/kg	3.33	0.333	10	9/17/97	10:51	M.Goodrich	8270C	3714
2-Chloronaphthalene	ND	mg/kg	3.33	0.333	10	9/17/97	10:51	M.Goodrich	8270C	3714
2-Chlorophenol	ND	mg/kg	3.33	0.333	10	9/17/97	10:51	M.Goodrich	8270C	3714
4-Chlorophenylphenylether	ND	mg/kg	3.33	0.333	10	9/17/97	10:51	M.Goodrich	8270C	3714
Chrysene	9.32	mg/kg	3.33	0.333	10	9/17/97	10:51	M.Goodrich	8270C	3714
Dibenzofuran	ND	mg/kg	3.33	0.333	10	9/17/97	10:51	M.Goodrich	8270C	3714
Dibenz(a,h)anthracene	ND	mg/kg	3.33	0.333	10	9/17/97	10:51	M.Goodrich	8270C	3714
1,2-Dichlorobenzene	ND	mg/kg	3.33	0.333	10	9/17/97	10:51	M.Goodrich	8270C	3714
1,3-Dichlorobenzene	ND	mg/kg	3.33	0.333	10	9/17/97	10:51	M.Goodrich	8270C	3714
1,4-Dichlorobenzene	ND	mg/kg	3.33	0.333	10	9/17/97	10:51	M.Goodrich	8270C	3714
3,3'-Dichlorobenzidine	ND	mg/kg	6.66	0.666	10	9/17/97	10:51	M.Goodrich	8270C	3714
2,4-Dichlorophenol	ND	mg/kg	3.33	0.333	10	9/17/97	10:51	M.Goodrich	8270C	3714
Diethylphthalate	ND	mg/kg	3.33	0.333	10	9/17/97	10:51	M.Goodrich	8270C	3714

COPY 1

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

Laboratory Number: 97-A076106
Sample ID: #12

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
2,4-Dimethylphenol	ND	mg/kg	3.33	0.333	10	9/17/97	10:51	M.Goodrich	8270C	3714
Dimethylphthalate	ND	mg/kg	3.33	0.333	10	9/17/97	10:51	M.Goodrich	8270C	3714
Di-n-butylphthalate	ND	mg/kg	3.33	0.333	10	9/17/97	10:51	M.Goodrich	8270C	3714
4,6-Dinitro-2-methylphenol	ND	mg/kg	8.32	0.830	10	9/17/97	10:51	M.Goodrich	8270C	3714
2,4-Dinitrophenol	ND	mg/kg	8.32	0.830	10	9/17/97	10:51	M.Goodrich	8270C	3714
2,4-dinitrotoluene	ND	mg/kg	3.33	0.333	10	9/17/97	10:51	M.Goodrich	8270C	3714
2,6-Dinitrotoluene	ND	mg/kg	3.33	0.333	10	9/17/97	10:51	M.Goodrich	8270C	3714
Di-n-octylphthalate	ND	mg/kg	3.33	0.333	10	9/17/97	10:51	M.Goodrich	8270C	3714
Fluoranthene	15.0	mg/kg	3.33	0.333	10	9/17/97	10:51	M.Goodrich	8270C	3714
Fluorene	ND	mg/kg	3.33	0.333	10	9/17/97	10:51	M.Goodrich	8270C	3714
Hexachlorobenzene	ND	mg/kg	3.33	0.333	10	9/17/97	10:51	M.Goodrich	8270C	3714
Hexachlorobutadiene	ND	mg/kg	3.33	0.333	10	9/17/97	10:51	M.Goodrich	8270C	3714
Hexachlorocyclopentadiene	ND	mg/kg	3.33	0.333	10	9/17/97	10:51	M.Goodrich	8270C	3714
Hexachloroethane	ND	mg/kg	3.33	0.333	10	9/17/97	10:51	M.Goodrich	8270C	3714
Indeno(1,2,3-cd)pyrene	3.33	mg/kg	3.33	0.333	10	9/17/97	10:51	M.Goodrich	8270C	3714
Isophorone	ND	mg/kg	3.33	0.333	10	9/17/97	10:51	M.Goodrich	8270C	3714
2-Methylnaphthalene	ND	mg/kg	3.33	0.333	10	9/17/97	10:51	M.Goodrich	8270C	3714
2-Methylphenol	ND	mg/kg	3.33	0.333	10	9/17/97	10:51	M.Goodrich	8270C	3714
m,p-Methylphenol	ND	mg/kg	3.33	0.333	10	9/17/97	10:51	M.Goodrich	8270C	3714
Naphthalene	ND	mg/kg	3.33	0.333	10	9/17/97	10:51	M.Goodrich	8270C	3714
2-Nitroaniline	ND	mg/kg	8.32	0.830	10	9/17/97	10:51	M.Goodrich	8270C	3714
3-Nitroaniline	ND	mg/kg	8.32	0.830	10	9/17/97	10:51	M.Goodrich	8270C	3714
4-Nitroaniline	ND	mg/kg	8.32	0.830	10	9/17/97	10:51	M.Goodrich	8270C	3714
Nitrobenzene	ND	mg/kg	3.33	0.333	10	9/17/97	10:51	M.Goodrich	8270C	3714
2-Nitrophenol	ND	mg/kg	3.33	0.333	10	9/17/97	10:51	M.Goodrich	8270C	3714
4-Nitrophenol	ND	mg/kg	8.32	0.830	10	9/17/97	10:51	M.Goodrich	8270C	3714
N-nitrosodi-n-propylamine	ND	mg/kg	3.33	0.333	10	9/17/97	10:51	M.Goodrich	8270C	3714
N-nitrosodiphenylamine	ND	mg/kg	3.33	0.333	10	9/17/97	10:51	M.Goodrich	8270C	3714
Pentachlorophenol	ND	mg/kg	8.32	0.830	10	9/17/97	10:51	M.Goodrich	8270C	3714
Phenanthrene	11.0	mg/kg	3.33	0.333	10	9/17/97	10:51	M.Goodrich	8270C	3714
Phenol	ND	mg/kg	3.33	0.333	10	9/17/97	10:51	M.Goodrich	8270C	3714
Pyrene	19.0	mg/kg	3.33	0.333	10	9/17/97	10:51	M.Goodrich	8270C	3714
Bis(2-ethylhexyl)phthalate	ND	mg/kg	3.33	0.333	10	9/17/97	10:51	M.Goodrich	8270C	3714
1,2,4-Trichlorobenzene	ND	mg/kg	3.33	0.333	10	9/17/97	10:51	M.Goodrich	8270C	3714
2,4,5-Trichlorophenol	ND	mg/kg	8.32	0.830	10	9/17/97	10:51	M.Goodrich	8270C	3714
2,4,6-Trichlorophenol	ND	mg/kg	3.33	0.333	10	9/17/97	10:51	M.Goodrich	8270C	3714
METALS										
Antimony	ND	mg/kg	10.1	10.0	1	9/14/97	0:45	R.Street	6010B	2714
Arsenic	17.4	mg/kg	1.01	1.00	1	9/14/97	0:45	R.Street	6010B	2714
Barium	62.1	mg/kg	1.01	1.00	1	9/14/97	0:45	R.Street	6010B	2714
Beryllium	ND	mg/kg	1.01	1.00	1	9/14/97	0:45	R.Street	6010B	2714
Cadmium	ND	mg/kg	1.01	1.00	1	9/14/97	0:45	R.Street	6010B	2714
Chromium	5.48	mg/kg	1.01	1.00	1	9/14/97	0:45	R.Street	6010B	2714

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

Laboratory Number: 97-A076106
Sample ID: #12

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
Lead	74.8	mg/kg	1.01	1.00	1	9/14/97	0:45	R.Street	6010B	2714
Mercury	ND	mg/kg	0.10	0.10	1	9/11/97	15:18	R.Street	7471	2507
Nickel	5.88	mg/kg	1.01	1.00	1	9/14/97	0:45	R.Street	6010B	2714
Selenium	ND	mg/kg	1.01	1.00	1	9/14/97	0:45	R.Street	6010B	2714
Silver	ND	mg/kg	1.01	1.00	1	9/14/97	0:45	R.Street	6010B	2714
Thallium	ND	mg/kg	1.01	1.00	1	9/14/97	0:45	R.Street	6010B	2714
Vanadium	ND	mg/kg	10.1	10.0	1	9/14/97	0:45	R.Street	6010B	2714
GENERAL CHEMISTRY PARAMETERS										
Cyanide	ND	mg/kg	2.00	2.00	1	9/13/97	8:14	A Hardison	9012A	3863

ND = Not detected at the report limit.

Sample Extraction Data

BNA's Extracted 9/11/97 Wt extracted: 30.0 gm Extract Volume: 1.0 ml C.Gereaser

** SURROGATE RECOVERIES **

Surrogate	% Recovery	Target Range
BNA Surr., Nitrobenzene-d5	80.0	23. - 120.
BNA Surr., 2-Fluorobiphenyl	78.0	30. - 115.
BNA Surrogate, Terphenyl d14	81.0	18. - 140.
BNA Surrogate, Phenol d5	88.0	10. - 115.
BNA Surrogate, 2-Fluorophenol	64.0	20. - 121.
BNA Surrogate, 2,4,6-Tribromophenol	43.0	19. - 122.

Report Approved By: Michael H. Dunn Report Date: 9/22/97

Theodore J. Duello, Ph.D., Q.A. Officer
Michael H. Dunn, M.S., Technical Director
Danny B. Hale, M.S., Laboratory Director

COPY 1

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

ATLANTIC ENVIRONMENTAL SERV. 6043
ATTN. TOM HELFICH
2232 WELSCH IND. COURT
ST. LOUIS, MO 63146

Lab Number: 97-A076107

Sample ID: #13

Date Collected: 9/ 7/97

Project: 97521

Time Collected:

Project Name: 33RD ST. SITE

Date Received: 9/ 9/97

Sampler: DAVID PLUHAR

Time Received: 9:00

State Certification:

Sample Type: Soil

Site I.D.:

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
EXTRACTABLE ORGANICS										
Acenaphthene	ND	mg/kg	6.66	0.333	20	9/17/97	11:27	M.Goodrich	8270C	3714
Acenaphthylene	ND	mg/kg	6.66	0.333	20	9/17/97	11:27	M.Goodrich	8270C	3714
Anthracene	7.33	mg/kg	6.66	0.333	20	9/17/97	11:27	M.Goodrich	8270C	3714
Benzo(a)anthracene	18.0	mg/kg	6.66	0.333	20	9/17/97	11:27	M.Goodrich	8270C	3714
Benzo(a)pyrene	14.0	mg/kg	6.66	0.333	20	9/17/97	11:27	M.Goodrich	8270C	3714
Benzo(b)fluoranthene	12.7	mg/kg	6.66	0.333	20	9/17/97	11:27	M.Goodrich	8270C	3714
Benzo(g,h,i)perylene	ND	mg/kg	6.66	0.333	20	9/17/97	11:27	M.Goodrich	8270C	3714
Benzo(k)fluoranthene	13.3	mg/kg	6.66	0.333	20	9/17/97	11:27	M.Goodrich	8270C	3714
4-Bromophenylphenylether	ND	mg/kg	6.66	0.333	20	9/17/97	11:27	M.Goodrich	8270C	3714
Butylbenzylphthalate	ND	mg/kg	6.66	0.333	20	9/17/97	11:27	M.Goodrich	8270C	3714
Carbazole	ND	mg/kg	6.66	0.333	20	9/17/97	11:27	M.Goodrich	8270C	3714
4-Chloro-3-methylphenol	ND	mg/kg	6.66	0.333	20	9/17/97	11:27	M.Goodrich	8270C	3714
4-Chloroaniline	ND	mg/kg	6.66	0.333	20	9/17/97	11:27	M.Goodrich	8270C	3714
bis(2-Chloroethoxy)methane	ND	mg/kg	6.66	0.333	20	9/17/97	11:27	M.Goodrich	8270C	3714
bis(2-Chloroethyl)ether	ND	mg/kg	6.66	0.333	20	9/17/97	11:27	M.Goodrich	8270C	3714
bis(2-Chloroisopropyl)ether	ND	mg/kg	6.66	0.333	20	9/17/97	11:27	M.Goodrich	8270C	3714
2-Chloronaphthalene	ND	mg/kg	6.66	0.333	20	9/17/97	11:27	M.Goodrich	8270C	3714
2-Chlorophenol	ND	mg/kg	6.66	0.333	20	9/17/97	11:27	M.Goodrich	8270C	3714
4-Chlorophenylphenylether	ND	mg/kg	6.66	0.333	20	9/17/97	11:27	M.Goodrich	8270C	3714
Chrysene	20.0	mg/kg	6.66	0.333	20	9/17/97	11:27	M.Goodrich	8270C	3714
Dibenzofuran	ND	mg/kg	6.66	0.333	20	9/17/97	11:27	M.Goodrich	8270C	3714
Dibenz(a,h)anthracene	ND	mg/kg	6.66	0.333	20	9/17/97	11:27	M.Goodrich	8270C	3714
1,2-Dichlorobenzene	ND	mg/kg	6.66	0.333	20	9/17/97	11:27	M.Goodrich	8270C	3714
1,3-Dichlorobenzene	ND	mg/kg	6.66	0.333	20	9/17/97	11:27	M.Goodrich	8270C	3714
1,4-Dichlorobenzene	ND	mg/kg	6.66	0.333	20	9/17/97	11:27	M.Goodrich	8270C	3714
3,3'-Dichlorobenzidine	ND	mg/kg	13.3	0.666	20	9/17/97	11:27	M.Goodrich	8270C	3714
2,4-Dichlorophenol	ND	mg/kg	6.66	0.333	20	9/17/97	11:27	M.Goodrich	8270C	3714
Diethylphthalate	ND	mg/kg	6.66	0.333	20	9/17/97	11:27	M.Goodrich	8270C	3714

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SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

Laboratory Number: 97-A076107
Sample ID: #13

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
2,4-Dimethylphenol	ND	mg/kg	6.66	0.333	20	9/17/97	11:27	M.Goodrich	8270C	3714
Dimethylphthalate	ND	mg/kg	6.66	0.333	20	9/17/97	11:27	M.Goodrich	8270C	3714
Di-n-butylphthalate	ND	mg/kg	6.66	0.333	20	9/17/97	11:27	M.Goodrich	8270C	3714
4,6-Dinitro-2-methylphenol	ND	mg/kg	16.6	0.830	20	9/17/97	11:27	M.Goodrich	8270C	3714
2,4-Dinitrophenol	ND	mg/kg	16.6	0.830	20	9/17/97	11:27	M.Goodrich	8270C	3714
2,4-dinitrotoluene	ND	mg/kg	6.66	0.333	20	9/17/97	11:27	M.Goodrich	8270C	3714
2,6-Dinitrotoluene	ND	mg/kg	6.66	0.333	20	9/17/97	11:27	M.Goodrich	8270C	3714
Di-n-octylphthalate	ND	mg/kg	6.66	0.333	20	9/17/97	11:27	M.Goodrich	8270C	3714
Fluoranthene	40.0	mg/kg	6.66	0.333	20	9/17/97	11:27	M.Goodrich	8270C	3714
Fluorene	ND	mg/kg	6.66	0.333	20	9/17/97	11:27	M.Goodrich	8270C	3714
Hexachlorobenzene	ND	mg/kg	6.66	0.333	20	9/17/97	11:27	M.Goodrich	8270C	3714
Hexachlorobutadiene	ND	mg/kg	6.66	0.333	20	9/17/97	11:27	M.Goodrich	8270C	3714
Hexachlorocyclopentadiene	ND	mg/kg	6.66	0.333	20	9/17/97	11:27	M.Goodrich	8270C	3714
Hexachloroethane	ND	mg/kg	6.66	0.333	20	9/17/97	11:27	M.Goodrich	8270C	3714
Indeno(1,2,3-cd)pyrene	ND	mg/kg	6.66	0.333	20	9/17/97	11:27	M.Goodrich	8270C	3714
Isophorone	ND	mg/kg	6.66	0.333	20	9/17/97	11:27	M.Goodrich	8270C	3714
2-Methylnaphthalene	ND	mg/kg	6.66	0.333	20	9/17/97	11:27	M.Goodrich	8270C	3714
2-Methylphenol	ND	mg/kg	6.66	0.333	20	9/17/97	11:27	M.Goodrich	8270C	3714
m,p-Methylphenol	ND	mg/kg	6.66	0.333	20	9/17/97	11:27	M.Goodrich	8270C	3714
Naphthalene	ND	mg/kg	6.66	0.333	20	9/17/97	11:27	M.Goodrich	8270C	3714
2-Nitroaniline	ND	mg/kg	16.6	0.830	20	9/17/97	11:27	M.Goodrich	8270C	3714
3-Nitroaniline	ND	mg/kg	16.6	0.830	20	9/17/97	11:27	M.Goodrich	8270C	3714
4-Nitroaniline	ND	mg/kg	16.6	0.830	20	9/17/97	11:27	M.Goodrich	8270C	3714
Nitrobenzene	ND	mg/kg	6.66	0.333	20	9/17/97	11:27	M.Goodrich	8270C	3714
2-Nitrophenol	ND	mg/kg	6.66	0.333	20	9/17/97	11:27	M.Goodrich	8270C	3714
4-Nitrophenol	ND	mg/kg	16.6	0.830	20	9/17/97	11:27	M.Goodrich	8270C	3714
N-nitrosodi-n-propylamine	ND	mg/kg	6.66	0.333	20	9/17/97	11:27	M.Goodrich	8270C	3714
N-nitrosodiphenylamine	ND	mg/kg	6.66	0.333	20	9/17/97	11:27	M.Goodrich	8270C	3714
Pentachlorophenol	ND	mg/kg	16.6	0.830	20	9/17/97	11:27	M.Goodrich	8270C	3714
Phenanthrene	31.3	mg/kg	6.66	0.333	20	9/17/97	11:27	M.Goodrich	8270C	3714
Phenol	ND	mg/kg	6.66	0.333	20	9/17/97	11:27	M.Goodrich	8270C	3714
Pyrene	33.3	mg/kg	6.66	0.333	20	9/17/97	11:27	M.Goodrich	8270C	3714
Bis(2-ethylhexyl)phthalate	ND	mg/kg	6.66	0.333	20	9/17/97	11:27	M.Goodrich	8270C	3714
1,2,4-Trichlorobenzene	ND	mg/kg	6.66	0.333	20	9/17/97	11:27	M.Goodrich	8270C	3714
2,4,5-Trichlorophenol	ND	mg/kg	16.6	0.830	20	9/17/97	11:27	M.Goodrich	8270C	3714
2,4,6-Trichlorophenol	ND	mg/kg	6.66	0.333	20	9/17/97	11:27	M.Goodrich	8270C	3714
METALS										
Antimony	ND	mg/kg	9.60	9.60	1	9/14/97	0:45	R.Street	6010B	2714
Arsenic	20.9	mg/kg	0.96	0.96	1	9/14/97	0:45	R.Street	6010B	2714
Barium	68.5	mg/kg	0.96	0.96	1	9/14/97	0:45	R.Street	6010B	2714
Beryllium	ND	mg/kg	0.96	0.96	1	9/14/97	0:45	R.Street	6010B	2714
Cadmium	ND	mg/kg	0.96	0.96	1	9/14/97	0:45	R.Street	6010B	2714
Chromium	5.57	mg/kg	0.96	0.96	1	9/14/97	0:45	R.Street	6010B	2714

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

Laboratory Number: 97-A076107
Sample ID: #13

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
Lead	72.2	mg/kg	0.96	0.96	1	9/14/97	0:45	R.Street	6010B	2714
Mercury	ND	mg/kg	0.10	0.10	1	9/11/97	15:18	R.Street	7471	2507
Nickel	4.99	mg/kg	0.96	0.96	1	9/14/97	0:45	R.Street	6010B	2714
Selenium	ND	mg/kg	0.96	0.96	1	9/14/97	0:45	R.Street	6010B	2714
Silver	ND	mg/kg	0.96	0.96	1	9/14/97	0:45	R.Street	6010B	2714
Thallium	ND	mg/kg	0.96	0.96	1	9/14/97	0:45	R.Street	6010B	2714
Vanadium	ND	mg/kg	9.60	9.60	1	9/14/97	0:45	R.Street	6010B	2714
GENERAL CHEMISTRY PARAMETERS										
Cyanide	ND	mg/kg	2.00	2.00	1	9/13/97	8:15	A Hardison	9012A	3863

ND = Not detected at the report limit.

Sample Extraction Data

BNA's Extracted 9/11/97 Wt extracted: 30.0 gm Extract Volume: 1.0 ml C.Gerenser

** SURROGATE RECOVERIES **

Surrogate	% Recovery	Target Range
BNA Surr., Nitrobenzene-d5	55.0	23. - 120.
BNA Surr., 2-Fluorobiphenyl	55.0	30. - 115.
BNA Surrogate, Terphenyl d14	55.0	18. - 140.
BNA Surrogate, Phenol d5	55.0	10. - 115.
BNA Surrogate, 2-Fluorophenol	40.0	20. - 121.
BNA Surrogate, 2,4,6-Tribromophenol	30.0	19. - 122.

Report Approved By: Michael H. Dunn Report Date: 9/22/97

Theodore J. Duello, Ph.D., Q.A. Officer
Michael H. Dunn, M.S., Technical Director
Danny B. Hale, M.S., Laboratory Director

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

ATLANTIC ENVIRONMENTAL SERV. 6043
ATTN. TOM HELFICH
2232 WELSCH IND. COURT
ST. LOUIS, MO 63146

Lab Number: 97-A076108

Sample ID: #14

Date Collected: 9/ 7/97

Project: 97521

Time Collected:

Project Name: 33RD ST. SITE

Date Received: 9/ 9/97

Sampler: DAVID PLUHAR

Time Received: 9:00

State Certification:

Sample Type: Soil

Site I.D.:

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
EXTRACTABLE ORGANICS										
Acenaphthene	ND	mg/kg	3.33	0.333	10	9/22/97	6:56	M.Goodrich	8270C	3714
Acenaphthylene	ND	mg/kg	3.33	0.333	10	9/22/97	6:56	M.Goodrich	8270C	3714
Anthracene	7.99	mg/kg	3.33	0.333	10	9/22/97	6:56	M.Goodrich	8270C	3714
Benzo(a)anthracene	23.6	mg/kg	3.33	0.333	10	9/22/97	6:56	M.Goodrich	8270C	3714
Benzo(a)pyrene	26.0	mg/kg	3.33	0.333	10	9/22/97	6:56	M.Goodrich	8270C	3714
Benzo(b)fluoranthene	26.3	mg/kg	3.33	0.333	10	9/22/97	6:56	M.Goodrich	8270C	3714
Benzo(g,h,i)perylene	ND	mg/kg	3.33	0.333	10	9/22/97	6:56	M.Goodrich	8270C	3714
Benzo(k)fluoranthene	26.0	mg/kg	3.33	0.333	10	9/22/97	6:56	M.Goodrich	8270C	3714
4-Bromophenylphenylether	ND	mg/kg	3.33	0.333	10	9/22/97	6:56	M.Goodrich	8270C	3714
Butylbenzylphthalate	ND	mg/kg	3.33	0.333	10	9/22/97	6:56	M.Goodrich	8270C	3714
Carbazole	5.33	mg/kg	3.33	0.333	10	9/22/97	6:56	M.Goodrich	8270C	3714
4-Chloro-3-methylphenol	ND	mg/kg	3.33	0.333	10	9/22/97	6:56	M.Goodrich	8270C	3714
4-Chloroaniline	ND	mg/kg	3.33	0.333	10	9/22/97	6:56	M.Goodrich	8270C	3714
bis(2-Chloroethoxy)methane	ND	mg/kg	3.33	0.333	10	9/22/97	6:56	M.Goodrich	8270C	3714
bis(2-Chloroethyl)ether	ND	mg/kg	3.33	0.333	10	9/22/97	6:56	M.Goodrich	8270C	3714
bis(2-Chloroisopropyl)ether	ND	mg/kg	3.33	0.333	10	9/22/97	6:56	M.Goodrich	8270C	3714
2-Chloronaphthalene	ND	mg/kg	3.33	0.333	10	9/22/97	6:56	M.Goodrich	8270C	3714
2-Chlorophenol	ND	mg/kg	3.33	0.333	10	9/22/97	6:56	M.Goodrich	8270C	3714
4-Chlorophenylphenylether	ND	mg/kg	3.33	0.333	10	9/22/97	6:56	M.Goodrich	8270C	3714
Chrysene	25.3	mg/kg	3.33	0.333	10	9/22/97	6:56	M.Goodrich	8270C	3714
Dibenzofuran	ND	mg/kg	3.33	0.333	10	9/22/97	6:56	M.Goodrich	8270C	3714
Dibenz(a,h)anthracene	ND	mg/kg	3.33	0.333	10	9/22/97	6:56	M.Goodrich	8270C	3714
1,2-Dichlorobenzene	ND	mg/kg	3.33	0.333	10	9/22/97	6:56	M.Goodrich	8270C	3714
1,3-Dichlorobenzene	ND	mg/kg	3.33	0.333	10	9/22/97	6:56	M.Goodrich	8270C	3714
1,4-Dichlorobenzene	ND	mg/kg	3.33	0.333	10	9/22/97	6:56	M.Goodrich	8270C	3714
3,3'-Dichlorobenzidine	ND	mg/kg	6.66	0.666	10	9/22/97	6:56	M.Goodrich	8270C	3714
2,4-Dichlorophenol	ND	mg/kg	3.33	0.333	10	9/22/97	6:56	M.Goodrich	8270C	3714
Diethylphthalate	ND	mg/kg	3.33	0.333	10	9/22/97	6:56	M.Goodrich	8270C	3714

COPY 1

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

Laboratory Number: 97-A076108
Sample ID: #14

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
2,4-Dimethylphenol	ND	mg/kg	3.33	0.333	10	9/22/97	6:56	M.Goodrich	8270C	3714
Dimethylphthalate	ND	mg/kg	3.33	0.333	10	9/22/97	6:56	M.Goodrich	8270C	3714
Di-n-butylphthalate	ND	mg/kg	3.33	0.333	10	9/22/97	6:56	M.Goodrich	8270C	3714
4,6-Dinitro-2-methylphenol	ND	mg/kg	8.32	0.830	10	9/22/97	6:56	M.Goodrich	8270C	3714
2,4-Dinitrophenol	ND	mg/kg	8.32	0.830	10	9/22/97	6:56	M.Goodrich	8270C	3714
2,4-dinitrotoluene	ND	mg/kg	3.33	0.333	10	9/22/97	6:56	M.Goodrich	8270C	3714
2,6-Dinitrotoluene	ND	mg/kg	3.33	0.333	10	9/22/97	6:56	M.Goodrich	8270C	3714
Di-n-octylphthalate	ND	mg/kg	3.33	0.333	10	9/22/97	6:56	M.Goodrich	8270C	3714
Fluoranthene	46.6	mg/kg	3.33	0.333	10	9/22/97	6:56	M.Goodrich	8270C	3714
Fluorene	4.00	mg/kg	3.33	0.333	10	9/22/97	6:56	M.Goodrich	8270C	3714
Hexachlorobenzene	ND	mg/kg	3.33	0.333	10	9/22/97	6:56	M.Goodrich	8270C	3714
Hexachlorobutadiene	ND	mg/kg	3.33	0.333	10	9/22/97	6:56	M.Goodrich	8270C	3714
Hexachlorocyclopentadiene	ND	mg/kg	3.33	0.333	10	9/22/97	6:56	M.Goodrich	8270C	3714
Hexachloroethane	ND	mg/kg	3.33	0.333	10	9/22/97	6:56	M.Goodrich	8270C	3714
Indeno(1,2,3-cd)pyrene	6.33	mg/kg	3.33	0.333	10	9/22/97	6:56	M.Goodrich	8270C	3714
Isophorone	ND	mg/kg	3.33	0.333	10	9/22/97	6:56	M.Goodrich	8270C	3714
2-Methylnaphthalene	ND	mg/kg	3.33	0.333	10	9/22/97	6:56	M.Goodrich	8270C	3714
2-Methylphenol	ND	mg/kg	3.33	0.333	10	9/22/97	6:56	M.Goodrich	8270C	3714
m,p-Methylphenol	ND	mg/kg	3.33	0.333	10	9/22/97	6:56	M.Goodrich	8270C	3714
Naphthalene	4.00	mg/kg	3.33	0.333	10	9/22/97	6:56	M.Goodrich	8270C	3714
2-Nitroaniline	ND	mg/kg	8.32	0.830	10	9/22/97	6:56	M.Goodrich	8270C	3714
3-Nitroaniline	ND	mg/kg	8.32	0.830	10	9/22/97	6:56	M.Goodrich	8270C	3714
4-Nitroaniline	ND	mg/kg	8.32	0.830	10	9/22/97	6:56	M.Goodrich	8270C	3714
Nitrobenzene	ND	mg/kg	3.33	0.333	10	9/22/97	6:56	M.Goodrich	8270C	3714
2-Nitrophenol	ND	mg/kg	3.33	0.333	10	9/22/97	6:56	M.Goodrich	8270C	3714
4-Nitrophenol	ND	mg/kg	8.32	0.830	10	9/22/97	6:56	M.Goodrich	8270C	3714
N-nitrosodi-n-propylamine	ND	mg/kg	3.33	0.333	10	9/22/97	6:56	M.Goodrich	8270C	3714
N-nitrosodiphenylamine	ND	mg/kg	3.33	0.333	10	9/22/97	6:56	M.Goodrich	8270C	3714
Pentachlorophenol	ND	mg/kg	8.32	0.830	10	9/22/97	6:56	M.Goodrich	8270C	3714
Phenanthrene	40.0	mg/kg	3.33	0.333	10	9/22/97	6:56	M.Goodrich	8270C	3714
Phenol	ND	mg/kg	3.33	0.333	10	9/22/97	6:56	M.Goodrich	8270C	3714
Pyrene	43.3	mg/kg	3.33	0.333	10	9/22/97	6:56	M.Goodrich	8270C	3714
Bis(2-ethylhexyl)phthalate	ND	mg/kg	3.33	0.333	10	9/22/97	6:56	M.Goodrich	8270C	3714
1,2,4-Trichlorobenzene	ND	mg/kg	3.33	0.333	10	9/22/97	6:56	M.Goodrich	8270C	3714
2,4,5-Trichlorophenol	ND	mg/kg	8.32	0.830	10	9/22/97	6:56	M.Goodrich	8270C	3714
2,4,6-Trichlorophenol	ND	mg/kg	3.33	0.333	10	9/22/97	6:56	M.Goodrich	8270C	3714
METALS										
Antimony	ND	mg/kg	9.86	9.86	1	9/14/97	0:45	R.Street	6010B	2714
Arsenic	17.2	mg/kg	0.99	0.99	1	9/14/97	0:45	R.Street	6010B	2714
Barium	48.7	mg/kg	0.99	0.99	1	9/14/97	0:45	R.Street	6010B	2714
Beryllium	ND	mg/kg	0.99	0.99	1	9/14/97	0:45	R.Street	6010B	2714
Cadmium	ND	mg/kg	0.99	0.99	1	9/14/97	0:45	R.Street	6010B	2714
Chromium	4.14	mg/kg	0.99	0.99	1	9/14/97	0:45	R.Street	6010B	2714

COPY 1

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

Laboratory Number: 97-A076108
Sample ID: #14

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
Lead	130.	mg/kg	0.99	0.99	1	9/14/97	0:45	R.Street	6010B	2714
Mercury	0.14	mg/kg	0.10	0.10	1	9/11/97	15:18	R.Street	7471	2507
Nickel	11.0	mg/kg	0.99	0.99	1	9/14/97	0:45	R.Street	6010B	2714
Selenium	ND	mg/kg	0.99	0.99	1	9/14/97	0:45	R.Street	6010B	2714
Silver	ND	mg/kg	0.99	0.99	1	9/14/97	0:45	R.Street	6010B	2714
Thallium	ND	mg/kg	0.99	0.99	1	9/14/97	0:45	R.Street	6010B	2714
Vanadium	18.9	mg/kg	9.86	9.86	1	9/14/97	0:45	R.Street	6010B	2714
GENERAL CHEMISTRY PARAMETERS										
Cyanide	ND	mg/kg	2.00	2.00	1	9/13/97	8:16	A Hardison	9012A	3863

ND = Not detected at the report limit.

Sample Extraction Data

BNA's Extracted 9/11/97 Wt extracted: 30.0 gm Extract Volume: 1.0 ml C.Gereaser

** SURROGATE RECOVERIES **

Surrogate	% Recovery	Target Range
BNA Surr., Nitrobenzene-d5	65.0	23. - 120.
BNA Surr., 2-Fluorobiphenyl	69.0	30. - 115.
BNA Surrogate, Terphenyl d14	74.0	18. - 140.
BNA Surrogate, Phenol d5	67.0	10. - 115.
BNA Surrogate, 2-Fluorophenol	45.0	20. - 121.
BNA Surrogate, 2,4,6-Tribromophenol	38.0	19. - 122.

Report Approved By: Michael A Dunn Report Date: 9/22/97

Theodore J. Duello, Ph.D., Q.A. Officer
Michael H. Dunn, M.S., Technical Director
Danny B. Hale, M.S., Laboratory Director

COPY 1

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

ATLANTIC ENVIRONMENTAL SERV. 6043
ATTN. TOM HELFICH
2232 WELSCH IND. COURT
ST. LOUIS, MO 63146

Lab Number: 97-A076109

Sample ID: #15

Date Collected: 9/ 7/97

Project: 97521

Time Collected:

Project Name: 33RD ST. SITE

Date Received: 9/ 9/97

Sampler: DAVID PLUHAR

Time Received: 9:00

State Certification:

Sample Type: Soil

Site I.D.:

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
EXTRACTABLE ORGANICS										
Acenaphthene	ND	mg/kg	3.33	0.333	50	9/22/97	7:32	M.Goodrich	8270C	7193
Acenaphthylene	ND	mg/kg	3.33	0.333	50	9/22/97	7:32	M.Goodrich	8270C	7193
Anthracene	ND	mg/kg	3.33	0.333	50	9/22/97	7:32	M.Goodrich	8270C	7193
Benzo(a)anthracene	5.00	mg/kg	3.33	0.333	50	9/22/97	7:32	M.Goodrich	8270C	7193
Benzo(a)pyrene	5.00	mg/kg	3.33	0.333	50	9/22/97	7:32	M.Goodrich	8270C	7193
Benzo(b)fluoranthene	3.33	mg/kg	3.33	0.333	50	9/22/97	7:32	M.Goodrich	8270C	7193
Benzo(g,h,i)perylene	ND	mg/kg	3.33	0.333	50	9/22/97	7:32	M.Goodrich	8270C	7193
Benzo(k)fluoranthene	5.00	mg/kg	3.33	0.333	50	9/22/97	7:32	M.Goodrich	8270C	7193
4-Bromophenylphenylether	ND	mg/kg	3.33	0.333	50	9/22/97	7:32	M.Goodrich	8270C	7193
Butylbenzylphthalate	ND	mg/kg	3.33	0.333	50	9/22/97	7:32	M.Goodrich	8270C	7193
Carbazole	ND	mg/kg	3.33	0.333	50	9/22/97	7:32	M.Goodrich	8270C	7193
4-Chloro-3-methylphenol	ND	mg/kg	3.33	0.333	50	9/22/97	7:32	M.Goodrich	8270C	7193
4-Chloroaniline	ND	mg/kg	3.33	0.333	50	9/22/97	7:32	M.Goodrich	8270C	7193
bis(2-Chloroethoxy)methane	ND	mg/kg	3.33	0.333	50	9/22/97	7:32	M.Goodrich	8270C	7193
bis(2-Chloroethyl)ether	ND	mg/kg	3.33	0.333	50	9/22/97	7:32	M.Goodrich	8270C	7193
bis(2-Chloroisopropyl)ether	ND	mg/kg	3.33	0.333	50	9/22/97	7:32	M.Goodrich	8270C	7193
2-Chloronaphthalene	ND	mg/kg	3.33	0.333	50	9/22/97	7:32	M.Goodrich	8270C	7193
2-Chlorophenol	ND	mg/kg	3.33	0.333	50	9/22/97	7:32	M.Goodrich	8270C	7193
4-Chlorophenylphenylether	ND	mg/kg	3.33	0.333	50	9/22/97	7:32	M.Goodrich	8270C	7193
Chrysene	5.00	mg/kg	3.33	0.333	50	9/22/97	7:32	M.Goodrich	8270C	7193
Dibenzofuran	ND	mg/kg	3.33	0.333	50	9/22/97	7:32	M.Goodrich	8270C	7193
Dibenz(a,h)anthracene	ND	mg/kg	3.33	0.333	50	9/22/97	7:32	M.Goodrich	8270C	7193
1,2-Dichlorobenzene	ND	mg/kg	3.33	0.333	50	9/22/97	7:32	M.Goodrich	8270C	7193
1,3-Dichlorobenzene	ND	mg/kg	3.33	0.333	50	9/22/97	7:32	M.Goodrich	8270C	7193
1,4-Dichlorobenzene	ND	mg/kg	3.33	0.333	50	9/22/97	7:32	M.Goodrich	8270C	7193
3,3'-Dichlorobenzidine	ND	mg/kg	6.66	0.666	50	9/22/97	7:32	M.Goodrich	8270C	7193
2,4-Dichlorophenol	ND	mg/kg	3.33	0.333	50	9/22/97	7:32	M.Goodrich	8270C	7193
Diethylphthalate	ND	mg/kg	3.33	0.333	50	9/22/97	7:32	M.Goodrich	8270C	7193

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

Laboratory Number: 97-A076109
Sample ID: #15

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
2,4-Dimethylphenol	ND	mg/kg	3.33	0.333	50	9/22/97	7:32	M.Goodrich	8270C	7193
Dimethylphthalate	ND	mg/kg	3.33	0.333	50	9/22/97	7:32	M.Goodrich	8270C	7193
Di-n-butylphthalate	ND	mg/kg	3.33	0.333	50	9/22/97	7:32	M.Goodrich	8270C	7193
4,6-Dinitro-2-methylphenol	ND	mg/kg	8.32	0.830	50	9/22/97	7:32	M.Goodrich	8270C	7193
2,4-Dinitrophenol	ND	mg/kg	8.32	0.830	50	9/22/97	7:32	M.Goodrich	8270C	7193
2,4-dinitrotoluene	ND	mg/kg	3.33	0.333	50	9/22/97	7:32	M.Goodrich	8270C	7193
2,6-Dinitrotoluene	ND	mg/kg	3.33	0.333	50	9/22/97	7:32	M.Goodrich	8270C	7193
Di-n-octylphthalate	ND	mg/kg	3.33	0.333	50	9/22/97	7:32	M.Goodrich	8270C	7193
Fluoranthene	8.32	mg/kg	3.33	0.333	50	9/22/97	7:32	M.Goodrich	8270C	7193
Fluorene	ND	mg/kg	3.33	0.333	50	9/22/97	7:32	M.Goodrich	8270C	7193
Hexachlorobenzene	ND	mg/kg	3.33	0.333	50	9/22/97	7:32	M.Goodrich	8270C	7193
Hexachlorobutadiene	ND	mg/kg	3.33	0.333	50	9/22/97	7:32	M.Goodrich	8270C	7193
Hexachlorocyclopentadiene	ND	mg/kg	3.33	0.333	50	9/22/97	7:32	M.Goodrich	8270C	7193
Hexachloroethane	ND	mg/kg	3.33	0.333	50	9/22/97	7:32	M.Goodrich	8270C	7193
Indeno(1,2,3-cd)pyrene	ND	mg/kg	3.33	0.333	50	9/22/97	7:32	M.Goodrich	8270C	7193
Isophorone	ND	mg/kg	3.33	0.333	50	9/22/97	7:32	M.Goodrich	8270C	7193
2-Methylnaphthalene	ND	mg/kg	3.33	0.333	50	9/22/97	7:32	M.Goodrich	8270C	7193
2-Methylphenol	ND	mg/kg	3.33	0.333	50	9/22/97	7:32	M.Goodrich	8270C	7193
m,p-Methylphenol	ND	mg/kg	3.33	0.333	50	9/22/97	7:32	M.Goodrich	8270C	7193
Naphthalene	ND	mg/kg	3.33	0.333	50	9/22/97	7:32	M.Goodrich	8270C	7193
2-Nitroaniline	ND	mg/kg	8.32	0.830	50	9/22/97	7:32	M.Goodrich	8270C	7193
3-Nitroaniline	ND	mg/kg	8.32	0.830	50	9/22/97	7:32	M.Goodrich	8270C	7193
4-Nitroaniline	ND	mg/kg	8.32	0.830	50	9/22/97	7:32	M.Goodrich	8270C	7193
Nitrobenzene	ND	mg/kg	3.33	0.333	50	9/22/97	7:32	M.Goodrich	8270C	7193
2-Nitrophenol	ND	mg/kg	3.33	0.333	50	9/22/97	7:32	M.Goodrich	8270C	7193
4-Nitrophenol	ND	mg/kg	8.32	0.830	50	9/22/97	7:32	M.Goodrich	8270C	7193
N-nitrosodi-n-propylamine	ND	mg/kg	3.33	0.333	50	9/22/97	7:32	M.Goodrich	8270C	7193
N-nitrosodiphenylamine	ND	mg/kg	3.33	0.333	50	9/22/97	7:32	M.Goodrich	8270C	7193
Pentachlorophenol	ND	mg/kg	8.32	0.830	50	9/22/97	7:32	M.Goodrich	8270C	7193
Phenanthrene	ND	mg/kg	3.33	0.333	50	9/22/97	7:32	M.Goodrich	8270C	7193
Phenol	ND	mg/kg	3.33	0.333	50	9/22/97	7:32	M.Goodrich	8270C	7193
Pyrene	8.32	mg/kg	3.33	0.333	50	9/22/97	7:32	M.Goodrich	8270C	7193
Bis(2-ethylhexyl)phthalate	ND	mg/kg	3.33	0.333	50	9/22/97	7:32	M.Goodrich	8270C	7193
1,2,4-Trichlorobenzene	ND	mg/kg	3.33	0.333	50	9/22/97	7:32	M.Goodrich	8270C	7193
2,4,5-Trichlorophenol	ND	mg/kg	8.32	0.830	50	9/22/97	7:32	M.Goodrich	8270C	7193
2,4,6-Trichlorophenol	ND	mg/kg	3.33	0.333	50	9/22/97	7:32	M.Goodrich	8270C	7193
METALS										
Antimony	ND	mg/kg	10.2	10.0	1	9/14/97	0:45	R.Street	6010B	2714
Arsenic	4.68	mg/kg	1.02	1.00	1	9/14/97	0:45	R.Street	6010B	2714
Barium	56.4	mg/kg	1.02	1.00	1	9/14/97	0:45	R.Street	6010B	2714
Beryllium	ND	mg/kg	1.02	1.00	1	9/14/97	0:45	R.Street	6010B	2714
Cadmium	ND	mg/kg	1.02	1.00	1	9/14/97	0:45	R.Street	6010B	2714
Chromium	6.11	mg/kg	1.02	1.00	1	9/14/97	0:45	R.Street	6010B	2714

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

Laboratory Number: 97-A076109
Sample ID: #15

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
Lead	162.	mg/kg	1.02	1.00	1	9/14/97	0:45	R.Street	6010B	2714
Mercury	ND	mg/kg	0.10	0.10	1	9/11/97	15:18	R.Street	7471	2507
Nickel	12.2	mg/kg	1.02	1.00	1	9/14/97	0:45	R.Street	6010B	2714
Selenium	ND	mg/kg	1.02	1.00	1	9/14/97	0:45	R.Street	6010B	2714
Silver	ND	mg/kg	1.02	1.00	1	9/14/97	0:45	R.Street	6010B	2714
Thallium	ND	mg/kg	1.02	1.00	1	9/14/97	0:45	R.Street	6010B	2714
Vanadium	29.1	mg/kg	10.2	10.0	1	9/14/97	0:45	R.Street	6010B	2714
GENERAL CHEMISTRY PARAMETERS										
Cyanide	ND	mg/kg	2.00	2.00	1	9/13/97	8:16	A Hardison	9012A	3863

ND = Not detected at the report limit.

Sample Extraction Data

BNA's Extracted 9/11/97 Wt extracted: 30.0 gm Extract Volume: 1.0 ml C.Gerenser

BNA surrogates were diluted below detectable limits due to sample matrix.

Report Approved By: Michael H. Dunn Report Date: 9/22/97

Theodore J. Duello, Ph.D., Q.A. Officer
Michael H. Dunn, M.S., Technical Director
Danny B. Hale, M.S., Laboratory Director

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SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

/ 'LANTIC ENVIRONMENTAL SERV. 6043
ATTN. TOM HELFICH
2232 WELSCH IND. COURT
S ". LOUIS, MO 63146

Lab Number: 97-A076110

Sample ID: #16

Date Collected: 9/ 7/97

P 'oject: 97521

Time Collected:

P 'oject Name: 33RD ST. SITE

Date Received: 9/ 9/97

Sampler: DAVID PLUHAR

Time Received: 9:00

S ;ate Certification:

Sample Type: Soil

Site I.D.:

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
EXTRACTABLE ORGANICS*										
Acenaphthene	ND	mg/kg	3.33	0.333	50	9/22/97	6:58	M.Goodrich	8270C	3714
Acenaphthylene	ND	mg/kg	3.33	0.333	50	9/22/97	6:58	M.Goodrich	8270C	3714
Anthracene	ND	mg/kg	3.33	0.333	50	9/22/97	6:58	M.Goodrich	8270C	3714
Benzo(a)anthracene	8.32	mg/kg	3.33	0.333	50	9/22/97	6:58	M.Goodrich	8270C	3714
Benzo(a)pyrene	ND	mg/kg	3.33	0.333	50	9/22/97	6:58	M.Goodrich	8270C	3714
Benzo(b)fluoranthene	6.66	mg/kg	3.33	0.333	50	9/22/97	6:58	M.Goodrich	8270C	3714
Benzo(g,h,i)perylene	ND	mg/kg	3.33	0.333	50	9/22/97	6:58	M.Goodrich	8270C	3714
Benzo(k)fluoranthene	8.32	mg/kg	3.33	0.333	50	9/22/97	6:58	M.Goodrich	8270C	3714
4-Bromophenylphenylether	ND	mg/kg	3.33	0.333	50	9/22/97	6:58	M.Goodrich	8270C	3714
Butylbenzylphthalate	ND	mg/kg	3.33	0.333	50	9/22/97	6:58	M.Goodrich	8270C	3714
Carbazole	ND	mg/kg	3.33	0.333	50	9/22/97	6:58	M.Goodrich	8270C	3714
4-Chloro-3-methylphenol	ND	mg/kg	3.33	0.333	50	9/22/97	6:58	M.Goodrich	8270C	3714
4-Chloroaniline	ND	mg/kg	3.33	0.333	50	9/22/97	6:58	M.Goodrich	8270C	3714
bis(2-Chloroethoxy)methane	ND	mg/kg	3.33	0.333	50	9/22/97	6:58	M.Goodrich	8270C	3714
bis(2-Chloroethyl)ether	ND	mg/kg	3.33	0.333	50	9/22/97	6:58	M.Goodrich	8270C	3714
bis(2-Chloroisopropyl)ether	ND	mg/kg	3.33	0.333	50	9/22/97	6:58	M.Goodrich	8270C	3714
2-Chloronaphthalene	ND	mg/kg	3.33	0.333	50	9/22/97	6:58	M.Goodrich	8270C	3714
2-Chlorophenol	ND	mg/kg	3.33	0.333	50	9/22/97	6:58	M.Goodrich	8270C	3714
4-Chlorophenylphenylether	ND	mg/kg	3.33	0.333	50	9/22/97	6:58	M.Goodrich	8270C	3714
Chrysene	9.99	mg/kg	3.33	0.333	50	9/22/97	6:58	M.Goodrich	8270C	3714
Dibenzofuran	ND	mg/kg	3.33	0.333	50	9/22/97	6:58	M.Goodrich	8270C	3714
Dibenz(a,h)anthracene	ND	mg/kg	3.33	0.333	50	9/22/97	6:58	M.Goodrich	8270C	3714
1,2-Dichlorobenzene	ND	mg/kg	3.33	0.333	50	9/22/97	6:58	M.Goodrich	8270C	3714
1,3-Dichlorobenzene	ND	mg/kg	3.33	0.333	50	9/22/97	6:58	M.Goodrich	8270C	3714
,4-Dichlorobenzene	ND	mg/kg	3.33	0.333	50	9/22/97	6:58	M.Goodrich	8270C	3714
,3'-Dichlorobenzidine	ND	mg/kg	6.66	0.666	50	9/22/97	6:58	M.Goodrich	8270C	3714
2,4-Dichlorophenol	ND	mg/kg	3.33	0.333	50	9/22/97	6:58	M.Goodrich	8270C	3714
Diethylphthalate	ND	mg/kg	3.33	0.333	50	9/22/97	6:58	M.Goodrich	8270C	3714

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SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

Laboratory Number: 97-A076110
Sample ID: #16

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
2,4-Dimethylphenol	ND	mg/kg	3.33	0.333	50	9/22/97	6:58	M.Goodrich	8270C	3714
Dimethylphthalate	ND	mg/kg	3.33	0.333	50	9/22/97	6:58	M.Goodrich	8270C	3714
Di-n-butylphthalate	ND	mg/kg	3.33	0.333	50	9/22/97	6:58	M.Goodrich	8270C	3714
4,6-Dinitro-2-methylphenol	ND	mg/kg	8.32	0.830	50	9/22/97	6:58	M.Goodrich	8270C	3714
2,4-Dinitrophenol	ND	mg/kg	8.32	0.830	50	9/22/97	6:58	M.Goodrich	8270C	3714
2,4-dinitrotoluene	ND	mg/kg	3.33	0.333	50	9/22/97	6:58	M.Goodrich	8270C	3714
2,6-Dinitrotoluene	ND	mg/kg	3.33	0.333	50	9/22/97	6:58	M.Goodrich	8270C	3714
Di-n-octylphthalate	ND	mg/kg	3.33	0.333	50	9/22/97	6:58	M.Goodrich	8270C	3714
Fluoranthene	9.99	mg/kg	3.33	0.333	50	9/22/97	6:58	M.Goodrich	8270C	3714
Fluorene	ND	mg/kg	3.33	0.333	50	9/22/97	6:58	M.Goodrich	8270C	3714
Hexachlorobenzene	ND	mg/kg	3.33	0.333	50	9/22/97	6:58	M.Goodrich	8270C	3714
Hexachlorobutadiene	ND	mg/kg	3.33	0.333	50	9/22/97	6:58	M.Goodrich	8270C	3714
Hexachlorocyclopentadiene	ND	mg/kg	3.33	0.333	50	9/22/97	6:58	M.Goodrich	8270C	3714
Hexachloroethane	ND	mg/kg	3.33	0.333	50	9/22/97	6:58	M.Goodrich	8270C	3714
Indeno(1,2,3-cd)pyrene	ND	mg/kg	3.33	0.333	50	9/22/97	6:58	M.Goodrich	8270C	3714
Isophorone	ND	mg/kg	3.33	0.333	50	9/22/97	6:58	M.Goodrich	8270C	3714
2-Methylnaphthalene	ND	mg/kg	3.33	0.333	50	9/22/97	6:58	M.Goodrich	8270C	3714
2-Methylphenol	ND	mg/kg	3.33	0.333	50	9/22/97	6:58	M.Goodrich	8270C	3714
m,p-Methylphenol	ND	mg/kg	3.33	0.333	50	9/22/97	6:58	M.Goodrich	8270C	3714
Naphthalene	3.33	mg/kg	3.33	0.333	50	9/22/97	6:58	M.Goodrich	8270C	3714
2-Nitroaniline	ND	mg/kg	8.32	0.830	50	9/22/97	6:58	M.Goodrich	8270C	3714
3-Nitroaniline	ND	mg/kg	8.32	0.830	50	9/22/97	6:58	M.Goodrich	8270C	3714
4-Nitroaniline	ND	mg/kg	8.32	0.830	50	9/22/97	6:58	M.Goodrich	8270C	3714
Nitrobenzene	ND	mg/kg	3.33	0.333	50	9/22/97	6:58	M.Goodrich	8270C	3714
2-Nitrophenol	ND	mg/kg	3.33	0.333	50	9/22/97	6:58	M.Goodrich	8270C	3714
4-Nitrophenol	ND	mg/kg	8.32	0.830	50	9/22/97	6:58	M.Goodrich	8270C	3714
N-nitrosodi-n-propylamine	ND	mg/kg	3.33	0.333	50	9/22/97	6:58	M.Goodrich	8270C	3714
N-nitrosodiphenylamine	ND	mg/kg	3.33	0.333	50	9/22/97	6:58	M.Goodrich	8270C	3714
Pentachlorophenol	ND	mg/kg	8.32	0.830	50	9/22/97	6:58	M.Goodrich	8270C	3714
Phenanthrene	5.00	mg/kg	3.33	0.333	50	9/22/97	6:58	M.Goodrich	8270C	3714
Phenol	ND	mg/kg	3.33	0.333	50	9/22/97	6:58	M.Goodrich	8270C	3714
Pyrene	15.0	mg/kg	3.33	0.333	50	9/22/97	6:58	M.Goodrich	8270C	3714
Bis(2-ethylhexyl)phthalate	ND	mg/kg	3.33	0.333	50	9/22/97	6:58	M.Goodrich	8270C	3714
1,2,4-Trichlorobenzene	ND	mg/kg	3.33	0.333	50	9/22/97	6:58	M.Goodrich	8270C	3714
2,4,5-Trichlorophenol	ND	mg/kg	8.32	0.830	50	9/22/97	6:58	M.Goodrich	8270C	3714
2,4,6-Trichlorophenol	ND	mg/kg	3.33	0.333	50	9/22/97	6:58	M.Goodrich	8270C	3714
METALS										
Antimony	ND	mg/kg	9.78	9.78	1	9/14/97	0:45	R.Street	6010B	2714
Arsenic	7.24	mg/kg	0.98	0.98	1	9/14/97	0:45	R.Street	6010B	2714
Barium	90.0	mg/kg	0.98	0.98	1	9/14/97	0:45	R.Street	6010B	2714
Beryllium	ND	mg/kg	0.98	0.98	1	9/14/97	0:45	R.Street	6010B	2714
Cadmium	1.17	mg/kg	0.98	0.98	1	9/14/97	0:45	R.Street	6010B	2714
Chromium	5.48	mg/kg	0.98	0.98	1	9/14/97	0:45	R.Street	6010B	2714

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

Laboratory Number: 97-A076110
Sample ID: #16

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
Lead	276.	mg/kg	0.98	0.98	1	9/14/97	0:45	R.Street	6010B	2714
Mercury	ND	mg/kg	0.10	0.10	1	9/11/97	15:18	R.Street	7471	2507
Nickel	10.6	mg/kg	0.98	0.98	1	9/14/97	0:45	R.Street	6010B	2714
Selenium	ND	mg/kg	0.98	0.98	1	9/14/97	0:45	R.Street	6010B	2714
Silver	ND	mg/kg	0.98	0.98	1	9/14/97	0:45	R.Street	6010B	2714
Thallium	ND	mg/kg	0.98	0.98	1	9/14/97	0:45	R.Street	6010B	2714
Vanadium	49.3	mg/kg	9.78	9.78	1	9/14/97	0:45	R.Street	6010B	2714
GENERAL CHEMISTRY PARAMETERS										
Cyanide	ND	mg/kg	2.00	2.00	1	9/13/97	8:17	A Hardison	9012A	3863

ND = Not detected at the report limit.

Sample Extraction Data

BNA's Extracted 9/11/97 Wt extracted: 30.0 gm Extract Volume: 1.0 ml C.Gereaser

BNA surrogates were diluted out due to sample matrix.

Report Approved By: Michael H. Dunn Report Date: 9/22/97

Theodore J. Duello, Ph.D., Q.A. Officer
Michael H. Dunn, M.S., Technical Director
Danny B. Hale, M.S., Laboratory Director

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

ATLANTIC ENVIRONMENTAL SERV. 6043
ATTN. TOM HELFICH
2232 WELSCH IND. COURT
ST. LOUIS, MO 63146

Lab Number: 97-A076111

Sample ID: #17

Date Collected: 9/ 7/97

Project: 97521

Time Collected:

Project Name: 33RD ST. SITE

Date Received: 9/ 9/97

Sampler: DAVID PLUHAR

Time Received: 9:00

State Certification:

Sample Type: Soil

Site I.D.:

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
EXTRACTABLE ORGANICS										
Acenaphthene	ND	mg/kg	1.66	0.333	5	9/22/97	7:34	M.Goodrich	8270C	3714
Acenaphthylene	ND	mg/kg	1.66	0.333	5	9/22/97	7:34	M.Goodrich	8270C	3714
Anthracene	ND	mg/kg	1.66	0.333	5	9/22/97	7:34	M.Goodrich	8270C	3714
Benzo(a)anthracene	ND	mg/kg	1.66	0.333	5	9/22/97	7:34	M.Goodrich	8270C	3714
Benzo(a)pyrene	ND	mg/kg	1.66	0.333	5	9/22/97	7:34	M.Goodrich	8270C	3714
Benzo(b)fluoranthene	ND	mg/kg	1.66	0.333	5	9/22/97	7:34	M.Goodrich	8270C	3714
Benzo(g,h,i)perylene	ND	mg/kg	1.66	0.333	5	9/22/97	7:34	M.Goodrich	8270C	3714
Benzo(k)fluoranthene	ND	mg/kg	1.66	0.333	5	9/22/97	7:34	M.Goodrich	8270C	3714
4-Bromophenylphenylether	ND	mg/kg	1.66	0.333	5	9/22/97	7:34	M.Goodrich	8270C	3714
Butylbenzylphthalate	ND	mg/kg	1.66	0.333	5	9/22/97	7:34	M.Goodrich	8270C	3714
Carbazole	ND	mg/kg	1.66	0.333	5	9/22/97	7:34	M.Goodrich	8270C	3714
4-Chloro-3-methylphenol	ND	mg/kg	1.66	0.333	5	9/22/97	7:34	M.Goodrich	8270C	3714
4-Chloroaniline	ND	mg/kg	1.66	0.333	5	9/22/97	7:34	M.Goodrich	8270C	3714
bis(2-Chloroethoxy)methane	ND	mg/kg	1.66	0.333	5	9/22/97	7:34	M.Goodrich	8270C	3714
bis(2-Chloroethyl)ether	ND	mg/kg	1.66	0.333	5	9/22/97	7:34	M.Goodrich	8270C	3714
bis(2-Chloroisopropyl)ether	ND	mg/kg	1.66	0.333	5	9/22/97	7:34	M.Goodrich	8270C	3714
2-Chloronaphthalene	ND	mg/kg	1.66	0.333	5	9/22/97	7:34	M.Goodrich	8270C	3714
2-Chlorophenol	ND	mg/kg	1.66	0.333	5	9/22/97	7:34	M.Goodrich	8270C	3714
4-Chlorophenylphenylether	ND	mg/kg	1.66	0.333	5	9/22/97	7:34	M.Goodrich	8270C	3714
Chrysene	ND	mg/kg	1.66	0.333	5	9/22/97	7:34	M.Goodrich	8270C	3714
Dibenzofuran	ND	mg/kg	1.66	0.333	5	9/22/97	7:34	M.Goodrich	8270C	3714
Dibenz(a,h)anthracene	ND	mg/kg	1.66	0.333	5	9/22/97	7:34	M.Goodrich	8270C	3714
1,2-Dichlorobenzene	ND	mg/kg	1.66	0.333	5	9/22/97	7:34	M.Goodrich	8270C	3714
1,3-Dichlorobenzene	ND	mg/kg	1.66	0.333	5	9/22/97	7:34	M.Goodrich	8270C	3714
1,4-Dichlorobenzene	ND	mg/kg	1.66	0.333	5	9/22/97	7:34	M.Goodrich	8270C	3714
3,3'-Dichlorobenzidine	ND	mg/kg	3.33	0.666	5	9/22/97	7:34	M.Goodrich	8270C	3714
2,4-Dichlorophenol	ND	mg/kg	1.66	0.333	5	9/22/97	7:34	M.Goodrich	8270C	3714
Diethylphthalate	ND	mg/kg	1.66	0.333	5	9/22/97	7:34	M.Goodrich	8270C	3714

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SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

Laboratory Number: 97-A076111
Sample ID: #17

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
2,4-Dimethylphenol	ND	mg/kg	1.66	0.333	5	9/22/97	7:34	M.Goodrich	8270C	3714
Dimethylphthalate	ND	mg/kg	1.66	0.333	5	9/22/97	7:34	M.Goodrich	8270C	3714
Di-n-butylphthalate	ND	mg/kg	1.66	0.333	5	9/22/97	7:34	M.Goodrich	8270C	3714
4,6-Dinitro-2-methylphenol	ND	mg/kg	4.16	0.830	5	9/22/97	7:34	M.Goodrich	8270C	3714
2,4-Dinitrophenol	ND	mg/kg	4.16	0.830	5	9/22/97	7:34	M.Goodrich	8270C	3714
2,4-dinitrotoluene	ND	mg/kg	1.66	0.333	5	9/22/97	7:34	M.Goodrich	8270C	3714
2,6-Dinitrotoluene	ND	mg/kg	1.66	0.333	5	9/22/97	7:34	M.Goodrich	8270C	3714
Di-n-octylphthalate	ND	mg/kg	1.66	0.333	5	9/22/97	7:34	M.Goodrich	8270C	3714
Fluoranthene	ND	mg/kg	1.66	0.333	5	9/22/97	7:34	M.Goodrich	8270C	3714
Fluorene	ND	mg/kg	1.66	0.333	5	9/22/97	7:34	M.Goodrich	8270C	3714
Hexachlorobenzene	ND	mg/kg	1.66	0.333	5	9/22/97	7:34	M.Goodrich	8270C	3714
Hexachlorobutadiene	ND	mg/kg	1.66	0.333	5	9/22/97	7:34	M.Goodrich	8270C	3714
Hexachlorocyclopentadiene	ND	mg/kg	1.66	0.333	5	9/22/97	7:34	M.Goodrich	8270C	3714
Hexachloroethane	ND	mg/kg	1.66	0.333	5	9/22/97	7:34	M.Goodrich	8270C	3714
Indeno(1,2,3-cd)pyrene	ND	mg/kg	1.66	0.333	5	9/22/97	7:34	M.Goodrich	8270C	3714
Isophorone	ND	mg/kg	1.66	0.333	5	9/22/97	7:34	M.Goodrich	8270C	3714
2-Methylnaphthalene	ND	mg/kg	1.66	0.333	5	9/22/97	7:34	M.Goodrich	8270C	3714
2-Methylphenol	ND	mg/kg	1.66	0.333	5	9/22/97	7:34	M.Goodrich	8270C	3714
m,p-Methylphenol	ND	mg/kg	1.66	0.333	5	9/22/97	7:34	M.Goodrich	8270C	3714
Naphthalene	ND	mg/kg	1.66	0.333	5	9/22/97	7:34	M.Goodrich	8270C	3714
2-Nitroaniline	ND	mg/kg	4.16	0.830	5	9/22/97	7:34	M.Goodrich	8270C	3714
3-Nitroaniline	ND	mg/kg	4.16	0.830	5	9/22/97	7:34	M.Goodrich	8270C	3714
4-Nitroaniline	ND	mg/kg	4.16	0.830	5	9/22/97	7:34	M.Goodrich	8270C	3714
Nitrobenzene	ND	mg/kg	1.66	0.333	5	9/22/97	7:34	M.Goodrich	8270C	3714
2-Nitrophenol	ND	mg/kg	1.66	0.333	5	9/22/97	7:34	M.Goodrich	8270C	3714
4-Nitrophenol	ND	mg/kg	4.16	0.830	5	9/22/97	7:34	M.Goodrich	8270C	3714
N-nitrosodi-n-propylamine	ND	mg/kg	1.66	0.333	5	9/22/97	7:34	M.Goodrich	8270C	3714
N-nitrosodiphenylamine	ND	mg/kg	1.66	0.333	5	9/22/97	7:34	M.Goodrich	8270C	3714
Pentachlorophenol	ND	mg/kg	4.16	0.830	5	9/22/97	7:34	M.Goodrich	8270C	3714
Phenanthrene	ND	mg/kg	1.66	0.333	5	9/22/97	7:34	M.Goodrich	8270C	3714
Phenol	ND	mg/kg	1.66	0.333	5	9/22/97	7:34	M.Goodrich	8270C	3714
Pyrene	ND	mg/kg	1.66	0.333	5	9/22/97	7:34	M.Goodrich	8270C	3714
Bis(2-ethylhexyl)phthalate	ND	mg/kg	1.66	0.333	5	9/22/97	7:34	M.Goodrich	8270C	3714
1,2,4-Trichlorobenzene	ND	mg/kg	1.66	0.333	5	9/22/97	7:34	M.Goodrich	8270C	3714
2,4,5-Trichlorophenol	ND	mg/kg	4.16	0.830	5	9/22/97	7:34	M.Goodrich	8270C	3714
2,4,6-Trichlorophenol	ND	mg/kg	1.66	0.333	5	9/22/97	7:34	M.Goodrich	8270C	3714
METALS										
Antimony	ND	mg/kg	9.82	9.82	1	9/14/97	0:45	R.Street	6010B	2714
Arsenic	2.16	mg/kg	0.98	0.98	1	9/14/97	0:45	R.Street	6010B	2714
Barium	117.	mg/kg	0.98	0.98	1	9/14/97	0:45	R.Street	6010B	2714
Beryllium	ND	mg/kg	0.98	0.98	1	9/14/97	0:45	R.Street	6010B	2714
Cadmium	ND	mg/kg	0.98	0.98	1	9/14/97	0:45	R.Street	6010B	2714
Chromium	5.89	mg/kg	0.98	0.98	1	9/14/97	0:45	R.Street	6010B	2714

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

Laboratory Number: 97-A076111
Sample ID: #17

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
Lead	583.	mg/kg	0.98	0.98	1	9/14/97	0:45	R.Street	6010B	2714
Mercury	0.28	mg/kg	0.10	0.10	1	9/11/97	15:18	R.Street	7471	2507
Nickel	5.89	mg/kg	0.98	0.98	1	9/14/97	0:45	R.Street	6010B	2714
Selenium	ND	mg/kg	0.98	0.98	1	9/14/97	0:45	R.Street	6010B	2714
Silver	ND	mg/kg	0.98	0.98	1	9/14/97	0:45	R.Street	6010B	2714
Thallium	ND	mg/kg	0.98	0.98	1	9/14/97	0:45	R.Street	6010B	2714
Vanadium	ND	mg/kg	9.82	9.82	1	9/14/97	0:45	R.Street	6010B	2714
GENERAL CHEMISTRY PARAMETERS										
Cyanide	ND	mg/kg	2.00	2.00	1	9/13/97	8:18	A Hardison	9012A	3863

ND = Not detected at the report limit.

Sample Extraction Data

BNA's Extracted 9/11/97 Wt extracted: 30.0 gm Extract Volume: 1.0 ml C.Gereaser

** SURROGATE RECOVERIES **

Surrogate	% Recovery	Target Range
BNA Surr., Nitrobenzene-d5	40.0	23. - 120.
BNA Surr., 2-Fluorobiphenyl	60.0	30. - 115.
BNA Surrogate, Terphenyl d14	80.0	18. - 140.
BNA Surrogate, Phenol d5	45.0	10. - 115.
BNA Surrogate, 2-Fluorophenol	30.0	20. - 121.
BNA Surrogate, 2,4,6-Tribromophenol	40.0	19. - 122.

Report Approved By: Michael H. Dunn Report Date: 9/22/97

Theodore J. Duello, Ph.D., Q.A. Officer
Michael H. Dunn, M.S., Technical Director
Danny B. Hale, M.S., Laboratory Director

SPECIALIZED ANALYTICAL, INC.
2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

TLANTIC ENVIRONMENTAL SERV. 6043
ATTN. TOM HELFICH
2232 WELSCH IND. COURT
T. LOUIS, MO 63146

Lab Number: 97-A076112

Sample ID: #18

Date Collected: 9/ 7/97

roject: 97521

Time Collected:

Project Name: 33RD ST. SITE

Date Received: 9/ 9/97

Sampler: DAVID PLUHAR

Time Received: 9:00

tate Certification:

Sample Type: Soil

Site I.D.:

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
TRACTABLE ORGANICS*										
Acenaphthene	ND	mg/kg	1.66	0.333	10	9/22/97	8:11	M.Goodrich	8270C	3714
Acenaphthylene	ND	mg/kg	1.66	0.333	10	9/22/97	8:11	M.Goodrich	8270C	3714
Anthracene	ND	mg/kg	1.66	0.333	10	9/22/97	8:11	M.Goodrich	8270C	3714
Benzo(a)anthracene	ND	mg/kg	1.66	0.333	10	9/22/97	8:11	M.Goodrich	8270C	3714
Benzo(a)pyrene	ND	mg/kg	1.66	0.333	10	9/22/97	8:11	M.Goodrich	8270C	3714
Benzo(b)fluoranthene	ND	mg/kg	1.66	0.333	10	9/22/97	8:11	M.Goodrich	8270C	3714
Benzo(g,h,i)perylene	ND	mg/kg	1.66	0.333	10	9/22/97	8:11	M.Goodrich	8270C	3714
Benzo(k)fluoranthene	ND	mg/kg	1.66	0.333	10	9/22/97	8:11	M.Goodrich	8270C	3714
4-Bromophenylphenylether	ND	mg/kg	1.66	0.333	10	9/22/97	8:11	M.Goodrich	8270C	3714
Butylbenzylphthalate	ND	mg/kg	1.66	0.333	10	9/22/97	8:11	M.Goodrich	8270C	3714
Carbazole	ND	mg/kg	1.66	0.333	10	9/22/97	8:11	M.Goodrich	8270C	3714
4-Chloro-3-methylphenol	ND	mg/kg	1.66	0.333	10	9/22/97	8:11	M.Goodrich	8270C	3714
4-Chloroaniline	ND	mg/kg	1.66	0.333	10	9/22/97	8:11	M.Goodrich	8270C	3714
bis(2-Chloroethoxy)methane	ND	mg/kg	1.66	0.333	10	9/22/97	8:11	M.Goodrich	8270C	3714
bis(2-Chloroethyl)ether	ND	mg/kg	1.66	0.333	10	9/22/97	8:11	M.Goodrich	8270C	3714
bis(2-Chloroisopropyl)ether	ND	mg/kg	1.66	0.333	10	9/22/97	8:11	M.Goodrich	8270C	3714
2-Chloronaphthalene	ND	mg/kg	1.66	0.333	10	9/22/97	8:11	M.Goodrich	8270C	3714
2-Chlorophenol	ND	mg/kg	1.66	0.333	10	9/22/97	8:11	M.Goodrich	8270C	3714
4-Chlorophenylphenylether	ND	mg/kg	1.66	0.333	10	9/22/97	8:11	M.Goodrich	8270C	3714
Chrysene	ND	mg/kg	1.66	0.333	10	9/22/97	8:11	M.Goodrich	8270C	3714
Dibenzofuran	ND	mg/kg	1.66	0.333	10	9/22/97	8:11	M.Goodrich	8270C	3714
Dibenz(a,h)anthracene	ND	mg/kg	1.66	0.333	10	9/22/97	8:11	M.Goodrich	8270C	3714
1,2-Dichlorobenzene	ND	mg/kg	1.66	0.333	10	9/22/97	8:11	M.Goodrich	8270C	3714
1,3-Dichlorobenzene	ND	mg/kg	1.66	0.333	10	9/22/97	8:11	M.Goodrich	8270C	3714
1,4-Dichlorobenzene	ND	mg/kg	1.66	0.333	10	9/22/97	8:11	M.Goodrich	8270C	3714
3,3'-Dichlorobenzidine	ND	mg/kg	3.33	0.666	10	9/22/97	8:11	M.Goodrich	8270C	3714
2,4-Dichlorophenol	ND	mg/kg	1.66	0.333	10	9/22/97	8:11	M.Goodrich	8270C	3714
Diethylphthalate	ND	mg/kg	1.66	0.333	10	9/22/97	8:11	M.Goodrich	8270C	3714

COPY 1

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

Laboratory Number: 97-A076112
Sample ID: #18

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
2,4-Dimethylphenol	ND	mg/kg	1.66	0.333	10	9/22/97	8:11	M.Goodrich	8270C	3714
Dimethylphthalate	ND	mg/kg	1.66	0.333	10	9/22/97	8:11	M.Goodrich	8270C	3714
Di-n-butylphthalate	ND	mg/kg	1.66	0.333	10	9/22/97	8:11	M.Goodrich	8270C	3714
4,6-Dinitro-2-methylphenol	ND	mg/kg	4.16	0.830	10	9/22/97	8:11	M.Goodrich	8270C	3714
2,4-Dinitrophenol	ND	mg/kg	4.16	0.830	10	9/22/97	8:11	M.Goodrich	8270C	3714
2,4-dinitrotoluene	ND	mg/kg	1.66	0.333	10	9/22/97	8:11	M.Goodrich	8270C	3714
2,6-Dinitrotoluene	ND	mg/kg	1.66	0.333	10	9/22/97	8:11	M.Goodrich	8270C	3714
Di-n-octylphthalate	ND	mg/kg	1.66	0.333	10	9/22/97	8:11	M.Goodrich	8270C	3714
Fluoranthene	ND	mg/kg	1.66	0.333	10	9/22/97	8:11	M.Goodrich	8270C	3714
Fluorene	ND	mg/kg	1.66	0.333	10	9/22/97	8:11	M.Goodrich	8270C	3714
Hexachlorobenzene	ND	mg/kg	1.66	0.333	10	9/22/97	8:11	M.Goodrich	8270C	3714
Hexachlorobutadiene	ND	mg/kg	1.66	0.333	10	9/22/97	8:11	M.Goodrich	8270C	3714
Hexachlorocyclopentadiene	ND	mg/kg	1.66	0.333	10	9/22/97	8:11	M.Goodrich	8270C	3714
Hexachloroethane	ND	mg/kg	1.66	0.333	10	9/22/97	8:11	M.Goodrich	8270C	3714
Indeno(1,2,3-cd)pyrene	ND	mg/kg	1.66	0.333	10	9/22/97	8:11	M.Goodrich	8270C	3714
Isophorone	ND	mg/kg	1.66	0.333	10	9/22/97	8:11	M.Goodrich	8270C	3714
2-Methylnaphthalene	ND	mg/kg	1.66	0.333	10	9/22/97	8:11	M.Goodrich	8270C	3714
2-Methylphenol	ND	mg/kg	1.66	0.333	10	9/22/97	8:11	M.Goodrich	8270C	3714
m,p-Methylphenol	ND	mg/kg	1.66	0.333	10	9/22/97	8:11	M.Goodrich	8270C	3714
Naphthalene	ND	mg/kg	1.66	0.333	10	9/22/97	8:11	M.Goodrich	8270C	3714
2-Nitroaniline	ND	mg/kg	4.16	0.830	10	9/22/97	8:11	M.Goodrich	8270C	3714
3-Nitroaniline	ND	mg/kg	4.16	0.830	10	9/22/97	8:11	M.Goodrich	8270C	3714
4-Nitroaniline	ND	mg/kg	4.16	0.830	10	9/22/97	8:11	M.Goodrich	8270C	3714
Nitrobenzene	ND	mg/kg	1.66	0.333	10	9/22/97	8:11	M.Goodrich	8270C	3714
2-Nitrophenol	ND	mg/kg	1.66	0.333	10	9/22/97	8:11	M.Goodrich	8270C	3714
4-Nitrophenol	ND	mg/kg	4.16	0.830	10	9/22/97	8:11	M.Goodrich	8270C	3714
N-nitrosodi-n-propylamine	ND	mg/kg	1.66	0.333	10	9/22/97	8:11	M.Goodrich	8270C	3714
N-nitrosodiphenylamine	ND	mg/kg	1.66	0.333	10	9/22/97	8:11	M.Goodrich	8270C	3714
Pentachlorophenol	ND	mg/kg	4.16	0.830	10	9/22/97	8:11	M.Goodrich	8270C	3714
Phenanthrene	ND	mg/kg	1.66	0.333	10	9/22/97	8:11	M.Goodrich	8270C	3714
Phenol	ND	mg/kg	1.66	0.333	10	9/22/97	8:11	M.Goodrich	8270C	3714
Pyrene	ND	mg/kg	1.66	0.333	10	9/22/97	8:11	M.Goodrich	8270C	3714
Bis(2-ethylhexyl)phthalate	ND	mg/kg	1.66	0.333	10	9/22/97	8:11	M.Goodrich	8270C	3714
1,2,4-Trichlorobenzene	ND	mg/kg	1.66	0.333	10	9/22/97	8:11	M.Goodrich	8270C	3714
2,4,5-Trichlorophenol	ND	mg/kg	4.16	0.830	10	9/22/97	8:11	M.Goodrich	8270C	3714
2,4,6-Trichlorophenol	ND	mg/kg	1.66	0.333	10	9/22/97	8:11	M.Goodrich	8270C	3714
METALS										
Antimony	ND	mg/kg	9.86	9.86	1	9/14/97	0:45	R.Street	6010B	2714
Arsenic	1.78	mg/kg	0.99	0.99	1	9/14/97	0:45	R.Street	6010B	2714
Barium	93.5	mg/kg	0.99	0.99	1	9/14/97	0:45	R.Street	6010B	2714
Beryllium	ND	mg/kg	0.99	0.99	1	9/14/97	0:45	R.Street	6010B	2714
Cadmium	ND	mg/kg	0.99	0.99	1	9/14/97	0:45	R.Street	6010B	2714
Chromium	5.92	mg/kg	0.99	0.99	1	9/14/97	0:45	R.Street	6010B	2714

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

Laboratory Number: 97-A076112
Sample ID: #18

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
Lead	95.9	mg/kg	0.99	0.99	1	9/14/97	0:45	R.Street	6010B	2714
Mercury	ND	mg/kg	0.10	0.10	1	9/11/97	15:18	R.Street	7471	2507
Nickel	4.93	mg/kg	0.99	0.99	1	9/14/97	0:45	R.Street	6010B	2714
Selenium	ND	mg/kg	0.99	0.99	1	9/14/97	0:45	R.Street	6010B	2714
Silver	ND	mg/kg	0.99	0.99	1	9/14/97	0:45	R.Street	6010B	2714
Thallium	ND	mg/kg	0.99	0.99	1	9/14/97	0:45	R.Street	6010B	2714
Vanadium	ND	mg/kg	9.86	9.86	1	9/14/97	0:45	R.Street	6010B	2714
GENERAL CHEMISTRY PARAMETERS										
Cyanide	ND	mg/kg	2.00	2.00	1	9/13/97	8:18	A Hardison	9012A	3863

ND = Not detected at the report limit.

Sample Extraction Data

Date Extracted 9/11/97 Wt extracted: 30.0 gm Extract Volume: 1.0 ml C.Gerenser

** SURROGATE RECOVERIES **

Surrogate	% Recovery	Target Range
BNA Surr., Nitrobenzene-d5	38.0	23. - 120.
BNA Surr., 2-Fluorobiphenyl	57.0	30. - 115.
BNA Surrogate, Terphenyl d14	74.0	18. - 140.
BNA Surrogate, Phenol d5	48.0	10. - 115.
BNA Surrogate, 2-Fluorophenol	24.0	20. - 121.
BNA Surrogate, 2,4,6-Tribromophenol	35.0	19. - 122.

Report Approved By: Michael H. Dunn Report Date: 9/22/97

Theodore J. Duello, Ph.D., Q.A. Officer
Michael H. Dunn, M.S., Technical Director
Danny B. Hale, M.S., Laboratory Director

COPY 1

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

ATLANTIC ENVIRONMENTAL SERV. 6043
ATTN. TOM HELFICH
2232 WELSCH IND. COURT
ST. LOUIS, MO 63146

Lab Number: 97-A076113

Sample ID: #19

Date Collected: 9/ 7/97

Project: 97521

Time Collected:

Project Name: 33RD ST. SITE

Date Received: 9/ 9/97

Sampler: DAVID PLUHAR

Time Received: 9:00

State Certification:

Sample Type: Soil

Site I.D.:

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
EXTRACTABLE ORGANICS										
Acenaphthene	ND	mg/kg	3.33	0.333	10	9/22/97	8:47	M.Goodrich	8270C	3714
Acenaphthylene	ND	mg/kg	3.33	0.333	10	9/22/97	8:47	M.Goodrich	8270C	3714
Anthracene	ND	mg/kg	3.33	0.333	10	9/22/97	8:47	M.Goodrich	8270C	3714
Benzo(a)anthracene	ND	mg/kg	3.33	0.333	10	9/22/97	8:47	M.Goodrich	8270C	3714
Benzo(a)pyrene	ND	mg/kg	3.33	0.333	10	9/22/97	8:47	M.Goodrich	8270C	3714
Benzo(b)fluoranthene	ND	mg/kg	3.33	0.333	10	9/22/97	8:47	M.Goodrich	8270C	3714
Benzo(g,h,i)perylene	ND	mg/kg	3.33	0.333	10	9/22/97	8:47	M.Goodrich	8270C	3714
Benzo(k)fluoranthene	ND	mg/kg	3.33	0.333	10	9/22/97	8:47	M.Goodrich	8270C	3714
4-Bromophenylphenylether	ND	mg/kg	3.33	0.333	10	9/22/97	8:47	M.Goodrich	8270C	3714
Butylbenzylphthalate	ND	mg/kg	3.33	0.333	10	9/22/97	8:47	M.Goodrich	8270C	3714
Carbazole	ND	mg/kg	3.33	0.333	10	9/22/97	8:47	M.Goodrich	8270C	3714
4-Chloro-3-methylphenol	ND	mg/kg	3.33	0.333	10	9/22/97	8:47	M.Goodrich	8270C	3714
4-Chloroaniline	ND	mg/kg	3.33	0.333	10	9/22/97	8:47	M.Goodrich	8270C	3714
bis(2-Chloroethoxy)methane	ND	mg/kg	3.33	0.333	10	9/22/97	8:47	M.Goodrich	8270C	3714
bis(2-Chloroethyl)ether	ND	mg/kg	3.33	0.333	10	9/22/97	8:47	M.Goodrich	8270C	3714
bis(2-Chloroisopropyl)ether	ND	mg/kg	3.33	0.333	10	9/22/97	8:47	M.Goodrich	8270C	3714
2-Chloronaphthalene	ND	mg/kg	3.33	0.333	10	9/22/97	8:47	M.Goodrich	8270C	3714
2-Chlorophenol	ND	mg/kg	3.33	0.333	10	9/22/97	8:47	M.Goodrich	8270C	3714
4-Chlorophenylphenylether	ND	mg/kg	3.33	0.333	10	9/22/97	8:47	M.Goodrich	8270C	3714
Chrysene	ND	mg/kg	3.33	0.333	10	9/22/97	8:47	M.Goodrich	8270C	3714
Dibenzofuran	ND	mg/kg	3.33	0.333	10	9/22/97	8:47	M.Goodrich	8270C	3714
Dibenz(a,h)anthracene	ND	mg/kg	3.33	0.333	10	9/22/97	8:47	M.Goodrich	8270C	3714
1,2-Dichlorobenzene	ND	mg/kg	3.33	0.333	10	9/22/97	8:47	M.Goodrich	8270C	3714
1,3-Dichlorobenzene	ND	mg/kg	3.33	0.333	10	9/22/97	8:47	M.Goodrich	8270C	3714
1,4-Dichlorobenzene	ND	mg/kg	3.33	0.333	10	9/22/97	8:47	M.Goodrich	8270C	3714
3,3'-Dichlorobenzidine	ND	mg/kg	6.66	0.666	10	9/22/97	8:47	M.Goodrich	8270C	3714
2,4-Dichlorophenol	ND	mg/kg	3.33	0.333	10	9/22/97	8:47	M.Goodrich	8270C	3714
Diethylphthalate	ND	mg/kg	3.33	0.333	10	9/22/97	8:47	M.Goodrich	8270C	3714

COPY 1

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

Laboratory Number: 97-A076113
Sample ID: #19

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
2,4-Dimethylphenol	ND	mg/kg	3.33	0.333	10	9/22/97	8:47	M.Goodrich	8270C	3714
Dimethylphthalate	ND	mg/kg	3.33	0.333	10	9/22/97	8:47	M.Goodrich	8270C	3714
Di-n-butylphthalate	ND	mg/kg	3.33	0.333	10	9/22/97	8:47	M.Goodrich	8270C	3714
4,6-Dinitro-2-methylphenol	ND	mg/kg	8.32	0.830	10	9/22/97	8:47	M.Goodrich	8270C	3714
2,4-Dinitrophenol	ND	mg/kg	8.32	0.830	10	9/22/97	8:47	M.Goodrich	8270C	3714
2,4-dinitrotoluene	ND	mg/kg	3.33	0.333	10	9/22/97	8:47	M.Goodrich	8270C	3714
2,6-Dinitrotoluene	ND	mg/kg	3.33	0.333	10	9/22/97	8:47	M.Goodrich	8270C	3714
Di-n-octylphthalate	ND	mg/kg	3.33	0.333	10	9/22/97	8:47	M.Goodrich	8270C	3714
Fluoranthene	ND	mg/kg	3.33	0.333	10	9/22/97	8:47	M.Goodrich	8270C	3714
Fluorene	ND	mg/kg	3.33	0.333	10	9/22/97	8:47	M.Goodrich	8270C	3714
Hexachlorobenzene	ND	mg/kg	3.33	0.333	10	9/22/97	8:47	M.Goodrich	8270C	3714
Hexachlorobutadiene	ND	mg/kg	3.33	0.333	10	9/22/97	8:47	M.Goodrich	8270C	3714
Hexachlorocyclopentadiene	ND	mg/kg	3.33	0.333	10	9/22/97	8:47	M.Goodrich	8270C	3714
Hexachloroethane	ND	mg/kg	3.33	0.333	10	9/22/97	8:47	M.Goodrich	8270C	3714
Indeno(1,2,3-cd)pyrene	ND	mg/kg	3.33	0.333	10	9/22/97	8:47	M.Goodrich	8270C	3714
Isophorone	ND	mg/kg	3.33	0.333	10	9/22/97	8:47	M.Goodrich	8270C	3714
2-Methylnaphthalene	ND	mg/kg	3.33	0.333	10	9/22/97	8:47	M.Goodrich	8270C	3714
2-Methylphenol	ND	mg/kg	3.33	0.333	10	9/22/97	8:47	M.Goodrich	8270C	3714
m,p-Methylphenol	ND	mg/kg	3.33	0.333	10	9/22/97	8:47	M.Goodrich	8270C	3714
Naphthalene	ND	mg/kg	3.33	0.333	10	9/22/97	8:47	M.Goodrich	8270C	3714
2-Nitroaniline	ND	mg/kg	8.32	0.830	10	9/22/97	8:47	M.Goodrich	8270C	3714
3-Nitroaniline	ND	mg/kg	8.32	0.830	10	9/22/97	8:47	M.Goodrich	8270C	3714
4-Nitroaniline	ND	mg/kg	8.32	0.830	10	9/22/97	8:47	M.Goodrich	8270C	3714
Nitrobenzene	ND	mg/kg	3.33	0.333	10	9/22/97	8:47	M.Goodrich	8270C	3714
2-Nitrophenol	ND	mg/kg	3.33	0.333	10	9/22/97	8:47	M.Goodrich	8270C	3714
4-Nitrophenol	ND	mg/kg	8.32	0.830	10	9/22/97	8:47	M.Goodrich	8270C	3714
N-nitrosodi-n-propylamine	ND	mg/kg	3.33	0.333	10	9/22/97	8:47	M.Goodrich	8270C	3714
N-nitrosodiphenylamine	ND	mg/kg	3.33	0.333	10	9/22/97	8:47	M.Goodrich	8270C	3714
Pentachlorophenol	ND	mg/kg	8.32	0.830	10	9/22/97	8:47	M.Goodrich	8270C	3714
Phenanthrene	ND	mg/kg	3.33	0.333	10	9/22/97	8:47	M.Goodrich	8270C	3714
Phenol	ND	mg/kg	3.33	0.333	10	9/22/97	8:47	M.Goodrich	8270C	3714
Pyrene	ND	mg/kg	3.33	0.333	10	9/22/97	8:47	M.Goodrich	8270C	3714
Bis(2-ethylhexyl)phthalate	ND	mg/kg	3.33	0.333	10	9/22/97	8:47	M.Goodrich	8270C	3714
1,2,4-Trichlorobenzene	ND	mg/kg	3.33	0.333	10	9/22/97	8:47	M.Goodrich	8270C	3714
2,4,5-Trichlorophenol	ND	mg/kg	8.32	0.830	10	9/22/97	8:47	M.Goodrich	8270C	3714
2,4,6-Trichlorophenol	ND	mg/kg	3.33	0.333	10	9/22/97	8:47	M.Goodrich	8270C	3714
METALS										
Antimony	ND	mg/kg	10.2	10.0	1	9/14/97	0:45	R.Street	6010B	2714
Arsenic	2.03	mg/kg	1.02	1.00	1	9/14/97	0:45	R.Street	6010B	2714
Barium	79.7	mg/kg	1.02	1.00	1	9/14/97	0:45	R.Street	6010B	2714
Beryllium	ND	mg/kg	1.02	1.00	1	9/14/97	0:45	R.Street	6010B	2714
Cadmium	ND	mg/kg	1.02	1.00	1	9/14/97	0:45	R.Street	6010B	2714
Chromium	5.69	mg/kg	1.02	1.00	1	9/14/97	0:45	R.Street	6010B	2714

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SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

Laboratory Number: 97-A076113
Sample ID: #19

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
Lead	299.	mg/kg	1.02	1.00	1	9/14/97	0:45	R.Street	6010B	2714
Mercury	0.25	mg/kg	0.10	0.10	1	9/11/97	15:18	R.Street	7471	2507
Nickel	5.28	mg/kg	1.02	1.00	1	9/14/97	0:45	R.Street	6010B	2714
Selenium	ND	mg/kg	1.02	1.00	1	9/14/97	0:45	R.Street	6010B	2714
Silver	ND	mg/kg	1.02	1.00	1	9/14/97	0:45	R.Street	6010B	2714
Thallium	ND	mg/kg	1.02	1.00	1	9/14/97	0:45	R.Street	6010B	2714
Vanadium	ND	mg/kg	10.2	10.0	1	9/14/97	0:45	R.Street	6010B	2714
GENERAL CHEMISTRY PARAMETERS										
Cyanide	ND	mg/kg	2.00	2.00	1	9/13/97	8:19	A Hardison	9012A	3863

ND = Not detected at the report limit.

Sample Extraction Data

BNA's Extracted 9/11/97 Wt extracted: 30.0 gm Extract Volume: 1.0 ml C.Gerenser

** SURROGATE RECOVERIES **

Surrogate	% Recovery	Target Range
BNA Surr., Nitrobenzene-d5	43.0	23. - 120.
BNA Surr., 2-Fluorobiphenyl	59.0	30. - 115.
BNA Surrogate, Terphenyl d14	70.0	18. - 140.
BNA Surrogate, Phenol d5	51.0	10. - 115.
BNA Surrogate, 2-Fluorophenol	30.0	20. - 121.
BNA Surrogate, 2,4,6-Tribromophenol	37.0	19. - 122.

Report Approved By: Michael H. Dunn Report Date: 9/22/97

Theodore J. Duello, Ph.D., Q.A. Officer
Michael H. Dunn, M.S., Technical Director
Danny R. Hale, M.S., Laboratory Director

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

TLANTIC ENVIRONMENTAL SERV. 6043
ATTN. TOM HELFICH
2232 WELSCH IND. COURT
T. LOUIS, MO 63146

Lab Number: 97-A076114

Sample ID: #20

Date Collected: 9/ 7/97

roject: 97521

Time Collected:

Project Name: 33RD ST. SITE

Date Received: 9/ 9/97

Sampler: DAVID PLUHAR

Time Received: 9:00

tate Certification:

Sample Type: Soil

Site I.D.:

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
RACTABLE ORGANICS*										
cenaphthene	ND	mg/kg	3.33	0.333	10	9/22/97	2:24	M.Goodrich	8270C	3714
Acenaphthylene	ND	mg/kg	3.33	0.333	10	9/22/97	2:24	M.Goodrich	8270C	3714
Anthracene	ND	mg/kg	3.33	0.333	10	9/22/97	2:24	M.Goodrich	8270C	3714
Benzo(a)anthracene	3.66	mg/kg	3.33	0.333	10	9/22/97	2:24	M.Goodrich	8270C	3714
Benzo(a)pyrene	4.33	mg/kg	3.33	0.333	10	9/22/97	2:24	M.Goodrich	8270C	3714
Benzo(b)fluoranthene	4.00	mg/kg	3.33	0.333	10	9/22/97	2:24	M.Goodrich	8270C	3714
Benzo(g,h,i)perylene	ND	mg/kg	3.33	0.333	10	9/22/97	2:24	M.Goodrich	8270C	3714
Benzo(k)fluoranthene	5.33	mg/kg	3.33	0.333	10	9/22/97	2:24	M.Goodrich	8270C	3714
4-Bromophenylphenylether	ND	mg/kg	3.33	0.333	10	9/22/97	2:24	M.Goodrich	8270C	3714
Butylbenzylphthalate	ND	mg/kg	3.33	0.333	10	9/22/97	2:24	M.Goodrich	8270C	3714
Carbazole	ND	mg/kg	3.33	0.333	10	9/22/97	2:24	M.Goodrich	8270C	3714
4-Chloro-3-methylphenol	ND	mg/kg	3.33	0.333	10	9/22/97	2:24	M.Goodrich	8270C	3714
4-Chloroaniline	ND	mg/kg	3.33	0.333	10	9/22/97	2:24	M.Goodrich	8270C	3714
bis(2-Chloroethoxy)methane	ND	mg/kg	3.33	0.333	10	9/22/97	2:24	M.Goodrich	8270C	3714
bis(2-Chloroethyl)ether	ND	mg/kg	3.33	0.333	10	9/22/97	2:24	M.Goodrich	8270C	3714
bis(2-Chloroisopropyl)ether	ND	mg/kg	3.33	0.333	10	9/22/97	2:24	M.Goodrich	8270C	3714
2-Chloronaphthalene	ND	mg/kg	3.33	0.333	10	9/22/97	2:24	M.Goodrich	8270C	3714
2-Chlorophenol	ND	mg/kg	3.33	0.333	10	9/22/97	2:24	M.Goodrich	8270C	3714
4-Chlorophenylphenylether	ND	mg/kg	3.33	0.333	10	9/22/97	2:24	M.Goodrich	8270C	3714
Chrysene	4.00	mg/kg	3.33	0.333	10	9/22/97	2:24	M.Goodrich	8270C	3714
Dibenzofuran	ND	mg/kg	3.33	0.333	10	9/22/97	2:24	M.Goodrich	8270C	3714
Dibenz(a,h)anthracene	ND	mg/kg	3.33	0.333	10	9/22/97	2:24	M.Goodrich	8270C	3714
1,2-Dichlorobenzene	ND	mg/kg	3.33	0.333	10	9/22/97	2:24	M.Goodrich	8270C	3714
1,3-Dichlorobenzene	ND	mg/kg	3.33	0.333	10	9/22/97	2:24	M.Goodrich	8270C	3714
-Dichlorobenzene	ND	mg/kg	3.33	0.333	10	9/22/97	2:24	M.Goodrich	8270C	3714
-Dichlorobenzidine	ND	mg/kg	6.66	0.666	10	9/22/97	2:24	M.Goodrich	8270C	3714
2,4-Dichlorophenol	ND	mg/kg	3.33	0.333	10	9/22/97	2:24	M.Goodrich	8270C	3714
Diethylphthalate	ND	mg/kg	3.33	0.333	10	9/22/97	2:24	M.Goodrich	8270C	3714

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SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

Laboratory Number: 97-A076114
Sample ID: #20

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
2,4-Dimethylphenol	ND	mg/kg	3.33	0.333	10	9/22/97	2:24	M.Goodrich	8270C	3714
Dimethylphthalate	ND	mg/kg	3.33	0.333	10	9/22/97	2:24	M.Goodrich	8270C	3714
Di-n-butylphthalate	ND	mg/kg	3.33	0.333	10	9/22/97	2:24	M.Goodrich	8270C	3714
4,6-Dinitro-2-methylphenol	ND	mg/kg	8.32	0.830	10	9/22/97	2:24	M.Goodrich	8270C	3714
2,4-Dinitrophenol	ND	mg/kg	8.32	0.830	10	9/22/97	2:24	M.Goodrich	8270C	3714
2,4-dinitrotoluene	ND	mg/kg	3.33	0.333	10	9/22/97	2:24	M.Goodrich	8270C	3714
2,6-Dinitrotoluene	ND	mg/kg	3.33	0.333	10	9/22/97	2:24	M.Goodrich	8270C	3714
Di-n-octylphthalate	ND	mg/kg	3.33	0.333	10	9/22/97	2:24	M.Goodrich	8270C	3714
Fluoranthene	7.33	mg/kg	3.33	0.333	10	9/22/97	2:24	M.Goodrich	8270C	3714
Fluorene	ND	mg/kg	3.33	0.333	10	9/22/97	2:24	M.Goodrich	8270C	3714
Hexachlorobenzene	ND	mg/kg	3.33	0.333	10	9/22/97	2:24	M.Goodrich	8270C	3714
Hexachlorobutadiene	ND	mg/kg	3.33	0.333	10	9/22/97	2:24	M.Goodrich	8270C	3714
Hexachlorocyclopentadiene	ND	mg/kg	3.33	0.333	10	9/22/97	2:24	M.Goodrich	8270C	3714
Hexachloroethane	ND	mg/kg	3.33	0.333	10	9/22/97	2:24	M.Goodrich	8270C	3714
Indeno(1,2,3-cd)pyrene	ND	mg/kg	3.33	0.333	10	9/22/97	2:24	M.Goodrich	8270C	3714
Isophorone	ND	mg/kg	3.33	0.333	10	9/22/97	2:24	M.Goodrich	8270C	3714
2-Methylnaphthalene	ND	mg/kg	3.33	0.333	10	9/22/97	2:24	M.Goodrich	8270C	3714
2-Methylphenol	ND	mg/kg	3.33	0.333	10	9/22/97	2:24	M.Goodrich	8270C	3714
m,p-Methylphenol	ND	mg/kg	3.33	0.333	10	9/22/97	2:24	M.Goodrich	8270C	3714
Naphthalene	ND	mg/kg	3.33	0.333	10	9/22/97	2:24	M.Goodrich	8270C	3714
2-Nitroaniline	ND	mg/kg	8.32	0.830	10	9/22/97	2:24	M.Goodrich	8270C	3714
3-Nitroaniline	ND	mg/kg	8.32	0.830	10	9/22/97	2:24	M.Goodrich	8270C	3714
4-Nitroaniline	ND	mg/kg	8.32	0.830	10	9/22/97	2:24	M.Goodrich	8270C	3714
Nitrobenzene	ND	mg/kg	3.33	0.333	10	9/22/97	2:24	M.Goodrich	8270C	3714
2-Nitrophenol	ND	mg/kg	3.33	0.333	10	9/22/97	2:24	M.Goodrich	8270C	3714
4-Nitrophenol	ND	mg/kg	8.32	0.830	10	9/22/97	2:24	M.Goodrich	8270C	3714
N-nitrosodi-n-propylamine	ND	mg/kg	3.33	0.333	10	9/22/97	2:24	M.Goodrich	8270C	3714
N-nitrosodiphenylamine	ND	mg/kg	3.33	0.333	10	9/22/97	2:24	M.Goodrich	8270C	3714
Pentachlorophenol	ND	mg/kg	8.32	0.830	10	9/22/97	2:24	M.Goodrich	8270C	3714
Phenanthrene	5.00	mg/kg	3.33	0.333	10	9/22/97	2:24	M.Goodrich	8270C	3714
Phenol	ND	mg/kg	3.33	0.333	10	9/22/97	2:24	M.Goodrich	8270C	3714
Pyrene	ND	mg/kg	3.33	0.333	10	9/22/97	2:24	M.Goodrich	8270C	3714
Bis(2-ethylhexyl)phthalate	ND	mg/kg	3.33	0.333	10	9/22/97	2:24	M.Goodrich	8270C	3714
1,2,4-Trichlorobenzene	ND	mg/kg	3.33	0.333	10	9/22/97	2:24	M.Goodrich	8270C	3714
2,4,5-Trichlorophenol	ND	mg/kg	8.32	0.830	10	9/22/97	2:24	M.Goodrich	8270C	3714
2,4,6-Trichlorophenol	ND	mg/kg	3.33	0.333	10	9/22/97	2:24	M.Goodrich	8270C	3714
METALS										
Antimony	ND	mg/kg	9.62	9.62	1	9/14/97	0:45	R.Street	6010B	2714
Arsenic	7.86	mg/kg	0.96	0.96	1	9/14/97	0:45	R.Street	6010B	2714
Barium	59.0	mg/kg	0.96	0.96	1	9/14/97	0:45	R.Street	6010B	2714
Beryllium	ND	mg/kg	0.96	0.96	1	9/14/97	0:45	R.Street	6010B	2714
Cadmium	ND	mg/kg	0.96	0.96	1	9/14/97	0:45	R.Street	6010B	2714
Chromium	6.54	mg/kg	0.96	0.96	1	9/14/97	0:45	R.Street	6010B	2714

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SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

Laboratory Number: 97-A076114
Sample ID: #20

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
Lead	145.	mg/kg	0.96	0.96	1	9/14/97	0:45	R.Street	6010B	2714
Mercury	0.11	mg/kg	0.10	0.10	1	9/11/97	15:18	R.Street	7471	2507
Nickel	10.4	mg/kg	0.96	0.96	1	9/14/97	0:45	R.Street	6010B	2714
Selenium	ND	mg/kg	0.96	0.96	1	9/14/97	0:45	R.Street	6010B	2714
Silver	ND	mg/kg	0.96	0.96	1	9/14/97	0:45	R.Street	6010B	2714
Thallium	ND	mg/kg	0.96	0.96	1	9/14/97	0:45	R.Street	6010B	2714
Vanadium	19.8	mg/kg	9.62	9.62	1	9/14/97	0:45	R.Street	6010B	2714
GENERAL CHEMISTRY PARAMETERS										
Cyanide	ND	mg/kg	2.00	2.00	1	9/13/97	8:20	A Hardison	9012A	3863

ND = Not detected at the report limit.

Sample Extraction Data

BNA's Extracted 9/11/97 Wt extracted: 30.0 gm Extract Volume: 1.0 ml C.Gerenser

** SURROGATE RECOVERIES **

Surrogate	% Recovery	Target Range
BNA Surr., Nitrobenzene-d5	50.0	23. - 120.
BNA Surr., 2-Fluorobiphenyl	68.0	30. - 115.
BNA Surrogate, Terphenyl d14	77.0	18. - 140.
BNA Surrogate, Phenol d5	60.0	10. - 115.
BNA Surrogate, 2-Fluorophenol	32.0	20. - 121.
BNA Surrogate, 2,4,6-Tribromophenol	39.0	19. - 122.

Report Approved By: Michael H. Dunn Report Date: 9/22/97

Theodore J. Duello, Ph.D., Q.A. Officer
Michael H. Dunn, M.S., Technical Director
Danny B. Hale, M.S., Laboratory Director

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SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

PROJECT QUALITY CONTROL DATA

Matrix Spike Recovery

Analyte	units	Orig. Val.	MS Val	Spike Conc	Recovery	Target Range	Q.C. Batch
Cyanide	mg/kg	< 2.00	0.23	0.20	Note	81. - 121.	3863
** Original sample concentration greater than four times spike added **							
Acenaphthene	mg/kg	< 0.333	2.13	3.33	63.96	51. - 108.	3714
2-Chlorophenol	mg/kg	< 0.333	2.10	3.33	63.06	45. - 105.	3714
1,4-Dichlorobenzene	mg/kg	< 0.333	1.73	3.33	51.95	46. - 112.	3714
2,4-dinitrotoluene	mg/kg	< 0.333	1.83	3.33	54.96	35. - 119.	3714
4-Nitrophenol	mg/kg	< 0.833	1.80	3.33	54.05	10. - 130.	3714
N-nitrosodi-n-propylamine	mg/kg	< 0.333	2.13	3.33	63.96	27. - 140.	3714
Pentachlorophenol	mg/kg	< 0.833	1.37	3.33	41.14	10. - 107.	3714
Phenol	mg/kg	< 0.333	2.27	3.33	68.17	37. - 112.	3714
Pyrene	mg/kg	< 0.333	4.33	3.33	130.03	33. - 139.	3714
1,2,4-Trichlorobenzene	mg/kg	< 0.333	1.93	3.33	57.96	48. - 107.	3714
Antimony	mg/kg	< 9.94	26.3	30.0	87.67	80 - 120	2714
Arsenic	mg/kg	3.58	18.4	15.0	98.80	80 - 120	2714
Barium	mg/kg	49.5	396.	400.	86.62	80 - 120	2714
Beryllium	mg/kg	< 0.99	8.51	10.0	85.10	80 - 120	2714
Cadmium	mg/kg	< 0.99	17.8	20.0	89.00	80 - 120	2714
Chromium	mg/kg	4.57	34.9	35.0	86.66	80 - 120	2714
Lead	mg/kg	152.	238.	100.	86.00	80 - 120	2714
Mercury	mg/kg	< 0.10	0.17	0.17	100.00	80 - 120	2507
Nickel	mg/kg	4.97	92.3	100.	87.33	80 - 120	2714
Selenium	mg/kg	< 0.99	14.5	15.0	96.67	80 - 120	2714
Silver	mg/kg	< 0.99	8.32	10.0	83.20	80 - 120	2714
Thallium	mg/kg	< 0.99	20.8	20.0	104.00	80 - 120	2714
Vanadium	mg/kg	< 9.94	81.2	100.	81.20	80 - 120	2714

Matrix Spike Duplicate

Analyte	units	Orig. Val.	Duplicate	RPD	Limit	Q.C. Batch
Cyanide	mg/kg	0.23	0.23	0.00	20.	3863
Acenaphthene	mg/kg	2.13	2.06	3.34	20.	3714
2-Chlorophenol	mg/kg	2.10	1.90	10.00	26.	3714
1,4-Dichlorobenzene	mg/kg	1.73	1.76	1.72	42.	3714
2,4-dinitrotoluene	mg/kg	1.83	2.04	10.85	35.	3714
4-Nitrophenol	mg/kg	1.80	1.65	8.70	37.	3714
N-nitrosodi-n-propylamine	mg/kg	2.13	2.55	17.95	22.	3714
Pentachlorophenol	mg/kg	1.37	1.48	7.72	42.	3714
Phenol	mg/kg	2.27	2.40	5.57	37.	3714
Pyrene	mg/kg	4.33	4.09	5.70	17.	3714
1,2,4-Trichlorobenzene	mg/kg	1.93	2.10	8.44	52.	3714
Antimony	mg/kg	26.3	27.5	4.46	20	2714
Arsenic	mg/kg	18.4	18.8	2.15	20	2714
Barium	mg/kg	396.	407.	2.74	20	2714
Beryllium	mg/kg	8.51	8.89	4.37	20	2714
Cadmium	mg/kg	17.8	18.4	3.31	20	2714

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PROJECT QUALITY CONTROL DATA

Matrix Spike Duplicate

Analyte	units	Orig. Val.	Duplicate	RPD	Limit	Q.C. Batch
Chromium	mg/kg	34.9	36.0	3.10	20	2714
Lead	mg/kg	238.	245.	2.90	20	2714
Mercury	mg/kg	0.17	0.17	0.00	20	2507
Nickel	mg/kg	92.3	95.3	3.20	20	2714
Selenium	mg/kg	14.5	15.4	6.02	20	2714
Silver	mg/kg	8.32	8.70	4.47	20	2714
Thallium	mg/kg	20.8	21.1	1.43	20	2714
Vanadium	mg/kg	81.2	83.8	3.15	20	2714

Laboratory Control Data

Analyte	units	Known Val.	Analyzed Val	% Recovery	Target Range	Q.C. Batch
Antimony	mg/kg	54.0	43.8	81.11	80 - 120	2714
Arsenic	mg/kg	108.	106.	98.15	80 - 120	2714
Barium	mg/kg	60.0	64.0	106.67	80 - 120	2714
Beryllium	mg/kg	48.0	45.0	93.75	80 - 120	2714
[illegible]ium	mg/kg	114.	112.	98.25	80 - 120	2714
[illegible]nium	mg/kg	42.0	39.0	92.86	80 - 120	2714
Lead	mg/kg	44.0	44.2	100.46	80 - 120	2714
Mercury	mg/kg	1.71	1.90	111.11	80 - 120	2507
Nickel	mg/kg	72.0	70.4	97.78	80 - 120	2714
Selenium	mg/kg	71.0	64.6	90.99	80 - 120	2714
Silver	mg/kg	60.0	53.2	88.67	80 - 120	2714
Thallium	mg/kg	78.0	64.2	82.31	80 - 120	2714
Vanadium	mg/kg	64.0	61.6	96.25	80 - 120	2714
Cyanide	mg/kg	0.40	0.39	97.50	80 - 120	3863

Duplicates

Analyte	units	Orig. Val.	Duplicate	RPD	Limit	Q.C. Batch
Cyanide	mg/kg	< 2.00	< 2.00	N/A	15	3863

Blank Data

Analyte	Blank Value	Units	Q.C. Batch
Antimony	< 10.0	mg/kg	2714
Arsenic	< 1.00	mg/kg	2714
Barium	< 1.00	mg/kg	2714
Beryllium	< 1.00	mg/kg	2714
Cadmium	< 1.00	mg/kg	2714
[illegible]nium	< 1.00	mg/kg	2714
[illegible]	< 1.00	mg/kg	2714
Mercury	< 0.10	mg/kg	2507
Nickel	< 1.00	mg/kg	2714

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Nashville, TN 37204-0566
Phone 1-615-726-0177

PROJECT QUALITY CONTROL DATA

Blank Data

Analyte	Blank Value	Units	Q.C. Batch
Selenium	< 1.00	mg/kg	2714
Silver	< 1.00	mg/kg	2714
Thallium	< 1.00	mg/kg	2714
Cyanide	< 2.00	mg/kg	3863
Acenaphthene	< 0.333	mg/kg	3714
Acenaphthylene	< 0.333	mg/kg	3714
Anthracene	< 0.333	mg/kg	3714
Benzo(a)anthracene	< 0.333	mg/kg	3714
Benzo(a)pyrene	< 0.333	mg/kg	3714
Benzo(b)fluoranthene	< 0.333	mg/kg	3714
Benzo(g,h,i)perylene	< 0.333	mg/kg	3714
Benzo(k)fluoranthene	< 0.333	mg/kg	3714
4-Bromophenylphenylether	< 0.333	mg/kg	3714
Butylbenzylphthalate	< 0.333	mg/kg	3714
Carbazole	< 0.333	mg/kg	3714
4-Chloro-3-methylphenol	< 0.333	mg/kg	3714
4-Chloroaniline	< 0.333	mg/kg	3714
bis(2-Chloroethoxy)methane	< 0.333	mg/kg	3714
bis(2-Chloroethyl)ether	< 0.333	mg/kg	3714
bis(2-Chloroisopropyl)ether	< 0.333	mg/kg	3714
2-Chloronaphthalene	< 0.333	mg/kg	3714
2-Chlorophenol	< 0.333	mg/kg	3714
4-Chlorophenylphenylether	< 0.333	mg/kg	3714
Chrysene	< 0.333	mg/kg	3714
Dibenzofuran	< 0.333	mg/kg	3714
Dibenz(a,h)anthracene	< 0.333	mg/kg	3714
1,2-Dichlorobenzene	< 0.333	mg/kg	3714
1,3-Dichlorobenzene	< 0.333	mg/kg	3714
1,4-Dichlorobenzene	< 0.333	mg/kg	3714
3,3'-Dichlorobenzidine	< 0.666	mg/kg	3714
2,4-Dichlorophenol	< 0.333	mg/kg	3714
Diethylphthalate	< 0.333	mg/kg	3714
2,4-Dimethylphenol	< 0.333	mg/kg	3714
Dimethylphthalate	< 0.333	mg/kg	3714
Di-n-butylphthalate	< 0.333	mg/kg	3714
4,6-Dinitro-2-methylphenol	< 0.830	mg/kg	3714
2,4-Dinitrophenol	< 0.830	mg/kg	3714
2,4-dinitrotoluene	< 0.333	mg/kg	3714
2,6-Dinitrotoluene	< 0.333	mg/kg	3714
Di-n-octylphthalate	< 0.333	mg/kg	3714
Fluoranthene	< 0.333	mg/kg	3714
Fluorene	< 0.333	mg/kg	3714
Hexachlorobenzene	< 0.333	mg/kg	3714
Hexachlorobutadiene	< 0.333	mg/kg	3714
Hexachlorocyclopentadiene	< 0.333	mg/kg	3714
Hexachloroethane	< 0.333	mg/kg	3714

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Nashville, TN 37204-0566
Phone 1-615-726-0177

PROJECT QUALITY CONTROL DATA

Blank Data

Analyte	Blank Value	Units	Q.C. Batch
Indeno(1,2,3-cd)pyrene	< 0.333	mg/kg	3714
Isophorone	< 0.333	mg/kg	3714
2-Methylnaphthalene	< 0.333	mg/kg	3714
2-Methylphenol	< 0.333	mg/kg	3714
m,p-Methylphenol	< 0.333	mg/kg	3714
Naphthalene	< 0.333	mg/kg	3714
2-Nitroaniline	< 0.830	mg/kg	3714
3-Nitroaniline	< 0.830	mg/kg	3714
4-Nitroaniline	< 0.830	mg/kg	3714
Nitrobenzene	< 0.333	mg/kg	3714
2-Nitrophenol	< 0.333	mg/kg	3714
4-Nitrophenol	< 0.830	mg/kg	3714
N-nitrosodi-n-propylamine	< 0.333	mg/kg	3714
N-nitrosodiphenylamine	< 0.333	mg/kg	3714
Pentachlorophenol	< 0.830	mg/kg	3714
Phenanthrene	< 0.333	mg/kg	3714
Phenol	< 0.333	mg/kg	3714
Pyrene	< 0.333	mg/kg	3714
Bis(2-ethylhexyl)phthalate	< 0.333	mg/kg	3714
1,2,4-Trichlorobenzene	< 0.333	mg/kg	3714
2,4,5-Trichlorophenol	< 0.830	mg/kg	3714
2,4,6-Trichlorophenol	< 0.333	mg/kg	3714

APPENDIX B

Air Sorbent Tubes
Analytical Results

SPECIALIZED ASSAYS, INC.

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ANALYTICAL REPORT

ΓLANTIC ENVIRONMENTAL SERV. 6043
TTN. TOM HELFICH
232 WELSCH IND. COURT
Γ. LOUIS, MO 63146

Lab Number: 97-A076024

ample ID: 97521-WEST STATION #15

Date Collected: 9/ 8/97

roject: 97521

Time Collected: 16:00

roject Name: 33RD STREET SITE

Date Received: 9/ 9/97

ampler: DAVID PLUHAR

Time Received: 9:00

IHA Certificate #: 517

Sample Type:

alyte	Result	Units	PQL	Date	Time	Analyst	Method
grene	ND	ug/tube	10.0	9/12/97	8:16	W. Klepper	N-1501
oluene	ND	ug/tube	5.00	9/12/97	8:16	W. Klepper	N-1501
ene	ND	ug/tube	5.00	9/12/97	8:16	W. Klepper	N-1501
e	ND	ug/tube	5.00	9/12/97	8:16	W. Klepper	N-1501
sphthalene	ND	ug/tube	50.0	9/12/97	8:16	W. Klepper	N-1501
hyl benzene	ND	ug/tube	5.00	9/12/97	8:16	W. Klepper	N-1501
mene	ND	ug/tube	10.0	9/12/97	8:16	W. Klepper	N-1501
Methylstyrene	ND	ug/tube	50.0	9/12/97	8:16	W. Klepper	N-1501
nyl Toluene	ND	ug/tube	50.0	9/12/97	8:16	W. Klepper	N-1501
t-Butyltoluene	ND	ug/tube	50.0	9/12/97	8:16	W. Klepper	N-1501

Report Approved By: Michael H. Dunn Report Date: 9/12/97

Theodore J. Duello, Ph.D., Q.A. Officer
Michael H. Dunn, M.S., Technical Director
Danny B. Hale, M.S., Laboratory Director

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ANALYTICAL REPORT

ATLANTIC ENVIRONMENTAL SERV. 6043
ATTN. TOM HELFICH
2232 WELSCH IND. COURT
ST. LOUIS, MO 63146

Lab Number: 97-A076023

Sample ID: 97521-SOUTH STATION #14

Date Collected: 9/ 8/97

Project: 97521

Time Collected: 16:00

Project Name: 33RD STREET SITE

Date Received: 9/ 9/97

Sampler: DAVID PLUHAR

Time Received: 9:00

AIHA Certificate #: 517

Sample Type:

nalyte	Result	Units	PQL	Date	Time	Analyst	Method
tyrene	ND	ug/tube	10.0	9/12/97	8:16	W. Klepper	N-1501
oluene	ND	ug/tube	5.00	9/12/97	8:16	W. Klepper	N-1501
enzene	ND	ug/tube	5.00	9/12/97	8:16	W. Klepper	N-1501
ylene	ND	ug/tube	5.00	9/12/97	8:16	W. Klepper	N-1501
apthalene	ND	ug/tube	50.0	9/12/97	8:16	W. Klepper	N-1501
thyl benzene	ND	ug/tube	5.00	9/12/97	8:16	W. Klepper	N-1501
umene	ND	ug/tube	10.0	9/12/97	8:16	W. Klepper	N-1501
-Methylstyrene	ND	ug/tube	50.0	9/12/97	8:16	W. Klepper	N-1501
inyl Toluene	ND	ug/tube	50.0	9/12/97	8:16	W. Klepper	N-1501
-t-Butyltoluene	ND	ug/tube	50.0	9/12/97	8:16	W. Klepper	N-1501

Report Approved By: Michael A. Dunn Report Date: 9/12/97

Theodore J. Duello, Ph.D., Q.A. Officer
Michael H. Dunn, M.S., Technical Director
Danny B. Hale, M.S., Laboratory Director

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ANALYTICAL REPORT

LANTIC ENVIRONMENTAL SERV. 6043
TTN. TOM HELFICH
32 WELSCH IND. COURT
. LOUIS, MO 63146

Lab Number: 97-A076022

mple ID: 97521-EAST STATION #13

Date Collected: 9/ 8/97

roject: 97521

Time Collected: 16:00

oject Name: 33RD STREET SITE

Date Received: 9/ 9/97

ampler: DAVID PLUHAR

Time Received: 9:00

HA Certificate #: 517

Sample Type:

alyte	Result	Units	PQL	Date	Time	Analyst	Method
grene	ND	ug/tube	10.0	9/12/97	8:16	W. Klepper	N-1501
luene	ND	ug/tube	5.00	9/12/97	8:16	W. Klepper	N-1501
[illegible]	ND	ug/tube	5.00	9/12/97	8:16	W. Klepper	N-1501
[illegible]	ND	ug/tube	5.00	9/12/97	8:16	W. Klepper	N-1501
pthalene	ND	ug/tube	50.0	9/12/97	8:16	W. Klepper	N-1501
hyl benzene	ND	ug/tube	5.00	9/12/97	8:16	W. Klepper	N-1501
ene	ND	ug/tube	10.0	9/12/97	8:16	W. Klepper	N-1501
methylstyrene	ND	ug/tube	50.0	9/12/97	8:16	W. Klepper	N-1501
nyl Toluene	ND	ug/tube	50.0	9/12/97	8:16	W. Klepper	N-1501
t-Butyltoluene	ND	ug/tube	50.0	9/12/97	8:16	W. Klepper	N-1501

Report Approved By: Michael H. Dunn Report Date: 9/12/97

Theodore J. Duello, Ph.D., Q.A. Officer
Michael H. Dunn, M.S., Technical Director
Danny B. Hale, M.S., Laboratory Director

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ANALYTICAL REPORT

TLANTIC ENVIRONMENTAL SERV. 6043
TTN. TOM HELFICH
232 WELSCH IND. COURT
T. LOUIS, MO 63146

Lab Number: 97-A076021

ample ID: 97521-NORTH STATION #12

Date Collected: 9/ 8/97

roject: 97521

Time Collected: 16:00

roject Name: 33RD STREET SITE

Date Received: 9/ 9/97

ampler: DAVID PLUHAR

Time Received: 9:00

IHA Certificate #: 517

Sample Type:

alyte	Result	Units	PQL	Date	Time	Analyst	Method
yrene	ND	ug/tube	10.0	9/12/97	8:16	W. Klepper	N-1501
luene	ND	ug/tube	5.00	9/12/97	8:16	W. Klepper	N-1501
nzene	ND	ug/tube	5.00	9/12/97	8:16	W. Klepper	N-1501
lene	ND	ug/tube	5.00	9/12/97	8:16	W. Klepper	N-1501
pthalene	ND	ug/tube	50.0	9/12/97	8:16	W. Klepper	N-1501
hyl benzene	ND	ug/tube	5.00	9/12/97	8:16	W. Klepper	N-1501
mene	ND	ug/tube	10.0	9/12/97	8:16	W. Klepper	N-1501
Methylstyrene	ND	ug/tube	50.0	9/12/97	8:16	W. Klepper	N-1501
nyl Toluene	ND	ug/tube	50.0	9/12/97	8:16	W. Klepper	N-1501
-t-Butyltoluene	ND	ug/tube	50.0	9/12/97	8:16	W. Klepper	N-1501

Report Approved By: Michael A. Dunn Report Date: 9/12/97

Theodore J. Duello, Ph.D., Q.A. Officer
Michael H. Dunn, M.S., Technical Director
Danny B. Hale, M.S., Laboratory Director

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ANALYTICAL REPORT

:LANTIC ENVIRONMENTAL SERV. 6043
TTN. TOM HELFICH
232 WELSCH IND. COURT
T. LOUIS, MO 63146

Lab Number: 97-A076020

ample ID: 97521-TRIP BLANK #11

Date Collected: 9/ 7/97

roject: 97521

Time Collected: 16:50

roject Name: 33RD STREET SITE

Date Received: 9/ 9/97

ampler: DAVID PLUHAR

Time Received: 9:00

[HA Certificate #: 517

Sample Type:

alyte	Result	Units	PQL	Date	Time	Analyst	Method
grene	ND	ug/tube	10.0	9/12/97	8:16	W. Klepper	N-1501
oluene	ND	ug/tube	5.00	9/12/97	8:16	W. Klepper	N-1501
ene	ND	ug/tube	5.00	9/12/97	8:16	W. Klepper	N-1501
e	ND	ug/tube	5.00	9/12/97	8:16	W. Klepper	N-1501
pthalene	ND	ug/tube	50.0	9/12/97	8:16	W. Klepper	N-1501
thyl benzene	ND	ug/tube	5.00	9/12/97	8:16	W. Klepper	N-1501
ene	ND	ug/tube	10.0	9/12/97	8:16	W. Klepper	N-1501
Methylstyrene	ND	ug/tube	50.0	9/12/97	8:16	W. Klepper	N-1501
nyl Toluene	ND	ug/tube	50.0	9/12/97	8:16	W. Klepper	N-1501
t-Butyltoluene	ND	ug/tube	50.0	9/12/97	8:16	W. Klepper	N-1501

Report Approved By: Michael A. Dunn Report Date: 9/12/97

Theodore J. Duello, Ph.D., Q.A. Officer
Michael H. Dunn, M.S., Technical Director
Danny B. Hale, M.S., Laboratory Director

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Phone 1-615-726-0177

ANALYTICAL REPORT

TLANTIC ENVIRONMENTAL SERV. 6043
TTN. TOM HELFICH
232 WELSCH IND. COURT
T. LOUIS, MO 63146

Lab Number: 97-A076019

ample ID: 97521-FIELD BLANK #10

Date Collected: 9/ 7/97

roject: 97521

Time Collected: 16:50

roject Name: 33RD STREET SITE

Date Received: 9/ 9/97

ampler: DAVID PLUHAR

Time Received: 9:00

IHA Certificate #: 517

Sample Type:

alyte	Result	Units	PQL	Date	Time	Analyst	Method
yrene	ND	ug/tube	10.0	9/12/97	8:16	W. Klepper	N-1501
luene	ND	ug/tube	5.00	9/12/97	8:16	W. Klepper	N-1501
nzene	ND	ug/tube	5.00	9/12/97	8:16	W. Klepper	N-1501
lene	ND	ug/tube	5.00	9/12/97	8:16	W. Klepper	N-1501
pthalene	ND	ug/tube	50.0	9/12/97	8:16	W. Klepper	N-1501
hyl benzene	ND	ug/tube	5.00	9/12/97	8:16	W. Klepper	N-1501
mene	ND	ug/tube	10.0	9/12/97	8:16	W. Klepper	N-1501
Methylstyrene	ND	ug/tube	50.0	9/12/97	8:16	W. Klepper	N-1501
nyl Toluene	ND	ug/tube	50.0	9/12/97	8:16	W. Klepper	N-1501
t-Butyltoluene	ND	ug/tube	50.0	9/12/97	8:16	W. Klepper	N-1501

Report Approved By: Michael A. Dunn Report Date: 9/12/97

Theodore J. Duello, Ph.D., Q.A. Officer
Michael H. Dunn, M.S., Technical Director
Danny B. Hale, M.S., Laboratory Director

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SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

ATLANTIC ENVIRONMENTAL SERV. 6043
ATTN. TOM HELFICH
2232 WELSCH IND. COURT
ST. LOUIS, MO 63146

Lab Number: 97-A076015

Sample ID: 97521-WEST DUP #6

Date Collected: 9/ 7/97

Project: 97521

Time Collected: 16:50

Project Name: 33RD STREET SITE

Date Received: 9/ 9/97

Sampler: DAVID PLUHAR

Time Received: 9:00

AIHA Certificate #: 517

Sample Type:

nalyte	Result	Units	PQL	Date	Time	Analyst	Method
tyrene	ND	ug/tube	10.0	9/12/97	8:16	W. Klepper	N-1501
[illegible]ne	ND	ug/tube	5.00	9/12/97	8:16	W. Klepper	N-1501
[illegible]ne	ND	ug/tube	5.00	9/12/97	8:16	W. Klepper	N-1501
ylene	ND	ug/tube	5.00	9/12/97	8:16	W. Klepper	N-1501
apthalene	ND	ug/tube	50.0	9/12/97	8:16	W. Klepper	N-1501
thyl benzene	ND	ug/tube	5.00	9/12/97	8:16	W. Klepper	N-1501
umene	ND	ug/tube	10.0	9/12/97	8:16	W. Klepper	N-1501
-Methylstyrene	ND	ug/tube	50.0	9/12/97	8:16	W. Klepper	N-1501
inyl Toluene	ND	ug/tube	50.0	9/12/97	8:16	W. Klepper	N-1501
-t-Butyltoluene	ND	ug/tube	50.0	9/12/97	8:16	W. Klepper	N-1501

Report Approved By: Michael H. Dunn Report Date: 9/12/97

Theodore J. Duello, Ph.D., Q.A. Officer
Michael H. Dunn, M.S., Technical Director
Danny B. Hale, M.S., Laboratory Director

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ANALYTICAL REPORT

LANTIC ENVIRONMENTAL SERV. 6043
TN. TOM HELFICH
32 WELSCH IND. COURT
LOUIS, MO 63146

Lab Number: 97-A076016

mple ID: 97521-NORTH STATION #7

Date Collected: 9/ 7/97

oject: 97521

Time Collected: 16:50

ject Name: 33RD STREET SITE

Date Received: 9/ 9/97

mpler: DAVID PLUHAR

Time Received: 9:00

HA Certificate #: 517

Sample Type:

lyte	Result	Units	PQL	Date	Time	Analyst	Method
ene	ND	ug/tube	10.0	9/12/97	8:16	W. Klepper	N-1501
uene	ND	ug/tube	5.00	9/12/97	8:16	W. Klepper	N-1501
zene	ND	ug/tube	5.00	9/12/97	8:16	W. Klepper	N-1501
ene	ND	ug/tube	5.00	9/12/97	8:16	W. Klepper	N-1501
thalene	ND	ug/tube	50.0	9/12/97	8:16	W. Klepper	N-1501
yl benzene	ND	ug/tube	5.00	9/12/97	8:16	W. Klepper	N-1501
ene	ND	ug/tube	10.0	9/12/97	8:16	W. Klepper	N-1501
ethylstyrene	ND	ug/tube	50.0	9/12/97	8:16	W. Klepper	N-1501
yl Toluene	ND	ug/tube	50.0	9/12/97	8:16	W. Klepper	N-1501
-Butyltoluene	ND	ug/tube	50.0	9/12/97	8:16	W. Klepper	N-1501

Report Approved By: Michael H. Dunn Report Date: 9/12/97

Theodore J. Duello, Ph.D., Q.A. Officer
Michael H. Dunn, M.S., Technical Director
Danny B. Hale, M.S., Laboratory Director

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ANALYTICAL REPORT

ATLANTIC ENVIRONMENTAL SERV. 6043
ATTN. TOM HELFICH
2232 WELSCH IND. COURT
ST. LOUIS, MO 63146

Lab Number: 97-A076013

Sample ID: 97521-EAST STATION #4

Date Collected: 9/ 6/97

Project: 97521

Time Collected: 17:50

Project Name: 33RD STREET SITE

Date Received: 9/ 9/97

Sampler: DAVID PLUHAR

Time Received: 9:00

AIHA Certificate #: 517

Sample Type:

nalyte	Result	Units	PQL	Date	Time	Analyst	Method
tyrene	ND	ug/tube	10.0	9/12/97	8:16	W. Klepper	N-1501
[illegible]ne	ND	ug/tube	5.00	9/12/97	8:16	W. Klepper	N-1501
[illegible]e	ND	ug/tube	5.00	9/12/97	8:16	W. Klepper	N-1501
ylene	ND	ug/tube	5.00	9/12/97	8:16	W. Klepper	N-1501
apthalene	ND	ug/tube	50.0	9/12/97	8:16	W. Klepper	N-1501
thyl benzene	ND	ug/tube	5.00	9/12/97	8:16	W. Klepper	N-1501
umene	ND	ug/tube	10.0	9/12/97	8:16	W. Klepper	N-1501
-Methylstyrene	ND	ug/tube	50.0	9/12/97	8:16	W. Klepper	N-1501
inyl Toluene	ND	ug/tube	50.0	9/12/97	8:16	W. Klepper	N-1501
-t-Butyltoluene	ND	ug/tube	50.0	9/12/97	8:16	W. Klepper	N-1501

Report Approved By: Michael H. Dunn Report Date: 9/12/97

Theodore J. Duello, Ph.D., Q.A. Officer
Michael H. Dunn, M.S., Technical Director
Danny B. Hale, M.S., Laboratory Director

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ANALYTICAL REPORT

LANTIC ENVIRONMENTAL SERV. 6043
TTN. TOM HELFICH
32 WELSCH IND. COURT
. LOUIS, MO 63146

Lab Number: 97-A076014

ample ID: 97521-WEST STATION #5

Date Collected: 9/ 7/97

oject: 97521

Time Collected: 16:50

oject Name: 33RD STREET SITE

Date Received: 9/ 9/97

ampler: DAVID PLUHAR

Time Received: 9:00

HA Certificate #: 517

Sample Type:

lyte	Result	Units	PQL	Date	Time	Analyst	Method
rene	ND	ug/tube	10.0	9/12/97	8:16	W. Klepper	N-1501
luene	ND	ug/tube	5.00	9/12/97	8:16	W. Klepper	N-1501
zene	ND	ug/tube	5.00	9/12/97	8:16	W. Klepper	N-1501
ene	ND	ug/tube	5.00	9/12/97	8:16	W. Klepper	N-1501
pthalene	ND	ug/tube	50.0	9/12/97	8:16	W. Klepper	N-1501
hyl benzene	ND	ug/tube	5.00	9/12/97	8:16	W. Klepper	N-1501
ene	ND	ug/tube	10.0	9/12/97	8:16	W. Klepper	N-1501
ethylstyrene	ND	ug/tube	50.0	9/12/97	8:16	W. Klepper	N-1501
hyl Toluene	ND	ug/tube	50.0	9/12/97	8:16	W. Klepper	N-1501
-Butylbenzene	ND	ug/tube	50.0	9/12/97	8:16	W. Klepper	N-1501

Report Approved By: Michael H. Dunn Report Date: 9/12/97

Theodore J. Duello, Ph.D., Q.A. Officer
Michael H. Dunn, M.S., Technical Director
Danny B. Hale, M.S., Laboratory Director

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ANALYTICAL REPORT

ATLANTIC ENVIRONMENTAL SERV. 6043
ATTN. TOM HELFICH
2232 WELSCH IND. COURT
ST. LOUIS, MO 63146

Lab Number: 97-A076017

Sample ID: 97521-EAST STATION #8

Date Collected: 9/ 7/97

Project: 97521

Time Collected: 16:50

Project Name: 33RD STREET SITE

Date Received: 9/ 9/97

Sampler: DAVID PLUHAR

Time Received: 9:00

AIHA Certificate #: 517

Sample Type:

Analyte	Result	Units	PQL	Date	Time	Analyst	Method
Styrene	ND	ug/tube	10.0	9/12/97	8:16	W. Klepper	N-1501
Toluene	ND	ug/tube	5.00	9/12/97	8:16	W. Klepper	N-1501
Benzene	ND	ug/tube	5.00	9/12/97	8:16	W. Klepper	N-1501
[illegible]ene	ND	ug/tube	5.00	9/12/97	8:16	W. Klepper	N-1501
[illegible]halene	ND	ug/tube	50.0	9/12/97	8:16	W. Klepper	N-1501
Ethyl benzene	ND	ug/tube	5.00	9/12/97	8:16	W. Klepper	N-1501
Cumene	ND	ug/tube	10.0	9/12/97	8:16	W. Klepper	N-1501
a-Methylstyrene	ND	ug/tube	50.0	9/12/97	8:16	W. Klepper	N-1501
Vinyl Toluene	ND	ug/tube	50.0	9/12/97	8:16	W. Klepper	N-1501
4-t-Butyltoluene	ND	ug/tube	50.0	9/12/97	8:16	W. Klepper	N-1501

Report Approved By: Michael H. Dunn Report Date: 9/12/97

Theodore J. Duello, Ph.D., Q.A. Officer
Michael H. Dunn, M.S., Technical Director
Danny B. Hale, M.S., Laboratory Director

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ANALYTICAL REPORT

A.LANTIC ENVIRONMENTAL SERV. 6043
ATTN. TOM HELFICH
E 32 WELSCH IND. COURT
S . LOUIS, MO 63146

Lab Number: 97-A076018

Sample ID: 97521-SOUTH STATION #9

Date Collected: 9/ 7/97

Project: 97521

Time Collected: 16:50

Project Name: 33RD STREET SITE

Date Received: 9/ 9/97

Sampler: DAVID PLUHAR

Time Received: 9:00

EPHA Certificate #: 517

Sample Type:

Analyte	Result	Units	PQL	Date	Time	Analyst	Method
Styrene	ND	ug/tube	10.0	9/12/97	8:16	W. Klepper	N-1501
Toluene	ND	ug/tube	5.00	9/12/97	8:16	W. Klepper	N-1501
Benzene	ND	ug/tube	5.00	9/12/97	8:16	W. Klepper	N-1501
Xylene	ND	ug/tube	5.00	9/12/97	8:16	W. Klepper	N-1501
Naphthalene	ND	ug/tube	50.0	9/12/97	8:16	W. Klepper	N-1501
Ethyl benzene	ND	ug/tube	5.00	9/12/97	8:16	W. Klepper	N-1501
Cumene	ND	ug/tube	10.0	9/12/97	8:16	W. Klepper	N-1501
Alpha methylstyrene	ND	ug/tube	50.0	9/12/97	8:16	W. Klepper	N-1501
Vinyl Toluene	ND	ug/tube	50.0	9/12/97	8:16	W. Klepper	N-1501
4-Tert-Butyltoluene	ND	ug/tube	50.0	9/12/97	8:16	W. Klepper	N-1501

Report Approved By Michael H. Dunn Report Date: 9/12/97

Theodore J. Duello, Ph.D., Q.A. Officer
Michael H. Dunn, M.S., Technical Director
Danny B. Hale, M.S., Laboratory Director

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ANALYTICAL REPORT

:LANTIC ENVIRONMENTAL SERV. 6043
TTN. TOM HELFICH
232 WELSCH IND. COURT
:. LOUIS, MO 63146

Lab Number: 97-A076012

ample ID: 97521-SOUTH STATION #3

Date Collected: 9/ 6/97

roject: 97521

Time Collected: 17:50

roject Name: 33RD STREET SITE

Date Received: 9/ 9/97

ampler: DAVID PLUHAR

Time Received: 9:00

:HA Certificate #: 517

Sample Type:

alyte	Result	Units	PQL	Date	Time	Analyst	Method
jrene	ND	ug/tube	10.0	9/12/97	8:16	W. Klepper	N-1501
luene	ND	ug/tube	5.00	9/12/97	8:16	W. Klepper	N-1501
e	ND	ug/tube	5.00	9/12/97	8:16	W. Klepper	N-1501
[illegible]	ND	ug/tube	5.00	9/12/97	8:16	W. Klepper	N-1501
pthalene	ND	ug/tube	50.0	9/12/97	8:16	W. Klepper	N-1501
hyl benzene	ND	ug/tube	5.00	9/12/97	8:16	W. Klepper	N-1501
mene	ND	ug/tube	10.0	9/12/97	8:16	W. Klepper	N-1501
Methylstyrene	ND	ug/tube	50.0	9/12/97	8:16	W. Klepper	N-1501
nyl Toluene	ND	ug/tube	50.0	9/12/97	8:16	W. Klepper	N-1501
t-Butyltoluene	ND	ug/tube	50.0	9/12/97	8:16	W. Klepper	N-1501

Report Approved By: Michael H. Dunn Report Date: 9/12/97

Theodore J. Duello, Ph.D., Q.A. Officer
Michael H. Dunn, M.S., Technical Director
Danny B. Hale, M.S., Laboratory Director

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Phone 1-615-726-0177

ANALYTICAL REPORT

TLANTIC ENVIRONMENTAL SERV. 6043
TTN. TOM HELFICH
232 WELSCH IND. COURT
T. LOUIS, MO 63146

Lab Number: 97-A076011

ample ID: 97521-WEST STATION #2

Date Collected: 9/ 6/97

roject: 97521

Time Collected: 17:50

roject Name: 33RD STREET SITE

Date Received: 9/ 9/97

ampler: DAVID PLUHAR

Time Received: 9:00

IHA Certificate #: 517

Sample Type:

alyte	Result	Units	PQL	Date	Time	Analyst	Method
yrene	ND	ug/tube	10.0	9/12/97	8:16	W. Klepper	N-1501
luene	ND	ug/tube	5.00	9/12/97	8:16	W. Klepper	N-1501
nzene	ND	ug/tube	5.00	9/12/97	8:16	W. Klepper	N-1501
lene	ND	ug/tube	5.00	9/12/97	8:16	W. Klepper	N-1501
pthalene	ND	ug/tube	50.0	9/12/97	8:16	W. Klepper	N-1501
hyl benzene	ND	ug/tube	5.00	9/12/97	8:16	W. Klepper	N-1501
mene	ND	ug/tube	10.0	9/12/97	8:16	W. Klepper	N-1501
-Methylstyrene	ND	ug/tube	50.0	9/12/97	8:16	W. Klepper	N-1501
hyl Toluene	ND	ug/tube	50.0	9/12/97	8:16	W. Klepper	N-1501
-t-Butyltoluene	ND	ug/tube	50.0	9/12/97	8:16	W. Klepper	N-1501

Report Approved By: Michael H. Dunn Report Date. 9/12/97

Theodore J. Duello, Ph.D., Q.A. Officer
Michael H. Dunn, M.S., Technical Director
Danny B. Hale, M.S., Laboratory Director

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ANALYTICAL REPORT

LANTIC ENVIRONMENTAL SERV. 6043
TN. TOM HELFICH
32 WELSCH IND. COURT
. LOUIS, MO 63146

Lab Number: 97-A076010

mple ID: 97521-NORTH AIR STATION #1

Date Collected: 9/ 6/97

oject: 97521

Time Collected: 17:50

oject Name: 33RD STREET SITE

Date Received: 9/ 9/97

ampler: DAVID PLUHAR

Time Received: 9:00

HA Certificate #: 517

Sample Type:

lyte	Result	Units	PQL	Date	Time	Analyst	Method
rene	ND	ug/tube	10.0	9/12/97	8:16	W. Klepper	N-1501
luene	ND	ug/tube	5.00	9/12/97	8:16	W. Klepper	N-1501
ne	ND	ug/tube	5.00	9/12/97	8:16	W. Klepper	N-1501
	ND	ug/tube	5.00	9/12/97	8:16	W. Klepper	N-1501
thalene	ND	ug/tube	50.0	9/12/97	8:16	W. Klepper	N-1501
nyl benzene	ND	ug/tube	5.00	9/12/97	8:16	W. Klepper	N-1501
ene	ND	ug/tube	10.0	9/12/97	8:16	W. Klepper	N-1501
ethylstyrene	ND	ug/tube	50.0	9/12/97	8:16	W. Klepper	N-1501
nyl Toluene	ND	ug/tube	50.0	9/12/97	8:16	W. Klepper	N-1501
-Butyltoluene	ND	ug/tube	50.0	9/12/97	8:16	W. Klepper	N-1501

Report Approved By: Michael H. Dunn

Report Date: 9/12/97

Theodore J. Duello, Ph.D., Q.A. Officer
Michael H. Dunn, M.S., Technical Director
Danny B. Hale, M.S., Laboratory Director

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7A- 003228

2960 Foster Creighton Drive
Nashville, TN 37204
615-726-0177
FAX 615/726-3404

REFERRING CLIENT
Account: 6043
Atlantic Environmental Services
~~Tom Wolfich~~ DAVID PLUHAR
2232 Welsch Ind. Court,
St. Louis, MO 63146
Ph: 314-569-9994 Fax: 314-569-9979

ING CONTROL NUMBER (FOR LAB USE ONLY) 77962

PROJECT # 97521

P.O. #

PLERS (Signature-Please Print) DAVID PLUHAR

PROJECT NAME 33rd STREET SITE

OR LAB USE ONLY ACC#	SAMPLE DESCRIPTION	DATE	TIME	COMP	GRAB	# of cont	ANALYSIS REQUESTED Fall
7-A076010	97521 - NORTH AIR STATION - 33rd St. Site No.1	9/6/97	5:50 pm	X		1	NIOSH METHOD 1501-VOA
7-A076011	97521 - WEST STATION No.2	9/6/97		X		1	
7-A076012	97521 - SOUTH STATION No.3	9/6/97		X		1	
7-A076013	97521 - EAST STATION No.4	9/6/97		X		1	
7-A076014	97521 - WEST STATION No.5	9/7/97	4:50	X		1	NIOSH 1501 - VOA'S
7-A076015	97521 - WEST DUP. No.6	9/7/97		X		1	
7-A076016	97521 - NORTH STATION No.7	9/7/97		X		1	
7-A076017	97521 - EAST STATION No.8	9/7/97		X		1	
7-A076018	97521 - SOUTH STATION No.9	9/7/97		X		1	
7-A076019	97521 - FIELD BLANK No.10	9/7/97		X		1	

inquished by: (Signature)	Date / Time	Received by: (Signature)	Received for Laboratory by:	Date / Time
[signature]	9/8/97 1600		[signature]	9/9/97 0940
inquished by: (Signature)	Date / Time	Received by: (Signature)	Remarks	
inquished by: (Signature)	Date / Time	Received by: (Signature)		
inquished by: (Signature)	Date / Time	Received by: (Signature)		

FLOW RATE OF 0.01-0.2 LTR/M
MIN. # OF LTR'S 1
MAX. # OF LTR'S 29

For further assistance in completing the chain of custody form please refer to the instructions found on the opposite si

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ENVIRONMENTAL

7A- 015260

2960 Foster Creighton Drive
Nashville, TN 37204
615-726-0177
FAX 615/726-3404

REFERRING CLIENT

COUNT: 6043
[illegible]NTIC ENVIRONMENTAL SERVICES
[illegible]VID PLUHAR
232 WELSCH IND. CT.
[illegible]. LOUIS, MO 63146
[illegible]h: 314-569-9994 Fax: 314-569-9979

[illegible]G CONTROL NUMBER (FOR LAB USE ONLY)

PROJECT # 97521

P.O. #

[illegible]LERS (Signature-Please Print)
[illegible]AVID PLUHAR

PROJECT NAME
33rd STREET SITE

[illegible]R LAB USE ONLY ACC#	SAMPLE DESCRIPTION	DATE	TIME	COMP	GRAB	# OF CONT	ANALYSIS REQUESTED
[illegible]-A076020	97521-TRIP BLANK NO. 11	9/7/97	4:50 pm			1	NIOSH METHOD 1501 -VOA's
[illegible]-A076021	97521 - NORTH STATION NO. 12	9/8/97	4:00 pm	X		1	
-A076022	97521- EAST STATION NO. 13	9/8/97		X		1	
-A076023	97521 - SOUTH STATION NO. 14	9/8/97		X		1	
[illegible]076024	97521- WEST STATION NO. 15	9/8/97		X		1	

[illegible]uished by: (Signature)	Date / Time	Received by: (Signature)	Received for Laboratory by:	Date / Time
[signature]	9/8/97 1600		[signature]	9/9/97 [illegible]
[illegible]quished by: (Signature)	Date / Time	Received by: (Signature)	Remarks	
[illegible]quished by: (Signature)	Date / Time	Received by: (Signature)		
[illegible]d by: (Signature)	Date / Time	Received by: (Signature)		

For further assistance in completing the chain of custody form please refer to the instructions found on the opposite [illegible]

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Nashville, TN 37204-0566
Phone 1-615-726-0177

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ANALYTICAL REPORT

'LANTIC ENVIRONMENTAL SERV. 6043
'TN. TOM HELFICH
232 WELSCH IND. COURT
'. LOUIS, MO 63146

Lab Number: 97-A076075

ample ID: #1-GRAB

Date Collected: 9/ 7/97

·oject: 97521

Time Collected:

roject Name: 33RD ST. SITE

Date Received: 9/ 9/97

ampler: DAVID PLUHAR

Time Received: 9:00

ate Certification:

Sample Type: Soil

ite I.D.:

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
ANIC PARAMETERS*										
Benzene	ND	mg/kg	0.0050	0.0010	1	9/16/97	16:46	Holingurth	8021B	4166
Toluene	ND	mg/kg	0.0050	0.0010	1	9/16/97	16:46	Holingurth	8021B	4166
Ethylbenzene	ND	mg/kg	0.0050	0.0010	1	9/16/97	16:46	Holingurth	8021B	4166
Xylenes, total	ND	mg/kg	0.005	0.001	1	9/16/97	16:46	Holingurth	8021B	4166

ND = Not detected at the report limit.

** SURROGATE RECOVERIES **

Surrogate	% Recovery	Target Range
BTEX/GRO Surr., a,a,a-trifluorotoluene	91.	50. - 150.

Report Approved By: Michael H. Dunn Report Date: 9/22/97

Theodore J. Duello, Ph.D., Q.A. Officer
Michael H. Dunn, M.S., Technical Director
Danny B. Hale, M.S., Laboratory Director

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ANALYTICAL REPORT

ATLANTIC ENVIRONMENTAL SERV. 6043
ATTN. TOM HELFICH
2232 WELSCH IND. COURT
ST. LOUIS, MO 63146

Lab Number: 97-A076076

Sample ID: #2-GRAB

Date Collected: 9/ 7/97

Project: 97521

Time Collected:

Project Name: 33RD ST. SITE

Date Received: 9/ 9/97

Sampler: DAVID PLUHAR

Time Received: 9:00

State Certification:

Sample Type: Soil

Site I.D.:

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
ORGANIC PARAMETERS										
Benzene	ND	mg/kg	0.0050	0.0010	1	9/16/97	17:22	Holingurth	8021B	4166
Toluene	ND	mg/kg	0.0050	0.0010	1	9/16/97	17:22	Holingurth	8021B	4166
Ethylbenzene	ND	mg/kg	0.0050	0.0010	1	9/16/97	17:22	Holingurth	8021B	4166
Xylenes, total	ND	mg/kg	0.005	0.001	1	9/16/97	17:22	Holingurth	8021B	4166

ND = Not detected at the report limit.

** SURROGATE RECOVERIES **

Surrogate	% Recovery	Target Range
BTEX/GRO Surr., a,a,a-trifluorotoluene	93.	50. - 150.

Report Approved By: Michael H. Dunn Report Date: 9/22/97

Theodore J. Duello, Ph.D., Q.A. Officer
Michael H. Dunn, M.S., Technical Director
Danny B. Hale, M.S., Laboratory Director

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ANALYTICAL REPORT

TLANTIC ENVIRONMENTAL SERV. 6043
ITTN. TOM HELFICH
:232 WELSCH IND. COURT
T. LOUIS, MO 63146

Lab Number: 97-A076077

Sample ID: #3-GRAB

Date Collected: 9/ 7/97

roject: 97521

Time Collected:

roject Name: 33RD ST. SITE

Date Received: 9/ 9/97

ampler: DAVID PLUHAR

Time Received: 9:00

tate Certification:

Sample Type: Soil

ite I.D.:

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
ANIC PARAMETERS*										
ene	ND	mg/kg	0.0050	0.0010	1	9/16/97	17:59	Holingurth	8021B	4166
Toluene	ND	mg/kg	0.0050	0.0010	1	9/16/97	17:59	Holingurth	8021B	4166
Ethylbenzene	ND	mg/kg	0.0050	0.0010	1	9/16/97	17:59	Holingurth	8021B	4166
Xylenes, total	ND	mg/kg	0.005	0.001	1	9/16/97	17:59	Holingurth	8021B	4166

ND = Not detected at the report limit.

** SURROGATE RECOVERIES **

Surrogate	% Recovery	Target Range
BTEX/GRO Surr., a,a,a-trifluorotoluene	102.	50. - 150.

Report Approved By: Michael H. Dunn Report Date: 9/22/97

Theodore J. Duello, Ph.D., Q.A. Officer
Michael H. Dunn, M.S., Technical Director
Danny R. Hale, M.S., Laboratory Director

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ANALYTICAL REPORT

ATLANTIC ENVIRONMENTAL SERV. 6043
ATTN. TOM HELFICH
2232 WELSCH IND. COURT
ST. LOUIS, MO 63146

Lab Number: 97-A076078

Sample ID: #4-GRAB

Date Collected: 9/ 7/97

Project: 97521

Time Collected:

Project Name: 33RD ST. SITE

Date Received: 9/ 9/97

Sampler: DAVID PLUHAR

Time Received: 9:00

State Certification:

Sample Type: Soil

Site I.D.:

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
ORGANIC PARAMETERS										
Benzene	ND	mg/kg	0.0050	0.0010	1	9/16/97	18:35	Holingurth	8021B	4166
Toluene	ND	mg/kg	0.0050	0.0010	1	9/16/97	18:35	Holingurth	8021B	4166
Ethylbenzene	ND	mg/kg	0.0050	0.0010	1	9/16/97	18:35	Holingurth	8021B	4166
Xylenes, total	0.020	mg/kg	0.005	0.001	1	9/16/97	18:35	Holingurth	8021B	4166

ND = Not detected at the report limit.

** SURROGATE RECOVERIES **

Surrogate	% Recovery	Target Range
BTEX/GRO Surr., a,a,a-trifluorotoluene	92.	50. - 150.

Report Approved By: Michael H. Dunn Report Date: 9/22/97

Theodore J. Duello, Ph.D., Q.A. Officer
Michael H. Dunn, M.S., Technical Director
Danny B. Hale, M.S., Laboratory Director

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ANALYTICAL REPORT

TLANTIC ENVIRONMENTAL SERV. 6043
TTN. TOM HELFICH
232 WELSCH IND. COURT
T. LOUIS, MO 63146

Lab Number: 97-A076080

ample ID: #6-GRAB

Date Collected: 9/ 7/97

roject: 97521

Time Collected:

roject Name: 33RD ST. SITE

Date Received: 9/ 9/97

ampler: DAVID PLUHAR

Time Received: 9:00

ate Certification:

Sample Type: Soil

ite I.D.:

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
NIC PARAMETERS*										
Benzene	ND	mg/kg	0.0050	0.0010	1	9/16/97	19:47	Holingurth	8021B	4166
Toluene	ND	mg/kg	0.0050	0.0010	1	9/16/97	19:47	Holingurth	8021B	4166
Ethylbenzene	ND	mg/kg	0.0050	0.0010	1	9/16/97	19:47	Holingurth	8021B	4166
Xylenes, total	ND	mg/kg	0.005	0.001	1	9/16/97	19:47	Holingurth	8021B	4166

ND = Not detected at the report limit.

** SURROGATE RECOVERIES **

Surrogate	% Recovery	Target Range
BTEX/GRO Surr., a,a,a-trifluorotoluene	97.	50. - 150.

Report Approved By: Michael A. Dunn Report Date: 9/22/97

Theodore J. Duello, Ph.D., Q.A. Officer
Michael H. Dunn, M.S., Technical Director
Danny B. Hale, M.S., Laboratory Director

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ANALYTICAL REPORT

A LANTIC ENVIRONMENTAL SERV. 6043
ATTN. TOM HELFICH
2232 WELSCH IND. COURT
S . LOUIS, MO 63146

Lab Number: 97-A076079

Sample ID: #5-GRAB

Date Collected: 9/ 7/97

P oject: 97521

Time Collected:

Project Name: 33RD ST. SITE

Date Received: 9/ 9/97

Sampler: DAVID PLUHAR

Time Received: 9:00

S ate Certification:

Sample Type: Soil

Site I.D.:

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
ORGANIC PARAMETERS										
Benzene	ND	mg/kg	0.0050	0.0010	1	9/16/97	19:11	Holingurth	8021B	4166
Toluene	ND	mg/kg	0.0050	0.0010	1	9/16/97	19:11	Holingurth	8021B	4166
Ethylbenzene	ND	mg/kg	0.0050	0.0010	1	9/16/97	19:11	Holingurth	8021B	4166
Xylenes, total	ND	mg/kg	0.005	0.001	1	9/16/97	19:11	Holingurth	8021B	4166

ND = Not detected at the report limit.

** SURROGATE RECOVERIES **

Surrogate	% Recovery	Target Range
BTEX/GRO Surr., a,a,a-trifluorotoluene	95.	50. - 150.

Report Approved By: Michael H. Dunn Report Date: 9/22/97

Theodore J. Duello, Ph.D., Q.A. Officer
Michael H. Dunn, M.S., Technical Director
Danny R. Hale, M.S., Laboratory Director

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ANALYTICAL REPORT

TLANTIC ENVIRONMENTAL SERV. 6043
ATTN. TOM HELFICH
232 WELSCH IND. COURT
T. LOUIS, MO 63146

Lab Number: 97-A076081

Sample ID: #7-GRAB

Date Collected: 9/ 7/97

Project: 97521

Time Collected:

Project Name: 33RD ST. SITE

Date Received: 9/ 9/97

Sampler: DAVID PLUHAR

Time Received: 9:00

State Certification:

Sample Type: Soil

Site I.D.:

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
ORGANIC PARAMETERS*										
Benzene	ND	mg/kg	0.0050	0.0010	1	9/16/97	20:22	Holingurth	8021B	4166
Toluene	ND	mg/kg	0.0050	0.0010	1	9/16/97	20:22	Holingurth	8021B	4166
Ethylbenzene	ND	mg/kg	0.0050	0.0010	1	9/16/97	20:22	Holingurth	8021B	4166
Xylenes, total	ND	mg/kg	0.005	0.001	1	9/16/97	20:22	Holingurth	8021B	4166

ND = Not detected at the report limit.

** SURROGATE RECOVERIES **

Surrogate	% Recovery	Target Range
BTEX/GRO Surr., a,a,a-trifluorotoluene	101.	50. - 150.

Report Approved By: Michael H. Dunn Report Date: 9/22/97

Theodore J. Duello, Ph.D., Q.A. Officer
Michael H. Dunn, M.S., Technical Director
Danny B. Hale, M.S., Laboratory Director

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ANALYTICAL REPORT

ATLANTIC ENVIRONMENTAL SERV. 6043
ATTN. TOM HELFICH
2232 WELSCH IND. COURT
ST. LOUIS, MO 63146

Lab Number: 97-A076082

Sample ID: #8

Date Collected: 9/ 7/97

Project: 97521

Time Collected:

Project Name: 33RD ST. SITE

Date Received: 9/ 9/97

Sampler: DAVID PLUHAR

Time Received: 9:00

State Certification:

Sample Type: Soil

Site I.D.:

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
ORGANIC PARAMETERS										
Benzene	ND	mg/kg	0.0050	0.0010	1	9/16/97	20:58	Holingurth	8021B	4166
Toluene	ND	mg/kg	0.0050	0.0010	1	9/16/97	20:58	Holingurth	8021B	4166
Ethylbenzene	ND	mg/kg	0.0050	0.0010	1	9/16/97	20:58	Holingurth	8021B	4166
Xylenes, total	0.010	mg/kg	0.005	0.001	1	9/16/97	20:58	Holingurth	8021B	4166

ND = Not detected at the report limit.

** SURROGATE RECOVERIES **

Surrogate	% Recovery	Target Range
BTEX/GRO Surr., a,a,a-trifluorotoluene	97.	50. - 150.

Report Approved By: Michael H. Dunn Report Date: 9/22/97

Theodore J. Duello, Ph.D., Q.A. Officer
Michael H. Dunn, M.S., Technical Director
Danny B. Hale, M.S., Laboratory Director

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ANALYTICAL REPORT

TLANTIC ENVIRONMENTAL SERV. 6043
TTN. TOM HELFICH
2232 WELSCH IND. COURT
T. LOUIS, MO 63146

Lab Number: 97-A076112

Sample ID: #18

Date Collected: 9/ 7/97

roject: 97521

Time Collected:

Project Name: 33RD ST. SITE

Date Received: 9/ 9/97

Sampler: DAVID PLUHAR

Time Received: 9:00

tate Certification:

Sample Type: Soil

Site I.D.:

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
TRACTABLE ORGANICS*										
Acenaphthene	ND	mg/kg	1.66	0.333	10	9/22/97	8:11	M.Goodrich	8270C	3714
Acenaphthylene	ND	mg/kg	1.66	0.333	10	9/22/97	8:11	M.Goodrich	8270C	3714
Anthracene	ND	mg/kg	1.66	0.333	10	9/22/97	8:11	M.Goodrich	8270C	3714
Benzo(a)anthracene	ND	mg/kg	1.66	0.333	10	9/22/97	8:11	M.Goodrich	8270C	3714
Benzo(a)pyrene	ND	mg/kg	1.66	0.333	10	9/22/97	8:11	M.Goodrich	8270C	3714
Benzo(b)fluoranthene	ND	mg/kg	1.66	0.333	10	9/22/97	8:11	M.Goodrich	8270C	3714
Benzo(g,h,i)perylene	ND	mg/kg	1.66	0.333	10	9/22/97	8:11	M.Goodrich	8270C	3714
Benzo(k)fluoranthene	ND	mg/kg	1.66	0.333	10	9/22/97	8:11	M.Goodrich	8270C	3714
4-Bromophenylphenylether	ND	mg/kg	1.66	0.333	10	9/22/97	8:11	M.Goodrich	8270C	3714
Butylbenzylphthalate	ND	mg/kg	1.66	0.333	10	9/22/97	8:11	M.Goodrich	8270C	3714
Carbazole	ND	mg/kg	1.66	0.333	10	9/22/97	8:11	M.Goodrich	8270C	3714
4-Chloro-3-methylphenol	ND	mg/kg	1.66	0.333	10	9/22/97	8:11	M.Goodrich	8270C	3714
4-Chloroaniline	ND	mg/kg	1.66	0.333	10	9/22/97	8:11	M.Goodrich	8270C	3714
bis(2-Chloroethoxy)methane	ND	mg/kg	1.66	0.333	10	9/22/97	8:11	M.Goodrich	8270C	3714
bis(2-Chloroethyl)ether	ND	mg/kg	1.66	0.333	10	9/22/97	8:11	M.Goodrich	8270C	3714
bis(2-Chloroisopropyl)ether	ND	mg/kg	1.66	0.333	10	9/22/97	8:11	M.Goodrich	8270C	3714
2-Chloronaphthalene	ND	mg/kg	1.66	0.333	10	9/22/97	8:11	M.Goodrich	8270C	3714
2-Chlorophenol	ND	mg/kg	1.66	0.333	10	9/22/97	8:11	M.Goodrich	8270C	3714
4-Chlorophenylphenylether	ND	mg/kg	1.66	0.333	10	9/22/97	8:11	M.Goodrich	8270C	3714
Chrysene	ND	mg/kg	1.66	0.333	10	9/22/97	8:11	M.Goodrich	8270C	3714
Dibenzofuran	ND	mg/kg	1.66	0.333	10	9/22/97	8:11	M.Goodrich	8270C	3714
Dibenz(a,h)anthracene	ND	mg/kg	1.66	0.333	10	9/22/97	8:11	M.Goodrich	8270C	3714
1,2-Dichlorobenzene	ND	mg/kg	1.66	0.333	10	9/22/97	8:11	M.Goodrich	8270C	3714
1,3-Dichlorobenzene	ND	mg/kg	1.66	0.333	10	9/22/97	8:11	M.Goodrich	8270C	3714
1-Dichlorobenzene	ND	mg/kg	1.66	0.333	10	9/22/97	8:11	M.Goodrich	8270C	3714
'-Dichlorobenzidine	ND	mg/kg	3.33	0.666	10	9/22/97	8:11	M.Goodrich	8270C	3714
2,4-Dichlorophenol	ND	mg/kg	1.66	0.333	10	9/22/97	8:11	M.Goodrich	8270C	3714
Diethylphthalate	ND	mg/kg	1.66	0.333	10	9/22/97	8:11	M.Goodrich	8270C	3714

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ANALYTICAL REPORT

Laboratory Number: 97-A076112
Sample ID: #18

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
2,4-Dimethylphenol	ND	mg/kg	1.66	0.333	10	9/22/97	8:11	M.Goodrich	8270C	3714
Dimethylphthalate	ND	mg/kg	1.66	0.333	10	9/22/97	8:11	M.Goodrich	8270C	3714
Di-n-butylphthalate	ND	mg/kg	1.66	0.333	10	9/22/97	8:11	M.Goodrich	8270C	3714
4,6-Dinitro-2-methylphenol	ND	mg/kg	4.16	0.830	10	9/22/97	8:11	M.Goodrich	8270C	3714
2,4-Dinitrophenol	ND	mg/kg	4.16	0.830	10	9/22/97	8:11	M.Goodrich	8270C	3714
2,4-dinitrotoluene	ND	mg/kg	1.66	0.333	10	9/22/97	8:11	M.Goodrich	8270C	3714
2,6-Dinitrotoluene	ND	mg/kg	1.66	0.333	10	9/22/97	8:11	M.Goodrich	8270C	3714
Di-n-octylphthalate	ND	mg/kg	1.66	0.333	10	9/22/97	8:11	M.Goodrich	8270C	3714
Fluoranthene	ND	mg/kg	1.66	0.333	10	9/22/97	8:11	M.Goodrich	8270C	3714
Fluorene	ND	mg/kg	1.66	0.333	10	9/22/97	8:11	M.Goodrich	8270C	3714
Hexachlorobenzene	ND	mg/kg	1.66	0.333	10	9/22/97	8:11	M.Goodrich	8270C	3714
Hexachlorobutadiene	ND	mg/kg	1.66	0.333	10	9/22/97	8:11	M.Goodrich	8270C	3714
Hexachlorocyclopentadiene	ND	mg/kg	1.66	0.333	10	9/22/97	8:11	M.Goodrich	8270C	3714
Hexachloroethane	ND	mg/kg	1.66	0.333	10	9/22/97	8:11	M.Goodrich	8270C	3714
Indeno(1,2,3-cd)pyrene	ND	mg/kg	1.66	0.333	10	9/22/97	8:11	M.Goodrich	8270C	3714
Isophorone	ND	mg/kg	1.66	0.333	10	9/22/97	8:11	M.Goodrich	8270C	3714
2-Methylnaphthalene	ND	mg/kg	1.66	0.333	10	9/22/97	8:11	M.Goodrich	8270C	3714
2-Methylphenol	ND	mg/kg	1.66	0.333	10	9/22/97	8:11	M.Goodrich	8270C	3714
m,p-Methylphenol	ND	mg/kg	1.66	0.333	10	9/22/97	8:11	M.Goodrich	8270C	3714
Naphthalene	ND	mg/kg	1.66	0.333	10	9/22/97	8:11	M.Goodrich	8270C	3714
2-Nitroaniline	ND	mg/kg	4.16	0.830	10	9/22/97	8:11	M.Goodrich	8270C	3714
3-Nitroaniline	ND	mg/kg	4.16	0.830	10	9/22/97	8:11	M.Goodrich	8270C	3714
4-Nitroaniline	ND	mg/kg	4.16	0.830	10	9/22/97	8:11	M.Goodrich	8270C	3714
Nitrobenzene	ND	mg/kg	1.66	0.333	10	9/22/97	8:11	M.Goodrich	8270C	3714
2-Nitrophenol	ND	mg/kg	1.66	0.333	10	9/22/97	8:11	M.Goodrich	8270C	3714
4-Nitrophenol	ND	mg/kg	4.16	0.830	10	9/22/97	8:11	M.Goodrich	8270C	3714
N-nitrosodi-n-propylamine	ND	mg/kg	1.66	0.333	10	9/22/97	8:11	M.Goodrich	8270C	3714
N-nitrosodiphenylamine	ND	mg/kg	1.66	0.333	10	9/22/97	8:11	M.Goodrich	8270C	3714
Pentachlorophenol	ND	mg/kg	4.16	0.830	10	9/22/97	8:11	M.Goodrich	8270C	3714
Phenanthrene	ND	mg/kg	1.66	0.333	10	9/22/97	8:11	M.Goodrich	8270C	3714
Phenol	ND	mg/kg	1.66	0.333	10	9/22/97	8:11	M.Goodrich	8270C	3714
Pyrene	ND	mg/kg	1.66	0.333	10	9/22/97	8:11	M.Goodrich	8270C	3714
Bis(2-ethylhexyl)phthalate	ND	mg/kg	1.66	0.333	10	9/22/97	8:11	M.Goodrich	8270C	3714
1,2,4-Trichlorobenzene	ND	mg/kg	1.66	0.333	10	9/22/97	8:11	M.Goodrich	8270C	3714
2,4,5-Trichlorophenol	ND	mg/kg	4.16	0.830	10	9/22/97	8:11	M.Goodrich	8270C	3714
2,4,6-Trichlorophenol	ND	mg/kg	1.66	0.333	10	9/22/97	8:11	M.Goodrich	8270C	3714
METALS										
Antimony	ND	mg/kg	9.86	9.86	1	9/14/97	0:45	R.Street	6010B	2714
Arsenic	1.78	mg/kg	0.99	0.99	1	9/14/97	0:45	R.Street	6010B	2714
Barium	93.5	mg/kg	0.99	0.99	1	9/14/97	0:45	R.Street	6010B	2714
Beryllium	ND	mg/kg	0.99	0.99	1	9/14/97	0:45	R.Street	6010B	2714
Cadmium	ND	mg/kg	0.99	0.99	1	9/14/97	0:45	R.Street	6010B	2714
Chromium	5.92	mg/kg	0.99	0.99	1	9/14/97	0:45	R.Street	6010B	2714

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ANALYTICAL REPORT

Laboratory Number: 97-A076112
Sample ID: #18

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
Lead	95.9	mg/kg	0.99	0.99	1	9/14/97	0:45	R.Street	6010B	2714
Mercury	ND	mg/kg	0.10	0.10	1	9/11/97	15:18	R.Street	7471	2507
Nickel	4.93	mg/kg	0.99	0.99	1	9/14/97	0:45	R.Street	6010B	2714
Selenium	ND	mg/kg	0.99	0.99	1	9/14/97	0:45	R.Street	6010B	2714
Silver	ND	mg/kg	0.99	0.99	1	9/14/97	0:45	R.Street	6010B	2714
Thallium	ND	mg/kg	0.99	0.99	1	9/14/97	0:45	R.Street	6010B	2714
Vanadium	ND	mg/kg	9.86	9.86	1	9/14/97	0:45	R.Street	6010B	2714
GENERAL CHEMISTRY PARAMETERS										
Cyanide	ND	mg/kg	2.00	2.00	1	9/13/97	8:18	A Hardison	9012A	3863

ND = Not detected at the report limit.

Sample Extraction Data

BNA's Extracted 9/11/97 Wt extracted: 30.0 gm Extract Volume: 1.0 ml C.Gerenser

** SURROGATE RECOVERIES **

Surrogate	% Recovery	Target Range
BNA Surr., Nitrobenzene-d5	38.0	23. - 120.
BNA Surr., 2-Fluorobiphenyl	57.0	30. - 115.
BNA Surrogate, Terphenyl d14	74.0	18. - 140.
BNA Surrogate, Phenol d5	48.0	10. - 115.
BNA Surrogate, 2-Fluorophenol	24.0	20. - 121.
BNA Surrogate, 2,4,6-Tribromophenol	35.0	19. - 122.

Report Approved By: Michael H. Dunn Report Date: 9/22/97

Theodore J. Duello, Ph.D., Q.A. Officer
Michael H. Dunn, M.S., Technical Director
Danny R. Hale, M.S., Laboratory Director

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

ATLANTIC ENVIRONMENTAL SERV. 6043
ATTN. TOM HELFICH
2232 WELSCH IND. COURT
ST. LOUIS, MO 63146

Lab Number: 97-A076113

Sample ID: #19

Date Collected: 9/ 7/97

Project: 97521

Time Collected:

Project Name: 33RD ST. SITE

Date Received: 9/ 9/97

Sampler: DAVID PLUHAR

Time Received: 9:00

State Certification:

Sample Type: Soil

Site I.D.:

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
EXTRACTABLE ORGANICS										
Acenaphthene	ND	mg/kg	3.33	0.333	10	9/22/97	8:47	M.Goodrich	8270C	3714
Acenaphthylene	ND	mg/kg	3.33	0.333	10	9/22/97	8:47	M.Goodrich	8270C	3714
Anthracene	ND	mg/kg	3.33	0.333	10	9/22/97	8:47	M.Goodrich	8270C	3714
Benzo(a)anthracene	ND	mg/kg	3.33	0.333	10	9/22/97	8:47	M.Goodrich	8270C	3714
Benzo(a)pyrene	ND	mg/kg	3.33	0.333	10	9/22/97	8:47	M.Goodrich	8270C	3714
Benzo(b)fluoranthene	ND	mg/kg	3.33	0.333	10	9/22/97	8:47	M.Goodrich	8270C	3714
Benzo(g,h,i)perylene	ND	mg/kg	3.33	0.333	10	9/22/97	8:47	M.Goodrich	8270C	3714
Benzo(k)fluoranthene	ND	mg/kg	3.33	0.333	10	9/22/97	8:47	M.Goodrich	8270C	3714
4-Bromophenylphenylether	ND	mg/kg	3.33	0.333	10	9/22/97	8:47	M.Goodrich	8270C	3714
Butylbenzylphthalate	ND	mg/kg	3.33	0.333	10	9/22/97	8:47	M.Goodrich	8270C	3714
Carbazole	ND	mg/kg	3.33	0.333	10	9/22/97	8:47	M.Goodrich	8270C	3714
4-Chloro-3-methylphenol	ND	mg/kg	3.33	0.333	10	9/22/97	8:47	M.Goodrich	8270C	3714
4-Chloroaniline	ND	mg/kg	3.33	0.333	10	9/22/97	8:47	M.Goodrich	8270C	3714
bis(2-Chloroethoxy)methane	ND	mg/kg	3.33	0.333	10	9/22/97	8:47	M.Goodrich	8270C	3714
bis(2-Chloroethyl)ether	ND	mg/kg	3.33	0.333	10	9/22/97	8:47	M.Goodrich	8270C	3714
bis(2-Chloroisopropyl)ether	ND	mg/kg	3.33	0.333	10	9/22/97	8:47	M.Goodrich	8270C	3714
2-Chloronaphthalene	ND	mg/kg	3.33	0.333	10	9/22/97	8:47	M.Goodrich	8270C	3714
2-Chlorophenol	ND	mg/kg	3.33	0.333	10	9/22/97	8:47	M.Goodrich	8270C	3714
4-Chlorophenylphenylether	ND	mg/kg	3.33	0.333	10	9/22/97	8:47	M.Goodrich	8270C	3714
Chrysene	ND	mg/kg	3.33	0.333	10	9/22/97	8:47	M.Goodrich	8270C	3714
Dibenzofuran	ND	mg/kg	3.33	0.333	10	9/22/97	8:47	M.Goodrich	8270C	3714
Dibenz(a,h)anthracene	ND	mg/kg	3.33	0.333	10	9/22/97	8:47	M.Goodrich	8270C	3714
1,2-Dichlorobenzene	ND	mg/kg	3.33	0.333	10	9/22/97	8:47	M.Goodrich	8270C	3714
1,3-Dichlorobenzene	ND	mg/kg	3.33	0.333	10	9/22/97	8:47	M.Goodrich	8270C	3714
1,4-Dichlorobenzene	ND	mg/kg	3.33	0.333	10	9/22/97	8:47	M.Goodrich	8270C	3714
3,3'-Dichlorobenzidine	ND	mg/kg	6.66	0.666	10	9/22/97	8:47	M.Goodrich	8270C	3714
2,4-Dichlorophenol	ND	mg/kg	3.33	0.333	10	9/22/97	8:47	M.Goodrich	8270C	3714
Diethylphthalate	ND	mg/kg	3.33	0.333	10	9/22/97	8:47	M.Goodrich	8270C	3714

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2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

Laboratory Number: 97-A076113
Sample ID: #19

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
2,4-Dimethylphenol	ND	mg/kg	3.33	0.333	10	9/22/97	8:47	M.Goodrich	8270C	3714
Dimethylphthalate	ND	mg/kg	3.33	0.333	10	9/22/97	8:47	M.Goodrich	8270C	3714
Di-n-butylphthalate	ND	mg/kg	3.33	0.333	10	9/22/97	8:47	M.Goodrich	8270C	3714
4,6-Dinitro-2-methylphenol	ND	mg/kg	8.32	0.830	10	9/22/97	8:47	M.Goodrich	8270C	3714
2,4-Dinitrophenol	ND	mg/kg	8.32	0.830	10	9/22/97	8:47	M.Goodrich	8270C	3714
2,4-dinitrotoluene	ND	mg/kg	3.33	0.333	10	9/22/97	8:47	M.Goodrich	8270C	3714
2,6-Dinitrotoluene	ND	mg/kg	3.33	0.333	10	9/22/97	8:47	M.Goodrich	8270C	3714
Di-n-octylphthalate	ND	mg/kg	3.33	0.333	10	9/22/97	8:47	M.Goodrich	8270C	3714
Fluoranthene	ND	mg/kg	3.33	0.333	10	9/22/97	8:47	M.Goodrich	8270C	3714
Fluorene	ND	mg/kg	3.33	0.333	10	9/22/97	8:47	M.Goodrich	8270C	3714
Hexachlorobenzene	ND	mg/kg	3.33	0.333	10	9/22/97	8:47	M.Goodrich	8270C	3714
Hexachlorobutadiene	ND	mg/kg	3.33	0.333	10	9/22/97	8:47	M.Goodrich	8270C	3714
Hexachlorocyclopentadiene	ND	mg/kg	3.33	0.333	10	9/22/97	8:47	M.Goodrich	8270C	3714
Hexachloroethane	ND	mg/kg	3.33	0.333	10	9/22/97	8:47	M.Goodrich	8270C	3714
Indeno(1,2,3-cd)pyrene	ND	mg/kg	3.33	0.333	10	9/22/97	8:47	M.Goodrich	8270C	3714
[illegible]phorone	ND	mg/kg	3.33	0.333	10	9/22/97	8:47	M.Goodrich	8270C	3714
2-Methylnaphthalene	ND	mg/kg	3.33	0.333	10	9/22/97	8:47	M.Goodrich	8270C	3714
2-Methylphenol	ND	mg/kg	3.33	0.333	10	9/22/97	8:47	M.Goodrich	8270C	3714
m,p-Methylphenol	ND	mg/kg	3.33	0.333	10	9/22/97	8:47	M.Goodrich	8270C	3714
Naphthalene	ND	mg/kg	3.33	0.333	10	9/22/97	8:47	M.Goodrich	8270C	3714
2-Nitroaniline	ND	mg/kg	8.32	0.830	10	9/22/97	8:47	M.Goodrich	8270C	3714
3-Nitroaniline	ND	mg/kg	8.32	0.830	10	9/22/97	8:47	M.Goodrich	8270C	3714
4-Nitroaniline	ND	mg/kg	8.32	0.830	10	9/22/97	8:47	M.Goodrich	8270C	3714
Nitrobenzene	ND	mg/kg	3.33	0.333	10	9/22/97	8:47	M.Goodrich	8270C	3714
2-Nitrophenol	ND	mg/kg	3.33	0.333	10	9/22/97	8:47	M.Goodrich	8270C	3714
4-Nitrophenol	ND	mg/kg	8.32	0.830	10	9/22/97	8:47	M.Goodrich	8270C	3714
N-nitrosodi-n-propylamine	ND	mg/kg	3.33	0.333	10	9/22/97	8:47	M.Goodrich	8270C	3714
N-nitrosodiphenylamine	ND	mg/kg	3.33	0.333	10	9/22/97	8:47	M.Goodrich	8270C	3714
Pentachlorophenol	ND	mg/kg	8.32	0.830	10	9/22/97	8:47	M.Goodrich	8270C	3714
Phenanthrene	ND	mg/kg	3.33	0.333	10	9/22/97	8:47	M.Goodrich	8270C	3714
Phenol	ND	mg/kg	3.33	0.333	10	9/22/97	8:47	M.Goodrich	8270C	3714
Pyrene	ND	mg/kg	3.33	0.333	10	9/22/97	8:47	M.Goodrich	8270C	3714
Bis(2-ethylhexyl)phthalate	ND	mg/kg	3.33	0.333	10	9/22/97	8:47	M.Goodrich	8270C	3714
1,2,4-Trichlorobenzene	ND	mg/kg	3.33	0.333	10	9/22/97	8:47	M.Goodrich	8270C	3714
2,4,5-Trichlorophenol	ND	mg/kg	8.32	0.830	10	9/22/97	8:47	M.Goodrich	8270C	3714
2,4,6-Trichlorophenol	ND	mg/kg	3.33	0.333	10	9/22/97	8:47	M.Goodrich	8270C	3714
METALS										
Antimony	ND	mg/kg	10.2	10.0	1	9/14/97	0:45	R.Street	6010B	2714
Arsenic	2.03	mg/kg	1.02	1.00	1	9/14/97	0:45	R.Street	6010B	2714
[illegible]ium	79.7	mg/kg	1.02	1.00	1	9/14/97	0:45	R.Street	6010B	2714
[illegible]yllium	ND	mg/kg	1.02	1.00	1	9/14/97	0:45	R.Street	6010B	2714
Cadmium	ND	mg/kg	1.02	1.00	1	9/14/97	0:45	R.Street	6010B	2714
Chromium	5.69	mg/kg	1.02	1.00	1	9/14/97	0:45	R.Street	6010B	2714

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

Laboratory Number: 97-A076113
Sample ID: #19

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
Lead	299.	mg/kg	1.02	1.00	1	9/14/97	0:45	R.Street	6010B	2714
Mercury	0.25	mg/kg	0.10	0.10	1	9/11/97	15:18	R.Street	7471	2507
Nickel	5.28	mg/kg	1.02	1.00	1	9/14/97	0:45	R.Street	6010B	2714
Selenium	ND	mg/kg	1.02	1.00	1	9/14/97	0:45	R.Street	6010B	2714
Silver	ND	mg/kg	1.02	1.00	1	9/14/97	0:45	R.Street	6010B	2714
Thallium	ND	mg/kg	1.02	1.00	1	9/14/97	0:45	R.Street	6010B	2714
Vanadium	ND	mg/kg	10.2	10.0	1	9/14/97	0:45	R.Street	6010B	2714
GENERAL CHEMISTRY PARAMETERS										
Cyanide	ND	mg/kg	2.00	2.00	1	9/13/97	8:19	A Hardison	9012A	3863

ND = Not detected at the report limit.

Sample Extraction Data

BNA's Extracted 9/11/97 Wt extracted: 30.0 gm Extract Volume: 1.0 ml C.Gerenser

** SURROGATE RECOVERIES **

Surrogate	% Recovery	Target Range
BNA Surr., Nitrobenzene-d5	43.0	23. - 120.
BNA Surr., 2-Fluorobiphenyl	59.0	30. - 115.
BNA Surrogate, Terphenyl d14	70.0	18. - 140.
BNA Surrogate, Phenol d5	51.0	10. - 115.
BNA Surrogate, 2-Fluorophenol	30.0	20. - 121.
BNA Surrogate, 2,4,6-Tribromophenol	37.0	19. - 122.

Report Approved By: Michael H. Dunn Report Date: 9/22/97

Theodore J. Duello, Ph.D., Q.A. Officer
Michael H. Dunn, M.S., Technical Director
Danny R. Hale, M.S., Laboratory Director

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

TLANTIC ENVIRONMENTAL SERV. 6043
ATTN. TOM HELFICH
2232 WELSCH IND. COURT
T. LOUIS, MO 63146

Lab Number: 97-A076114

Sample ID: #20

Date Collected: 9/ 7/97

Project: 97521

Time Collected:

Project Name: 33RD ST. SITE

Date Received: 9/ 9/97

Sampler: DAVID PLUHAR

Time Received: 9:00

State Certification:

Sample Type: Soil

Site I.D.:

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
TRACTABLE ORGANICS*										
Naphthene	ND	mg/kg	3.33	0.333	10	9/22/97	2:24	M.Goodrich	8270C	3714
Acenaphthylene	ND	mg/kg	3.33	0.333	10	9/22/97	2:24	M.Goodrich	8270C	3714
Anthracene	ND	mg/kg	3.33	0.333	10	9/22/97	2:24	M.Goodrich	8270C	3714
Benzo(a)anthracene	3.66	mg/kg	3.33	0.333	10	9/22/97	2:24	M.Goodrich	8270C	3714
Benzo(a)pyrene	4.33	mg/kg	3.33	0.333	10	9/22/97	2:24	M.Goodrich	8270C	3714
Benzo(b)fluoranthene	4.00	mg/kg	3.33	0.333	10	9/22/97	2:24	M.Goodrich	8270C	3714
Benzo(g,h,i)perylene	ND	mg/kg	3.33	0.333	10	9/22/97	2:24	M.Goodrich	8270C	3714
Benzo(k)fluoranthene	5.33	mg/kg	3.33	0.333	10	9/22/97	2:24	M.Goodrich	8270C	3714
4-Bromophenylphenylether	ND	mg/kg	3.33	0.333	10	9/22/97	2:24	M.Goodrich	8270C	3714
Butylbenzylphthalate	ND	mg/kg	3.33	0.333	10	9/22/97	2:24	M.Goodrich	8270C	3714
Carbazole	ND	mg/kg	3.33	0.333	10	9/22/97	2:24	M.Goodrich	8270C	3714
4-Chloro-3-methylphenol	ND	mg/kg	3.33	0.333	10	9/22/97	2:24	M.Goodrich	8270C	3714
4-Chloroaniline	ND	mg/kg	3.33	0.333	10	9/22/97	2:24	M.Goodrich	8270C	3714
bis(2-Chloroethoxy)methane	ND	mg/kg	3.33	0.333	10	9/22/97	2:24	M.Goodrich	8270C	3714
bis(2-Chloroethyl)ether	ND	mg/kg	3.33	0.333	10	9/22/97	2:24	M.Goodrich	8270C	3714
bis(2-Chloroisopropyl)ether	ND	mg/kg	3.33	0.333	10	9/22/97	2:24	M.Goodrich	8270C	3714
2-Chloronaphthalene	ND	mg/kg	3.33	0.333	10	9/22/97	2:24	M.Goodrich	8270C	3714
2-Chlorophenol	ND	mg/kg	3.33	0.333	10	9/22/97	2:24	M.Goodrich	8270C	3714
4-Chlorophenylphenylether	ND	mg/kg	3.33	0.333	10	9/22/97	2:24	M.Goodrich	8270C	3714
Chrysene	4.00	mg/kg	3.33	0.333	10	9/22/97	2:24	M.Goodrich	8270C	3714
Dibenzofuran	ND	mg/kg	3.33	0.333	10	9/22/97	2:24	M.Goodrich	8270C	3714
Dibenz(a,h)anthracene	ND	mg/kg	3.33	0.333	10	9/22/97	2:24	M.Goodrich	8270C	3714
1,2-Dichlorobenzene	ND	mg/kg	3.33	0.333	10	9/22/97	2:24	M.Goodrich	8270C	3714
1,3-Dichlorobenzene	ND	mg/kg	3.33	0.333	10	9/22/97	2:24	M.Goodrich	8270C	3714
-Dichlorobenzene	ND	mg/kg	3.33	0.333	10	9/22/97	2:24	M.Goodrich	8270C	3714
-Dichlorobenzidine	ND	mg/kg	6.66	0.666	10	9/22/97	2:24	M.Goodrich	8270C	3714
2,4-Dichlorophenol	ND	mg/kg	3.33	0.333	10	9/22/97	2:24	M.Goodrich	8270C	3714
Diethylphthalate	ND	mg/kg	3.33	0.333	10	9/22/97	2:24	M.Goodrich	8270C	3714

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2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

Laboratory Number: 97-A076114
Sample ID: #20

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
2,4-Dimethylphenol	ND	mg/kg	3.33	0.333	10	9/22/97	2:24	M.Goodrich	8270C	3714
Dimethylphthalate	ND	mg/kg	3.33	0.333	10	9/22/97	2:24	M.Goodrich	8270C	3714
Di-n-butylphthalate	ND	mg/kg	3.33	0.333	10	9/22/97	2:24	M.Goodrich	8270C	3714
4,6-Dinitro-2-methylphenol	ND	mg/kg	8.32	0.830	10	9/22/97	2:24	M.Goodrich	8270C	3714
2,4-Dinitrophenol	ND	mg/kg	8.32	0.830	10	9/22/97	2:24	M.Goodrich	8270C	3714
2,4-dinitrotoluene	ND	mg/kg	3.33	0.333	10	9/22/97	2:24	M.Goodrich	8270C	3714
2,6-Dinitrotoluene	ND	mg/kg	3.33	0.333	10	9/22/97	2:24	M.Goodrich	8270C	3714
Di-n-octylphthalate	ND	mg/kg	3.33	0.333	10	9/22/97	2:24	M.Goodrich	8270C	3714
Fluoranthene	7.33	mg/kg	3.33	0.333	10	9/22/97	2:24	M.Goodrich	8270C	3714
Fluorene	ND	mg/kg	3.33	0.333	10	9/22/97	2:24	M.Goodrich	8270C	3714
Hexachlorobenzene	ND	mg/kg	3.33	0.333	10	9/22/97	2:24	M.Goodrich	8270C	3714
Hexachlorobutadiene	ND	mg/kg	3.33	0.333	10	9/22/97	2:24	M.Goodrich	8270C	3714
Hexachlorocyclopentadiene	ND	mg/kg	3.33	0.333	10	9/22/97	2:24	M.Goodrich	8270C	3714
Hexachloroethane	ND	mg/kg	3.33	0.333	10	9/22/97	2:24	M.Goodrich	8270C	3714
Indeno(1,2,3-cd)pyrene	ND	mg/kg	3.33	0.333	10	9/22/97	2:24	M.Goodrich	8270C	3714
Isophorone	ND	mg/kg	3.33	0.333	10	9/22/97	2:24	M.Goodrich	8270C	3714
2-Methylnaphthalene	ND	mg/kg	3.33	0.333	10	9/22/97	2:24	M.Goodrich	8270C	3714
2-Methylphenol	ND	mg/kg	3.33	0.333	10	9/22/97	2:24	M.Goodrich	8270C	3714
m,p-Methylphenol	ND	mg/kg	3.33	0.333	10	9/22/97	2:24	M.Goodrich	8270C	3714
Naphthalene	ND	mg/kg	3.33	0.333	10	9/22/97	2:24	M.Goodrich	8270C	3714
2-Nitroaniline	ND	mg/kg	8.32	0.830	10	9/22/97	2:24	M.Goodrich	8270C	3714
3-Nitroaniline	ND	mg/kg	8.32	0.830	10	9/22/97	2:24	M.Goodrich	8270C	3714
4-Nitroaniline	ND	mg/kg	8.32	0.830	10	9/22/97	2:24	M.Goodrich	8270C	3714
Nitrobenzene	ND	mg/kg	3.33	0.333	10	9/22/97	2:24	M.Goodrich	8270C	3714
2-Nitrophenol	ND	mg/kg	3.33	0.333	10	9/22/97	2:24	M.Goodrich	8270C	3714
4-Nitrophenol	ND	mg/kg	8.32	0.830	10	9/22/97	2:24	M.Goodrich	8270C	3714
N-nitrosodi-n-propylamine	ND	mg/kg	3.33	0.333	10	9/22/97	2:24	M.Goodrich	8270C	3714
N-nitrosodiphenylamine	ND	mg/kg	3.33	0.333	10	9/22/97	2:24	M.Goodrich	8270C	3714
Pentachlorophenol	ND	mg/kg	8.32	0.830	10	9/22/97	2:24	M.Goodrich	8270C	3714
Phenanthrene	5.00	mg/kg	3.33	0.333	10	9/22/97	2:24	M.Goodrich	8270C	3714
Phenol	ND	mg/kg	3.33	0.333	10	9/22/97	2:24	M.Goodrich	8270C	3714
Pyrene	ND	mg/kg	3.33	0.333	10	9/22/97	2:24	M.Goodrich	8270C	3714
Bis(2-ethylhexyl)phthalate	ND	mg/kg	3.33	0.333	10	9/22/97	2:24	M.Goodrich	8270C	3714
1,2,4-Trichlorobenzene	ND	mg/kg	3.33	0.333	10	9/22/97	2:24	M.Goodrich	8270C	3714
2,4,5-Trichlorophenol	ND	mg/kg	8.32	0.830	10	9/22/97	2:24	M.Goodrich	8270C	3714
2,4,6-Trichlorophenol	ND	mg/kg	3.33	0.333	10	9/22/97	2:24	M.Goodrich	8270C	3714
METALS										
Antimony	ND	mg/kg	9.62	9.62	1	9/14/97	0:45	R.Street	6010B	2714
Arsenic	7.86	mg/kg	0.96	0.96	1	9/14/97	0:45	R.Street	6010B	2714
Barium	59.0	mg/kg	0.96	0.96	1	9/14/97	0:45	R.Street	6010B	2714
Beryllium	ND	mg/kg	0.96	0.96	1	9/14/97	0:45	R.Street	6010B	2714
Cadmium	ND	mg/kg	0.96	0.96	1	9/14/97	0:45	R.Street	6010B	2714
Chromium	6.54	mg/kg	0.96	0.96	1	9/14/97	0:45	R.Street	6010B	2714

COPY 1

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LIST OF ACRONYMS

bgs	Below Ground Surface
BTEX	Benzene, Toluene, Ethylbenzene, Xylene
CCI(s)	Chemical Constituent(s) of Interest
COI(s)	Chemical(s) of Interest
CPF(s)	Cancer Potency Factor(s)
FSP	Field Sampling Program
GEI/Atlantic	GEI Consultants, Inc., Atlantic Environmental Division
ICLR(s)	Incremental Lifetime Cancer Risk(s)
MDL(s)	Method Detection Limit(s)
mg/kg	Milligrams per Kilogram
MGP(s)	Manufactured Gas Plant(s)
NIOSH	National Institute of Occupational Safety and Health
NMAM	*NIOSH Manual of Analytical Methods*
PAH(s)	Polynuclear Aromatic Hydrocarbon(s)
PCL(s)	Protective Concentration Level(s)
QA/QC	Quality Assurance/Quality Control
RA	Risk Assessment
RAGS	*Risk Assessment Guidance for Superfund, Volume 1*
RfD(s)	Reference Dose(s)
SA	Site Assessment
Site	Property located at 33rd Street and Avenue E, Galveston, Texas
Southern Union	Southern Union Company
SVOC(s)	Semi-Volatile Organic Compound(s)
TNRCC	Texas Natural Resource Conservation Commission
USEPA	U.S. Environmental Protection Agency
VOC(s)	Volatile Organic Compound(s)
Work Plan	*Work Plan for Surface Soils and Air Assessment, 33rd Street Property, Galveston, Texas*

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APPENDIX E

Falstaff Brewing Company VCP

EXTRA ENVIRONMENTAL, INC. - RCAS00037
2426 Freedom Dr. San Antonio,Texas 78217 (210)829-7137

MAY 23 2000

SITE ASSESSMENT WORK PLAN

Falstaff Brewing Company
33rd Street and Church Street
Galveston (Galveston County), Texas
VCP No.: 337

May 16, 2000

prepared for:

Mr. Syl Dew
Falstaff Brewing Company
312 Pearl Parkway
San Antonio, Texas 78215

prepared by:

Peter V. Schram,
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1.0 PREFACE

This Site Assessment Work Plan covers the anticipated activities for delineation (lateral) of RCRA 8 Metals, semi-volatiles, and TPH impacted soil and groundwater, for the Falstaff Brewing Company facility, located in Galveston, Texas. The Site Assessment Work Plan has been prepared with consideration of documents previously filed with the Texas Natural Resource Conservation Commission (TNRCC) which include a Phase I Environmental Site Assessment, Phase II Environmental Site Assessment, Phase III Environmental Site Assessment, and Response Action Completion Report (PCB's only), with guidance from the TNRCC and the US Environmental Protection Agency (USEPA). The Site Assessment Work Plan was developed through the use of a Conceptual Environmental Assessment Model (CEAM), completed as part of the previous assessment phase(s).

All activities related to the PCB remediation of the facility, are addressed under a separate report (Response Action Completion Report, dated 01/28/2000).

2.0 INTRODUCTION

Falstaff Brewing Company (FBC), retained the services of Extra Environmental, Inc. (EEI), to perform an environmental site assessment relating to RCRA 8 Metals, semi-volatiles, and TPH impacted soil and groundwater at their facility located at 33rd Street and Church Street in Galveston, Galveston County, Texas.

2.1 Site Background

At the present time, the subject facility is commercial in nature and being utilized as a warehouse. The project site is a former brewery which has been inactive since the early 1980's. Rehabilitation of the subject property began in 1997, with the occupation of the former bottling plant. Current plans call for the rehabilitation of the entire property for future commercial use. This commercial use could include commercial storage, commercial office space (i.e., offices, restaurant, etc.), and/or manufacturing.

The subject site has historically been utilized for the brewing and bottling of beer. A review of Sanborn Fire Insurance Rate Maps available for the area indicated that the property has been utilized in the past for single-family residences, brewery, stables, spray pond (painting related to the brewery), a filling station, autowash, and private garage.

2.2 Summary of Site Investigation Activities and CEAM

Based on previous studies completed by EEI, data contained in the previously submitted Phase II Assessment and CEAM, and analytical data generated from additional assessment work at the subject facility (see previous reports), it is felt that the primary source areas have been identified. Specifically, contamination was identified as heavy metals (RCRA 8), and petroleum hydrocarbons, that appears to be

associated with painting operations of the brewery (TMW-4, TMW-16, TMW-20) and with the former filling station and autowash (TMW-23, TMW-24). Several areas sampled previously (TMW-5, TMW-6, TMW-7, TMW-8), appear to be impacted by heavy metals. The source of this contamination is unknown but may be related to historical railroad activities that have occurred.

Laboratory analyses performed on soil samples collected for completion of the Phase II Assessment and CEAM, indicated the presence of total arsenic, total cadmium, total chromium, total lead, and total mercury at various soil boring locations at the project site. The identified contaminants appear to be related to painting activities which occurred at the brewery, potential contamination from a former filling station and auto washing facility, and contamination from an off-site source. Total metals contamination in a few of the soil borings (TMW-5, TMW-6, TMW-7, TMW-8, A, and L), may be the result of historical railroad activities occurring at the rear of the facility. Concentrations analyzed ranged from nondetectable to 7.40 mg/Kg for total arsenic, nondetectable to 3.10 mg/Kg for total cadmium, 1.20 mg/Kg to 39.00 mg/Kg for total chromium, 1.8 mg/Kg to 2200 mg/Kg for total lead, and nondetectable to 0.85 mg/Kg for total mercury. The extent of these contaminants is determined to be limited to the upper 4.0 feet of soil.

Other constituents were identified during activities performed at the site. Specifically, semi-VOC's were analyzed in a number of the samples at low levels. These semi-VOC's included anthracene (nondetectable to 0.39 mg/Kg), benzo(a)anthracene (nondetectable to 0.81 mg/Kg), benzo(b)fluoranthene (nondetectable to 1.00 mg/Kg), benzo(k)fluoranthene (nondetectable to 0.63 mg/Kg), benzo(g,h,i)perylene (nondetectable to 0.42 mg/Kg), benzo(a)pyrene (nondetectable to 0.84 mg/Kg), chrysene (nondetectable to 0.74 mg/Kg), fluoranthene (nondetectable to 1.80 mg/Kg), indeno(1,2,3-cd)pyrene (nondetectable to 0.56 mg/Kg), phenanthrene (nondetectable to 1.20 mg/Kg) and pyrene (nondetectable to 3.00 mg/Kg). The highest concentrations of anthracene, benzo(b)anthracene, benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(a)pyrene, chrysene, fluoranthene,and phenanthrene occurred in soil samples collected from soil boring TMW-23 at 2.0'-2.5' BGS. The highest concentrations analyzed for benzo(g,h,i)perylene, indeno(1,2,3-cd)pyrene, and pyrene occurred in soil samples collected from soil boring TMW-16 at 0'-2' BGS. The source of this material is believed to be associated with "coal oil" that resulted from historical activities of the railroad and the former tankfarm located across 33rd Street (currently a basketball center and park). This is based on benzo- chemicals and their association with coal oil.

A walking survey was performed at the subject site on 07/24/96. Observations made during that walking survey included one (1) middle school, five (5) churches, numerous businesses (i.e., convenience stores, restaurants, etc.), two (2) city parks; one (1) registered water well, and numerous residences (both single family and multi-family) within a 1/4 mile radius of the subject facility. No daycare centers were observed during the walking survey

The only potential receptors observed on-site included utility trenches (i.e., telephones, water, sewer, etc.), and groundwater. Since the majority of all known soil

contamination attributable to the contaminants of concern, is located on-site, under impervious cover, and secured from unauthorized entry, exposure (to workers, residents, visitors, etc.), from on-site soils, is considered remote or nonexistent.

A number of potential receptors exist off-site. These include residences, businesses, churches, and one (1) monitor well. Based on laboratory analyses of soil samples collected during the installation of the soil borings and monitor wells, all TPH contamination of soil occurs on-site, beneath and around the main facility structure.

Any exposure to potential receptors is considered chronic (if applicable). This is based on the low solubility of the majority of the contaminants of concern identified.

Where exposure is possible (grass covered areas that are unsecured), ingestion and dermal contact with contaminants in soil is considered remote. This is because only a small portion of the subject facility is not covered with an impervious material. These areas are covered by a thick layer of grass. Additionally, inhalation of vapors and particulates is considered remote due to the low volatilization rate (if applicable), of the contaminants of concern and the previously mentioned grasses covering areas with no impervious materials.

The potential impact to groundwater from the contaminated soil is considered remote. This is based on SPLP evaluations performed on the highest indicated levels of each contaminant of concern. Specifically, a TPH concentration of 9700 mg/Kg, 8400 mg/Kg, and 7600 mg/Kg were all incapable of leaching (via SPLP). A total arsenic concentration of 7.4 mg/Kg (MW-4 at 2'), was capable of leaching (via SPLP), approximately 0.029 mg/L. The highest concentration analyzed in groundwater from the five (5) monitor wells installed onsite in February of 1998, indicated a total arsenic concentration of 0.240 mg/L (MW-2; located in narrow alleyway of main facility building). Laboratory analyses of the groundwater sample collected from monitor well MW-4 indicated total arsenic=0.059 mg/L. All five (5) monitor wells were resampled on 11/05/98 during the installation of eight (8) additional monitor wells. Laboratory analyses of all thirteen (13) monitor wells indicated total arsenic concentrations ranging from nondetectable to 0.070 mg/L. Only one (1) monitor well [MW-4; total arsenic=0.070 mg/L] indicated total arsenic concentrations above detection levels. A total cadmium concentration of 3.1 mg/Kg (M at 2' BGS), was incapable of leaching (nondetectable SPLP cadmium). Laboratory analyses of groundwater samples collected from all five (5) monitor wells on 02/09/98, indicated nondetectable total cadmium. Similar results occurred when all thirteen (13) on-site monitor wells were sampled on 11/05/98. A total chromium concentration of 240.0 mg/Kg (M at 2' BGS), was capable of leaching (via SPLP), approximately 0.016 mg/L. Laboratory analyses of the groundwater samples collected from the five (5) monitor wells installed in February of 1998, indicated total chromium concentrations ranging from 0.008 mg/L to 0.020 mg/L. Laboratory analyses of the groundwater samples collected from all thirteen (13) on-site monitor wells indicated total chromium concentrations ranging from nondetectable (<0.010 mg/L) to 0.010 mg/L. A total mercury concentration of 0.85 mg/Kg (M at 2' BGS), was incapable of leaching (nondetectable SPLP mercury). Laboratory analyses of groundwater samples collected from the five (5) monitor wells installed on-site on 02/09/98, indicated total

mercury concentrations ranging from nondetectable to 0.0003 mg/L. Laboratory analyses of the groundwater samples collected from all thirteen (13) on-site monitor wells on 11/05/98, indicated nondetectable total mercury concentrations. Total selenium was analyzed in the groundwater sample collected from monitor well MW-5 (0.050 mg/L), on 02/09/98. This impact is believed to be the result of off-site impact that has migrated to the subject property. Total selenium was detected in soil boring H@2 feet BGS (0.60 mg/Kg), in soil boring I@2 feet BGS (1.50 mg/Kg), and soil boring MW-5@3-5 feet BGS (0.64 mg/Kg), which are all below the Risk Reduction 2 Groundwater Protection Standards. Laboratory analyses of the groundwater samples collected from all thirteen (13) on-site monitor wells on 11/05/98, indicated nondetectable total selenium. While potential impact of groundwater from all contaminants analyzed is considered remote or nonexistent, there is potential for impact from total lead. Additional analyses of the highest indicated total lead (2200 mg/Kg), indicated an SPLP lead of 1.70 mg/L. Laboratory analyses of groundwater samples collected from all five (5) monitor wells installed in February of 1998, indicated total lead concentrations ranging from 0.07 mg/L to 0.16 mg/L. Laboratory analyses of the groundwater samples collected from all thirteen (13) on-site monitor wells on 11/05/98, indicated total lead concentrations ranging from nondetectable (<0.030 mg/L) to 0.15 mg/L.

Site features that will limit or otherwise restrict exposure include buildings and impervious cover (i.e., concrete and asphalt) over the majority of the subject site and the security fencing surrounding the majority of the facility structures. Additionally, the subject site is monitored on a regular basis by personnel of the facility.

Where exposure is possible (grass covered areas that are unsecured), ingestion and dermal contact with contaminants in soil is considered remote. This is because only a small portion of the subject facility is not covered with an impervious material. These areas are covered by a thick layer of grass. Additionally, inhalation of vapors and particulates is considered remote due to the low volatilization rate (if applicable), of the contaminants of concern and the previously mentioned grasses covering areas with no impervious materials.

A water well search was conducted for the subject facility on 6/28/96. Results of the search indicated that one (1) water well was located within a 1/2 mile radius of the subject facility. The well is located approximately 1000 feet east of the subject facility and is owned by the City of Galveston. Records indicate that the well was drilled in 1893 and that groundwater was encountered at a depth of 13.79 feet BGS. Records further indicate that the well was drilled to a total depth of 3070 feet as a "test well for a better water supply", but that all groundwaters encountered increased in salinity with each succeeding horizon.

Conversations with the City of Galveston indicate that all waters utilized for human consumption are purchased from the City of Houston (Ellington Field), and piped to the City of Galveston. Further conversations revealed that this water supply is augmented in the summer by groundwater produced from shallow wells at the Alta Loma Pump Station, located approximately 18 miles west of the City of Galveston.

The City of Galveston indicated that no water was produced on the island for human consumption.

The surface geology of the project site consists of soils of the Galveston Series, Gd, having 0 to 4 percent slopes. The soils consist of nearly level to undulating, somewhat excessively drained, nonsaline, sandy soils. The surface, for the most part, is convex. These soils have a high permeability, moderate porosity, low organic content and a low shrink-swell potential. Two (2) geotechnical samples were collected from two (2) of the soil borings/monitor wells installed on-site, from a depth of 1' to 3' BGS. Analyses of the the two (2) samples indicated total moisture contents ranging from 15.0% to 26.3%, a total organic carbon content ranging from 6.2% to 17.2%, a dry bulk density ranging from 85.2 #/ft^3 to 97.1 #/ft^3, an effective porosity ranging from 0.42% to 0.50%, and a coefficient of permeability of 2.99 x 10^{-5}.

Groundwater at the site occurs at a depth of approximately 4.0 feet BGS. This level fluctuates and is influenced by tidal surges (i.e., high- and low-tide). Monitor wells installed at the subject property during all assessment activities indicated a groundwater gradient towards the north-northeast at a rate of 0.194 feet per 100 linear feet. Based on the water well search and the walking survey, the shallow groundwater observed during previous sampling events is not currently utilized by any of the businesses or residences that surround the project site.

Site features discussed in this report that could limit or otherwise restrict exposure to contaminated groundwater include buildings, security fencing, the low solubility of the contaminants, limited fresh water availability, and deed restrictions. The City of Galveston does not currently have any ordinances prohibiting the installation and use of domestic water wells within the extra territorial jurisdiction, due in large part to the fact that very little usable water exists in the area, and has never become an issue.

Ingestion, dermal exposure, and inhalation of vapors does not represent potential routes of exposure to contaminated groundwater at the present time since no groundwater is utilized in the area. Additionally, the subject property is a secured facility limiting unauthorized entry into the known impacted area.

The nearest body of surface water is Galveston Ship Channel which is located approximately 2700 feet north-northeast of the subject facility. Subsurface utilities and city streets represent the only discernible conduits to this body of surface water. This body of water is currently utilized for industrial, recreational, and commercial purposes. The Port of Galveston is heavily industrialized with agricultural storehouses, shipping warehouses, and petrochemical facilities. The Port also contains a large fleet of commercial fishing and transportation vessels, as well as support vessels for the petroleum industry. Since the Port has been utilized for the above in excess of 150 years, it is likely that the body of surface water will be utilized for the same purposes in the future.

Surface water is not anticipated to be impacted by contamination in the future by direct discharge or overland migration from rainfall runoff. This is because all known contamination is located mostly under impervious cover (i.e., concrete, buildings, asphalt), is located in a secure environment (i.e., cyclone fencing), and all stormwater drain systems leading from the facility to municipal systems have been severed.

There are no current or reasonably anticipated future receptor exposures to contaminated surface water, on-site or off-site within a 1/2 mile radius of the subject facility. Additionally, ingestion, dermal contact, and inhalation of vapors are not considered potential exposure routes for contaminated surface water.

If the Port of Galveston has been impacted by the known contamination, there is a strong likelihood that the bay sediments could become impacted due to the nature of the contaminants. However, all data to date indicates that the contaminants of concern occur near the point of origin and have not migrated off-site.

Due to the low volatility of the contaminants of concern and the competent impervious surface covering the impacted areas, the potential for exposure to contaminants in air is considered remote and not harmful for human exposure. This also applies to confined spaces (located in the subject facility) and the potential build-up of contaminants that may present a current or reasonably anticipated health hazard.

3.0 STATEMENT OF WORK

3.1 Objectives of Site Assessment Action

The objectives of the additional site assessment activities is to determine the lateral extent of impact to native soil with RCRA 8 metals and petroleum hydrocarbons. Additionally, it is the intent of the site assessment to determine the actual classification of groundwaters encountered at the site, and the extent of contamination (if applicable). To simplify the proposed assessment, all impacted areas within the project boundaries have been subdivided into specific areas. Each subdivided area is listed below, with known COC's indicated.

Area A - Area A was formerly the executive offices for the brewery. The site consists of one (1) large monolithic structure and a large paved parking area. Soil COC's (in excess of Residential-Tier 3 levels), include cadmium,chromium, lead, and TPH. The impact appears to be from the historical use of the property which included brewery stables, sign painting and advertising, a concentrated spray pond, and private garage.

Area B - Area B was formerly a parking area for the brewery, and consists of a large paved parking area, secured with cyclone fencing. Soil COC's (in excess of Residential-Tier 3 levels), include silver and lead. The impact appears to be from the historical use of the property which included single family residences and vehicle parking.

Area C - Area C was formerly a warehouse for the brewery. The site consists of a large monolithic foundation, and an asphalt paved parking area, secured with cyclone fencing. Soil COC's (in excess of Residential-Tier 3 levels), include silver and semi-volatiles (i.e., benzo(a)pyrene). The impact appears to be from the historical use of the property which included single family residences, a fueling station, and an auto wash.

Area D - Area D was formerly a warehouse facility for the brewery. The site consists of two (2) monolithic foundations, and a large unpaved parking area. Soil COC's (in excess of Residential-Tier 3 levels), include lead, TPH, and semi-volatiles (i.e., benzo(a)anthracene and dibenzo(a,h)anthracene). The impact appears to be from the historical use of the property which included rail sidings and a rail yard.

Area E - Area E for formerly the main facility of the brewery. Area E consists of a large monolithic structure currently used as a warehouse. All previous PCB abatement activities occurred in this area. Soil COC's (in excess of Residential-Tier 3 levels), include arsenic, lead, TPH, and semi-volatiles (i.e., dibenzo(a,h)anthracene). The impact appears to be from the historical use of the property which included dielectric transformers (PCB's) and railsiding.

3.2 Quality Assurance

Quality assurance for the project will be insured by a double scrubbing of all sampling equipment with a non-phosphatic detergent and DI water, a final rinsing with DI water, and a final rinse with pesticide grade hexane. Quality assurance will also be insured by the collection of at least two (2) duplicate samples from the proposed soil borings/monitor well. Final assurance will be provided by field screening of all collected samples utilizing a Thermo 580-B PID calibrated with 100 ppm isobutylene.

All decontamination water will be sampled and analyzed on the basis of one (1) sample for each thirty (30) decontamination events. Only the final DI water rinse will be sampled for analysis. Decontamination water is applicable to all decontamination of project equipment. It is anticipated that approximately two (2) final rinse samples will be collected and analyzed for Total RCRA 8 metals and TPH (Method 1006).

4.0 SITE ASSESSMENT ACTION PLAN

The proposed investigation activities include the installation of seventeen (17) soil borings, one (1) 6" monitor well, a slug/pump test on the 6" monitor well, and resampling all previously installed monitor wells. For simplicity sake, each subdivided area is discussed separately below.

Area A - Three (3) soil borings are proposed for the subject area. The three (3) soil borings will be installed on the southern boundary of the site to establish confident PCLE's (soil) for cadmium, chromium, and lead. Soil samples collected from all

three (3) soil borings will be analyzed for total cadmium, total chromium, total lead, and TPH (Method 418.1). The sample indicating the highest TPH concentration from the three (3) soil borings will also be evaluated for volatiles (Method 8260), semi-volatiles, and TPH (Method 1006). All soil borings will be installed to a depth of 6 feet BGS and continuously sampled.

Area B - Three (3) soil borings are proposed for Area B. The three (3) soil borings will be installed along the western side of the tract to establish confident PCLE's (soil) for silver and lead. Soil samples collected from the three (3) soil borings will be analyzed for total silver, total lead, and TPH (Method 418.1). The sample indicating the highest TPH concentration from the three (3) soil borings will also be evaluated for volatiles (Method 8260), semi-volatiles, and TPH (Method 1006). All three (3) soil borings will be installed to a depth of 6 feet BGS, and continuously sampled.

Area C - Three (3) soil borings are proposed for Area C. The three (3) soil borings will be installed along the eastern boundary of the tract to establish confident PCLE's (soil) for lead and benzo(a)pyrene. Soil samples collected from the three (3) soil borings will be analyzed for total silver, total lead, semi-volatiles, and TPH (Method 418.1). The sample indicating the highest TPH concentration from the three (3) soil borings will also be evaluated for volatiles (Method 8260) and TPH (Method 1006). All three (3) soil borings will be installed to a depth of 6 feet BGS, and continuously sampled. Assuming the total silver concentration is comparable to the previously analyzed concentration (1.68 mg/Kg), SPLP Silver will also be performed.

Area D - Three (3) soil borings are proposed for Area D. The three (3) soil borings will be installed on the northern and southern sides of confirmation well CW-4, to establish confident PCLE's (soil) for lead. Soil samples collected from the three (3) soil borings will be analyzed for total lead and TPH (Method 418.1). The sample indicating the highest TPH concentration from the three (3) soil borings will also be evaluated for volatiles (Method 8260), semi-volatiles, and TPH (Method 1006). All three (3) soil borings will be installed to a depth of 6 feet BGS, and continuously sampled. Additionally, one (1) 6 inch monitor well will be installed in Area D. The monitor well will be installed north of confirmation well CW-2, to establish confident PCLE's (groundwater) for benzo(a)anthracene and dibenzo(a,h)anthracene, and an accurate groundwater classification. The monitor well will be installed to a depth of 10 feet BGS and continuous soil samples will be collected from the monitor well and field screened. Three (3) soil samples will be collected from the monitor well: one (1) indicating the highest PID reading; one (1) at the groundwater interface; and, one (1) at total depth. All three (3) soil samples will be analyzed for Total RCRA 8 metals, semi-volatiles, and TPH (Method 418.1). The soil sample indicating the highest TPH concentration will also be analyzed for volatiles (Method 8260) and TPH (Method 1006). Once the monitor well is installed and developed, a slug/pump test will be performed on the monitor well to establish a groundwater classification for the area. By performing the slug/pump test and establishing a groundwater classification, it may be possible to close the groundwater pathway (assumes nonusable classification).

Area E - Five (5) soil borings are proposed for Area E. Four (4) soil brings will be installed in the alleyway previously remediated for PCB's. The four (4) soil borings will be installed on the south side of the former excavation (see attached site plot). The four (4) soil borings will be installed to a depth of 6 feet BGS and continuously sampled. All soil samples collected from the four (4) soil borings will be analyzed for PCB's. Finally, one (1) soil boring will be installed on the north side of the brewery building, in the proximity of TWM-6. The soil boring will be installed to a depth of 6 feet BGS and continuously sampled. The soil samples collected from this boring will be analyzed for semi-volatiles and TPH (Method 418.1). The soil sample indicating the highest TPH concentration will also be analyzed for volatiles (Method 8260) and TPH (Method 1006).

Monitor Wells - Monitor wells, previously installed at the subject property (Areas A, B, C, D, and E), as well as the new 6 inch monitor well, will be gauged, purged, and sampled. All groundwater samples collected will be analyzed for TPH (Method 1006), total RCRA 8 metals, VOC's (Method 8260), semi-volatiles, and PCB's.

5.0 REMEDIAL ACTION PLAN

At the present time, the Falstaff Brewery is being addressed under the Risk Reduction Rules. However, the option to address the facility (Areas A, B, C, D, and E) under the Texas Risk Reduction Program (TRRP), is being maintained, and all activities proposed under this Assessment Plan, are proposed so that the client will have the option of selecting the most appropriate and cost effective response. This will occur at the conclusion of all field assessment activities. It is anticipated that the selected response action will be direct dig and haul. However, until the lateral and vertical extent of impact (and PCLE's, if TRRP is selected), has been established, no commitment to any course of action will be contemplated.

6.0 WASTE CHARACTERIZATION AND DISPOSAL

All drill cuttings generated during the installation of the soil borings and monitor well will be stored in 55-gallon drums, on-site. Once characterized, the drilling derived waste will be transported for disposal at a licensed facility.

Dewatering fluid, decontamination fluid, and other fluid ("project waters"), collected in the work areas from assessment activities will be stored on-site, in 55-gallon drums. Once characterized, the project waters will then be transported for disposal at a licensed facility.

Personal Protective Equipment (disposable), will be collected in 55-gallon barrels located on-site, at the end of each work day. At the conclusion of the project, the PPE will be transported for disposal at an approved facility.

7.0 DATA MANAGEMENT

Sampling data generated from the proposed activities will be documented through the analytical laboratory. All data generated from the laboratory will be reported in mg/Kg (ppm) and mg/L (ppm). The data will be tabulated reflecting date of collection, time of collection, identification of collection point, and sample results (in ppm).

8.0 COMPLETION OF THE SITE ASSESSMENT

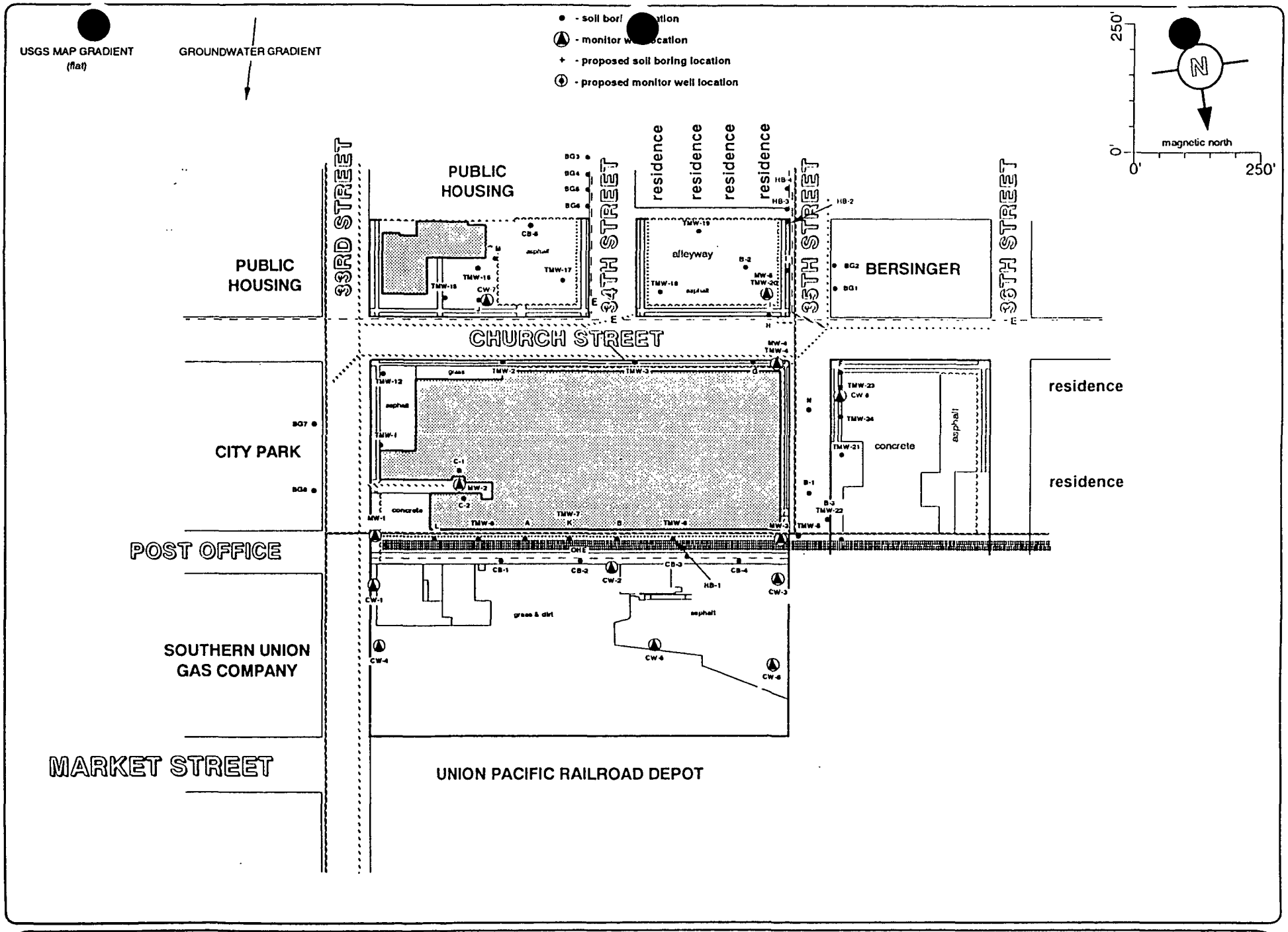
A Site Assessment Completion Report detailing all proposed field activities will be submitted upon completion of the proposed actions.

9.0 SCHEDULE

Once approved, it is anticipated that it will require approximately 80 days for completion. This includes 30 days for review of the Work Plan, 5 days for mobilization, and 45 days for assessment and reporting.

10.0 COST ESTIMATE

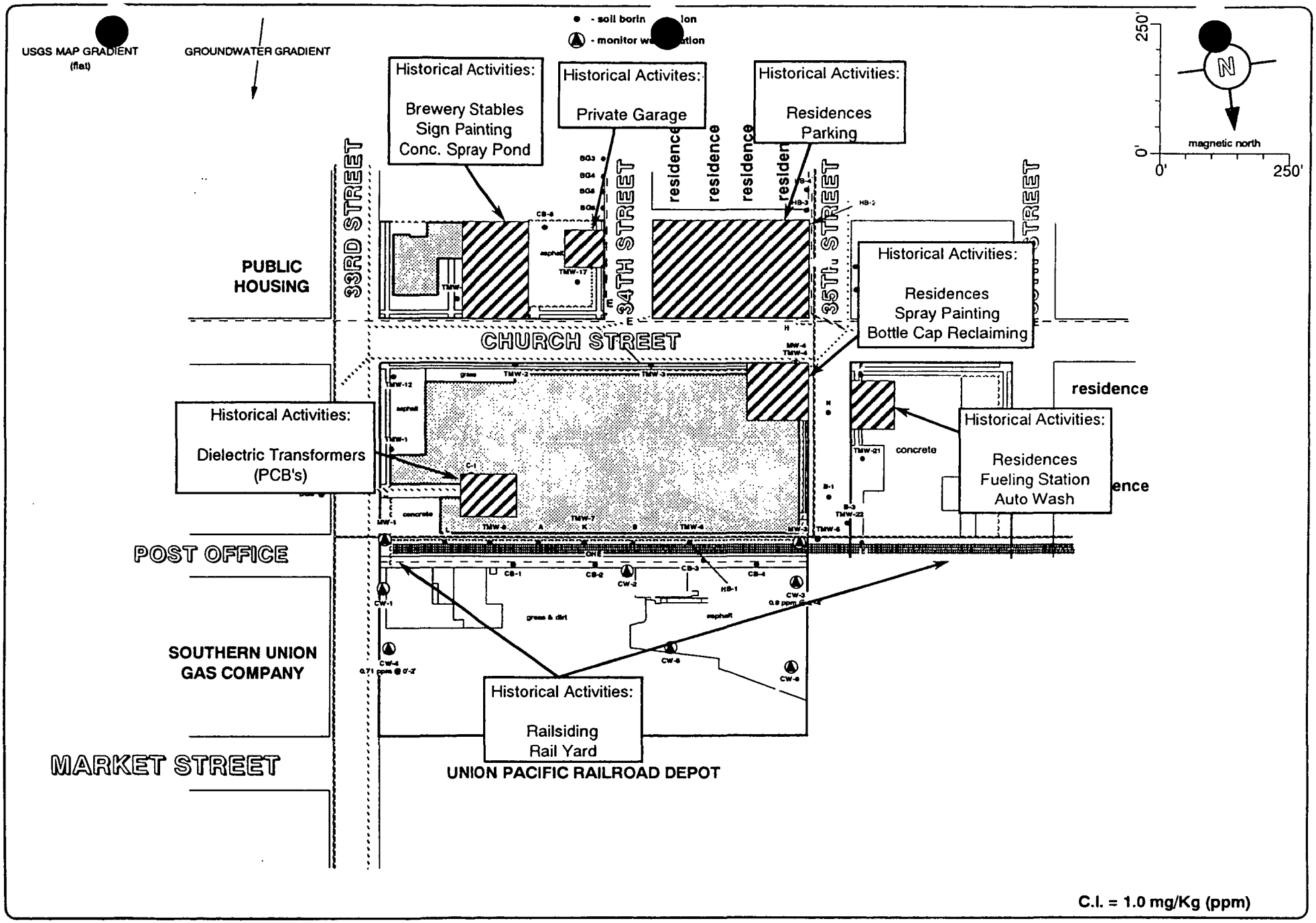
At the present time, it is anticipated that total costs attributable to this assessment will be approximtely $53,000.00. This estimate includes mobilization/demobilization, drilling, sampling and analysis, transportation, disposal, and consulting.



FALSTAFF BREWING COMPANY
33rd & 34th STREETS
GALVESTON, TEXAS

SITE PLOT
(11/5/98)

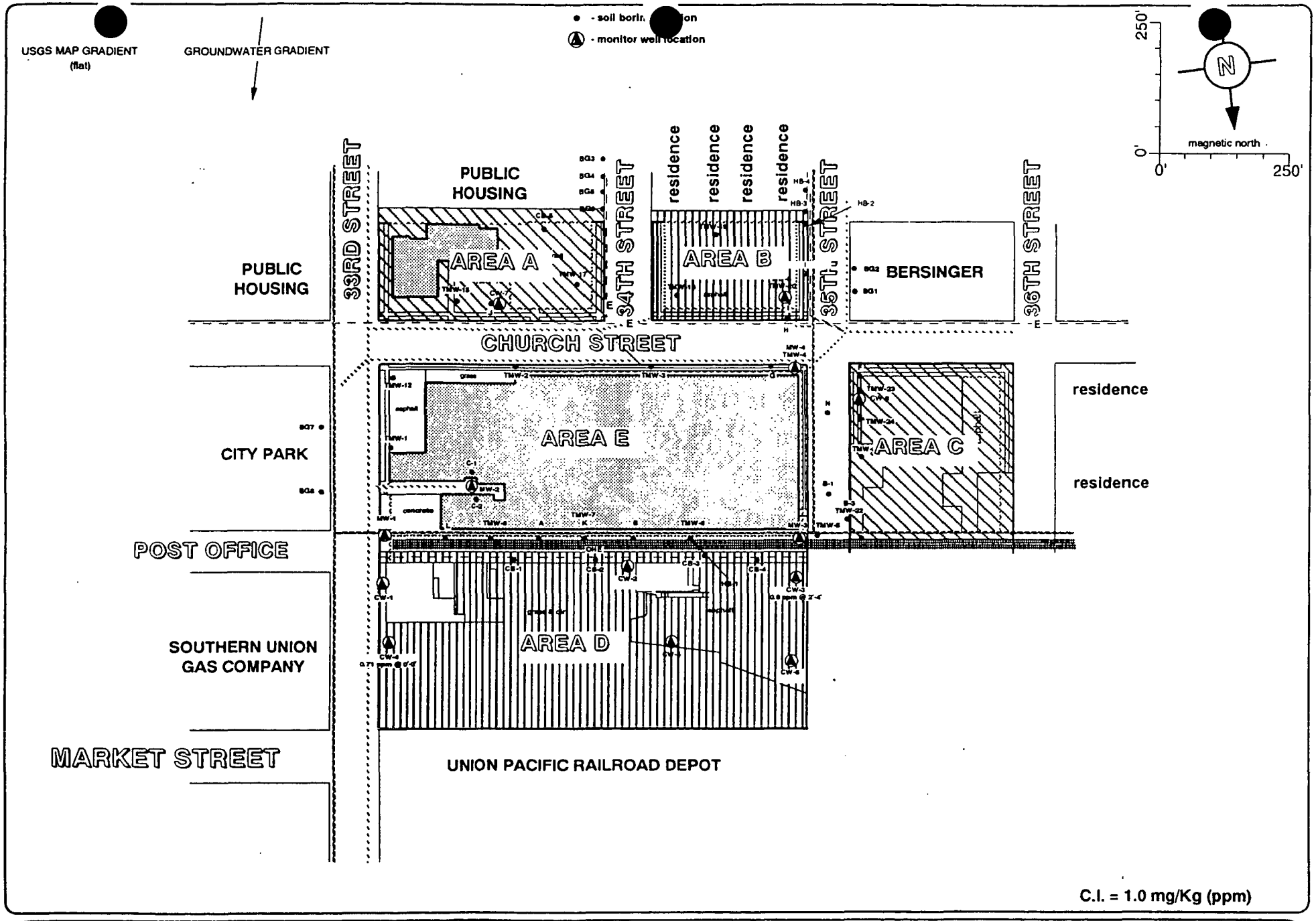
extra ENVIRONMENTAL, inc.
Environmental Consulting Services



FALSTAFF BREWING COMPANY
33rd & 34th STREETS
GALVESTON, TEXAS

AREA SOURCE
(COC'S) MAP

extra ENVIRONMENTAL, inc.
Environmental Consulting Services



FALSTAFF BREWING COMPANY
33rd & 34th STREETS
GALVESTON, TEXAS

AREA DESIGNATION
BASE MAP

extra ENVIRONMENTAL inc.
Environmental Consulting Services

EXTRA ENVIRONMENTAL, INC. - RCAS00037
2426 Freedom Dr. San Antonio,Texas 78217 (210)829-7137

FEB 15 2000

(INTERIM) RESPONSE ACTION COMPLETION REPORT
(PCB Remediation Only)

Falstaff Brewing Company
33rd Street and Church Street
Galveston (Galveston County), Texas
VCP No.: 337

January 28, 2000

prepared for:

Mr. Syl Dew
Falstaff Brewing Company
312 Pearl Parkway
San Antonio, Texas 78215

prepared by:

Peter V. Schram,
geologist

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1.0 EXECUTIVE SUMMARY

Falstaff Brewing Company (FBC), retained the services of Extra Environmental, Inc. (EEI), to perform an environmental remediation relating to a spill of PCB contaminated transformer oil at their facility located at 33rd Street and Church Street in Galveston, Galveston County, Texas.

The remedial action included the excavation, transportation, and disposal of approximately 1087 tons of PCB impacted soil and 17,700 gallons of produced groundwaters and decontamination waters. Additional actions included confirmation sampling of the excavated areas, composite sampling of the excavated materials, field screening of selected samples, and laboratory analyses of all collected samples. Laboratory analyses of confirmation samples collected from the excavated areas indicated PCB concentrations ranging from nondetectable (<0.5 mg/Kg) to 11.0 mg/Kg remaining in place. Laboratory analyses of samples collected from the produced waters indicated PCB concentrations ranging from 58 μg/L to 63 μg/L. Random field screening of confirmation samples, using photometric methods, indicated PCB concentrations comparable to the laboratory analyses.

Restoration of the remediated area included backfilling all excavated areas with clean backfill (60% clay), compacting all backfilled areas, and capping all excavated areas with 6" of concrete, reinforced with hog wire.

Since the remaining concentrations of PCB's in native soil, ranges from nondetectable (<0.5 mg/Kg) to 11.0 mg/Kg, all impacted areas are capped with 6" concrete, reinforced with hog wire, and the USEPA PCB requirements for a commercial facility are 25 mg/Kg or less, no further action is deemed warranted for the PCB impacted area.

2.0 INTRODUCTION

Falstaff Brewing Company (FBC), retained the services of Extra Environmental, Inc. (EEI), to perform an environmental assessment relating to a spill of PCB contaminated transformer oil at their facility located at 33rd Street and Church Street in Galveston, Galveston County, Texas. Because field investigations and laboratory analyses performed during previous sampling events indicated PCB and total RCRA metals concentrations above Risk Reduction 1 and 2 levels, it has been decided that the use of Risk Reduction Standard 3 would be best suited for voluntary cleanup of the site. Furthermore, the Conceptual Environmental Assessment Model (CEAM) has been utilized versus a traditional baseline risk assessment, in the hope that the CEAM may be used to guide the site investigation.

At the present time, the subject facility is commercial in nature and being utilized for a warehouse. The project site is a former brewery which has been inactive since the early 1980's. Rehabilitation of the subject property began in 1997, with the occupation of the former bottling plant. Current plans call for the rehabilitation of

the entire property for future commercial use. This commercial use could include commercial storage, commercial office space (i.e., offices, restaurant, etc.), and/or manufacturing.

2.1 Brief Chronology of Events

1980-1990	Vandals enter former brewery and rupture transformer, releasing approximately 2000 gallons of PCB dielectric fluid.
3/1/93	PCB release reported to the USEPA.
1993	USEPA assigns oversite of project to TNRCC
1994	ENSR contracted to bevel concrete in area of impact
8/30/94	ENSR submitted Remedial Action Completion Report to TNRCC.
4/15/96	Extra contracted to excavate and sample former stormsewer chase and former transformer pad; approximately 55000 gallons of storm water removed from facility basement and transported for disposal.
6/11/96	Extra excavated former stormsewer chase and former transformer pad; laboratory analyses of soil samples indicated PCB concentrations ranging from 0.4 mg/Kg to 12700 mg/Kg; all excavated material replaced in excavation.
8/29/96	Application made to the TNRCC Voluntary Cleanup Program.
9/20/96	TNRCC accepts application to the VCP Program
1/6/97	Extra installed numerous monitor wells and collected numerous soil samples as part of the approved Phase II Site Assessment; laboratory analyses of soil samples indicted that the PCB contamination affected only the alleyway and former transformer pad areas.
Mid 1997	TNRCC informed Extra that the USEPA had notified them that the PCB spill and subsequent cleanup would be under USEPA jurisdiction; USEPA also informed TNRCC that they would work the project (in part) through the VCP Program; USEPA requests additional assessment work prior to approval of any cleanup plan.
2/10/98 - 3/6/98	Extra is contracted to install additional monitor wells as part of a Phase III Site Assessment for further delineation of all contaminants; additional monitor wells installed around entire property; laboratory analyses indicated that the PCB contamination was limited to alleyway and former transformer pad.
5/1/99	Extra submitted Phase III Environmental Site Assessment, Conceptual Environmental Assessment Model (CEAM), Response Action Work Plan, and Health & Safety Plan.
6/2/99	Notice made to USEPA for approval of self-implementing cleanup of facility.
7/2/99	USEPA notifies Extra of disapproval of proposed work plan; Extra protests disapproval and requests a formal hearing; USEPA proposes to send new coordinator to project site to review, prior to formal hearing.
7/30/99	USEPA (Mr. Jim Sales) visited the site with PV Schram and Kirby Newbanks; after review, Mr. Sales indicated that the proposed work plan was acceptable after negotiating out a different sampling grid and answering a few questions.

8/17/99 Revised questions received from USEPA; all questions answered (referenced to original proposed work plan); smaller sampling grid accepted.

Oct. 99 Counsel for Mr. Bill Hughes contacts Extra to discuss the current lack of action on the cleanup; it is explained to counsel that Falstaff Brewing Company is not in the "drivers seat", that we were waiting on approval from the USEPA to begin.

10/15/99 Approval received from USEPA to begin cleanup.

11/7/99 ENTACT contracted to provide dirt work on project; mobilization begins.

11/8/99 - 12/3/99 Excavation, confirmation sampling, remediation completed.

2.2 Site Location and History

The subject site has historically been utilized for the brewing and bottling of beer. A review of Sanborn Fire Insurance Rate Maps available for the area indicated that the property has been utilized in the past for single-family residences, brewery, stables, spray pond (painting related to the brewery), a filling station, autowash, and private garage.

Based on previous studies completed by EEI, data contained in the previously submitted Phase II Assessment and CEAM, and analytical data generated from additional assessment work at the subject facility, it is felt that the primary source areas have been identified. Specifically, all PCB contamination appears to be directly related to the release of 2000+ gallons of PCB containing transformer oil. This occurred when vandals pierced the transformers located on site and allowed the contents to drain on the ground.

Laboratory analyses performed on soil samples collected during previous activities (see EEI report dated 08/25/96), indicated PCB concentrations ranging from 0.4 mg/Kg to 12700 mg/Kg. The area of impact has been determined to be the area located in the narrow alleyway (main facility) beginning at the former transformer location to the street exit of the property at 33rd Street. The majority of this area is covered with an impervious layer (concrete), and appears to render little or no threat to human health or welfare in its current state. Information provided in the Phase I Work Plan (see EEI report dated August 25, 1996) indicated that PCB's (particularly Aroclor 1260, 1,2,3-trichlorobenzene, and 1,2,3,4-tetrachlorobenzene), generally have a low solubility with groundwater and soil, and therefore have a low potential for migration off-site.

Additional assessment work was completed at the subject facility in November of 1998. The additional assessment included the installation of two (2) additional monitor wells, with PCB analysis of soil cores and groundwater. PCB analysis of the soil cores and groundwater samples collected from both monitor wells indicated non-detectable concentrations of PCB's. The additional wells confirmed the vertical and lateral extent of all PCB contamination at the subject facility.

A walking survey was performed at the subject site on 07/24/96. Observations made during that walking survey included one (1) middle school, five (5) churches, numerous businesses (i.e., convenience stores, restaurants, etc.), two (2) city parks, one (1) registered water well, and numerous residences (both single family and multi-family) within a 1/4 mile radius of the subject facility. No daycare centers were observed during the walking survey.

Site features that will limit or otherwise restrict exposure include buildings and impervious cover (i.e. , concrete and asphalt) over the majority of the subject site and the security fencing surrounding the majority of the facility structures. Additionally, the subject site is monitored on a regular basis by personnel of the facility.

A water well search was conducted for the subject facility on 6/28/96. Results of the search indicated that one (1) water well was located within a 1/2 mile radius of the subject facility. The well is located approximately 1000 feet east of the subject facility and is owned by the City of Galveston. Records indicate that the well was drilled in 1893 and that groundwater was encountered at a depth of 13.79 feet BGS. Records further indicate that the well was drilled to a total depth of 3070 feet as a "test well for a better water supply", but that all groundwaters encountered increased in salinity with each succeeding horizon.

Conversations with the City of Galveston indicate that all waters utilized for human consumption are purchased from the City of Houston (Ellington Field), and piped to the City of Galveston. Further conversations revealed that this water supply is augmented in the summer by groundwater produced from shallow wells at the Alta Loma Pump Station, located approximately 18 miles west of the City of Galveston. The City of Galveston indicated that no water was produced on the island for human consumption.

The surface geology of the project site consists of soils of the Galveston Series, Gd, having 0 to 4 percent slopes. The soils consist of nearly level to undulating, somewhat excessively drained, nonsaline, sandy soils. The surface, for the most part, is convex. These soils have a high permeability, moderate porosity, low organic content and a low shrink-swell potential. Two (2) geotechnical samples were collected from two (2) of the soil borings/monitor wells installed on-site, from a depth of 1' to 3' BGS. Analyses of the the two (2) samples indicated total moisture contents ranging from 15.0% to 26.3%, a total organic carbon content ranging from 6.2% to 17.2%, a dry bulk density ranging from 85.2 #/ft3 to 97.1 #/ft3, and an effective porosity ranging from 0.42% to 0.50%, and a coefficient of permeability of 2.99×10^{-5}.

Groundwater at the site occurs at a depth of approximately 4.0 feet BGS. This level fluctuates and is influenced by tidal surges (i.e., high- and low-tide). Monitor wells installed at the subject property during all assessment activities indicated a groundwater gradient towards the north-northeast at a rate of 0.194 feet per 100 linear feet. Based on the water well search and the walking survey, the shallow

groundwater observed during previous sampling events is not currently utilized by any of the businesses or residences that surround the project site.

Site features that could limit or otherwise restrict exposure to contaminated groundwater include buildings, security fencing, the low solubility of the contaminants, limited fresh water availability, and deed restrictions. The City of Galveston does not currently have any ordinances prohibiting the installation and use of domestic water wells within the extra territorial jurisdiction, due in large part to the fact that very little usable water exists in the area, and has never become an issue.

The nearest body of surface water is Galveston Ship Channel which is located approximately 2700 feet north-northeast of the subject facility. Subsurface utilities and city streets represent the only discernible conduits to this body of surface water. This body of water is currently utilized for industrial, recreational, and commercial purposes. The Port of Galveston is heavily industrialized with agricultural storehouses, shipping warehouses, and petrochemical facilities. The Port also contains a large fleet of commercial fishing and transportation vessels, as well as support vessels for the petroleum industry. Since the Port has been utilized for the above in excess of 150 years, it is likely that the body of surface water will be utilized for the same purposes in the future.

Due to the low volatility of the contaminants of concern and the competent impervious surface covering the impacted areas, the potential for exposure to contaminants in air is considered remote and not harmful for human exposure. This also applies to confined spaces (located in the subject facility) and the potential build-up of contaminants that may present a current or reasonably anticipated health hazard.

Laboratory analyses of all soil samples and groundwater samples collected to date indicate that all PCB contamination is located on-site.

2.3 Site Documentation

Site location maps, USGS maps, site plots, etc., are illustrated on the following pages.

3.0 INVESTIGATION

Investigative activities previously completed on the subject property, in relation to the PCB remediation are fully described in correspondence and reports previously submitted to the USEPA and TNRCC. These documents are chronologically listed below:

Report Prepared By:	Date of Report	Title
ENSR	08/30/94	Status update letter to Bob Brock (TNRCC) discussing concrete scabbing operations and analytical results
Extra Environmental	06/19/96	Status update letter to Bob Brock (TNRCC) outlining assessment activities.
Extra Environmental	07/01/96	Status update letter to Bob Brock (TNRCC) outlining results of assessment activities.
Extra Environmental	08/27/96	Phase I Environmental Site Assessment; VCP Application.
Extra Environmental	10/03/96	Phase II Environmental Site Assessment
Extra Environmental	02/24/97	Interim Conceptual Environmental Assessment Model (CEAM)
Extra Environmental	07/01/98	Phase II Environmental Assessment and Conceptual Environmental Assessment Model (CEAM)
Extra Environmental	05/01/99	Phase III Environmental Site Assessment, Conceptual Environmental Assessment Model (CEAM) Addendum, Response Action Plan, and Health and Safety Plan (HASP)

4.0 RESPONSE ACTIONS

The objectives of the response action were to clean up all PCB impacted soil to levels acceptable under TSCA regulations (<25 mg/Kg). Only groundwater produced from the remediation activities were anticipated to be impacted by PCB's, and the objectives included the proper transportation and disposal of these waters. The activities undertaken at the project site to meet the objectives of the response action, are more fully discussed in the following sections.

4.1 Scope of Response Actions

The scope of the response action (PCB's only), called for the excavation, loading, transportation, and disposal of approximately 1080 tons of PCB impacted soil and 20,000 gallons of PCB impacted groundwater. The impacted soil and groundwater were located in the alleyway of the facility, accessed from 33rd Street, Galveston, Galveston County, Texas.

Extra Environmental, Inc., contracted ENTACT, Inc., to excavate an area covering approximately 4400 square feet to a depth of approximately 6'-6" BGS. The impacted material was excavated using a track hoe and front-end loader. The impacted material was removed from the area of concern and staged on 80-mil HDPE, until characterization could be completed. Once sufficient composite samples were collected from the stockpiled soil, the material was loaded onto lined 90-ton railcars, and tarped for transportation to a TSCA landfill (WCS/Andrews, Texas). The original work plan called for the dewatering of the material prior to loading. However, due to an unusually dry season, dewatering actions were not required. The only groundwater produced from the activities occurred as recharge into the excavation during each night, at the conclusion of the days activities. The following morning, the slow recharging groundwater was vacuumed from the excavation with a trash pump, and transferred to a 500-barrel frac tank. The produced groundwaters remained on-site until disposal characterization could be completed.

After excavation, the impacted area was sampled for field screening and laboratory confirmation. Discreet soil samples were collected from the floor of the excavation at an average depth of 6'-6" BGS. The soil samples were collected with a Large Bore Retractable Geoprobe or by digging into the sample area using a rock hammer. All sampling equipment was decontaminated between samples, using Alconex, DI water and pesticide grade hexane. Confirmation and field screening samples were collected on the basis of one (1) discreet soil sample per 1.5 meter x 1.5 meter grid. Once collected, the discreet sample was placed in a clean, sealable 1-gallon polyethylene bag and thoroughly mixed. The bag, which remained sealed during the mixing process, was then opened. A portion of the sample was then transferred to clean, 4-ounce glass jars fitted with Teflon lids. Once filled, the jar was sealed and placed on ice for transport to the laboratory. The bag, which still contained a portion of the discreet sample was then transferred to the area dedicated for field screening. Field screening was conducted on approximately 60 samples, selected randomly from the confirmation samples. The field screening consisted of analyzing the samples using photometry techniques, and demonstrated good correlativity with the laboratory analyses. All excavated material was manifested to its disposal destination and are included in the appendices of this report.

Once an area of the excavation was confirmed clean through field screening and laboratory analyses, the area was backfilled using clean select fill (60% clay). The original work plan called for 3' of backfill, followed by a 1.5' clay cap, followed by a 6" layer of concrete reinforced with hog wire. The original work plan assumed that PCB concentrations in excess of 10 mg/Kg and less than 25 mg/Kg would remain in place. After receiving all laboratory analyses, it was determined that the highest concentration that remained in place was 11.0 mg/Kg (all confirmation samples indicated PCB concentrations ranging from nondetectable (<0.50 mg/Kg) to 11.0 mg/Kg). Due to the high compactability of the select fill and the low levels of PCB's remaining in place, it was determined that the clay cap could be dispensed with. After compacting the backfill, a 6" layer of concrete reinforced with hog-wire, was placed across the excavated area. A copy of the laboratory analyses is included in the appendices of this report.

The produced groundwaters were stored in an on-site 500-barrel frac tank. The groundwaters were tested prior to combining with decontamination water and indicated PCB concentrations ranging from 58 μg/L to 63 μg/L. Once characterization was completed, the produced water was transported for permitted disposal.

During remediation, the monitor well located in the alleyway (MW-2), was damaged beyond repair. Due to the agreed Work Plan and the proposed quarterly monitoring, the well will have to be replaced. The monitor well will be replaced after the USEPA and TNRCC have an opportunity to review the interim report.

4.2 Area and Volume

The area of remediation occurred in the alleyway that originates off 33rd street and extends towards the main facility building approximately 270 feet. A site plot illustrating the source area and areal extent of the contamination prior to the response action activities (PCB's only), is included on the following page.

During the site activities, approximately 1086 tons of PCB impacted soil was excavated and transported for disposal. Additionally, approximately 17700 gallons of groundwater produced during the excavation was removed and transported for disposal. No non-aqueous phase separated liquids were generated during the remediation activities.

All excavated soil was sampled and characterized as a TSCA waste. All groundwater produced during the excavation, was characterized and disposed of as a TSCA waste.

All PCB impacted soil was transported to the WCS TSCA permitted facility in West Texas. The WCS (Waste Control Specialties, Inc.) facility is located at 9998 West Highway 176, Andrews County, Texas [phone: (505) 394-4300]. All soil was transported by railcar through the Union Pacific RR system.

All produced groundwater and decontamination water was transported by Four Way Trucking to Texas Industrial Waste Control facility. The facility is permitted and located at 3701 N. Grove, Ft. Worth, Texas [phone: (817) 625-9969].

Manifests for impacted disposed soils and produced groundwaters are included in the appendices of the report.

No engineering controls beyond the concrete cap are anticipated. Institutional control already exists through a lack of potable groundwater on the island.

4.3 Response Action (Remediation) System Details

No remediation system was required for completion of the remedial action.

Major equipment utilized on the remedial action included:

- 48' supply trailer with misc. tools, supplies, and small equipment
- 220 Komatsu Track Hoe
- 380 Komatsu Rubber Tire Loader
- 416 Caterpiller Backhoe with 1000 lb. Hammer
- 56" Smooth Roll Compactor
- 30' Mobile Home Field Office
- 1/2 ton Truck
- 3/4 ton Truck
- 90 ton railcars

The only problems encountered during the remedial actions conducted on the project site were in scheduling the railcars for transportation of the impacted soil. Due to a lack of knowledge as to the speed of activities, approximately two (2) days of delay were experienced. Although the delay proved to be a nuisance, no real impact was realized. Once the problem was outlined for UPRR, major efforts were expended on the part of the rail line to meet the project needs.

4.4 Confirmation Sampling

4.4.1 Data Collection

Confirmation samples were collected from all excavated areas. The majority of the samples were collected at a depth of 6'-6" BGS. A total of seventy-five (75) confirmation samples were collected for laboratory analyses. Of the 75 samples, four (4) soil samples were collected from the sidewall of the excavation near samples that indicated elevated levels of PCB's from field screening. A total of approximately sixty (60) soil samples were field screened on-site, prior to submittal to the analytical laboratory. All field screening was performed using the Strategic Diagnostics Inc., PCB EnSys 12T Soil Testing System, calibrated for 1 ppm, 12.5 ppm, and 50 ppm.

Quality Assurance/Quality Control was maintained through sampling and storage practices. Specifically, all samples were originally collected in clean, gallon-size polyethylene bags and immediately transferred to clean, 4-oz. glass jars, fitted with Teflon lids. Once filled, the sample jar was sealed, and placed on ice for transport to the laboratory. The samples were generally transported the day following collection. All samples were documented with Chain-of-Custody. Two (2) duplicate samples were collected from areas designated for confirmation sampling. Laboratory analyses of the confirmation samples indicated PCB concentrations ranging from nondetectable (<0.5 mg/Kg) to 11.0 mg/Kg.

The sample analysis method utilized on all confirmation samples was EPA 8082.

A site map and summary of laboratory analyses and field screening, indicating sample locations and results are listed on the following pages.

4.4.2 Comparison of Data to Cleanup Criteria

Tables indicating sample locations and results are listed on the following pages. The cleanup criteria established with the USEPA prior to the remedial action, and agreed to by Extra, stated that all levels that remained at the site must be less than or equal to 25 mg/Kg. Laboratory analyses of all confirmation samples collected indicated that this criteria was met. Laboratory analyses demonstrate that acceptable levels have been attained through direct comparison.

Additional work will be required for the site, to address RCRA 8 metals impact to other areas of the facility. Fortunately, prior assessment work performed on the site documented that no other compound specific or non-compound specific contaminants needed to be addressed during this phase of the remediation.

One composite sample was collected from the material utilized for backfill. Laboratory analyses of the composite sample indicated nondetectable PCB's (<0.05 mg/Kg), total arsenic=4.94 mg/Kg, total barium=12 mg/Kg, total cadmium=0.13 mg/Kg, total chromium=7.85 mg/Kg, and total lead=5.17 mg/Kg. All material utilized for backfill was purchased from a local Galveston supplier and are representative of background concentrations.

4.5 Engineering Controls

Since confirmation samples indicated PCB concentrations (remaining in place) are less than 25 mg/Kg, no engineering controls are anticipated.

4.6 Site Restoration

Site restoration, after the remedial action, included backfilling and compacting the excavated area with clean fill, and capping the entire excavated area with 6" of concrete, reinforced with hog wire. Additional site restoration included the removal and disposal of several tank saddles located in the area formerly containing AST's. The staging area utilized to store the excavated material until transported for disposal, was excavated and smoothed to natural grade. All material excavated from the staging area was transported with the PCB impacted soil for proper disposal. No other restoration activities were required for completion of the project. Site maps and photographs of the project during remediation activities and restoration activities are included in the appendices.

5.0 DEVIATIONS FROM WORK PLAN

A few deviations from the Work Plan occurred during the completion of the remedial actions. The deviations occurred as a result of changes in on-site geology, application of the field screening methods and results from the confirmation sampling.

Specifically, the original Work Plan called for the sampling of the final rinse (decontamination) and analyses for PCB's. During the remediation, field screening results were compared with analytical results and indicated that all decontamination of sampling equipment was adequate and that cross-contamination was not occurring. Groundwater, produced during the remedial activities, was placed on-site, in a 500-barrel frac tank. Prior to combining the produced groundwaters with decontamination waters, samples were collected for analyses and characterization. Laboratory analyses indicated PCB concentrations ranging from 58 μg/L (ppb) to 63 μg/L (ppb). Since the levels indicated were less than <1 mg/L (ppm), dilution through the combination of decon water was not considered a factor.

Additional deviations occurred during backfilling operations of the excavated areas. The original work plan called for select fill to be placed in the excavation, followed by 1.5' of clay, and capped with a 6" layer of concrete, reinforced with hog wire. Due to the low levels of PCB's remaining in-place (<25 mg/Kg), and the high clay content of the select fill (60% clay), no clay cap was utilized. Instead, the select fill was compacted to ground level, and the entire area capped with 6" of concrete, reinforced with hog wire. Additionally, although no sidewall samples were discussed in the original work plan, a decision was made to "safe side" all confirmation sampling by collecting sidewall samples in cells indicating PCB impact (>25 mg/Kg) [based on field screening], prior to overexcavating. Approximately five (5) sidewall samples were collected from cells F2, F8, F9, and F10. Laboratory analyses of the sidewall samples indicated PCB concentrations ranging from nondetectable (<0.5 mg/Kg) to 4.2 mg/Kg.

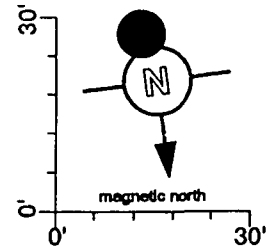
6.0 DEED RECORDATION

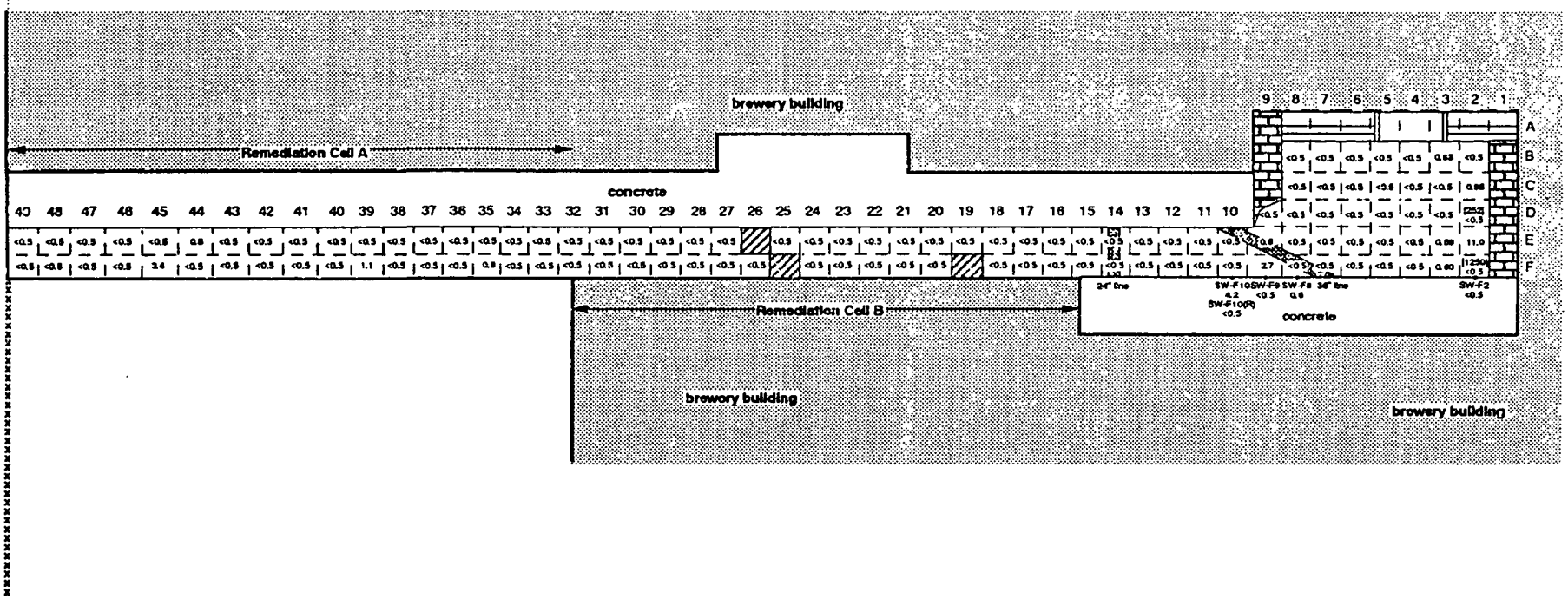
The model language that will be utilized for the deed recordation requirements will be developed at a later date. It is anticipated that the only deed recordation that will be required will be under the Risk Reduction 2 standards, limiting the use of the property (i.e., residential), with no engineering controls required. Since that entire property is in the VCP Program, deed recordation for the RCRA 8 metals and petroleum hydrocarbons located on-site, will be combined with any requirements for the former PCB impact.

USGS MAP GRADIENT
(flat)

- sample not collected (missed)

- PCB concentrations remaining in place that are greater than or equal to 0.50 mg/Kg

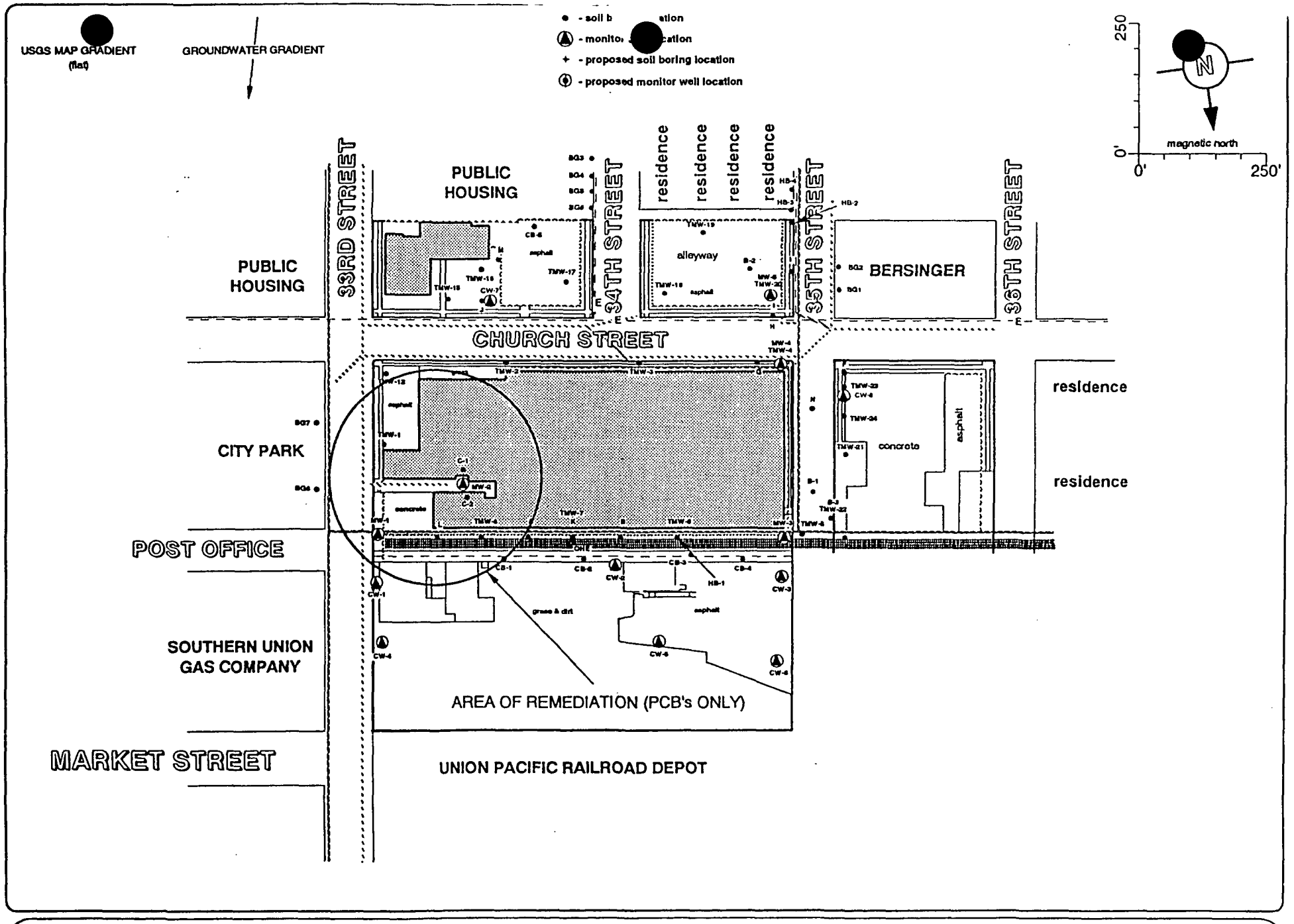




FALSTAFF BREWING COMPANY
33rd & 34th STREETS
GALVESTON, TEXAS

CONFIRMATION
SAMPLING
CONCENTRATIONS (12/23/99)

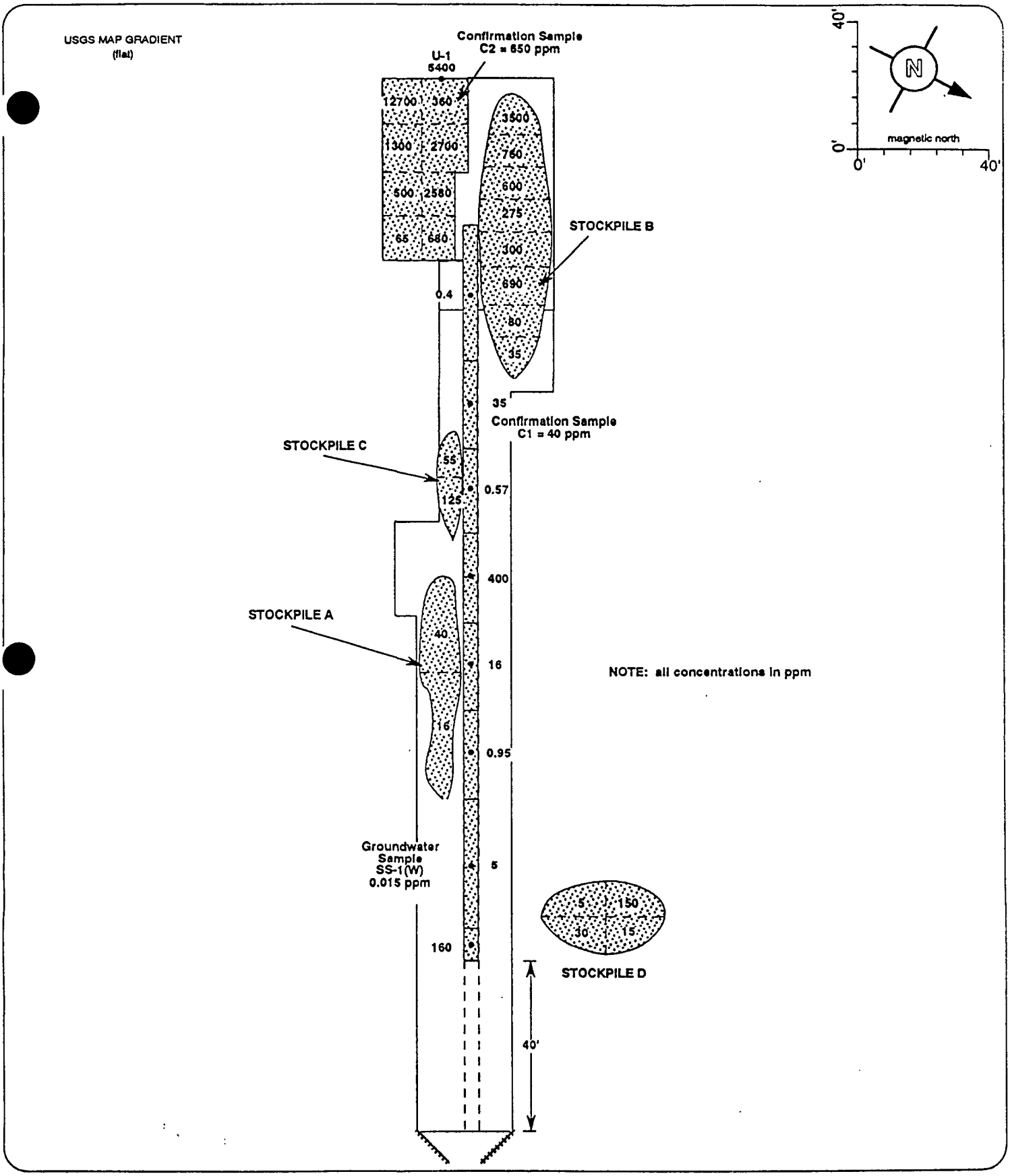
extra ENVIRONMENTAL, inc.
Environmental Consulting Services



FALSTAFF BREWING COMPANY
33rd & 34th STREETS
GALVESTON, TEXAS

SITE PLOT

extra ENVIRONMENTAL inc.
Environmental Consulting Services



FALSTAFF BREWING COMPANY
33RD STREET AND 34TH STREET
GALVESTON, TEXAS

SITE PLOT
(06/13/96)

extra ENVIRONMENTAL, inc.
Environmental Consulting Services

FALSTAFF/GALVESTON (PCB Remediation)

Sample Area	Sample ID	Laboratory ID	Time	Date	Description
C	A1	NA	NA	NA	concrete foundation - no sample collected
C	A2	NA	NA	NA	concrete foundation - no sample collected
C	A3	NA	NA	NA	concrete foundation - no sample collected
C	A4	NA	NA	NA	concrete foundation - no sample collected
C	A5	NA	NA	NA	concrete foundation - no sample collected
C	A6	NA	NA	NA	concrete foundation - no sample collected
C	A7	NA	NA	NA	concrete foundation - no sample collected
C	A8	NA	NA	NA	concrete foundation - no sample collected
C	A9	NA	NA	NA	concrete foundation - no sample collected
C	B1	NA	NA	NA	confirmation sample from cell B1 @4'0"-NS
C	B2	NA	NA	NA	not submitted; "hot" at 3'6"
C	B2(R)	9110445	11/14/99	1015	confirmation sample from cell B2 @ 6'6"
C	B2 (RA)	9110445	11/14/99	1015	reanalyzed for lower MDL on 12/20/99
C	B3	9110446	11/12/99	1130	confirmation sample from cell B3 @ 6'6"
C	B3 (RA)	9110446	11/12/99	1130	reanalyzed for lower MDL on 12/20/99
C	B4	9110447	11/14/99	1022	confirmation sample from cell B4 @ 6'6"
C	B4 (RA)	9110447	11/14/99	1022	reanalyzed for lower MDL on 12/20/99
C	B5	9110448	11/14/99	1025	confirmation sample from cell B5 @ 6'6"
C	B5 (RA)	9110448	11/14/99	1025	reanalyzed for lower MDL on 12/21/99
C	Duplicate 2	9110561	11/14/99	1025	duplicate sample of CB5
C	B6	9110449	11/14/99	1026	confirmation sample from cell B6 @ 6'6"
C	B6 (RA)	9110449	11/14/99	1026	reanalyzed for lower MDL on 12/21/99
C	B7	9110450	11/14/99	1026	confirmation sample from cell B7 @ 6'6"
C	B7 (RA)	9110450	11/14/99	1026	reanalyzed for lower MDL on 12/21/99
C	B8	9110451	11/14/99	1028	confirmation sample from cell B8 @ 6'6"
C	B8 (RA)	9110451	11/14/99	1028	reanalyzed for lower MDL on 12/21/99
C	C1	NA	NA	NA	not submitted; "hot" over concrete
C	C1(Control)	NA	NA	NA	not submitted; "hot" over concrete
C	C2	9110452	11/14/99	1058	confirmation sample from cell C2 @ 6'6"
C	C2 (RA)	9110452	11/14/99	1058	reanalyzed for lower MDL on 12/21/99
C	C3	9110453	11/14/99	1020	confirmation sample from cell C3 @ 6'6"
C	C3 (RA)	9110453	11/14/99	1020	reanalyzed for lower MDL on 12/21/99
C	C4	9110454	11/14/99	1043	confirmation sample from cell C4 @ 6'6"
C	C4 (RA)	9110454	11/14/99	1043	reanalyzed for lower MDL on 12/21/99
C	C5	9110455	11/14/99	1045	confirmation sample from cell C5 @ 6'6"
C	C5 (RA)	9110455	11/14/99	1045	reanalyzed for lower MDL on 12/21/99
C	C6	9110456	11/14/99	1035	confirmation sample from cell C6 @ 6'6"
C	C6 (RA)	9110456	11/14/99	1035	reanalyzed for lower MDL on 12/21/99
C	C7	9110457	11/14/99	1032	confirmation sample from cell C7 @ 6'6"
C	C7 (RA)	9110457	11/14/99	1032	reanalyzed for lower MDL on 12/21/99
C	C8	9110458	11/14/99	1030	confirmation sample from cell C8 @ 6'6"
C	C8 (RA)	9110458	11/14/99	1030	reanalyzed for lower MDL on 12/21/99
C	D1	NA	NA	NA	not submitted; over concrete foundation
C	D2	9110434	11/14/99	1049	confirmation sample from cell D2 @ 5'8"
C	D2(R)	9110756	11/19/99	1140	confirmation sample from cell D2 @ 6'6"
C	D3	9110435	11/14/99	1050	confirmation sample from cell D3 @ 6'6"
C	D3 (RA)	9110435	11/14/99	1050	reanalyzed for lower MDL on 12/20/99
C	D4	9110436	11/14/99	1056	confirmation sample from cell D4 @ 6'6"
C	D4 (RA)	9110436	11/14/99	1056	reanalyzed for lower MDL on 12/20/99
C	D5	9110437	11/14/99	1057	confirmation sample from cell D5 @ 6'6"
C	D5 (RA)	9110437	11/14/99	1057	reanalyzed for lower MDL on 12/20/99

FALSTAFF/GALVESTON (PCB Remediation)

Sample Area	Sample ID	Laboratory ID	Time	Date	Description
C	D6	9110438	11/14/99	1037	confirmation sample from cell D6 @ 6'6"
C	D6 (RA)	9110438	11/14/99	1037	reanalyzed for lower MDL on 12/20/99
C	D7	9110547	11/15/99	1114	confirmation sample from cell D7 @ 6'6"
C	D8	9110548	11/15/99	1519	confirmation sample from cell D8 @ 6'6"
C	D9	9110549	11/15/99	1601	confirmation sample from cell D9 @ 6'6"
C	E1	NA	NA	NA	not submitted; over concrete foundation
C	E2	9110439	11/14/99	1058	confirmation sample from cell E2 @ 5'8"
C	E2 (RA)	9110439	11/14/99	1058	reanalyzed for lower MDL on 12/20/99
C	E3	9110440	11/14/99	1105	confirmation sample from cell E3 @ 5'8"
C	E3 (RA)	9110440	11/14/99	1105	reanalyzed for lower MDL on 12/20/99
C	E4	9110441	11/14/99	1110	confirmation sample from cell E4 @ 5'8"
C	E4 (RA)	9110441	11/14/99	1110	reanalyzed for lower MDL on 12/20/99
C	E5	9110550	11/15/99	1100	confirmation sample from cell E5 @ 6'6"
C	E6	9110551	11/15/99	1103	confirmation sample from cell E6 @ 6'6"
C	E7	9110552	11/15/99	1105	confirmation sample from cell E7 @ 6'6"
C	E8	9110553	11/15/99	1110	confirmation sample from cell E8 @ 6'6"
C	E9	9110554	11/15/99	1555	confirmation sample from cell E9 @ 6'6"
B	E10	9110531	11/16/99	820	confirmation sample from cell E10 @ 6'6"
B	E11	9110532	11/16/99	823	confirmation sample from cell E11 @ 6'6"
B	E12	9110533	11/16/99	830	confirmation sample from cell E12 @ 6'6"
B	E13	9110534	11/16/99	835	confirmation sample from cell E13 @ 6'6"
B	E14	9110535	11/16/99	835	confirmation sample from cell E14 @ 6'6"
B	E15	9110538	11/16/99	840	confirmation sample from cell E15 @ 6'6"
B	E16	9110537	11/16/99	845	confirmation sample from cell E16 @ 6'6"
B	E17	9110538	11/16/99	846	confirmation sample from cell E17 @ 6'6"
B	E18	9110562	11/16/99	1004	confirmation sample from cell E18 @ 6'6"
B	E19	9110563	11/16/99	1009	confirmation sample from cell E19 @ 6'6"
B	E20	9110564	11/16/99	1011	confirmation sample from cell E20 @ 6'6"
B	E21	9110565	11/16/99	1017	confirmation sample from cell E21 @ 6'6"
B	E22	9110566	11/16/99	1023	confirmation sample from cell E22 @ 6'6"
B	E23	9110567	11/16/99	1100	confirmation sample from cell E23 @ 6'6"
B	E24	9110568	11/16/99	1104	confirmation sample from cell E24 @ 6'6"
B	E25	9110569	11/16/99	1106	confirmation sample from cell E25 @ 6'6"
B	E26	NA	NA	NA	missed
B	E27	9110613	11/16/99	1145	confirmation sample from cell E27 @ 6'6"
B	E28	9110614	11/16/99	1150	confirmation sample from cell E28 @ 6'6"
B	E29	9110615	11/16/99	1430	confirmation sample from cell E29 @ 6'6"
B	E30	9110616	11/16/99	1420	confirmation sample from cell E30 @ 6'6"
A	E31	9110617	11/16/99	1415	confirmation sample from cell E31 @ 6'6"
A	E32	9110618	11/16/99	1440	confirmation sample from cell E32 @ 6'6"
A	E33	9110619	11/16/99	1451	confirmation sample from cell E33 @ 6'6"
A	E34	9110633	11/16/99	1605	confirmation sample from cell E34 @ 6'6"
A	E35	9110634	11/16/99	1620	confirmation sample from cell E35 @ 6'6"
A	E36	9110636	11/16/99	1630	confirmation sample from cell E36 @ 6'6"
A	E37	9110635	11/16/99	1630	confirmation sample from cell E37 @ 6'6"
A	E38	9110601	11/17/99	1035	confirmation sample from cell E38 @ 6'6"
A	E39	9110602	11/17/99	1039	confirmation sample from cell E39 @ 6'6"
A	E40	9110603	11/17/99	1043	confirmation sample from cell E40 @ 6'6"
A	E41	9110604	11/17/99	923	confirmation sample from cell E41 @ 6'6"
A	E42	9110605	11/17/99	825	confirmation sample from cell E42 @ 6'6"
A	E43	9110606	11/17/99	830	confirmation sample from cell E43 @ 6'6"

FALSTAFF/GALVESTON (PCB Remediation)

Sample Area	Sample ID	Laboratory ID	Time	Date	Description
A	E44	9110640	11/16/99	1731	confirmation sample from cell E44 @ 6'6"
A	E45	9110641	11/16/99	1729	confirmation sample from cell E45 @ 6'6"
A	E46	9110642	11/16/99	1728	confirmation sample from cell E46 @ 6'6"
A	E47	9110643	11/16/99	1723	confirmation sample from cell E47 @ 6'6"
A	E48	9110644	11/16/99	1721	confirmation sample from cell E48 @ 6'6"
A	E49	9110645	11/16/99	1716	confirmation sample from cell E49 @ 6'6"
C	F1	NA	NA	NA	not submitted; over concrete foundation
C	F2	9110442	11/14/99	1113	confirmation sample from cell F2 @ 5'8"
C	F2(R)	9110758	11/19/99	1145	confirmation sample from cell F2 @ 6'6"
C	SW-F2	9110757	11/19/99	1135	sidwall sample @ 4'6" of cell F2
C	F3	9110443	11/14/99	1108	confirmation sample from cell F3 @ 5'8"
C	F3 (RA)	9110443	11/14/99	1108	reanalyzed for lower MDL on 12/20/99
C	F4	9110444	11/14/99	1111	confirmation sample from cell F4 @ 5'8"
C	F4 (RA)	9110444	11/14/99	1111	reanalyzed for lower MDL on 12/20/99
C	F5	9110555	11/15/99	1058	confirmation sample from cell F5 @ 6'6"
C	Duplicate 1	9110560	11/15/99	1058	duplicate sample of CF5
C	F6	9110556	11/15/99	1100	confirmation sample from cell F6 @ 6'6"
C	F7	9110557	11/15/99	1107	confirmation sample from cell F7 @ 6'6"
C	F8	9110558	11/15/99	1105	confirmation sample from cell F8 @ 6'6"
C	SW-F8	9110693	11/19/99	804	sidewall sample @ 4'6" of cell F8
C	F9	9110559	11/15/99	1542	confirmation sample from cell F9 @ 5'8"
C	F9(R)	9110692	11/19/99	750	confirmation sample from cell F9 @ 6'6"
C	SW-F9	9110694	11/19/99	803	sidewall sample @ 4'6" of cell F9
B	F10	9110539	11/15/99	821	confirmation sample from cell F10 @ 6'6"
B	SW-F10	9110695	11/19/99	808	sidewall sample @ 4'6" of cell F10
B	SW-F10(R)	9110759	11/19/99	800	sidewall sample @ 4'6" of cell F10
B	F11	9110540	11/15/99	825	confirmation sample from cell F11 @ 6'6"
B	F12	9110541	11/15/99	832	confirmation sample from cell F12 @ 6'6"
B	F13	9110542	11/15/99	835	confirmation sample from cell F13 @ 6'6"
B	F14	9110543	11/15/99	837	confirmation sample from cell F14 @ 6'6"
B	F15	9110544	11/15/99	842	confirmation sample from cell F15 @ 6'6"
B	F16	9110545	11/15/99	844	confirmation sample from cell F16 @ 6'6"
B	F17	9110546	11/15/99	850	confirmation sample from cell F17 @ 6'6"
B	F18	9110570	11/16/99	1005	confirmation sample from cell F18 @ 6'6"
B	F19	NA	NA	NA	missed
B	F20	9110576	11/16/99	1313	confirmation sample from cell F20 @ 6'6"
B	F21	9110571	11/16/99	1020	confirmation sample from cell F21 @ 6'6"
B	F22	9110572	11/16/99	1025	confirmation sample from cell F22 @ 6'6"
B	F23	9110573	11/16/99	1102	confirmation sample from cell F23 @ 6'6"
B	F24	9110574	11/16/99	1105	confirmation sample from cell F24 @ 6'6"
B	F25	NA	NA	NA	missed
B	F26	9110575	11/16/99	1107	confirmation sample from cell F26 @ 6'6"
B	F27	9110621	11/16/99	1148	confirmation sample from cell F27 @ 6'6"
B	F28	9110622	11/16/99	1155	confirmation sample from cell F28 @ 6'6"
B	F29	9110623	11/16/99	1430	confirmation sample from cell F29 @ 6'6"
B	F30	9110624	11/16/99	1432	confirmation sample from cell F30 @ 6'6"
A	F31	9110625	11/16/99	1454	confirmation sample from cell F31 @ 6'6"
A	F32	9110626	11/16/99	1510	confirmation sample from cell F32 @ 6'6"
A	F33	9110627	11/16/99	1504	confirmation sample from cell F33 @ 6'6"
A	F34	9110632	11/16/99	1605	confirmation sample from cell F34 @ 6'6"
A	F35	9110639	11/16/99	1022	confirmation sample from cell F35 @ 6'6"

FALSTAFF/GALVESTON (PCB Remediation)

Sample Area	Sample ID	Laboratory ID	Time	Date	Description
A	F36	9110638	11/16/99	1626	confirmation sample from cell F36 @ 6'6"
A	F37	9110637	11/16/99	1622	confirmation sample from cell F37 @ 6'6"
A	F38	9110607	11/17/99	1037	confirmation sample from cell F38 @ 6'6"
A	F39	9110608	11/17/99	1040	confirmation sample from cell F39 @ 6'6"
A	F40	9110609	11/17/99	1045	confirmation sample from cell F40 @ 6'6"
A	F41	9110610	11/17/99	820	confirmation sample from cell F41 @ 6'6"
A	F42	9110611	11/17/99	832	confirmation sample from cell F42 @ 6'6"
A	F43	9110612	11/17/99	828	confirmation sample from cell F43 @ 6'6"
A	F44	9110646	11/16/99	1730	confirmation sample from cell F44 @ 6'6"
A	F45	9110647	11/16/99	1730	confirmation sample from cell F45 @ 6'6"
A	F46	9110648	11/16/99	1725	confirmation sample from cell F46 @ 6'6"
A	F47	9110649	11/16/99	1724	confirmation sample from cell F47 @ 6'6"
A	F48	9110650	11/16/99	1722	confirmation sample from cell F48 @ 6'6"
A	F49	9110651	11/16/99	1718	confirmation sample from cell F49 @ 6'6"
	Frac Tank 1	9110629	11/16/99	1420	top, center, bottom liquid composite
	Frac Tank 2	9110628	11/16/99	1420	top, center, bottom liquid composite
	W-3	9110705	11/19/99	1250	liquid composite (not analyzed for PCB's)
	W-4	9110706	11/19/99	1250	liquid composite (not analyzed for PCB's)
	Drum 1	9110630	11/16/99	1415	sludge sample
	SP1	NA	11/14/99	NA	composite soil sample; field screen only
	SP2	NA	11/14/99	NA	composite soil sample; field screen only
	MCS-001	9110405	11/12/99	1330	composite soil sample from excav. material
	MCS-002	9110406	11/12/99	1334	composite soil sample from excav. material
	MCS-003	9110407	11/12/99	1334	composite soil sample from excav. material
	MCS-004	9110408	11/12/99	1336	composite soil sample from excav. material
	MCS-005	9110409	11/12/99	1338	composite soil sample from excav. material
	MCS-006	9110410	11/12/99	1340	composite soil sample from excav. material
	MCS-007	9110411	11/12/99	1342	composite soil sample from excav. material
	MCS-008	9110511	11/16/99	720	composite soil sample from excav. material
	MCS-009	9110512	11/16/99	722	composite soil sample from excav. material
	MCS-010	9110513	11/16/99	724	composite soil sample from excav. material
	MCS-011	9110514	11/16/99	726	composite soil sample from excav. material
	MCS-012	9110515	11/16/99	728	composite soil sample from excav. material
	MCS-013	9110687	11/19/99	700	composite soil sample from excav. material
	MCS-014	9110688	11/19/99	702	composite soil sample from excav. material
	MCS-015	9110689	11/19/99	704	composite soil sample from excav. material
	MCS-016	9110690	11/19/99	706	composite soil sample from excav. material
	MCS-017	9110691	11/19/99	708	composite soil sample from excav. material
	BF-001	9110240	11/10/99		composite soil sample from backfill material
	SA-002	9120211	12/7/99	1145	composite soil sample from staging area

(R) - resampled after overexcavation
(RA) - reanalyzed for lower MDL [date specified]

FALSTAFF/GALVESTON (PCB Remediation)

Sample Area	Sample ID	Laboratory ID	Field Screening Levels				Laboratory Results
			Standard	1 ppm	12.5 ppm	50 ppm	
C	B1	NA	NA		NA	NA	NA
C	B2	NA	-0.04		**-0.83**	**-0.08**	NA
C	B2(R)	9110445	-0.16	0.37	0.62	0.52	<25
C	B2 (RA)	9110445					<0.50
C	B3	9110446	-0.04		0.47	0.46	<25
C	B3 (RA)	9110446					**0.85**
C	B4	9110447	-0.11		0.65	0.73	<25
C	B4 (RA)	9110447					<0.50
C	B5	9110448	-0.10		0.68	1.06	<25
C	B5 (RA)	9110448					<0.50
C	Duplicate 2	9110561	-0.10		0.68	1.06	<0.50
C	B6	9110449	-0.13		0.65	0.65	<25
C	B6 (RA)	9110449					<0.50
C	B7	9110450	-0.08		0.52	0.57	<25
C	B7 (RA)	9110450					<0.50
C	B8	9110451	-0.10		0.78	0.82	<25
C	B8 (RA)	9110451					<0.50
C	C1 (Control)	NA	-0.05		**-0.96**	**-0.95**	NA
C	C1 (Control)	NA	-0.12	-0.53	**-0.48**	**-0.51**	NA
C	C2	9110452	-0.05	-0.55	0.19	0.32	<25
C	C2 (RA)	9110452					**0.95**
C	C3	9110453	-0.11		0.64	0.53	<25
C	C3 (RA)	9110453					<0.50
C	C4	9110454	-0.13		0.66	0.59	<25
C	C4 (RA)	9110454					<0.50
C	C5	9110455	-0.11			0.62	<25
C	C5 (RA)	9110455					<0.50
C	C6	9110456	-0.07		0.68	0.73	<25
C	C6 (RA)	9110456					<0.50
C	C7	9110457	-0.12	0.16	0.42	0.61	<25
C	C7 (RA)	9110457					<0.50
C	C8	9110458	-0.08		0.59	0.61	<25
C	C8 (RA)	9110458					<0.50
C	D1	NA	NA	NA	NA	NA	NA
C	D2	9110434	-0.10		**-0.41**	**-0.39**	**252**
C	D2(R)	9110756					<0.50
C	D3	9110435	-0.16		0.49	0.75	<25
C	D3 (RA)	9110435					<0.50
C	D4	9110436	-0.11		0.71	0.69	<25
C	D4 (RA)	9110436					<0.50
C	D5	9110437	-0.07		0.73	0.69	<25
C	D5 (RA)	9110437					<0.50
C	D6	9110438	-0.11		0.64	0.66	<25
C	D6 (RA)	9110438					<0.50
C	D7	9110547	-0.07		1.19	1.34	<0.50
C	D8	9110548	-0.21		0.47	0.18	<0.50
C	D9	9110549	-0.23		0.39	0.48	<0.50
C	E1	NA	NA		NA	NA	NA
C	E2	9110439	-0.08		**-0.50**	**-0.06**	<25
C	E2 (RA)	9110439					**11.00**

FALSTAFF/GALVESTON (PCB Remediation)

Sample Area	Sample ID	Laboratory ID	Field Screening Levels Standard	1 ppm	12.5 ppm	50 ppm	Laboratory Results
C	E3	9110440	-0.14		0.41	0.30	<25
C	E3 (RA)	9110440					**0.59**
C	E4	9110441	-0.13		0.90	0.98	<25
C	E4 (RA)						<0.50
C	E5	9110550	-0.07		0.98	0.99	<0.50
C	E6	9110551	-0.07		0.92	1.21	<0.50
C	E7	9110552	-0.23		0.14	0.26	<0.50
C	E8	9110553	-0.09		1.07	0.76	<0.50
C	E9	9110554	-0.21		0.25	0.28	**0.50**
B	E10	9110531	-0.20		0.24	0.31	<0.50
B	E11	9110532	-0.21		0.22	0.16	<0.50
B	E12	9110533	-0.19		0.16	0.18	<0.50
B	E13	9110534	-0.19		0.11	0.43	<0.50
B	E14	9110535	NA		NA	NA	<0.50
B	E15	9110538	-0.21		0.28	0.34	<0.50
B	E16	9110537	-0.20		0.21	0.21	<0.50
B	E17	9110538	-0.20		0.22	0.30	<0.50
B	E18	9110562	NA		NA	NA	<0.50
B	E19	9110563	NA		NA	NA	<0.50
B	E20	9110564	NA		NA	NA	<0.50
B	E21	9110565	NA		NA	NA	<0.50
B	E22	9110566	NA		NA	NA	<0.50
B	E23	9110567	NA		NA	NA	<0.50
B	E24	9110568	NA		NA	NA	<0.50
B	E25	9110569	-0.22		0.50	0.46	<0.50
B	E26	NA	NA		NA	NA	NA
B	E27	9110613	-0.19		0.14	0.10	<0.50
B	E28	9110614	NA		NA	NA	<0.50
B	E29	9110615	NA		NA	NA	<0.50
B	E30	9110616	NA		NA	NA	<0.50
A	E31	9110617	NA		NA	NA	<0.50
A	E32	9110618	-0.19		0.16	0.08	<0.50
A	E33	9110619	NA		NA	NA	<0.50
A	E34	9110633	NA		NA	NA	<0.50
A	E35	9110634	NA		NA	NA	<0.50
A	E36	9110636	NA		NA	NA	<0.50
A	E37	9110635	NA		NA	NA	<0.50
A	E38	9110601	NA		NA	NA	<0.50
A	E39	9110602	NA		NA	NA	<0.50
A	E40	9110603	NA		NA	NA	<0.50
A	E41	9110604	-0.22		0.31	0.34	<0.50
A	E42	9110605	NA		NA	NA	<0.50
A	E43	9110606	-0.22		0.19	0.34	<0.50
A	E44	9110640	-0.24		0.18	0.06	**0.5**
A	E45	9110641	NA		NA	NA	<0.50
A	E46	9110642	-0.24		0.42	0.28	<0.50
A	E47	9110643	NA		NA	NA	<0.50
A	E48	9110644	NA		NA	NA	<0.50
A	E49	9110645	-0.24		0.07	0.18	<0.50
C	F1	NA	NA		NA	NA	NA

FALSTAFF/GALVESTON (PCB Remediation)

Sample Area	Sample ID	Laboratory ID	Field Screening Levels				Laboratory Results
			Standard	1 ppm	12.5 ppm	50 ppm	
C	F2	9110442	-0.14		0.13	0.10	**1250**
C	F2(R)	9110758	-0.09		0.20	0.20	<0.50
C	SW-F2	9110757	-0.09		0.09	0.21	<0.50
C	F3	9110443	-0.14		0.54	0.72	<25
C	F3 (RA)	9110443					0.60
C	F4	9110444	-0.13		0.72	0.39	<25
C	F4 (RA)	9110444					<0.50
C	F5	9110555	-0.07		1.23	1.19	<0.50
C	Duplicate 1	9110560	-0.07		1.23	1.19	<0.50
C	F6	9110556	-0.09		1.01	1.07	<0.50
C	F7	9110557	-0.23		0.41	0.44	<0.50
C	F8	9110558	-0.09		0.97	1.01	<0.50
C	SW-F8	9110693	-0.14		0.19	0.32	**0.6**
C	F9	9110559	-0.21		**-0.13**	**-0.63**	**0.5**
C	F9(R)	9110692	-0.14		0.27	0.03	**2.7**
C	SW-F9	9110694	-0.14		0.09	0.03	<0.50
B	F10	9110539	NA		NA	NA	<0.50
B	SW-F10	9110695	NA		NA	NA	**4.2**
B	SW-F10(R)	9110759	-0.09		0.22	0.19	<0.50
B	F11	9110540	NA		NA	NA	<0.50
B	F12	9110541	NA		NA	NA	<0.50
B	F13	9110542	NA		NA	NA	<0.50
B	F14	9110543	NA		NA	NA	<0.50
B	F15	9110544	NA		NA	NA	<0.50
B	F16	9110545	NA		NA	NA	<0.50
B	F17	9110546	-0.19		0.13	0.44	<0.50
B	F18	9110570	NA		NA	NA	<0.50
B	F19	NA	NA		NA	NA	NA
B	F20	9110576	-0.21		-0.08	0.29	<0.50
B	F21	9110571	NA		NA	NA	<0.50
B	F22	9110572	NA		NA	NA	<0.50
B	F23	9110573	NA		NA	NA	<0.50
B	F24	9110574	NA		NA	NA	<0.50
B	F25	NA	NA		NA	NA	NA
B	F26	9110575	-0.22		0.33	0.32	<0.50
B	F27	9110621	NA		NA	NA	<0.50
B	F28	9110622	NA		NA	NA	<0.50
B	F29	9110623	NA		NA	NA	<0.50
B	F30	9110624	NA		NA	NA	<0.50
A	F31	9110625	NA		NA	NA	<0.50
A	F32	9110626	-0.19		0.12	0.2	<0.50
A	F33	9110627	NA		NA	NA	<0.50
A	F34	9110632	NA		NA	NA	<0.50
A	F35	9110639	NA		NA	NA	<0.50
A	F36	9110638	NA		NA	NA	<0.50
A	F37	9110637	NA		NA	NA	<0.50
A	F38	9110607	NA		NA	NA	<0.50
A	F39	9110608	NA		NA	NA	**1.1**
A	F40	9110609	NA		NA	NA	<0.50
A	F41	9110610	NA		NA	NA	<0.50

FALSTAFF/GALVESTON (PCB Remediation)

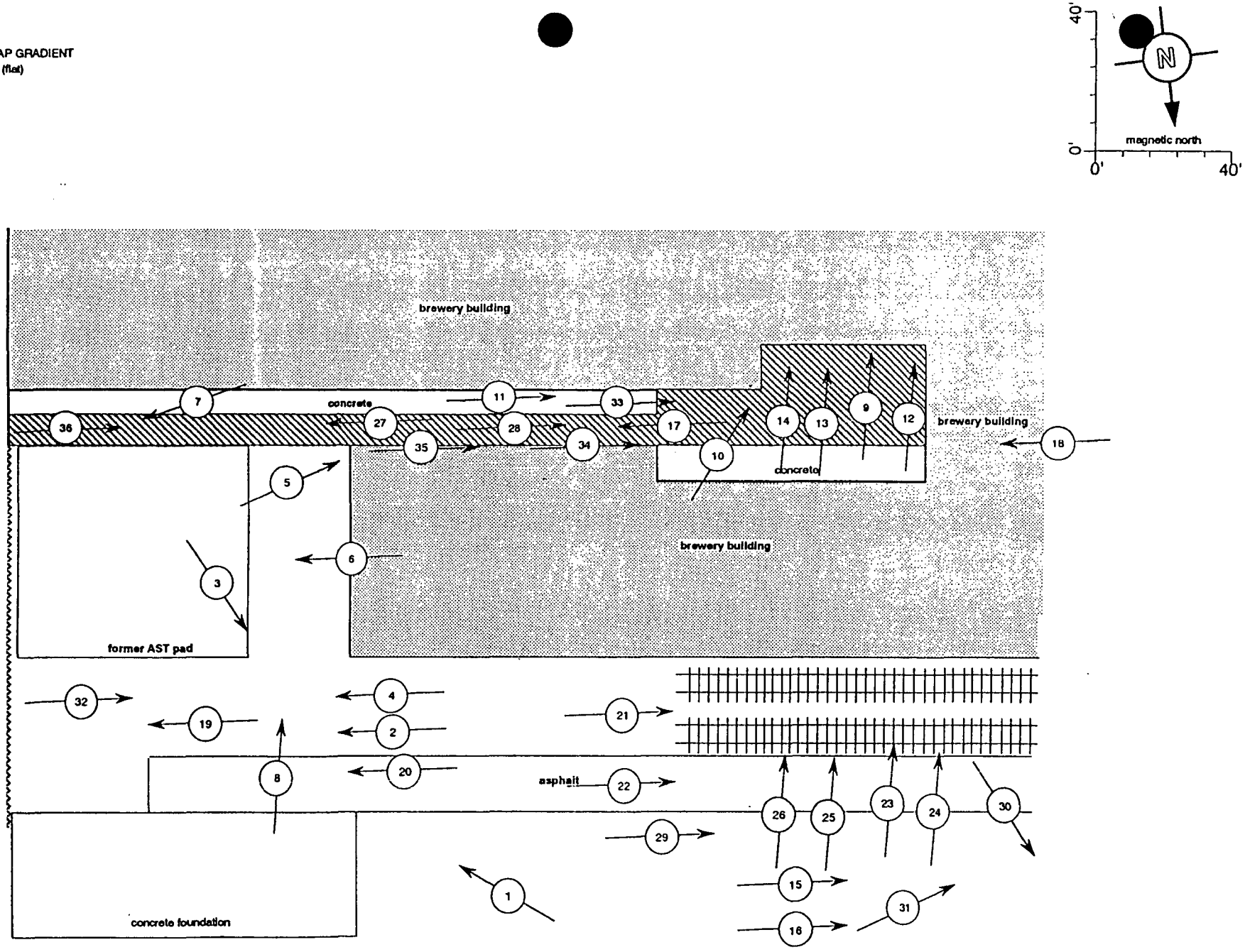
Sample Area	Sample ID	Laboratory ID	Field Screening Levels				Laboratory Results
			Standard	1 ppm	12.5 ppm	50 ppm	
A	F42	9110611	-0.22		0.4	0.38	<0.50
A	F43	9110612	NA		NA	NA	<0.50
A	F44	9110646	NA		NA	NA	**3.4**
A	F45	9110647	-0.26		0.2	0.14	<0.50
A	F46	9110648	NA		NA	NA	<0.50
A	F47	9110649	NA		NA	NA	<0.50
A	F48	9110650	-0.26		0.12	0.18	<0.50
A	F49	9110651	-0.26		0.1	0.16	<0.50
	Frac Tank 1	9110629	NA		NA	NA	**58 ppb**
	Frac Tank 2	9110628	NA		NA	NA	**63 ppb**
	Drum 1	9110630	NA		NA	NA	<0.50
	SP1	NA	-0.11		**-0.52**	**-0.51**	NA
	SP2	NA	-0.11		**-0.49**	**-0.50**	NA
	MCS-001	9110405	NA		NA	NA	**1470**
	MCS-002	9110406	NA		NA	NA	**1790**
	MCS-003	9110407	NA		NA	NA	**825**
	MCS-004	9110408	NA		NA	NA	**970**
	MCS-005	9110409	NA		NA	NA	**1160**
	MCS-006	9110410	NA		NA	NA	**1550**
	MCS-007	9110411	NA		NA	NA	**1400**
	MCS-008	9110511	NA		NA	NA	**1250**
	MCS-009	9110512	NA		NA	NA	**1700**
	MCS-010	9110513	NA		NA	NA	**310**
	MCS-011	9110514	NA		NA	NA	**200**
	MCS-012	9110515	NA		NA	NA	**240**
	MCS-013	9110687	NA		NA	NA	**11.5**
	MCS-014	9110688	NA		NA	NA	**<0.50**
	MCS-015	9110689	NA		NA	NA	**4**
	MCS-016	9110690	NA		NA	NA	**5.7**
	MCS-017	9110691	NA		NA	NA	**6.9**
	BF-001	9110240	NA		NA	NA	<0.05
	SA-002	9120211					<0.50

(R) - resampled after overexcavation
(RA) - reanalyzed for lower MDL [date specified]

APPENDIX A

PHOTOGRAPHIC LOG AND SITE PHOTOGRAPHS

USGS MAP GRADIENT
(flat)



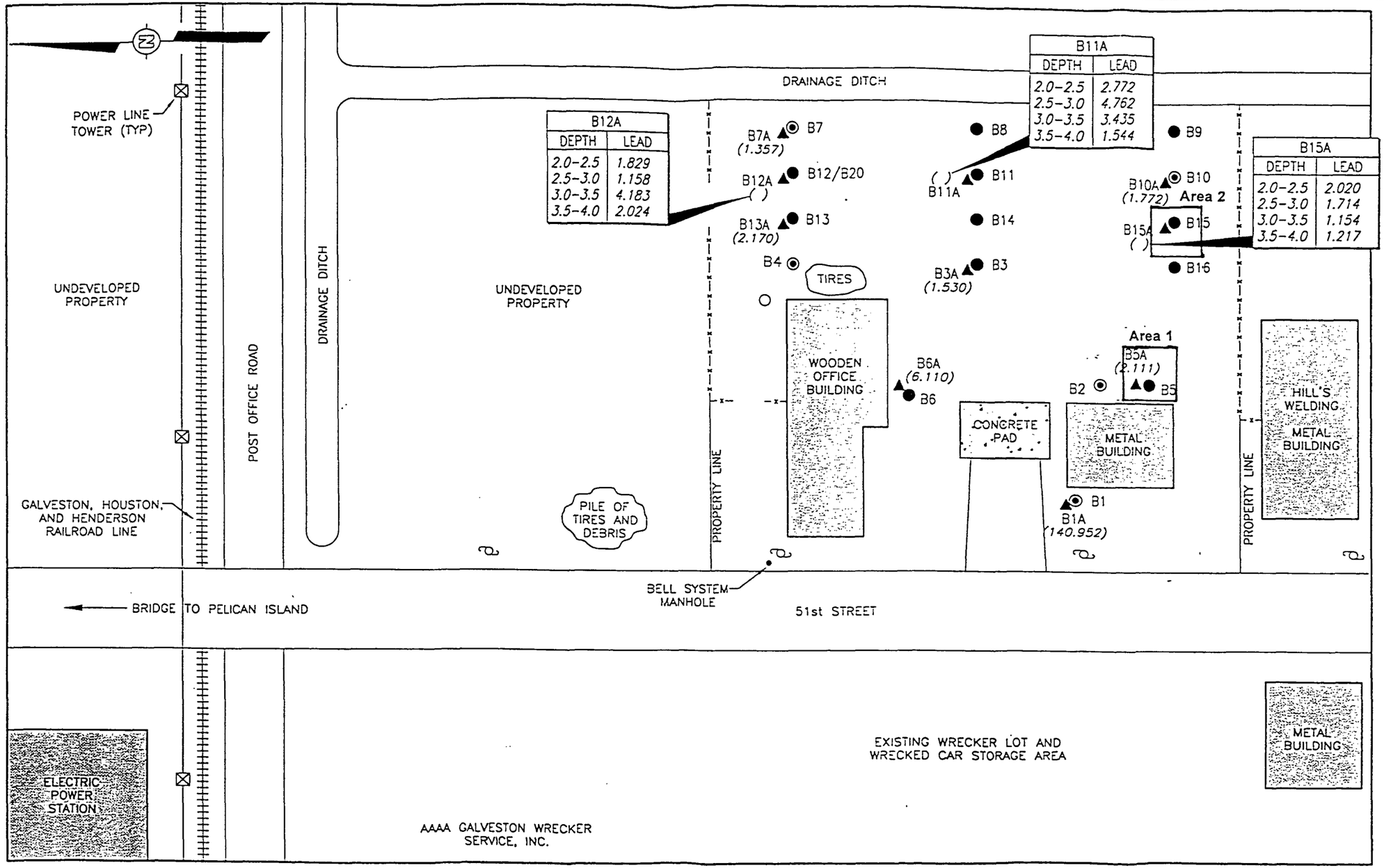
FALSTAFF BREWING COMPANY
33rd & 34th STREETS
GALVESTON, TEXAS

PHOTOGRAPHIC LOG

extra ENVIRONMENTAL, inc.
Environmental Consulting Services

APPENDIX F

Former Black Wrecker Site VCP



LEGEND:

- POWER POLE
- AUGUST 1999 SOIL BORING LOCATION
- AUGUST 1999 GROUNDWATER SAMPLING LOCATION
- FEBRUARY 2000 SOIL BORING LOCATION
- (2.499) CONCENTRATION (mg/Kg)
- FENCE LINE

NOTE:

SOIL SAMPLE B20 IS A DUPLICATE SAMPLE OF SAMPLE B12

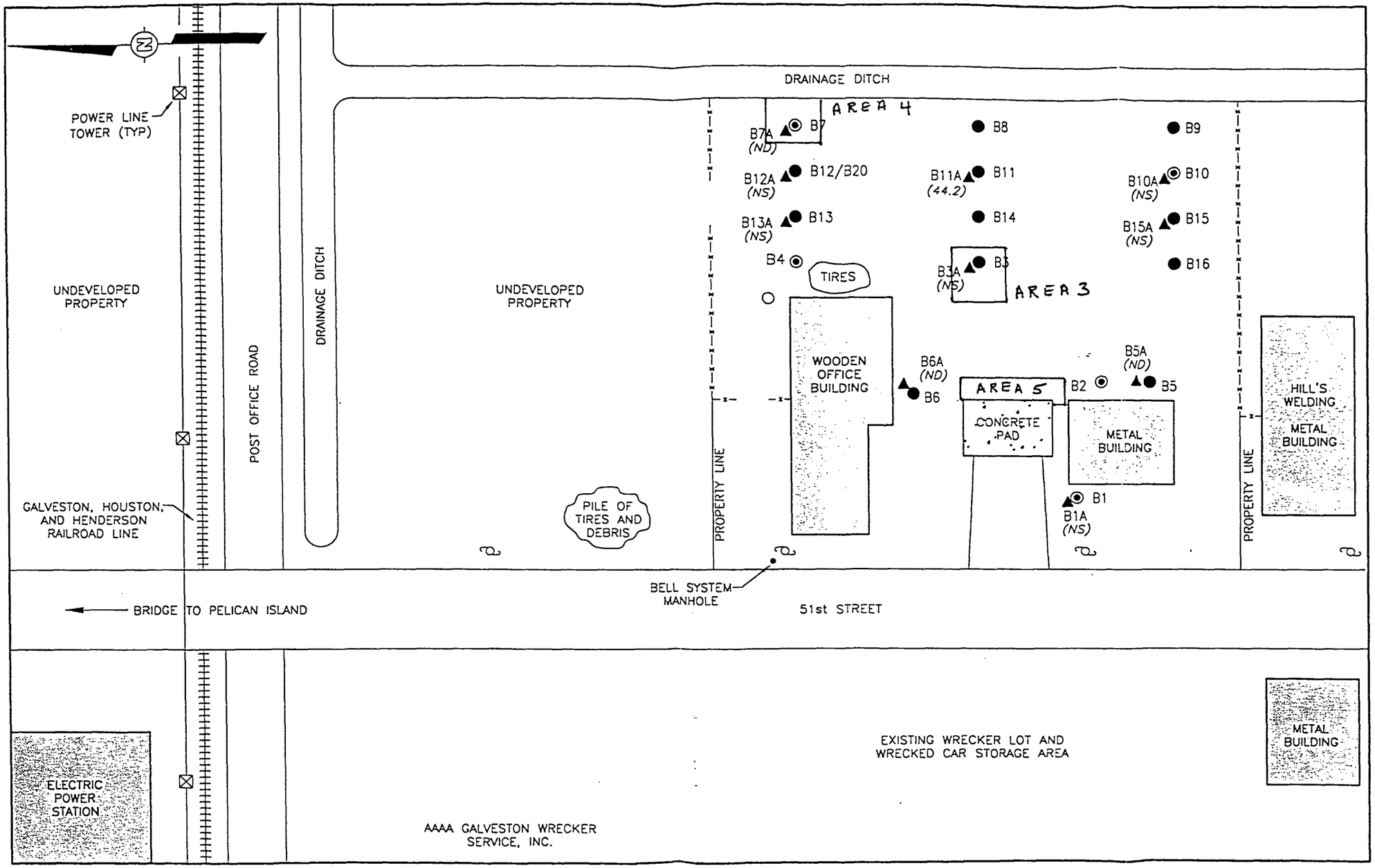
"DRAWING NOT TO SCALE"

IT CORPORATION

SUBJECT SITE LOCATION
600 51st STREET
GALVESTON, TEXAS

TOTAL LEAD CONCENTRATION IN SOIL (>2 FEET)
TNRCC BROWNFIELD SITE ASSESSMENT

DRAWING NUMBER 78364-012
APPROVED BY
CHECKED BY
DRAWN BY D.DAY 3/16
OFFICE HOUSTON, TX
X-REF ---
IMAGE ---
PLOT DATE: 4/ /25/99
FORMAT REVISION



LEGEND:

- POWER POLE
- AUGUST 1999 SOIL BORING LOCATION
- AUGUST 1999 GROUNDWATER SAMPLING LOCATION
- FEBRUARY 2000 SOIL BORING LOCATION
- (2.499) CONCENTRATION (mg/Kg)
- –x–x–x–x– FENCE LINE

NOTES:

SOIL SAMPLE B20 IS A DUPLICATE SAMPLE OF SAMPLE B12

NS – NOT SAMPLED

ND – NOT DETECTED

"DRAWING NOT TO SCALE"

IT CORPORATION

SUBJECT SITE LOCATION
600 51st STREET
GALVESTON, TEXAS

TPH 1006 CONCENTRATION IN SOIL (0–1 FOOT)
TNRCC BROWNFIELD SITE ASSESSMENT

DRAWING NUMBER 783644-B13
APPROVED BY
CHECKED BY
DRAWN BY 0.DAY 3/16/00
OFFICE HOUSTON, TX
X-REF ---
IMAGE ---
PLOT DATE: 4/[illegible]/99
FORMAT REVISION 3/25/99

IT Corporation
13111 Northwest Freeway, Suite 310
Houston, TX 77040-6392
Tel. 713.996.4400
Fax. 713.939.9546

A Member of The IT Group

April 3, 2000

Mr. Byron Ellington, CPG
Texas Natural Resource Conservation Commission
Voluntary Cleanup Section (MC-221)
12100 Park 35 Circle, Building D
Austin, Texas 78753

RECEIVED
APR 06 2000

Subject: W. R. Black Estate Site, VCP No. G17
Galveston, Galveston County, Texas
TNRCC Contract No. 5829-14832-0040
Work Order No. 90-0040
IT Corporation Project 804988

Dear Mr. Ellington:

The attached report investigation results were completed in February 2000. According to the proposed Scope of Work detailed in Work Order No. 90-0040, the attachments include the following:

- Analytical Tables
- Distribution Maps for the Chemicals of Concern
- Laboratory Reports

An additional copy of this data has been forwarded to Mr. Win Turner of KMA Environmental Services, Inc.

IT appreciates the opportunity to be of service to the TNRCC. If you have any questions about the content of the attached documents, please contact me at (713) 996-4400.

Sincerely,

for

J. Pete Spicer, PG
Project Manager

Attachments
c: Mr. Win Turner - KMA Environmental Services, Inc./ 1221 6th Street North/Texas City, TX 77590-6244

ATTACHMENTS

TABLE 1
SUMMARY OF SOIL LEAD ANALYTICAL DATA

WR BLACK PROPERTY
GALVESTON, TEXAS
FEBRUARY 2000

Sample Location	Sample Depth (ft)	Lead Concentration (mg/Kg)
B1A	0-1	5.499
B1A	3-4	140.952
B3A	0-1	53.714
B3A	3-4	1.530
B5A	0-1	193.102
B5A	3-4	2.111
B6A	0-1	40.683
B6A	2-3	6.110
B7A	0-1	90.732
B7A	3-4	1.357
B10A	0-1	12.224
B10A	3-4	1.772
B11A	0-0.5	6.667
B11A	0.5-1.0	32.745
B11A	1.0-1.5	49.326
B11A	1.5-2.0	6.587
B11A	2.0-2.5	2.772
B11A	2.5-3.0	4.762
B11A	3.0-3.5	3.435
B11A	3.5-4.0	1.544
B12A	0-0.5	141.517
B12A	0.5-1.0	65.422
B12A	1.0-1.5	58.882
B12A	1.5-2.0	6.719
B12A	2.0-2.5	1.829
B12A	2.5-3.0	1.158
B12A	3.0-3.5	4.183
B12A	3.5-4.0	2.024
B13A	0-1	68.119
B13A	3-4	2.170
B15A	0-0.5	5.416
B15A	0.5-1.0	1.927
B15A	1.0-1.5	51.081
B15A	1.5-2.0	2.569
B15A	2.0-2.5	2.020
B15A	2.5-3.0	1.714
B15A	3.0-3.5	1.154
B15A	3.5-4.0	1.217

Notes:
[ ] - samples from > 2 ft. below ground surface.

TABLE 2

SUMMARY OF SOIL TX TPH 1006 ANALYTICAL DATA
WR BLACK PROPERTY
GALVESTON, TEXAS
FEBRUARY 2000

TX TPH 1006 (mg/Kg)	B5A 0-1	B6A 0-1	B7A 0-1	B11A 0-1
C_6 TO C_8	<25.0	<25.0	<25.0	<25.0
C_8 to C_{10}	<25.0	<25.0	<25.0	<25.0
C_{10} to C_{12}	<25.0	<25.0	<25.0	<25.0
C_{12} to C_{16}	<25.0	<25.0	<25.0	<25.0
C_{16} to C_{21}	<25.0	<25.0	<25.0	14.5
C_{21} to C_{35}	<25.0	<25.0	<25.0	26.6
Total C_6 to C_{35}	<25.0	<25.0	<25.0	41.1

Notes:
* - contamination in range of C16 to C35.

TABLE 3
SUMMARY OF GROUNDWATER ANALYSIS
WR BLACK PROPERTY
GALVESTON, TEXAS
August 26, 1999

Sample Location	Sample Identification	VOCs[1]	SVOCs[2]	TRPH	Metals[3]			
					arsenic	barium	chromium	lead
		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
B1	W-1	ND	ND	0.13	ND	0.844	0.005	ND
B2	W-2	ND	ND	0.68	ND	0.0893	ND	ND
B4	W-4	ND	ND	0.92	**0.007**	0.957	0.01	0.01
B7	W-7	ND	ND	0.33	ND	1.03	ND	ND
B10	W-10	ND	ND	0.11	ND	1.1	0.006	0.007
B1	W-30 (dup)	ND	ND	0.27	ND	0.446	ND	ND
Field Blank	FB-1	ND	NS	NS	ND	ND	ND	ND
TRRS-2 GW-Res MSC (ppm)		NA	NA	NA	0.005	2	0.1	0.015

Notes:

VOCs - Volatile organic compounds by Method 8260.

SVOCs - Semivolatile organic compounds by Method 8270.

TRPH - Total recoverable petroleum hydrocarbon by method 418.1.

Metals by method 6010 and 5457.

[1] - All VOCs were below the laboratory limit of quantitation.

[2] - All SVOCs were below the laboratory limit of quantitation.

[3] - All other metals were below the laboratory limit of quantitation.

NS - Analysis not performed.

NA - Not applicable

TABLE 4

SUMMARY OF SOIL SPLP ANALYTICAL DATA
WR BLACK PROPERTY
GALVESTON, TEXAS
FEBRUARY 2000

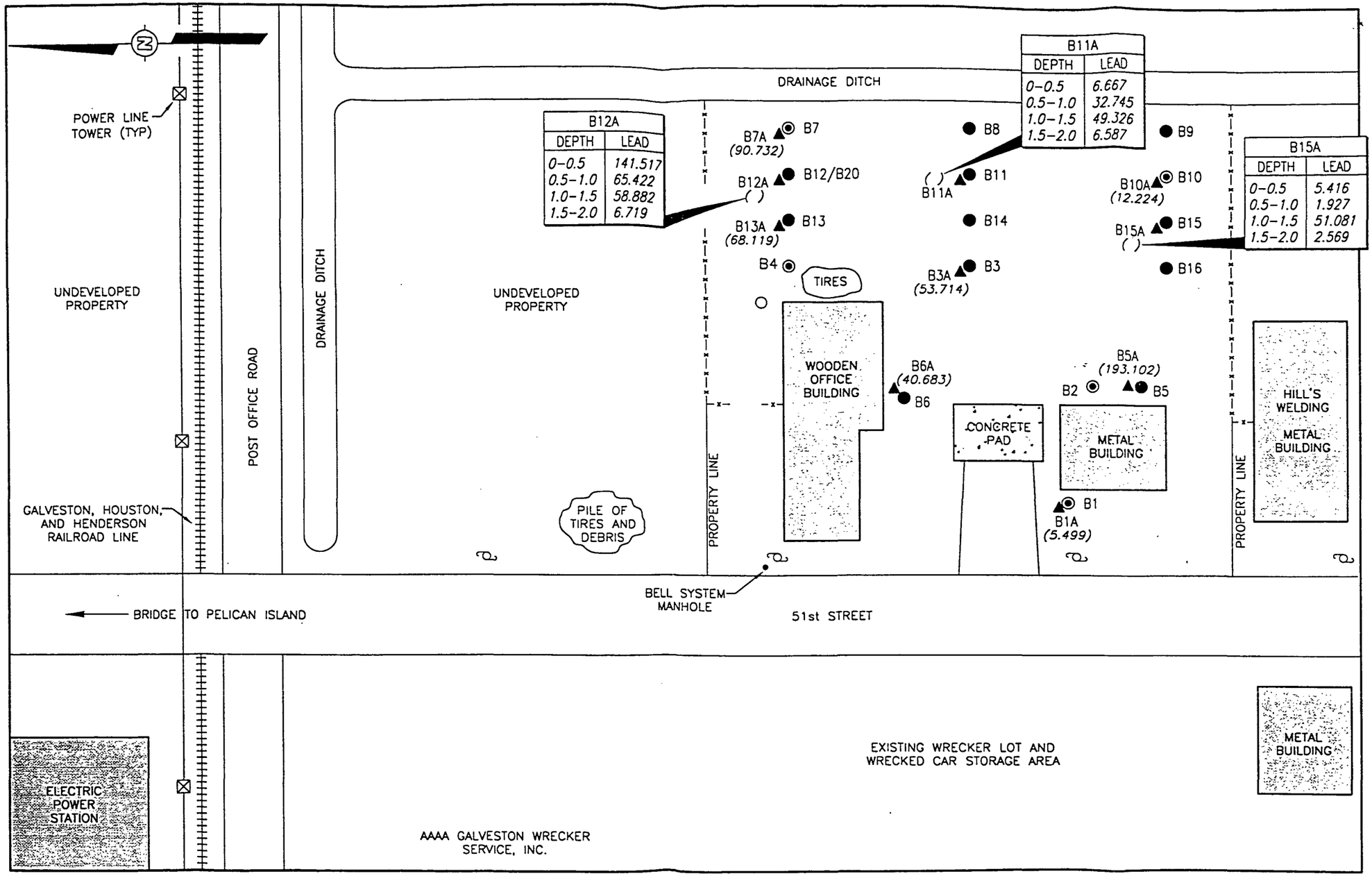
SPLP mg/l	B5A 0-1	B11A 2.5-3	B15A 3-3.5
Arsenic	<0.005	0.0060	<0.005
Barium	0.038	0.1210	0.019
Cadmium	<0.001	<0.001	<0.001
Chromium	<0.005	<0.005	<0.005
Lead	0.023	<0.003	<0.003
Mercury	<0.0002	<0.0002	<0.0002
Selenium	<0.005	<0.005	<0.005
Silver	<0.005	<0.005	<0.005

TABLE 5

SUMMARY OF SOIL TCLP ANALYTICAL DATA
WR BLACK PROPERTY
GALVESTON, TEXAS

FEBRUARY 2000

TCLP mg/l	Drum-1A
Arsenic	<0.100
Barium	<1
Cadmium	<0.100
Chromium	<0.500
Lead	<0.500
Mercury	<0.010
Selenium	<0.100
Silver	<0.100
Benzene	<0.050
Carbon Tetrachloride	<0.050
Chlorobenzene	<10.0
Chloroform	<0.060
1,2-Dichloroethane	<0.050
1,1-Dichloroethene	<.0070
Methylethylketone	<20.0
Tetrachloroethene	<0.070
Trichloroethene	<0.050
Vinyl Chloride	<0.020
Cresols	<0.013
1,4-Dichlorobenzene	<0.013
2,4-Dinitrotoluene	<0.013
Hexachlorobenzene	<0.013
Hexchlor-1,3-butadien	<0.013
Hexachloroethane	<0.013
Nitrobenzene	<0.013
Pentachlorophenol	<0.013
Pyridine	<0.013
2,4,5-Trichlorophenol	<0.013
2,4,6-Trichlorophenol	<0.013
Chlordane	<0.003
2,4-D	<1.00
Endrin	<0.002
Heptachlor	<0.0008
lindane	<0.040
Methoxychlor	<1.00
Toxaphene	<0.050
Silvex	<0.100
Heptachlor epoxide	<0.0008



B12A	
DEPTH	LEAD
0–0.5	141.517
0.5–1.0	65.422
1.0–1.5	58.882
1.5–2.0	6.719

B11A	
DEPTH	LEAD
0–0.5	6.667
0.5–1.0	32.745
1.0–1.5	49.326
1.5–2.0	6.587

B15A	
DEPTH	LEAD
0–0.5	5.416
0.5–1.0	1.927
1.0–1.5	51.081
1.5–2.0	2.569

LEGEND:

- POWER POLE
- AUGUST 1999 SOIL BORING LOCATION
- AUGUST 1999 GROUNDWATER SAMPLING LOCATION
- FEBRUARY 2000 SOIL BORING LOCATION
- (2.499) CONCENTRATION (mg/Kg)
- FENCE LINE

NOTE:

SOIL SAMPLE B20 IS A DUPLICATE SAMPLE OF SAMPLE B12

"DRAWING NOT TO SCALE"

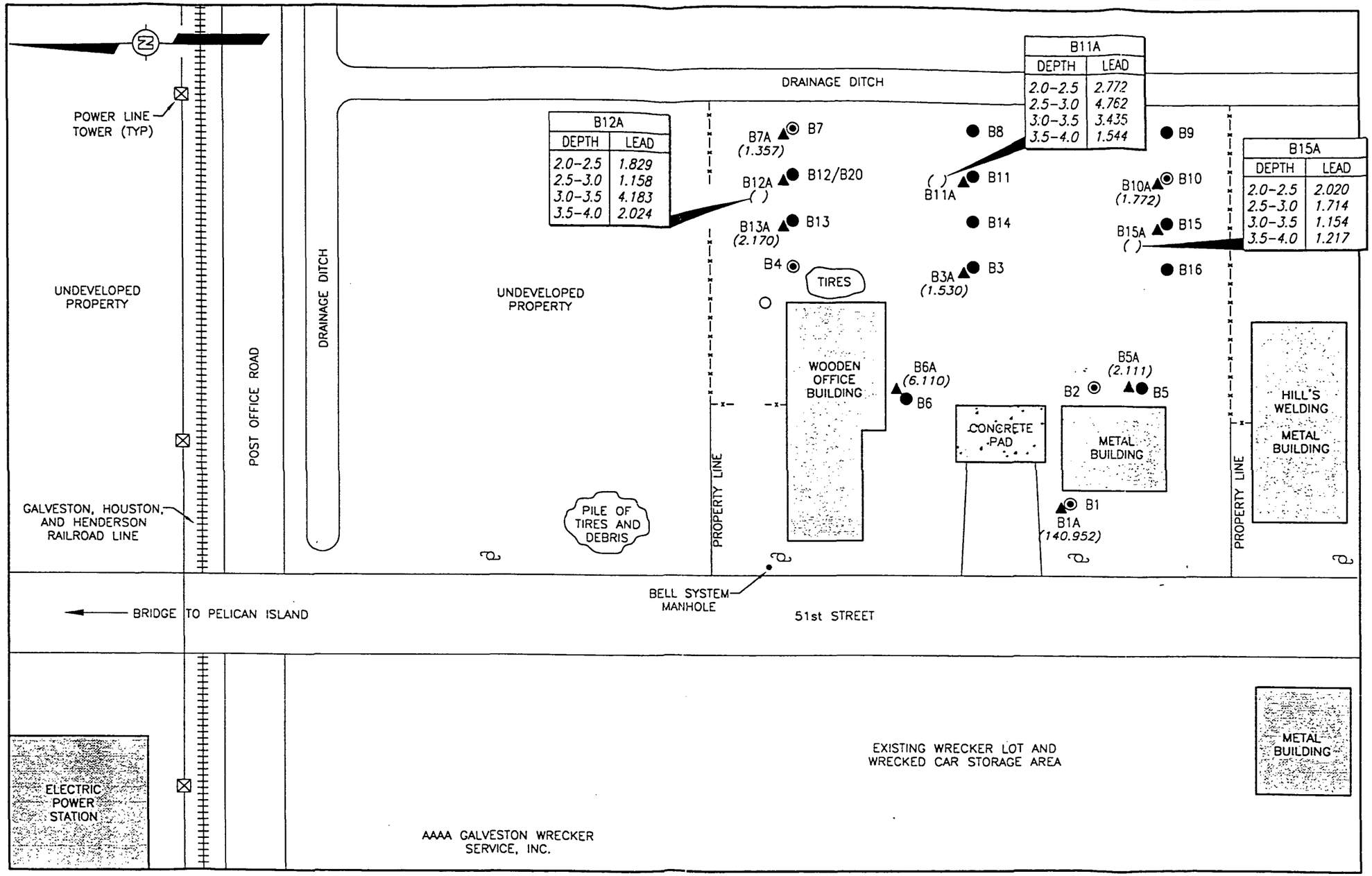
IT CORPORATION

SUBJECT SITE LOCATION
600 51st STREET
GALVESTON, TEXAS

TOTAL LEAD CONCENTRATION IN SOIL (0–2 FEET)
TNRCC BROWNFIELD SITE ASSESSMENT

IMAGE	X-REF	OFFICE	DRAWN BY	CHECKED BY	APPROVED BY	DRAWING NUMBER
---	---	HOUSTON, TX	D.DAY 3/16/00			783644 B11

PLOT DATE: 4/15/
FORMAT REVISION 3/25/99



LEGEND:

- POWER POLE
- AUGUST 1999 SOIL BORING LOCATION
- AUGUST 1999 GROUNDWATER SAMPLING LOCATION
- FEBRUARY 2000 SOIL BORING LOCATION
- (2.499) CONCENTRATION (mg/Kg)
- FENCE LINE

NOTE:

SOIL SAMPLE B20 IS A DUPLICATE SAMPLE OF SAMPLE B12

"DRAWING NOT TO SCALE"

IT CORPORATION

SUBJECT SITE LOCATION
600 51st STREET
GALVESTON, TEXAS

TOTAL LEAD CONCENTRATION IN SOIL (>2 FEET)
TNRCC BROWNFIELD SITE ASSESSMENT

IMAGE	X-REF	OFFICE	DRAWN BY	CHECKED BY	APPROVED BY	DRAWING NUMBER
---	---	HOUSTON, TX	D.DAY 3/16/00			78364-B12

PLOT DATE: 4/[illegible]
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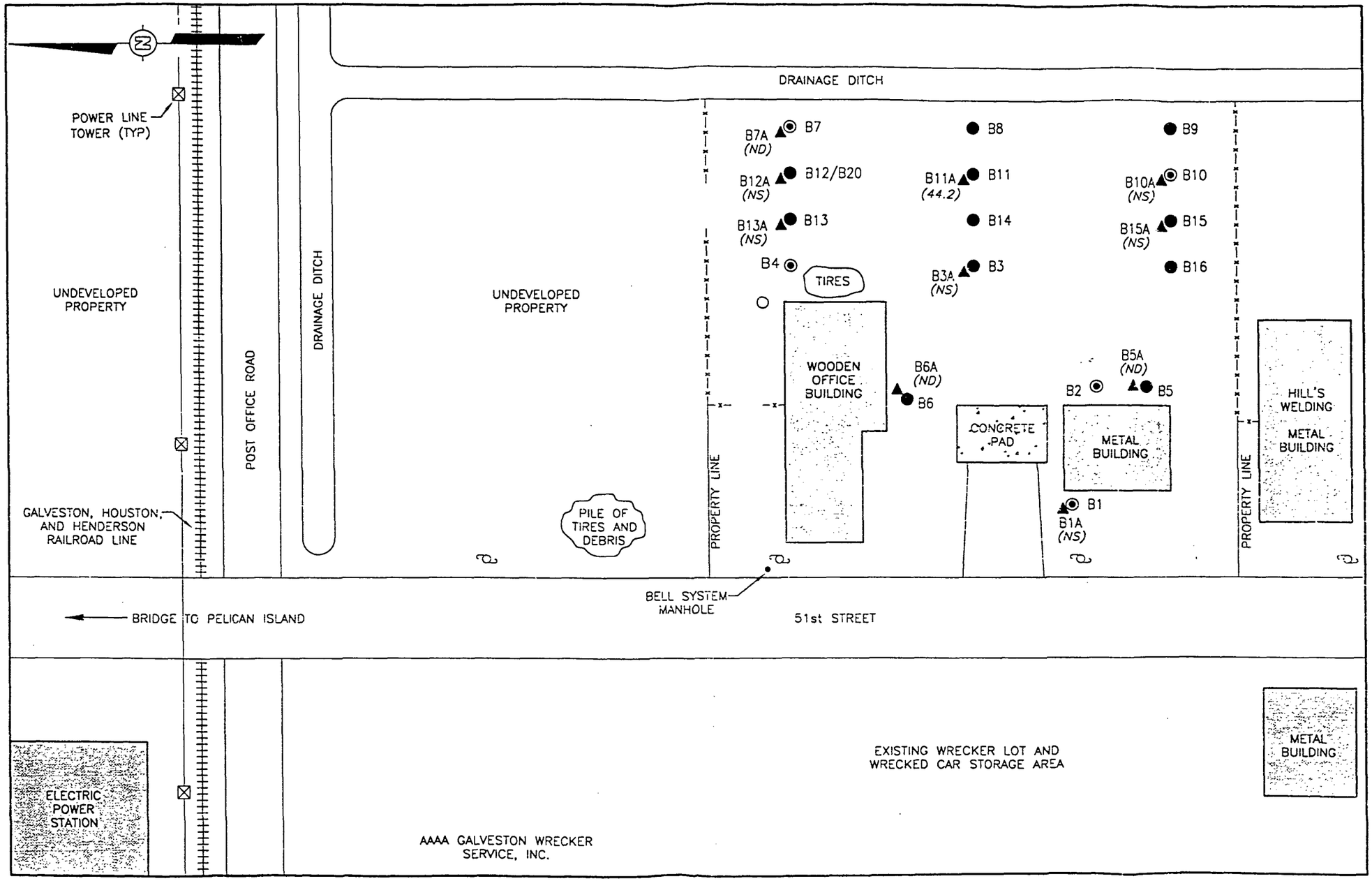

LEGEND:

- POWER POLE
- AUGUST 1999 SOIL BORING LOCATION
- AUGUST 1999 GROUNDWATER SAMPLING LOCATION — (2.499) CONCENTRATION (mg/Kg)
- FEBRUARY 2000 SOIL BORING LOCATION
- —x—x—x— FENCE LINE

NOTES:

SOIL SAMPLE B20 IS A DUPLICATE SAMPLE OF SAMPLE B12

NS – NOT SAMPLED

ND – NOT DETECTED

"DRAWING NOT TO SCALE"

IT CORPORATION

SUBJECT SITE LOCATION
600 51st STREET
GALVESTON, TEXAS

TPH 1006 CONCENTRATION IN SOIL (0–1 FOOT)
TNRCC BROWNFIELD SITE ASSESSMENT

IMAGE	X-REF	OFFICE	DRAWN BY	CHECKED BY	APPROVED BY	DRAWING NUMBER
---	---	HOUSTON, TX	D.DAY			7836-B13

PLOT DATE: 4/1/ /5/99
FORMAT REVISI

APPENDIX G

SPT Co. VCP

Phase IV Subsurface Investigation Report
Galveston Wharves Site

Union Pacific Railroad
Galveston, Texas

February 27, 1998
W.O. #422-01

ERM-SOUTHWEST, INC.
16300 Katy Freeway, Suite 300
Houston, Texas 77094-1611
(281) 579-8999

Phase IV Subsurface Investigation Report
Galveston Wharves Site
Union Pacific Railroad
Galveston, Texas

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February 27, 1998

W.O. #422-01

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EXECUTIVE SUMMARY

In June 1997, Phase IV subsurface investigation activities were completed at the Union Pacific Railroad (UPRR) Galveston Wharves site in Galveston, Texas. The purpose of these activities was to characterize further the extent of constituents in soil and ground water. As part of the investigation, five soil borings were installed in an on-site soil stockpile, seven soil borings were installed and subsequently completed as ground water monitor wells. Soil and ground water samples were collected for laboratory analyses, depth to ground water was measured and field hydraulic conductivity testing was conducted.

One of the stated objectives in the work plan prepared for this investigation was to refine the current state of knowledge regarding the distribution of creosote in the shallow soil and ground water. A review of the laboratory analytical results for the soil and ground water samples collected during the Phase IV investigation indicates that the constituents associated with creosote are apparently in the vicinity of former creosote transfer and storage activities. In general, the extent of the impacted soil does not appear to extend beyond a depth of six feet below grade.

Two previous subsurface investigations conducted at the site (in 1986 and 1990) analyzed soil samples only for anthracene. However, several other semivolatile organic compounds (SVOCs) were detected in the Phase IV soil samples. Naphthalene and phenanthrene were the two compounds reported at the greatest concentrations. For the purpose of discussion, the Phase IV soil and ground water SVOC concentrations were compared to the Texas Risk Reduction Rules Standard No. 2 limits. Several constituents including benzo(a)anthracene, benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(a)pyrene, chrysene, indeno(1,2,3-c,d)pyrene, naphthalene and phenanthrene were reported at concentrations that exceed Standard No. 2 limits for soil samples collected from depths of less than six feet. However, for soil samples collected from deeper than six feet, only the benzo(b)fluoranthene, benzo(k)fluoranthene and chrysene concentrations exceed Standard No. 2 limits.

Four SVOCs were detected in the Phase IV ground water samples. Three of the four SVOCs (2,4 dimethylphenol, bis(2-ethylhexyl)phthalate and naphthalene) detected in the ground water were reported at concentrations that exceed Standard No. 2 limits.

A review of the soil boring logs and ground water elevations indicated that the site is apparently underlain by two shallow transmissive zones that may be in communication. The ground water flow direction (southeast) for Phase IV is not consistent with the historic ground water flow direction (northwest). Apparently, the construction dewatering activities that taking place adjacent to

the southeast corner of the site at the time of the depth to ground water measurements (June 1997) influenced the local ground water flow direction.

The second stated objective of the investigation was to obtain sufficient information to assess remedial options for the stockpiled soils on site. Based on a review of the laboratory analytical data, additional information may be required if the stockpiled soil is to be transported to a landfill facility for disposal.

1.0 *INTRODUCTION*

Industrial Compliance (now Terranext) was retained by Southern Pacific Transportation Company (SPTCo) to complete a subsurface investigation at the Galveston Wharves site (the site) located in Galveston, Texas on the north side of Galveston Island along the Galveston Ship Channel (Figure 1-1). A work plan was completed and submitted to the Texas Water Commission (TWC) in December 1993. Approval of the work plan was issued by the Texas Natural Resource Conservation Commission (TNRCC) in May 1996. Prior to approval of the work plan, Union Pacific Railroad (UPRR) purchased SPTCo and the site. This report summarizes previous work and documents the results of the subsurface investigation completed in June 1997.

1.1 *SITE DESCRIPTION*

The site is located at 4100 Old Port Industrial Boulevard in Galveston, Galveston County, Texas. It is 15 acres in size, relatively flat, covered with vegetation and surrounded by a perimeter fence with one gate to restrict access. The local land use in the vicinity of the site is generally industrial. The site is bounded to the north by the Galveston Ship Channel (however, the site does not have direct access to the waterway); to the south by Old Port Industrial Boulevard; to the west by an aboveground terminal; and to the east by warehouses. Pelican Island is located north of the site, across the Galveston Ship Channel.

Based on available information, the site is a former bulk creosote terminal. Creosote was delivered and pumped through an underground pipeline to two aboveground storage tanks (ASTs) formerly located at the southeast corner of the site (Figure 1-2). A bermed containment cell, constructed during previous corrective measures, is now located in the southeast corner of the site north of the former ASTs. Approximately five acres surrounding the cell and former process area has been enclosed by an additional fence to further restrict access. No structures other than the bermed containment cell currently exist on site.

1.2 *BACKGROUND*

Investigation of the site has proceeded using a phased approach. The previous investigations include:

- Phase I Site Investigation (Phase I)
  - conducted in May 1986 by ERT (now ENSR);
  - included the completion of 32 soil borings to a depth of approximately five feet (Figure 1-3);
  - soil borings were logged at one-foot intervals by a field geologist for texture, color, structures, moisture content and odor, if any;

- four soil samples were submitted for laboratory analysis of semivolatile organic compounds (SVOCs);
- the constituent with the maximum reported concentration was anthracene;
- anthracene and phenanthrene were reported at detectable concentrations in three of the four soil samples;
- results indicated impacted soils in the vicinity of the former creosote ASTs, the loading facility and adjacent to the former creosote pipeline; and
- the impacted areas (referred to as areas of concern) became the focus of subsequent investigations.

- Phase II Site Investigation (Phase II)
  - conducted in September 1986 by ERT;
  - included installation of eight soil borings completed as four-inch PVC monitor wells (Figure 1-3);
  - 23 soil samples were submitted for laboratory analysis of anthracene; and
  - monitor wells were completed to total depths between 43 and 51 feet below grade and with screened intervals of 29 and 42 feet below grade.

- Phase III Site Investigation (Phase III)
  - conducted in May 1990 by ENSR;
  - included completion of three test pits and six soil borings to assess potential off-site migration;
  - two soil samples were submitted for laboratory analysis of anthracene; and
  - included the installation of three on-site soil borings, two of which were completed as four-inch PVC monitor wells similar to the Phase II monitor wells.

The reported results from Phases I, II and III indicated that both the soil and ground water beneath the site were impacted. At the time of these investigations, it was inferred by the investigators that there was no significant vertical or horizontal migration of the plume through the soil. The reported ground water flow direction was to the north, towards the Galveston Ship Channel.

In the fall of 1989, the City of Galveston Municipal Utilities Department (GMUD) encountered creosote-like material in an excavation for a new water main along Old Industrial Port Boulevard, adjacent to the south side of the site. The TWC requested that SPTCo address the off-site migration of the plume and a section of the water main was removed and replaced. Subsequently, a series of on- and off-site soil borings and test pits were completed to visually assess the lateral extent of creosote-like material. Based on the inferred extent of the impacted material, in excess of 4,000 cubic yards of soil was excavated from off site. In addition, a subsurface concrete cut-off wall was installed between the former AST area and the southern property line as an interim control measure to reduce the potential of additional off-site migration.

the southern property line as an interim control measure to reduce the potential of additional off-site migration.

A bermed containment area, lined with high-density polyethylene (HDPE) and comprised of two cells was constructed in the former tank and process area to hold affected off-site soils excavated from Old Industrial Port Boulevard. The affected soils were stockpiled in the northern cell while southern cell was left empty for possible future on-site treatment of the soils.

Prior to development of the 1993 Site Investigation Work Plan, the Phase I, II and III reports were reviewed. Reportedly, this review found the available data to be inconclusive with respect to assessing the presence or absence of light non-aqueous phase liquids (LNAPL) at the site. It was reported that because the screened intervals of the Phase II and Phase III wells are below the inferred capillary fringe of the uppermost transmissive zone, LNAPL, if present, could not enter the wells.

1.3 SCOPE AND OBJECTIVES

The scope of the Phase IV Subsurface Investigation included an evaluation of the stockpiled soils, completion of a subsurface soils assessment and a shallow ground water assessment. The primary objective the investigation was to assess of the nature and extent of creosote-affected soils and ground water at the site. An additional objective of the investigation was to characterize the stockpiled soils to evaluate possible remedial alternatives.

Based in part on a review of the Phase I, II and III reports, several items were identified for evaluation during the Phase IV field activities:

- collection of physical and chemical data for the stockpiled soils and shallow subsurface soils;
- installation of ground water monitor wells constructed to detect LNAPL, if present;
- collection of ground water samples to assess whether constituents typically associated with creosote were present; and
- evaluation of ground water flow direction, gradient and tidal influences, if any.

The investigation was completed in accordance with the scope and methods described in the Subsurface Investigation Work Plan, dated December 8, 1993, with the exception of the plugging and abandonment of the ten previously installed monitor wells. These monitor wells were determined to be screened in a deeper zone than the proposed wells and, therefore, were incorporated into this study.

2.0 *PHASE IV SITE INVESTIGATION PROCEDURES*

2.1 *SUBSURFACE SOIL SAMPLING METHODS AND PROCEDURES*

Seven soil borings were advanced to a depth of approximately 16 feet below grade on June 10 and 11, 1997 (Figure 2-1). These borings were subsequently completed as monitor wells. The soil borings were located in the vicinity of existing monitor wells for comparative analysis and to provide nested wells across the thickness of the uppermost transmissive zone.

The seven soil borings were installed by PSI, Inc. of Houston, Texas using a truck-mounted Mobile B-61 drilling rig equipped with hollow-stem augers. Soil borings were drilled using 6¼-inch inside diameter (ID) hollow-stem augers. The soil borings were continuously sampled using a combination of standard 24-inch thin-walled (Shelby) tubes and split-spoon samplers. After each two-foot interval was drilled, the soil core was extruded and visually logged by a field geologist for parameters such as texture, color, relative moisture content, and stiffness, according to the Unified Soil Classification System (USCS). The full length of the sample was visually inspected for creosote-like material. In addition, a representative portion of soil from each interval was placed in a resealable plastic bag, agitated and allowed to remain at ambient conditions for approximately five minutes. The headspace gases which accumulated in the bag were subsequently screened using photoionization detector (PID). The reported PID headspace readings are presented on the boring logs included in Appendix A.

A minimum of three soil samples from each boring were selected for laboratory analysis. Samples for analysis were collected from the following depths:

- 0 to 2 feet below grade;
- adjacent to the apparent capillary fringe above the uppermost transmissive zone; and
- from the total depth (TD) of the boring.

Additional samples from intervals in which reported PID readings exceeded 30 ppm or in which soil impacted with creosote-like material was observed were also collected from the borings for monitor wells TMW-1 and TMW-2. Soil samples were collected from each boring in a clean, laboratory-supplied 8-ounce glass jar. Each jar was sealed with a Teflon-lined, screw-on cap with as little head space as possible and placed in a cooler with sufficient ice to maintain a temperature of approximately 4°C. Each soil sample was submitted to the PACE Analytical laboratories in Houston, Texas and was analyzed for the following compounds indicated in accordance with the listed Environmental Protection Agency (EPA) analytical methods:

- Target Compound List (TCL) SVOCs by SW-846 Method 8270;
- total organic carbon (TOC) by SW-846 Method 9060; and
- pH by SW-846 Method 9045.

In accordance with the Work Plan, two soil samples from the borings for monitor wells TMW-3, TMW-4, and TMW-6 were submitted for geotechnical analysis for the following parameters, as applicable to specific lithology, in accordance with the listed American Standards Testing Methods (ASTM) methods:

- moisture content by ASTM Method D2216;
- dry density by ASTM Method D2937;
- permeability by EM Method 1110-2-1906 (from US Department of the Army, "Soil Sampling", March 31, 1972);
- grain size distribution (including hydrometer analysis) by ASTM Method D422; and
- specific gravity by ASTM Method D1429.

2.2 *GROUND WATER ASSESSMENT*

The ground water investigation included additional characterization of the uppermost transmissive zone and, more specifically, the upper portion of the zone including the water table interface. This characterization included analysis of chemical parameters for ground water quality, evaluation of ground water gradients, flow direction and assessment of the subsurface hydraulic regime (e.g., transitivity and hydraulic conductivity). The ground water assessment included the following tasks:

- completion of seven shallow monitor wells to be screened across the top of the apparent water table;
- collection of ground water samples from the entire well network (new and existing wells), including quality control (QC) samples for laboratory analysis;
- collection of ground water elevation measurements from the entire well network; and
- completion of slug tests in both the new (shallow) and the old (deep) wells to assess transmissivity and hydraulic conductivity of each zone.

2.2.1 *Monitor Well Completion*

The well completion details for the seven monitor wells (TMW-1 through TMW-7) are summarized in Table 2-1. Available well construction diagrams and Texas Well Driller's Reports are included in Appendix A.

Each monitor well was completed such that the top of the observed water table was within the screened interval. Each monitor well was constructed using four-inch diameter, Schedule 40 PVC casing and 0.010-inch machine-slotted screen. Ten feet of screen was set from approximately four to fourteen feet below grade and two feet of blank casing with bottom cap were attached to the bottom of the screen to trap silt or clay particles which may become entrained in the well during development or purging. Approximately seven feet of blank casing were attached to the top of the screen to provide roughly three feet of riser pipe above ground surface.

A filter pack consisting of commercial grade silica sand was tremied uniformly around the well screen in one-foot increments as the augers were removed from the borehole. The filter pack extended from the total-drill depth to approximately two feet above the top of the screen. Approximately one-foot of bentonite pellets was placed on top of the sand pack and subsequently hydrated. The remainder of the borehole annulus was tremie-grouted to ground surface with a nominal three percent to five percent powdered bentonite and Type I Portland cement mixture. Each monitor well was completed above grade and the PVC riser pipe was enclosed in a six-inch I.D. lockable steel protective outer casing. Four-foot by four-foot square concrete pads were constructed around each outer protective casing. Four, four-inch diameter steel posts were placed at the corners of each concrete pad to protect the riser pipes.

2.2.2 *Monitor Well Development*

Each well was developed through a combination of surging and bailing to remove drilling residuals and/or fine-grained material from the screened interval. Depth to ground water measurements were collected prior to development and sampling in order to calculate the necessary purge volumes and to provide a reference for assessing ground water recovery.

The existing wells and the new wells were surged for approximately 30 minutes using a four-inch diameter surge block. The new monitor wells were then developed by bailing approximately 10-casing volumes (approximately 80 gallons) from the wells. The existing wells were developed by bailing three-casing volumes (approximately 75 gallons). During development, water quality parameters i.e., pH, specific conductance (SC), temperature and clarity were monitored. The values for these field parameters are summarized on Table 2-2. Development water was stored in 55-gallon drums on site pending disposal.

2.2.3 *Ground Water Level Measurements*

Following development, the depth to ground water was measured at each well on June 16, 1997 and June 26, 1997. The depths were measured to within 0.01 foot using an electronic water level meter or an electronic oil/water interface probe and recorded in a field log book. These measurements were used to compute relative ground water elevations.

2.2.4 *Ground Water Sampling Procedures*

Ground water samples were collected from each well on June 16 and 17, 1997. The volume of water in the well casing was calculated based on the known diameter of the well casing and the measured height of the water column. Dedicated bailers were used to purge approximately three-casing volumes of ground water from each monitor well prior to sampling. SC, temperature and pH were measured and recorded initially and for each casing volume removed. Each monitor well was allowed to recover to approximately 90 percent of its initial static water level prior to sampling. Purged ground water was stored in 55-gallon drums on site pending disposal.

Ground water samples were collected using dedicated PVC bailers. The samples were placed into new, laboratory-supplied containers with no headspace and stored in a cooler with sufficient ice to maintain a temperature of approximately 4°C. The samples were then transported to PACE laboratory in Houston, Texas for analysis of the following parameters in accordance with the listed EPA analytical methods:

- TCL SVOCs by EPA Method 8270; and
- TOC by EPA Method 415.1.

In addition, one ground water sample from monitor well TMW-4 was submitted for analysis of total dissolved solids (TDS) by EPA Method 160.1.

2.2.5 *Hydraulic Conductivity Testing*

Hydraulic conductivity testing was performed in selected new, shallow wells (TMW-3, TMW-4, TMW-7), and existing, deep wells (EMW-4, EMW-7 and EMW-9) to asses the shallow transmissive zones beneath the site. Both rising and falling-head slug tests were performed in wells EMW-4, EMW-7 and EMW-9. However, due to construction of wells TMW-3, TMW-4 and TMW-7 (i.e., screen and filter pack extending above the observed water table), only rising-head slug tests were performed in these wells. Field activities associated with the slug tests were completed on June 30, 1997. The slug tests were completed as follows:

- The static water level was measured to the nearest 0.01-foot.

- A decontaminated electrical pressure transducer was placed below the static water level in the well and calibrated by entering the water level reading into the pressure transducer control unit (i.e., Hermit®)

- For the falling-head test, a known quantity of potable water was rapidly introduced into the well inducing a nearly instantaneous increase in hydraulic head. Simultaneously, the Hermit® datalogger was started and rapid water level measurements were collected via the pressure transducer. For the rising-head slug tests, a decontaminated bailer was slowly inserted into the well. The water level was allowed to equilibrate and then the bailer full of water was rapidly removed from the well, producing a nearly instantaneous drop in hydraulic head. Water level data was simultaneously recorded at rapid intervals using the Hermit® datalogger.

- Water level measurements were recorded until the water level in the well was similar to the pre-test water level.

- Slug test data were evaluated using the Bouwer-Rice Method (Bouwer and Rice 1976; Bouwer 1989) for unconfined aquifers.

2.3 *SOIL STOCKPILE SAMPLING METHODS AND PROCEDURES*

The objective of the soil stockpile sampling program was to collect sufficient data to characterize the physical and chemical properties of the stockpiled materials. The field activities for the stockpiled soils assessment were completed on June 11, 1997. The soil stockpile holding cell measures approximately 170-feet by 120-feet and the height of the stockpile is approximately four feet above the floor of the holding cell. There is also a second cell adjacent to the stockpiled soil that is approximately equal in size and contains only collected rainwater and run-off from the stockpiled soil.

Five soil borings were completed to profile the stockpiled soil. Each boring was completed using an all terrain buggy-mounted drilling rig and hydraulic push methods provided by PSI, Inc.

Each boring was continuously sampled using standard two-foot split spoon sampler hydraulically advanced into the soil. The soil cores were visually logged as described in Section 2.1. Soils from each boring in the stockpile were composited over each two-foot interval for laboratory analyses. A portion of each sample was collected in accordance with the procedures described in Section 2.1 of this report and submitted for the same suite of analyses. Furthermore, in accordance with the Work Plan, one composite soil sample from boring SP-1 was

selected for geotechnical analysis and was tested for the parameters outlined in Section 2.1.

2.4 *SITE SURVEY*

Following completion of the site investigation activities, a survey of the site was completed by Baseline Corporation of Houston, Texas, a licensed land surveyor registered in Texas. The lateral coordinates (northings and eastings) and the top-of-casing (TOC) elevation of each monitor well were surveyed relative to a site-specific benchmark (Figure 2-2). The precision of the TOC and ground surface elevations and lateral coordinates of each well is 0.01 feet. The location and height of the holding cell berms and stockpiled soils in the containment cell were also surveyed, as were the locations and coordinates of other key site features in order to produce an accurate site map.

3.0 *SITE CHARACTERIZATION RESULTS*

The Phase IV Site Investigation included completion of five borings in the soil stockpile, seven soil borings completed as shallow monitor wells, redevelopment of the 10 existing deep monitor wells, collection of 17 ground water samples, collection of site-wide ground water elevation data and completion of seven slug tests to quantify aquifer characteristics. Table 3-1 presents the TCL SVOCs for which the soil and ground water samples collected during the subsurface investigation were analyzed. *It is important to note that subsequent summary tables of TCL SVOC concentrations will list only quantified compounds. Additional TCL SVOCs listed on Table 3-1 but not included in subsequent summary tables were analyzed, however, were not detected above the laboratory limit of quantitation (LOQ).*

3.1 *REGIONAL STRATIGRAPHY AND HYDROGEOLOGY*

Surface sediments in the Texas Gulf Coastal area consist of Holocene-age alluvium overlying Quaternary-age clay, silt and sand of the Beaumont Formation. Surface soils at the site are predominantly part of the Galveston-Urban land complex which consists of nearly level, somewhat excessively drained, nonsaline, sandy soil. An average of five feet of sandy material, which was dredged from bays and canals, has been added to the original soil surface in the vicinity of the site. The soils in this complex are rapidly permeable above a high water table. The surface runoff is very slow. The soils are nonsaline most of the year, except during prolonged dry periods. The surface becomes slightly saline without adequate rainfall due to salt spray.

The major geologic formations within approximately 3,000 feet of the surface, from shallowest to deepest, include the following:

Stratigraphic Unit	Approximate Depth to Top of Stratigraphic Unit
Barrier Island and Alluvial Deposits	At ground surface
Deweyville Formation	0 to 30 feet (if present)
Beaumont Formation (upper Chicot Aquifer)	0 to 60 feet
Lissie Formation (Lower Chicot Aquifer)	Unknown; not differentiated from Upper Chicot
Willis Sand (Lower Chicot Aquifer)	Unknown; not differentiated from Upper Chicot
Goliad Sand (Evangeline Aquifer)	550 feet
Upper Fleming Formation	2,150 feet

Together, these formations comprise the Chicot and Evangeline aquifers, which are bounded by the Burkeville Aquiclude at a depth of approximately 2,800 feet. Regionally, the barrier island deposits present at the site are characterized by recent silty and clayey fine sands, thin lenticular clays and abundant shell fragments consistent with Galveston Island. These deposits unconformably overlie the Beaumont Formation which is composed of stream channel, point bar, natural levee, backswamp, and to a lesser extent, coastal marsh and mud flat deposits which consist mostly of clay and silt with some lenses of fine sand.

A water well survey was completed and indicates that there are no reported water wells within a one-half mile radius of the site. The properties surrounding the site are serviced by municipal water supply. A copy of the water well survey is included in Appendix B.

3.2 *SITE HYDROGEOLOGY*

The shallow subsurface has been characterized to a depth of approximately 45 feet below grade across the site. The site hydrogeology is based on reported observations of the soils underlying the site made during drilling activities. Boring logs of both the new monitor wells and existing monitor wells, including soil descriptions and well construction details, are included in Appendix A.

3.2.1 *Geologic Characteristics*

As shown on Figure 3-1 through 3-4, three hydrogeologic units have been identified at the site.

- Hydrogeologic Unit I

Hydrogeologic Unit I is comprised of a fill material which covers the majority of the site from ground surface to a depth of approximately five feet. The fill material appears to be comprised of two different materials: a fine sand to silty clay containing shell fragments and roots and a dark brown stiff silty clay containing shell fragments. In areas where Unit I is present, it is underlain by Unit II.

- Hydrogeologic Unit II

Hydrogeologic Unit II occurs from ground surface to depths ranging from approximately five feet to 45 feet below grade. The upper portion of this unit (Unit IIa) grades from a silty sand to a fine sand containing some shell fragments and contains interbedded clays ranging in thickness from a few inches to approximately five feet. The new, shallow wells were constructed to be screened in Unit IIa. The lower portion of this unit (Unit IIb) contains a fine sand grading to a sandy clay, interbedded with fine sand. Because the screened

intervals of the existing, deep wells intersect the sand/sandy clay contact, it is impractical to separate these two lithologies into distinct hydrogeologic units.

Unit II becomes saturated within seven to twelve feet below grade. Based on an interpretation of the depth to ground water measurements (Section 3.2.2), it appears that the unit is composed of two different transmissive zones that may be in communication. The uppermost transmissive zone (Unit IIa) is apparently perched atop a relatively extensive, five-foot-thick clay-rich lens. This clay-rich lens appears to extend across the northern portion of the site at a depth of approximately twelve feet below grade (Figures 3-2 to 3-4). Soil samples were collected from Unit II and submitted for geotechnical analyses; reported laboratory analytical data are summarized in Table 3-2 and a copy of the laboratory analytical report is included in Appendix C. Two of the geotechnical soil samples were collected from the clay-rich lens at monitor wells TMW-3 and TMW-6 and were analyzed for hydraulic conductivity. The reported hydraulic conductivity values for these soil samples (3.17×10^{-8} cm/sec and 1.70×10^{-8} cm/sec, respectively) fall within the range of published values for aquitard soils.

The second transmissive zone (Unit IIb) occurs below the clay-rich lens and is also saturated. However, the calculated ground water elevations within the deep monitor wells tend to be approximately two feet lower than the calculated ground water elevations within the shallow monitor wells. This difference in hydraulic head between the deep wells and shallow wells suggests the presence of two different transmissive zones.

- *Hydrogeologic Unit III*

Hydrologic Unit III extends across entire site at a depth of approximately 40 to 50 feet below grade. Unit III is comprised of the stiff reddish brown to gray clays indicative of the Beaumont Formation, a regional aquitard. Unit III appears to represent a substantial clay underlying the site. The total thickness of this unit is unknown because the existing wells were completed in the top of this unit, and therefore, the base of the unit was not encountered.

3.2.2 Ground Water Flow Direction and Gradient

Ground water elevations for June 16, 1997 and June 26, 1997 are summarized with the historical ground water data in Table 3-3. During the two 1997 events, utility construction activities were being conducted along Old Port Industrial Boulevard adjacent to the southeast corner of the site. Excavation dewatering activities were being conducted in support of the construction activities. These dewatering activities apparently influenced the reported ground water flow direction and gradients at the site.

Historically, the reported groundwater flow direction was toward the north-northwest across the site. Because there was not a significant variation between the depth to ground water data collected during the two gauging events in June 1997, only one set of representative ground water contour maps (Figures 3-5 and 3-6) were constructed (using June 16, 1997 data). The inferred ground water flow direction for both the uppermost transmissive zone was toward the southeast, the dewatering point.

The horizontal hydraulic gradient on June 16, 1997 for the uppermost transmissive is approximately 0.002 feet/foot, while the horizontal hydraulic gradient on the same day for the second transmissive zone is approximately 0.005 feet/foot.

3.2.3 *Hydraulic Conductivity Test Results*

The water level response measured during the slug tests was analyzed using the Bouwer-Rice Method. The results of the analyses are presented in Table 3-4 and a summary of the data generated during the slug tests, the slug test calculations and background potentiometric data is included in Appendix D.

The horizontal hydraulic conductivity of the uppermost transmissive zone underlying the site ranges from 8.2×10^{-6} feet/second (well TMW-3) to 4.8×10^{-5} feet/second (well TMW-4). It should be noted that well TMW-3 was completed in the clay-rich lens that separates the two apparent transmissive zones (IIa and IIb); however, this clay-rich lens was not reported in the boring log for well TMW-4. The horizontal hydraulic conductivities for the second transmissive zone range from 1.7×10^{-5} feet/second (well EMW-7) to 7.1×10^{-5} feet/second (well EMW-4).

Due to the duration of each slug test (generally less than 30 minutes) tidal influences were considered to be minimal during the calculation of hydraulic conductivity values. However, values for hydraulic conductivity were not calculated from the data recovered wells TMW-1 and EMW-9. These monitor wells are located in the southeastern corner of the site and the construction dewatering activities appear to have influenced the slug tests.

3.3 *SOIL ANALYTICAL RESULTS*

The available soil analytical results from Phase I, Phase II and Phase III are summarized on Tables 3-5 and 3-6. The laboratory analytical results for the Phase II soil samples collected from the zero- to five-foot interval indicate elevated levels of several SVOC compounds. It should be noted that phase-separated NAPL reportedly was observed in the soil cores from the three to five-foot interval in several Phase I soil borings (ERT-3, ERT-4, ERT-5, ERT-7 and ERT-22) installed along the southern portion of the site. The soil sample with the

maximum reported soil SVOC concentrations for Phase I was collected from boring ERT-5 in the four- to five-foot interval. The constituent with the maximum reported concentration from this sample was anthracene (9,400 mg/kg). As a result, anthracene became the focal constituent of concern for Phase II and Phase III.

Phase II and III soil samples were analyzed only for anthracene. Anthracene was detected above the LOQ in only two of the 17 soil samples collected from depths greater than five feet below grade. The maximum reported Phase II soil anthracene concentration was reported for the sample collected from the three- to five-foot interval of monitor well EMW-5. Monitor well EMW-5 was installed in the vicinity of soil boring ERT-5 (Figure 1-3). The two soil samples collected during Phase III did not have anthracene reported concentrations greater than the LOQ.

The analytical results for soil samples collected during Phase IV are summarized on Table 3-7. Copies of the laboratory analytical reports and chain-of-custody documentation are included in Appendix B. Nine of the 12 soil samples collected from the zero- to four-foot interval reported concentrations of SVOCs in excess of the LOQ. However, only three of the nine samples collected from depths greater than four feet below grade contain reported SVOC concentrations in excess of the LOQ. Two of these three deeper samples were collected from the boring for monitor well TMW-2 and one was collected the boring for monitor well TMW-7.

Naphthalene was the only SVOC detected in the soil sample collected from the 12- to 14-foot interval in the boring for well TWM-7. The reported naphthalene concentration for this sample was 0.411 mg/kg (LOQ = 0.333 mg/kg). The maximum reported SVOC is from the soil sample collected at the four-to six-foot interval of the boring for well TMW-2. Phase-separated NAPL was observed in the soil core from this interval. Well TMW-2 is located in the vicinity the former creosote ASTs adjacent to existing well EMW-5. The soil sample collected from the 14-16 foot interval of the boring for well TMW-2 also had reported SVOC concentrations above the LOQ, however, they are generally two orders of magnitude less than those reported for the sample collected from the four- to six-foot interval.

Based on the laboratory analytical results from this and previous investigations, the areas of the site with SVOC-affected soils are generally located in the southeast corner of the site (former creosote AST area) and in the vicinity of a portion of the former creosote pipeline along the eastern property boundary (Figure 3-7). Generally, the vertical extent SVOC-affected soils does not extend beyond six feet below grade.

For the purpose of discussion, the reported concentrations for soil samples collected during the investigation were compared to the Texas Risk Reduction

Standard No. 2 Medium-Specific Concentrations (MSCs) of 30 TAC §335 Subchapter S. The reported analytical concentrations for soil samples collected from depths less than six feet at five locations (TMW-1, TMW-2, TMW-3, TMW-4 and TMW-7) exceed the industrial ground water protection (GWP-Ind) MSC for benzo(a)anthracene, benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(a)pyrene, chrysene, indeno(1,2,3-c,d)pyrene, naphthalene and/or phenanthrene. However, of the nine soil samples collected from deeper than six feet below grade, only the reported benzo(b)fluoranthene, benzo(k)fluoranthene and chrysene concentrations for the soil sample collected from the 14- to 16- foot interval of the boring for monitor well TMW-2 exceed the GWP-Ind MSCs.

3.4 *GROUND WATER ANALYTICAL RESULTS*

The available historic ground water analytical data from Phase III is summarized in Table 3-8. The ground water samples collected from three of the existing wells during this event contained SVOCs reported at concentrations above the laboratory LOQ. These three wells (EMW-5, EMW-6 and EMW-10) are located in the vicinity of the former creosote AST area in the southeastern portion of the site. The reported concentrations for the detected SVOC constituents are less than the ground water (GW) MSCs, however.

The analytical results for the 17 ground water samples collected during this investigation from the new and existing monitor wells are also summarized on Table 3-8. Copies of the laboratory analytical reports and chain-of-custody documentation are included in Appendix C. The reported analytical results indicate that the ground water samples collected from the existing (deep) monitor wells did not contain SVOCs at concentrations in excess of the LOQ. However, the analytical results indicate that ground water samples collected from four of the new (shallow) monitor wells contain SVOC constituents at concentrations in excess of the LOQ. Three of these samples were collected from monitor wells installed in the vicinity of the former creosote AST area (TMW-1, TMW-2 and TMW-3) and one sample was collected from a monitor well located north of the former AST area in the vicinity of the former creosote pipeline on the eastern portion of the site (TMW-6).

The reported 2,4-dimethylphenol, bis(2,4-ethylhexyl)phalate and naphthalene concentrations for the ground water samples collected from wells TMW-1, TMW-2 and/or TMW-3 exceed GW MSCs. Acenaphthene was the only SVOC detected above the LOQ in the ground water sample collected from well TMW-6, however the reported concentration is less than the GW MSC.

The reported TDS concentrations for the ground water sample collected from monitor well TMW-4 is 3,640 mg/L.

3.5 *STOCKPILED SOILS CHARACTERIZATION*

The soil analytical results for the stockpiled soil are summarized in Table 3-9. Copies of the laboratory analytical results and chain-of-custody documentation are included in Appendix C.

A review of the analytical results indicates that anthracene, fluoranthene and phenanthrene were detected above the LOQ in each of the 10 stockpiled soil samples. The constituent with the maximum reported concentration is phenanthrene (1,090 mg/kg). The twelve SVOCs included in the toxicity characteristic leaching procedure (TCLP) were not detected above the LOQ in any of the stockpiled soil samples. This indicates that it is likely that the stockpiled soil would not exceed the SVOC regulatory limits established by EPA that define a substance as characteristically hazardous for toxicity.

In addition to chemical analyses, a composite sample from soil boring SP1 was analyzed for geotechnical parameters listed in Section 2.1. A review of the geotechnical results indicates that the stockpiled soils are a fine sand to silty clay with a moisture content of 10% and a specific gravity of 2.649.

The volume of soil contained within the cell was estimated by measuring the perimeter dimensions and surveying the height of the stockpile. The northern cell contains approximately 4,500 cubic yards of soil. The volume calculations are included in Appendix E.

4.0 *CONCLUSIONS*

A subsurface investigation was conducted to assess the subsurface soils and ground water at the site and evaluate several data gaps identified during the review of the reports from previous investigations. Based on the reported data, the following conclusions can be made:

- soils collected from the stockpile are affected with SVOCs;
- additional sampling and analysis will be required to characterize the material as Class I or Class II waste for disposal purposes;
- it is not anticipated that the stockpiled soil will be considered characteristically hazardous for toxicity;
- there is a localized area of SVOC-affected soils and ground water near the southeastern corner of the site in the vicinity of the former ASTs;
- the affected soils generally do not extend deeper than six feet below grade;
- depth to ground water measurements in the new and existing monitor wells may indicate the presence of two hydraulically connected transmissive zones beneath the site;
- ground water flow was to the southeast during the two 1997 monitoring events, opposite of the historic flow direction; however, construction dewatering activities adjacent to the southeastern corner of the site apparently exerted hydraulic influence the local ground water flow patterns in both transmissive zones;
- the horizontal hydraulic conductivity value calculated from field testing results ranges from 8.2×10^{-6} ft/second to 7.1×10^{-5} ft/second for the transmissive units beneath the site; and
- phase-separated NAPL was observed in the soil cores for one of the monitor wells, however NAPL was not detected any of the wells during ground water monitoring activities.

Tables

TABLE 2-1

Reported Monitor Well Completion Details

Galveston Wharves
Union Pacific Railroad
Galveston, Texas

Monitor Well ID	Top of Casing Elevation (a) ft	Ground Surface Elevation (a) ft	Casing Stick-up ft	Screen Length (b) ft	Casing Length (c) ft	Screen Interval feet below grade		Sand Pack Interval feet below grade	
						from	to	from	to
TMW-1	99.34	96.70	2.64	10	4.0	4.0	14	2	18
TMW-2	99.77	97.20	2.57	10	3.5	3.5	13.5	1.5	16
TMW-3	101.78	99.50	2.28	10	3.5	3.5	13.5	1.5	16
TMW-4	103.70	101.00	2.70	10	3.5	3.5	13.5	1.5	16
TMW-5	102.90	100.30	2.60	10	3.5	3.5	13.5	1.5	16
TMW-6	101.45	98.90	2.55	10	3.5	3.5	13.5	1.5	16
TMW-7	102.48	99.70	2.78	10	3.5	3.5	13.5	1.5	16
EMW-1	99.46	97.80	1.66	10	29	29	39	27.5	48
EMW-2	100.50	98.60	1.90	10	31	31	41	29	48
EMW-3	102.35	99.60	2.75	10	32	32	42	30	48.5
EMW-4	102.81	100.10	2.71	10	32	32	42	30	48.5
EMW-5	100.29	98.20	2.09	10	31	31	41	29.5	47.5
EMW-6	101.00	99.10	1.90	10	29	29	39	28	45.0
EMW-7	104.32	101.60	2.72	10	33	33	43	31	49.5
EMW-8	103.18	100.40	2.78	10	32	32	42	30	48.5
EMW-9	97.98	96.60	1.38	10	36	36	46	30	51.0
EMW-10	99.34	97.60	1.74	10	28	28	38	23	43.5

NOTES:

(a) Survey elevations are relative to an arbitrary site datum (elevation = 100.00 ft.) established on July 21, 1997 by Baseline Corp. of Houston, Texas.
(b) Screen material is four-inch diamteter Schedule 40 PVC with 0.010- inch slot. TMW monitor wells were constructed with a two-foot sediment trap and EMW wells were constructed with a five-foot sediment trap.
(c) Casing length is measured from ground surface. Casing material is four-inch diameter Schedule 40 PVC.

TABLE 2-2

Reported Field Parameters
Measured Prior to Ground Water Sampling

Galveston Wharves
Union Pacific Railroad
Galveston, Texas

Monitor Well ID	Date	Temp. °C	pH s.u.	Conductivity µS/cm	Purge Volume gal.
TMW-1	6/17/97	26.5	7.56	7,230	1
		25.6	7.60	7,950	8
		25.3	7.50	8,160	16
		25.5	7.62	8,180	23
		26.0	7.61	7,920	--
TMW-2	6/17/97	26.5	7.84	3,980	1
		24.6	8.02	4,460	8
		25.0	8.10	5,110	16
		24.6	8.12	4,660	23
		25.5	7.89	4,420	--
TMW-3	6/17/97	26.5	7.52	1,330	1
		25.8	7.81	1,380	7
		25.3	7.90	1,278	14
		25.5	7.84	1,193	21
		26.0	7.61	1,190	--
TMW-4	6/16/97	36.5	6.81	4,810	7
		36.7	6.95	4,800	14
		36.7	6.96	4,700	20
TMW-5	6/17/97	22.5	7.04	3,840	1
		22.2	7.09	3,800	7
		22.3	7.28	3,700	14
		22.2	7.25	3,650	21
		22.3	7.28	3,580	--
TMW-6	6/16/97	22.9	7.12	4,010	8
		22.8	7.25	4,110	16
		22.8	7.14	3,990	23
TMW-7	6/16/97	22.1	7.25	4,090	7
		22.7	7.12	4,140	14
		22.8	7.34	4,110	21
EMW-1	6/16/97	25.0	7.14	98,600	1
		25.0	7.19	98,500	23
		24.5	7.20	100,100	46
		24.5	7.21	100,700	70
		24.6	7.26	101,800	--
EMW-2	6/17/97	31.1	7.15	71,500	1
		26.9	7.18	76,000	25
		26.6	7.50	73,700	50
		25.9	7.29	73,900	76
		26.6	7.29	--	--

NOTES:

-- = No data reported/data unavailable.

TABLE 2-2 (Cont'd)

Reported Field Parameters
Measured Prior to Ground Water Sampling

Galveston Wharves
Union Pacific Railroad
Galveston, Texas

Sample Location		Temp. °C	pH s.u.	Conductivity µS/cm	Purge Volume gal.
EMW-3	6/17/97	22.8	7.15	76,900	1
		22.8	7.32	78,200	26
		23.0	7.34	77,800	52
		22.9	7.25	77,200	78
		22.9	7.25	77,100	--
EMW-4	6/16/97	23.2	7.49	62,200	24
		23.2	7.15	62,000	48
		22.9	7.17	61,700	72
EMW-5	6/16/97	23.3	6.73	98,600	1
		24.4	6.72	98,800	25
		24.4	6.87	98,900	50
		24.4	6.91	98,100	76
		24.6	6.86	97,400	--
EMW-6	6/17/97	25.4	8.05	85,800	1
		26.9	7.16	89,000	24
		28.3	7.11	89,200	48
		23.7	7.20	90,900	72
		25.0	7.21	89,200	--
EMW-7	6/16/97	24.4	7.19	78,400	26
		24.8	7.11	70,100	52
		24.5	7.07	70,700	78
EMW-8	6/17/97	22.2	7.39	65,600	1
		22.5	7.02	68,700	24
		22.5	7.12	67,200	48
		22.7	7.10	67,100	72
		23.2	7.09	67,500	--
EMW-9	6/16/97	27.5	7.33	109,500	1
		24.8	7.20	107,100	23
		25.3	7.21	109,100	46
		26.2	7.20	108,500	70
		25.6	7.10	109,300	--
EMW-10	6/16/97	24.1	7.35	67,100	1
		24.2	6.67	83,900	23
		24.4	7.69	87,100	46
		24.6	7.42	86,300	70
		24.5	7.42	--	--

NOTES:

-- = No data reported/data unavailable.

TABLE 3-1

TCL Semivolatile Constituents Analyzed
Phase IV Site Investigation

Galveston Wharves
Union Pacific Railroad
Galveston, Texas

Acenaphthene
Acenaphthylene
Anthracene
Benzo(a)anthracene
Benzo(b)fluoranthene
Benzo(k)fluoranthene
Benzoic acid
Benzo(g,h,i)perylene
Benzo(a)pyrene
Benzyl alcohol
bis(2-Chloroethoxy)methane
bis(2-Cloroethyl)ether
bis(2-Chloroisopropyl)ether
4-Bromophenyl phenyl ether
Butylbenzylphtalate
4-Chloroaniline
4-Chloro-3-methylphenol
2-Chloronaphthalene
2-Chlorophenol
4-Chlorophenyl phenyl ether
Chrysene
Dibenzo(a,h)anthracene
Dibenzofuran
Di-n-butylphthalate
1,2-Dichlorobenzene
1,3-Dichlorobenzene
1,4-Dichlorobenzene
3-3'-Dichlorobenzidine
2,4-Dichlorophenol
Diethylphthalate
2,4-Dimethylphenol
Dimethylphthalate
4,6-Dinitro-2-methylphenol
2,4-Dinitrophenol
2,4-Dinitrotoluene
2,6-Dinitrotoluene
Di-n-octylphthalate
bis(2-Ethylhexyl)phthalate
Fluoranthene
Fluorene
Hexachlorobenzene
Hexachlorobutadiene
Hexachloroethane
Hexachlorocyclopentadiene
Indeno(1,2,3-cd)pyrene
Isophorone
2-Methylnaphthalene
2-Methylphenol
4-Methylphenol
Naphthalene
Nitrobenzene
2-Nitroaniline
3-Nitroaniline
4-Nitroaniline
2-Nitrophenol
4-Nitrophenol
n-Nitrosodiphenylamine
n-Nitroso-di-n-propylamine
Pentachlorophenol
Phenanthrene
Phenol
Pyrene
1,2,4-Trichlorobenzene
2,4,5-Trichlorophenol
2,4,6-Trichlorophenol

NOTES:

TCL = Target Compound List
Analytical Method is SW-846 8270

TABLE 3-2

Summary of Geotechnical Analyses

Galveston Wharves
Union Pacific Railroad
Galveston, Texas

Sample Location	Sample Interval	Moisture Content (a) (%)	Specific Gravity (a)	Hydraulic Conductivity (b) (cm/sec)	Dry Density (a) (lb/ft^3)
TMW-3	10-12 ft.	40	2.637	3.17×10^{-8}	94.1
TMW-3	14-16 ft.	25	2.64	---	---
TMW-4	6-10 ft.	29	2.65	---	---
TMW-4	12-16 ft.	33	2.657	---	---
TMW-6	4-8 ft.	31	2.626	---	---
TMW-6	12-14 ft.	36	2.644	1.70×10^{-8}	104.3

NOTES:

--- = Analysis not performed.

(a) Moisture content, dry density, specific gravity analyzed by ASTM Methods D-2216, D-2937 and D-422, respectively.

(b) Hydraulic Conductivity calculated from intrinsic permeability analyzed by Method EM-1110-2-1906, Corps. of Engineers.

TABLE 3-3

Ground Water Elevation Data

Galveston Wharves
Union Pacific Railroad
Galveston, Texas

Monitor Well	Monitoring Date	Top of Casing Elevation(a) ft	Depth to Water ft	LNAPL Thickness ft	Ground Water Elevation ft
EMW-1	5/11/90	8.24	5.00	–	3.24
	6/15/90	8.24	6.70	–	1.54
	7/17/90	8.24	6.30	–	1.94
	8/2/90	8.24	6.59	–	1.65
	6/16/97	99.46	9.88	–	89.58
	6/26/97	99.46	10.37	–	89.09
EMW-2	5/11/90	9.27	6.90	–	2.37
	6/15/90	9.27	7.60	–	1.67
	7/17/90	9.27	7.43	–	1.84
	8/2/90	9.27	7.63	–	1.64
	6/16/97	100.50	8.39	–	92.11
	6/26/97	100.50	8.69	–	91.81
EMW-3	5/11/90	11.05	8.50	–	2.55
	6/15/90	11.05	9.77	–	1.28
	7/17/90	11.05	9.61	–	1.44
	8/2/90	11.05	9.83	–	1.22
	6/16/97	102.35	9.92	–	92.43
	6/26/97	102.35	10.24	–	92.11
EMW-4	5/11/90	11.50	6.10	–	5.40
	6/15/90	11.50	10.13	–	1.37
	7/17/90	11.50	10.05	–	1.45
	8/2/90	11.50	10.19	–	1.31
	6/16/97	102.81	10.19	–	92.62
	6/26/97	102.81	10.53	–	92.28
EMW-5	5/11/90	9.05	5.50	–	3.55
	6/15/90	9.05	7.57	–	1.48
	7/17/90	9.05	7.15	–	1.90
	8/2/90	9.05	7.45	–	1.60
	6/16/97	100.29	9.72	–	90.57
	6/26/97	100.29	10.06	–	90.23

NOTES:

LNAPL - Light Non-Aqueous Phase Liquid

(a) The existing monitor wells (EMW-1 through EMW-10) were surveyed relative to mean sea level for 1990 ground water monitoring activities. Entire monitor well network was resurveyed in 1997 relative to an arbitrary on-site datum (elevation 100.00 feet).

TABLE 3-3 (Cont'd)

Relative Ground Water Elevation Summary

Galveston Wharves
Union Pacific Railroad
Galveston, Texas

Monitor Well	Monitoring Date	Top of Casing Elevation(a) ft	Depth to Water ft	LNAPL Thickness ft	Ground Water Elevation ft
EMW-6	5/11/90	9.78	6.50	–	3.28
	6/15/90	9.78	8.29	–	1.49
	7/17/90	9.78	8.10	–	1.68
	8/2/90	9.78	8.25	–	1.53
	6/16/97	101.00	8.78	–	92.22
	6/26/97	101.00	9.11	–	91.89
EMW-7	5/11/90	13.08	7.00	–	6.08
	6/15/90	13.08	11.09	–	1.99
	7/17/90	13.08	10.61	–	2.47
	8/2/90	13.08	10.95	–	2.13
	6/16/97	104.32	11.22	–	93.10
	6/26/97	104.32	11.43	–	92.89
EMW-8	5/11/90	11.85	6.00	–	5.85
	6/15/90	11.85	10.22	–	1.63
	7/17/90	11.85	10.15	–	1.70
	8/2/90	11.85	10.27	–	1.58
	6/16/97	103.18	10.34	–	92.84
	6/26/97	103.18	10.65	–	92.53
EMW-9	5/11/90	7.62	5.70	–	1.92
	6/15/90	7.62	6.55	–	1.07
	7/17/90	7.62	6.02	–	1.60
	8/2/90	7.62	5.95	–	1.67
	6/16/97	97.98	10.78	–	87.20
	6/26/97	97.98	7.55	–	90.43
EMW-10	5/11/90	8.70	7.28	–	1.42
	6/15/90	8.70	6.55	–	2.15
	7/17/90	8.70	6.49	–	2.21
	8/2/90	8.70	6.53	–	2.17
	6/16/97	99.34	8.81	–	90.53
	6/26/97	99.34	8.51	–	90.83

NOTES:

LNAPL - Light Non-Aqueous Phase Liquid

(a) The existing monitor wells (EMW-1 through EMW-10) were surveyed relative to mean sea level for 1990 ground water monitoring activities. Entire monitor well network was resurveyed in 1997 relative to an arbitrary on-site datum (elevation 100.00 feet).

TABLE 3-3 (Cont'd)

Relative Ground Water Elevation Summary

Galveston Wharves
Union Pacifice Railroad
Galveston, Texas

Monitor Well	Monitoring Date	Top of Casing Elevation (a) ft	Depth to Water ft	LNAPL Thickness ft	Ground Water Elevation ft
TMW-1	6/16/97	99.34	7.13	--	92.21
	6/26/97	99.34	11.26	--	88.08
TMW-2	6/16/97	99.77	7.31	--	92.46
	6/26/97	99.77	7.73	--	92.04
TMW-3	6/16/97	101.78	8.03	--	93.75
	6/26/97	101.78	8.21	--	93.57
TMW-4	6/16/97	103.70	8.70	--	95.00
	6/26/97	103.70	9.02	--	94.68
TMW-5	6/16/97	102.90	8.24	--	94.66
	6/26/97	102.90	8.42	--	94.48
TMW-6	6/16/97	101.45	7.37	--	94.08
	6/26/97	101.45	7.45	--	94.00
TMW-7	6/16/97	102.48	8.39	--	94.09
	6/26/97	102.48	8.53	--	93.95

NOTES:

LNAPL - Light Non-Aqueous Phase Liquid

(a) The existing monitor wells (EMW-1 through EMW-10) were surveyed relative to mean sea level for 1990 ground water monitoring activities. Entire monitor well network was resurveyed in 1997 relative to an arbitrary on-site datum (elevation 100.00 feet).

TABLE 3-4

Summary of Hydraulic Conductivity Test Results

Galveston Wharves
Union Pacific Railroad
Galveston, Texas

Test Location (a)	Screened Hydraulic Unit(s)	Hydraulic Conductivity Estimates			
		Rising Head Slug Test ft/sec	Rising Head Slug Test ft/year	Falling Head Slug Test ft/sec	Falling Head Slug Test ft/year
TMW-3	IIA	8.2×10^{-6}	260	---	---
TMW-4	IIA	4.8×10^{-5}	1,500	---	---
TMW-7	IIA	1.4×10^{-5}	440	---	---
EMW-4	IIB / III	7.1×10^{-5}	2,200	2.3×10^{-5}	730
EMW-7	IIB / III	5.3×10^{-5}	1,700	1.7×10^{-5}	500

NOTES:

--- = Test not performed
(a) The hydraulic conductivity tests were performed on June 30, 1997.

TABLE 3-5

Summary of Phase I Soil Analytical Data

Galveston Wharves
Union Pacific Railroad
Galveston, Texas

Sample Location:	ERT 4	ERT 5	ERT 22	ERT 23
Sample Interval:	4 - 5 ft.	4 - 5 ft.	4 - 5 ft.	4 - 5 ft.
Sample Date:	5/20/86	5/21/86	5/22/86	5/22/86
Constituents (a) Units:	mg/kg	mg/kg	mg/kg	mg/kg
Acenaphthene	ND (20)	600	ND (9.7)	ND (11)
Anthrancene	180	9,400	20	ND (11)
Benzo(a)anthracene	ND (20)	190	ND (9.7)	ND (11)
Benzofluoranthenes	ND (20)	110	ND (9.7)	ND (11)
Chrysene	ND (20)	260	ND (9.7)	ND (11)
Dibenzofuran	ND (20)	1,100	ND (9.7)	ND (11)
Fluoranthene	ND (20)	1,100	14	ND (11)
Fluorene	ND (20)	1,900	13	ND (11)
2-Methylnaphthalene	ND (20)	1,100	ND (9.7)	ND (11)
Naphthalene	ND (20)	930	ND (9.7)	ND (11)
Phenanthrene	22	3,000	33	ND (11)
Pyrene	ND (20)	690	ND (9.7)	ND (11)

NOTES:

ND - The constituent was reported as Not Detected at the laboratory limit of quantitation (shown in parentheses).

(a) Samples analyzed for base/neutral organic compounds using SW-846 Methods.

TABLE 3-6

Summary of Phase II and III Soil Analytical Data

Galveston Wharves
Union Pacific Railroad
Galveston, Texas

	Sample Location	Date	Sample Interval ft	Anthracene (a) mg/kg
Phase II	EMW-1	9/26/86	4-6	ND (0.2)
		9/26/86	8-10	ND (0.2)
		9/26/86	13-15	0.2
		9/26/86	46-48	ND (0.2)
	EMW-2	9/24/86	3-5	ND (0.2)
		9/24/86	8-10	ND (0.2)
		9/24/86	13-15	ND (0.2)
		9/24/86	46-48	ND (0.2)
	EMW-3	9/25/86	3-5	0.2
		9/25/86	8-10	ND (0.2)
		9/25/86	43-45	ND (0.2)
	EMW-4	9/23/86	44-45	ND (0.2)
	EMW-5	9/24/86	3-5	670
		9/24/86	8-10	ND (0.2)
		9/24/86	13-15	0.3
		9/24/86	43-45	ND (0.2)
	EMW-6	9/23/86	4-6	0.5
		9/23/86	8-10	ND (0.2)
		9/23/86	13.5-15	ND (0.2)
		9/23/86	43-45	ND (0.2)
	EMW-7	9/25/86	3-5	17.4
		9/25/86	45-47	ND (0.2)
	EMW-8	9/24/86	44-45	ND (0.2)
Phase III	EMW-9	5/2/90	4-6	ND (0.42)
	EMW-10	5/2/90	4-6	ND (0.4)

NOTES:

(a) Samples analyzed for base neutral compounds (anthracene only) using SW-846 Method 8270.

ND - The constituent was reported as Not Detected at the limit of quantitation (shown in parentheses).

TABLE 3-7

Summary of Phase IV Soil Analytical Data

Galveston Wharves
Union Pacific Railroad
Galveston, Texas

Sample Location:	TMW-1				TMW-2			TMW-3		
Sample Interval:	(0-2 ft.)	(2-4 ft.)	(10-12 ft)	(15-18 ft.)	(0-2 ft.)	(4-6 ft.)	(14-16 ft.)	(0-1 ft.)	(3-4 ft.)	(16-18 ft.)
Constituents (a) Units:	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Acenaphthene	ND(1.67)	ND(0.666)	ND(0.333)	ND(0.333)	ND(0.333)	302	3.05	ND(0.333)	ND(0.333)	ND(0.333)
Anthracene	64.6	1.99	ND(0.333)	ND(0.333)	ND(0.333)	222	2.44	ND(0.333)	ND(0.333)	ND(0.333)
Benzo(a)anthracene	ND(1.67)	1.48	ND(0.333)	ND(0.333)	0.390	ND(666)	0.926	0.715	ND(0.333)	ND(0.333)
Benzo(b)fluoranthene	ND(1.67)	1.58	ND(0.333)	ND(0.333)	0.628	ND(666)	0.363	0.959	ND(0.333)	ND(0.333)
Benzo(k)fluoranthene	ND(1.67)	ND(0.666)	ND(0.333)	ND(0.333)	ND(0.333)	ND(666)	ND(0.333)	0.433	ND(0.333)	ND(0.333)
Benzo(g,h,i)perylene	ND(1.67)	ND(0.666)	ND(0.333)	ND(0.333)	ND(0.333)	ND(666)	ND(0.333)	0.475	ND(0.333)	ND(0.333)
Benzo(a)pyrene	ND(1.67)	1.29	ND(0.333)	ND(0.333)	0.423	ND(666)	ND(0.333)	0.737	ND(0.333)	ND(0.333)
Chrysene	ND(1.67)	1.25	ND(0.333)	ND(0.333)	0.371	ND(666)	0.634	0.728	ND(0.333)	ND(0.333)
Dibenzofuran	ND(1.67)	ND(0.666)	ND(0.333)	ND(0.333)	ND(0.333)	281	2.85	ND(0.333)	ND(0.333)	ND(0.333)
Fluoranthene	2.51	3.29	ND(0.333)	ND(0.333)	0.817	334	5.52	1.63	ND(0.333)	ND(0.333)
Fluorene	1.93	ND(0.666)	ND(0.333)	ND(0.333)	ND(0.333)	350	3.72	ND(0.333)	ND(0.333)	ND(0.333)
Indeno(1,2,3-cd)pyrene	ND(1.67)	ND(0.666)	ND(0.333)	ND(0.333)	ND(0.333)	ND(666)	ND(0.333)	0.394	ND(0.333)	ND(0.333)
2-Methylnaphthalene	ND(1.67)	ND(0.666)	ND(0.333)	ND(0.333)	ND(0.333)	440	2.66	ND(0.333)	ND(0.333)	ND(0.333)
2-Methylphenol	ND(1.67)	ND(0.666)	ND(0.333)	ND(0.333)	ND(0.333)	ND(666)	ND(0.333)	ND(0.333)	ND(0.333)	ND(0.333)
Naphthalene	ND(1.67)	ND(0.666)	ND(0.333)	ND(0.333)	ND(0.333)	1,410	2.83	ND(0.333)	ND(0.333)	ND(0.333)
Phenanthrene	2.99	2.09	ND(0.333)	ND(0.333)	ND(0.333)	896	13.2	0.752	ND(0.333)	ND(0.333)
Pyrene	1.81	2.40	ND(0.333)	ND(0.333)	0.624	199	2.98	1.34	ND(0.333)	ND(0.333)
TOC (%)	0.35	0.08	0.10	0.02	0.51	1.40	0.24	0.62	0.03	0.11
pH (s.u.)	8.23	8.10	8.80	8.87	7.83	8.84	9.00	8.19	8.87	8.76

NOTES:

ND = The constituent was reported as not detected at the laboratory limit of quantification (shown in parentheses).
TOC = Total organic carbon
pH = Soil pH
(a) Samples analyzed for the Target Compound List (TCL) semivolatile compounds by SW-846 Method 8270.
TOC and pH were analyzed by SW-846 Method 9060 and SW-846 Method 9045, respectively.

TABLE 3-7 (Cont'd)

Summary of Phase IV Soil Analytical Data

Galveston Wharves
Union Pacific Railroad
Galveston, Texas

Sample Location:		TMW-4			TMW-5			TMW-6			TMW-7	
Sample Interval:		(0-2 ft.)	(2-4 ft.)	(14-16 ft.)	(0-2 ft.)	(2-4 ft.)	(10-12 ft)	(0-2 ft.)	(2-4 ft.)	(14-16 ft.)	(0-2 ft.)	(12-14 ft)
Constituents (a)	Units:	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Acenaphthene		ND(0.333)	ND(0.333)	ND(0.333)	ND(0.333)	ND(0.333)	ND(0.333)	ND(0.333)	ND(0.333)	ND(0.333)	ND(1.33)	ND(0.333)
Anthracene		0.584	ND(0.333)	ND(0.333)	ND(0.333)	ND(0.333)	ND(0.333)	ND(0.333)	ND(0.333)	ND(0.333)	ND(1.33)	ND(0.333)
Benzo(a)anthracene		0.666	0.35	ND(0.333)	ND(0.333)	ND(0.333)	ND(0.333)	ND(0.333)	ND(0.333)	ND(0.333)	3.17	ND(0.333)
Benzo(b)fluoranthene		0.937	0.926	ND(0.333)	ND(0.333)	ND(0.333)	ND(0.333)	ND(0.333)	ND(0.333)	ND(0.333)	3.87	ND(0.333)
Benzo(k)fluoranthene		ND(0.333)	ND(0.333)	ND(0.333)	ND(0.333)	ND(0.333)	ND(0.333)	ND(0.333)	ND(0.333)	ND(0.333)	ND(1.33)	ND(0.333)
Benzo(g,h,i)perylene		0.408	ND(0.333)	ND(0.333)	ND(0.333)	ND(0.333)	ND(0.333)	ND(0.333)	ND(0.333)	ND(0.333)	1.75	ND(0.333)
Benzo(a)pyrene		0.666	0.497	ND(0.333)	ND(0.333)	ND(0.333)	ND(0.333)	ND(0.333)	ND(0.333)	ND(0.333)	2.91	ND(0.333)
Chrysene		0.595	0.38	ND(0.333)	ND(0.333)	ND(0.333)	ND(0.333)	ND(0.333)	ND(0.333)	ND(0.333)	2.90	ND(0.333)
Dibenzofuran		ND(0.333)	ND(0.333)	ND(0.333)	ND(0.333)	ND(0.333)	ND(0.333)	ND(0.333)	ND(0.333)	ND(0.333)	ND(1.33)	ND(0.333)
Fluoranthene		1.39	0.478	ND(0.333)	ND(0.333)	ND(0.333)	ND(0.333)	ND(0.333)	ND(0.333)	ND(0.333)	7.44	ND(0.333)
Fluorene		ND(0.333)	ND(0.333)	ND(0.333)	ND(0.333)	ND(0.333)	ND(0.333)	ND(0.333)	ND(0.333)	ND(0.333)	ND(1.33)	ND(0.333)
Indeno(1,2,3-cd)pyrene		0.365	ND(0.333)	ND(0.333)	ND(0.333)	ND(0.333)	ND(0.333)	ND(0.333)	ND(0.333)	ND(0.333)	1.52	ND(0.333)
2-Methylnaphthalene		ND(0.333)	ND(0.333)	ND(0.333)	ND(0.333)	ND(0.333)	ND(0.333)	ND(0.333)	ND(0.333)	ND(0.333)	ND(1.33)	ND(0.333)
2-Methylphenol		ND(0.333)	ND(0.333)	ND(0.333)	ND(0.333)	ND(0.333)	ND(0.333)	ND(0.333)	ND(0.333)	ND(0.333)	ND(1.33)	ND(0.333)
Naphthalene		ND(0.333)	ND(0.333)	ND(0.333)	0.443	ND(0.333)	ND(0.333)	ND(0.333)	ND(0.333)	ND(0.333)	ND(1.33)	0.411
Phenanthrene		0.71	ND(0.333)	ND(0.333)	ND(0.333)	ND(0.333)	ND(0.333)	ND(0.333)	ND(0.333)	ND(0.333)	5.18	ND(0.333)
Pyrene		1.24	0.491	ND(0.333)	ND(0.333)	ND(0.333)	ND(0.333)	ND(0.333)	ND(0.333)	ND(0.333)	5.00	ND(0.333)
TOC (%)		0.59	0.19	0.1	0.2	0.13	0.09	0.09	0.12	0.22	0.50	0.17
pH (s.u.)		8.19	8.57	8.68	7.25	7.53	9.59	8.19	8.14	9.8	8.87	9.66

NOTES:

ND = The constituent was reported as not detected at the laboratory limit of quantification (shown in parentheses).
TOC = Total organic carbon
pH = Soil pH
(a) Samples analyzed for the Target Compound List (TCL) semivolatile compounds by SW-846 Method 8270.
TOC and pH were analyzed by SW-846 Method 9060 and SW-846 Method 9045, respectively.

TABLE 3-8

Summary of Ground Water Analytical Results

Galveston Wharves
Union Pacific Railroad
Galveston, Texas

Monitor Well ID	Sampling Date	Acenaphthene (mg/L)	Anthracene (mg/L)	2,4-Dimethylphenol (mg/L)	bis(2-Ethylhexyl) phthalate (mg/L)	Fluoranthene (mg/L)	Fluorene (mg/L)	Naphthalene (mg/L)	Phenanthrene (mg/L)	TOC (%)
EMW-1	5/11/90	ND(0.002)	ND(0.0004)	NA	NA	ND(0.0004)	ND(0.0004)	ND(0.004)	ND(0.0004)	NA
	6/16/97	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)	8
EMW-2	5/11/90	ND(0.002)	ND(0.0004)	NA	NA	ND(0.0004)	ND(0.0004)	ND(0.004)	ND(0.0004)	NA
	6/17/97	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)	9
EMW-3	5/11/90	ND(0.002)	ND(0.0004)	NA	NA	ND(0.0004)	ND(0.0004)	ND(0.004)	ND(0.0004)	NA
	6/17/97	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)	10
EMW-4	5/11/90	ND(0.002)	ND(0.0004)	NA	NA	ND(0.0004)	ND(0.0004)	ND(0.004)	ND(0.0004)	NA
	6/16/97	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)	8
EMW-5	5/11/90	ND(0.002)	0.005	NA	NA	0.002	0.004	ND(0.004)	0.006	NA
	6/16/97	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)	87
EMW-6	5/11/90	0.228	ND(0.0004)	NA	NA	ND(0.0004)	ND(0.0004)	ND(0.004)	ND(0.0004)	NA
	6/17/97	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)	9
EMW-7	5/11/90	ND(0.002)	ND(0.0004)	NA	NA	ND(0.0004)	ND(0.0004)	ND(0.004)	ND(0.0004)	NA
	6/16/97	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)	12
EMW-8	5/11/90	ND(0.002)	ND(0.0004)	NA	NA	ND(0.0004)	ND(0.0004)	ND(0.004)	ND(0.0004)	NA
	6/17/97	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)	9
EMW-9	5/11/90	ND(0.002)	ND(0.0004)	NA	NA	ND(0.0004)	ND(0.0004)	ND(0.004)	ND(0.0004)	NA
	6/16/97	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)	8
EMW-10	5/11/90	0.066	ND(0.0004)	NA	NA	ND(0.0004)	ND(0.0004)	ND(0.004)	0.001	NA
	6/16/97	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)	11
TMW-1	6/16/97	ND(0.20)	ND(0.20)	1.28	ND(0.20)	ND(0.20)	ND(0.20)	0.451	ND(0.20)	4
TMW-2	6/16/97	ND(1.0)	ND(1.0)	5.50	ND(1.0)	ND(1.0)	ND(1.0)	5.62	ND(1.0)	161
TMW-3	6/17/97	ND(0.01)	ND(0.01)	ND(0.01)	0.0167	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)	3
TMW-4	6/16/97	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)	20
TMW-5	6/17/97	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)	5
TMW-6	6/16/97	0.0376	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)	13
TMW-7	6/16/97	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)	3

NOTES:

ND - The constituent was reported as not detected (ND) at the limit of quantitation (shown in parentheses).
NA - Sample was not analyzed for constituent listed.
Samples collected on 5/11/90 analyzed for polynuclear aromatic hydrocarbons using SW-846 Method 8310.
Samples collected on 6/16/97 & 6/17/97 analyzed for semivolatile organic compounds using SW-846 Method 8270.
Reported total dissolved solids (TDS) concentration for sample collected from monitor well TMW-4 = 3,640 mg/L (6/16/97).

TABLE 3-9

Summary of Soil Stockpile Analytical Results

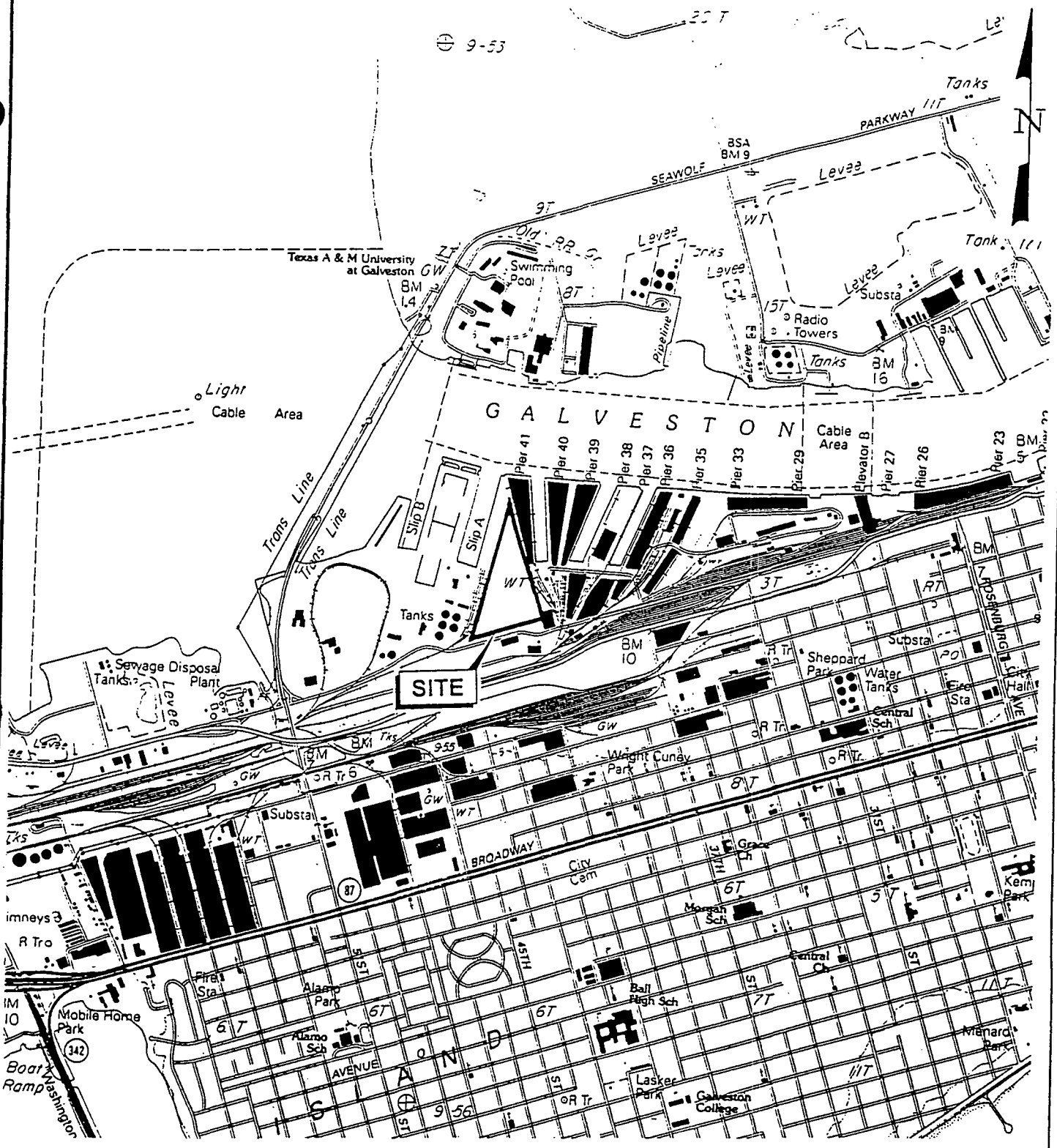
Galveston Wharves
Union Pacific Railroad
Galveston, Texas

Sample Location:	SP-1			SP-2		SP-3		SP-4	SP-5	
Sample Interval:	0-2 ft.	2-4 ft.	4-5 ft.	0-4 ft.	4-5 ft.	0-2 ft.	2-5 ft.	0-2 ft.	0-2 ft.	2-6 ft.
Constituents (a) Units:	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Acenaphthene	49.7	190	268	42.4	108	ND (0.666)	170	26.9	ND (0.333)	391
Acenaphthylene	ND (333)	ND (133)	ND (133)	ND (16.7)	ND (66.6)	ND (0.666)	ND (66.6)	ND (26.6)	0.381	ND (66.6)
Anthracene	72.3	372	320	29	355	1.8	96.4	34.8	0.718	386
Benzo(a)anthracene	ND (333)	ND (133)	ND (133)	21.9	ND (66.6)	0.791	ND (66.6)	ND (26.6)	0.473	79
Benzo(b)fluoranthene	ND (333)	ND (133)	ND (133)	ND (16.7)	ND (66.6)	1.83	ND (66.6)	ND (26.6)	1.36	ND (66.6)
Benzo(k)fluoranthene	ND (333)	ND (133)	ND (133)	ND (16.7)	ND (66.6)	ND (0.666)	ND (66.6)	ND (26.6)	0.371	ND (66.6)
Benzo(g,h,i)perylene	ND (333)	ND (133)	ND (133)	ND (16.7)	ND (66.6)	ND (0.666)	ND (66.6)	ND (26.6)	0.444	ND (66.6)
Benzo(a)pyrene	ND (333)	ND (133)	ND (133)	ND (16.7)	ND (66.6)	1.12	ND (66.6)	ND (26.6)	0.719	ND (66.6)
Chrysene	ND (333)	ND (133)	ND (133)	17.8	ND (66.6)	1.06	ND (66.6)	ND (26.6)	0.457	ND (66.6)
Dibenzofuran	37	168	205	48.8	111	ND (0.666)	149	ND (26.6)	ND (0.333)	331
Fluoranthene	128	254	362	154	221	2.04	211	185	0.396	545
Fluorene	49.2	197	249	46	120	ND (0.666)	173	32.1	ND (0.333)	404
Indeno(1,2,3-cd)pyrene	ND (333)	ND (133)	ND (133)	ND (16.7)	ND (66.6)	ND (0.666)	ND (66.6)	ND (26.6)	0.418	ND (66.6)
2-Methylnaphthalene	ND (333)	192	250	56.8	102	ND (0.666)	188	ND (26.6)	ND (0.333)	472
2-Methylphenol	ND (333)	ND (133)	ND (133)	ND (16.7)	ND (66.6)	ND (0.666)	ND (66.6)	ND (26.6)	ND (0.333)	ND (66.6)
Naphthalene	ND (333)	560	624	101	119	ND (0.666)	365	ND (26.6)	ND (0.333)	1,040
Phenanthrene	174	582	825	358	496	1	471	149	0.407	1,090
Pyrene	67.9	144	208	87.7	138	1.7	139	102	ND (0.333)	333
TOC (%)	0.75	1.90	1.50	0.72	0.64	0.64	1.60	0.35	0.33	2.10
pH (s.u.)	8.31	8.77	8.57	8.11	8.32	7.75	8.63	7.99	8.49	8.00

NOTES:

ND = The constituent was reported as not detected at the laboratory limit of quantification (shown in parentheses).
TOC = Total organic carbon
pH = Soil pH
(a) Samples analyzed for the Target Compound List (TCO) semivolatile compounds by SW-846 Method 8270.
TOC and pH were analyzed by SW-846 Method 9060 and SW-846 Method 9045, respectively.

Figures



0 2000 4000

SCALE FEET

SOURCE: U.S.G.S., QUADRANGLE, 7.5 MINUTE SERIES, GALVESTON, TEXAS, 1994.

ERM-Southwest, Inc.
HOUSTON • NEW ORLEANS • AUSTIN • DALLAS • BEAUMONT
ERM.

FIGURE 1-1
SITE LOCATION MAP
GALVESTON WHARVES
Union Pacific Railroad
Galveston, Texas

DATE: 02/09/98

W.O.NO.: 42201A21898

APPENDIX H

Reliant Energy Letter

Reliant Energy
HL&P

P.O. Box 1700
Houston, Texas 77251-1700

October 23, 2000

Ms. Josephine Ives
KMA Environmental Services, Inc.
1221 6th Street North
Texas City, TX 77592-0092

SUBJECT: CUSTOMER INQUIRY, POTENTIAL PCB CONTENT OF RELIANT ENERGY HL&P OWNED TRANSFORMERS

54th Street East to 25th Street and Broadway North to Harborside Drive

Dear Ms. Ives:

This letter is in response to your request pursuant to the existence of the transformers owned by Reliant Energy HL&P that may contain Polychlorinated Biphenyl (PCB) near the subject property location. The pole-mounted transformers at the above location are Reliant Energy HL&P owned.

PCB-containing electrical equipment is regulated by the Environmental Protection Agency (EPA) under the Toxic Substance Control Act. Reliant Energy HL&P complies fully with these regulations. The regulations state that mineral oil transformers are considered "PCB contaminated" (having a PCB content greater than or equal to 50 parts per million but less than 500 parts per million) until testing proves otherwise. Since such transformers can be utilized for the remainder of their useful lives with no requirement for record keeping or testing, it is normally not our policy to test such transformers for actual PCB content.

Should additional information pursuant to the possible PCB content be desired by a customer, it has been our policy for the customer to bear the costs associated with sampling and analysis of the mineral oil in the transformers. If your decision is to proceed with sampling, please contact Ms. Mary C. Price at (713) 945-8042 who will provide a cost estimate for these services.

Sincerely,

EC Reid

E. C. Reid, P. E.
Lead Engineer
HL&P Spill Management

KES.1.102300.doc

APPENDIX I

City of Galveston
Lead Abatement Code

Sec. 18.5-1. Application.

The provisions of this ordinance shall apply to all residential and commercial structures, or parts removed from such structures, including but not limited to doors, windows, shutters, or awnings, within the corporate limits of the city except for structures built after 1978. The provisions of this ordinance shall not apply to piers; bridges; ships; boats, or other water vessels; or water storage tanks.
(Ord. No. 95-35, § 2, 7-19-95)

Sec. 18.5-2. Scope.

This chapter shall govern and apply to controlling sources of lead that pose a health hazard to persons and animals.
(Ord. No. 95-35, § 2, 7-19-95)

Sec. 18.5-3. Definitions.

As used in this chapter, the following terms, phrases, words and their derivations shall have the meanings ascribed to them below unless the context clearly requires otherwise:

(a) *Exempt structure* means a structure built after 1978 or a structure for which a certificate of exemption has been issued as set forth in section 18.5-7 below.

(b) *Owner* means a holder of any legal or equitable estate in the premises, whether alone or jointly with others, and whether in possession or not, and includes but is not limited to tenant or renter.

(c) *Power assisted equipment* includes but is not limited to, sand blasting, water blasting, power assisted sanders, and power assisted wire brushes.

(d) *Surface* means the outermost materials of which a building is constructed including but not limited to plaster, putty, wood, plasterboard, concrete, brick and metal.

(e) *Process* shall mean the manner of removal of a source of lead or abatement of the same.

(f) *Source of lead* means any surface or applied surface coating, which contains a quantity of lead more than six-hundredths (0.06) of one (1) percent lead by weight (calculated as lead metal) in the total nonvolatile content of a liquid coating; or one-half (1/2) of one (1) percent lead in the dried film of a coating previously applied, or more than seven-tenths of one (1) milligram of lead per square centimeter (0.7 mg/cm^2) of surface when tested by a radioisotope x-ray fluorescent analyzer (XRF), or by a lab licensed by the Environmental Protection Agency or the State of Texas.
(Ord. No. 95-35, § 2, 7-19-95)

Sec. 18.5-4. Hazard.

Any source of lead contained in an exposed surface or exposed coating of any structure shall be considered a health hazard.
(Ord. No. 95-35, § 2, 7-19-95)

Sec. 18.5-5. Control of exterior paint removal.

(a) Unless structure is exempt, it shall be an offense for a person, or the owner of a structure to remove or to allow or authorize a person to remove exterior paint from a structure by a process not in accordance with this ordinance.

(b) Dropcloths. Dropcloths shall be used for the removal of exterior paint, regardless of the method of removal.

(1) Dropcloths shall be secured at the base of the work area of the structure;

(2) Dropcloths shall extend thirty (30) feet from the structure, or to the property line, whichever is less. With the consent of adjacent property owner(s) drop cloths shall extend onto adjacent property if the property line of the work site is less than thirty (30) feet;

(3) If a building has three (3) stories or more, dropcloths shall extend an additional five (5) feet for each story greater than two (2); and

(4) All vegetarian and soil shall be covered with dropcloths.

(5) After completion of work each day, the dropcloths shall be carefully rolled up and disposed of, and all paint or paint dust residue shall be removed from the premises, adjacent property and public rights-of-way, to the extent reasonably possible. All window sills or other ledges shall be brushed off; all

EXHIBIT A

(1) The permittee shall spread plastic disposal dropcloths to at least thirty (30) feet from the foundation below the surface upon which a process is being performed or to the property line if the property line is less than thirty (30) feet from said surface, and on all sides adjacent to said surface. The dropcloths must be attached to the foundation to collect as much of the residue as possible and prevent it from falling upon the ground. Where property line is less than thirty (30) feet from said surface, it is recommended that dropcloths extend to thirty (30) feet with permission of adjacent landowner.

(2) After completion of work each day, the dropcloths shall be carefully rolled up and disposed of, and all paint or paint dust residue shall be removed from the premises, adjacent property and public rights-of-way, to the extent reasonably possible.

(3) No work shall be conducted during rains, when the wind speed exceeds fifteen (15) miles per hour or other weather conditions which the housing department determines to be unsafe for such work.

(Ord. No. 93-110, § 2, 11-18-93; Ord. No. 94-9, § 2, 2-11-94)

[The next page is 1139]