

Phase I Environmental Site Assessment

**City of Houston Water Line Project
Contract 74A-1 and 74A-2
WBS No. S-000900-0109-3
WBS No. S-000900-0110-3
Houston, Texas**

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Executive Summary

Corrigan Consulting, Inc. was retained by Lockwood, Andrews & Newnam, Inc. (LAN) on behalf of the City of Houston to conduct a Phase I Environmental Site Assessment (ESA) to support the City of Houston Water Line 74A-1 and 74A-2 Projects (WBS No. S-000900-0109-3 & WBS No. S-000900-0110-3). The project is located approximately ten miles southwest of downtown Houston, Texas and includes the rights-of-way (ROWs) along 13 street segments totaling 15,654 feet in length (herein referred to as the "Project Area"). The rights-of-way are assumed to be 60 feet wide except for Hillcroft and US90A, which are wider. The main focus of this ESA is to assess the potential for encountering contaminated media during the construction activities for the water line installation.

In April 2010, historical information, including available aerial photographs and topographic maps, was reviewed to determine the historical use and development of the Project Area. A regulatory database search was obtained and reviewed to identify listed sites within the Project Area. A site reconnaissance and interviews were conducted in order to assess the possible presence of petroleum products and hazardous materials or releases within the Project Area.

Based on a review of historical aerial photographs and topographic maps, the majority of the Project Area was undeveloped until the 1940s. The Southern Pacific Railroad (Highway 90 and Main St) was present as early as 1915. Ongoing residential development was present in the project area until the 1990s. Commercial development was present in Project Area 74A-1 throughout the 2004 aerial. The street segments of Project Area 74A-1 were not visible until the 1980s. There was no obvious evidence of oil and gas exploration or production, large scale industrial activities or commercial waste disposal activities within the Project Area. However, there were commercial facilities and land scarring noted within the Project Area.

The surrounding area was developed as early as the 1920s. The Sam Houston Airport was present to the north from the 1940s through the 1960s. By the late 1960s, residential development replaced the airport, and the stadium and speedway were built to the north. Continued residential and commercial development was present in the surrounding areas through the 1990s. There was no obvious evidence of commercial waste disposal activities within the immediate surrounding areas. However, there was an oil well located at the west end of Darlinghurst, and an industrial facility, Marcus Oil & Chemical, located at the southwest corner of Minetta and Sandpiper. There were also commercial facilities and land scarring noted in the surrounding area.

Based on a review of the regulatory database obtained from GeoSearch on April 1, 2010, there were three spill sites, one CERCLIS site, two RCRA generator facilities and one ERNS site. In addition, there are six underground pipelines which transect the Project Area. There are potential impacts from the Clean Scene Washateria (previously a dry cleaning facility), the pipelines, and the Marcus Oil & Chemical site (formerly S&R Oil Company).

On April 7, 2010, a site reconnaissance of the Project Area was performed by a field geologist of Corrigan Consulting, Inc. After obtaining access to the project area south of W. Orem Drive, on June 29, 2010, a site reconnaissance and wetlands survey was performed by a project biologist of Corrigan Consulting, Inc. The Project Area was mostly residential with several

commercial businesses located throughout and an industrial facility located in Project Area 74A-2. The Project Area was inspected by walking and/or driving each street segment of the planned water line project. There were access restrictions which limited observations along the ROW including parked vehicles along many of the street segments within the Project Area, and parked vehicles in parking lots on adjoining properties. There were also fences that limited observations of adjoining properties.

There was one stream/ditch crossing south of W. Orem. However, the water line construction plans include directional drilling under the stream/ditch in order to avoid any impacts. There were roadside ditches with standing water located throughout the Project Area. However, the ditches are maintained and there was no obvious wetland vegetation noted during the site reconnaissance. There were several recognized environmental conditions that could impact the Project Area including dry cleaners, light industrial facilities, vehicle storage and service centers, a gas station and railroad tracks as detailed below.

In the professional opinion of Corrigan Consulting, Inc., an appropriate level of inquiry has been made into the previous uses of the Project Area to support the water line project as part of this Phase I ESA, but additional investigation is warranted to further evaluate recognized environmental conditions. Hazardous substances and/or petroleum products could be present at locations, as detailed in the report and shown in Figure 7-1. Based on the current City of Houston guidelines, which require investigating areas of anticipated contamination, a Phase II ESA should be conducted at the following sites:

Site 1	Meadows Washateria (former dry cleaner)	6403 W. Airport
Site 2	Marcus Oil & Chemical	14549 Minetta
Site 5	Ice Cream Truck Storage Yard	14349 Minetta
Site 7	Washateria (former dry cleaner)	14117 S. Main
Site 8	Fuel Depot #11 (gas station)	14111 S. Main
Site 9	Abandoned Mall (former auto service center)	S. Main and Dunlap
Site 11	Railroad Tracks	S. Main
Site 13	Church (former light industrial and/or an auto salvage yard)	Minetta and Haviland
Site 14	Crude Oil Pipeline	Darlinghurst

If groundwater is encountered during the Phase II Investigations, a groundwater sample from each site should be collected for laboratory analysis. Several pipelines transect the Project Area and before any drilling operations, the exact location of these pipelines should be verified. In addition, the contractor should be informed that, during the construction of the water lines, if any evidence of spills or releases is encountered, the contractor should immediately notify LAN for further instructions.

SECTION 1

Introduction and Background

1.1 Project Background and Objectives

Corrigan Consulting, Inc. was retained by Lockwood, Andrews & Newnam, Inc. (LAN) on behalf of the City of Houston to conduct a Phase I Environmental Site Assessment (ESA) to support the City of Houston Water Line 74A-1 and 74A-2 Projects (WBS No. S-000900-0109-3 & WBS No. S-000900-0110-3). The project is located approximately ten miles southwest of downtown Houston, Texas and includes the rights-of-way (ROWs) along 13 street segments totaling 15,654 feet in length (herein referred to as the “Project Area”). The rights-of-way are assumed to be 60 feet wide except for Hillcroft and US90A. A Project Area map with street segment descriptions is included as Figure 1-1 at the end of this section.

The City of Houston has requested this Phase I ESA to assess recognized environmental conditions associated with the Project Area. The main focus of this ESA is to assess the potential for encountering contaminated media during the construction activities for the water line installation.

1.2 Scope of Services, Limitations and Exceptions

The scope of work for this ESA included the general provisions of the American Society for Testing and Materials (ASTM) Standard E 1527-05 Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process, and the City of Houston’s ECRE Standard Practice with project-specific limitations and exceptions. The scope of work and limitations for this ESA were specified in the proposal dated March 22, 2010 which was approved by Lockwood, Andrews & Newnam, Inc. and the City of Houston on March 29, 2010 (see Appendix A).

1.3 Changes in the Scope of Services

There were no changes in the scope of services for this project.

1.4 Reliance

This report has been prepared solely for use by Lockwood, Andrews & Newnam, Inc. and the City of Houston. This report should not be relied upon by third parties without written authorization and signed agreement from Corrigan Consulting, Inc.

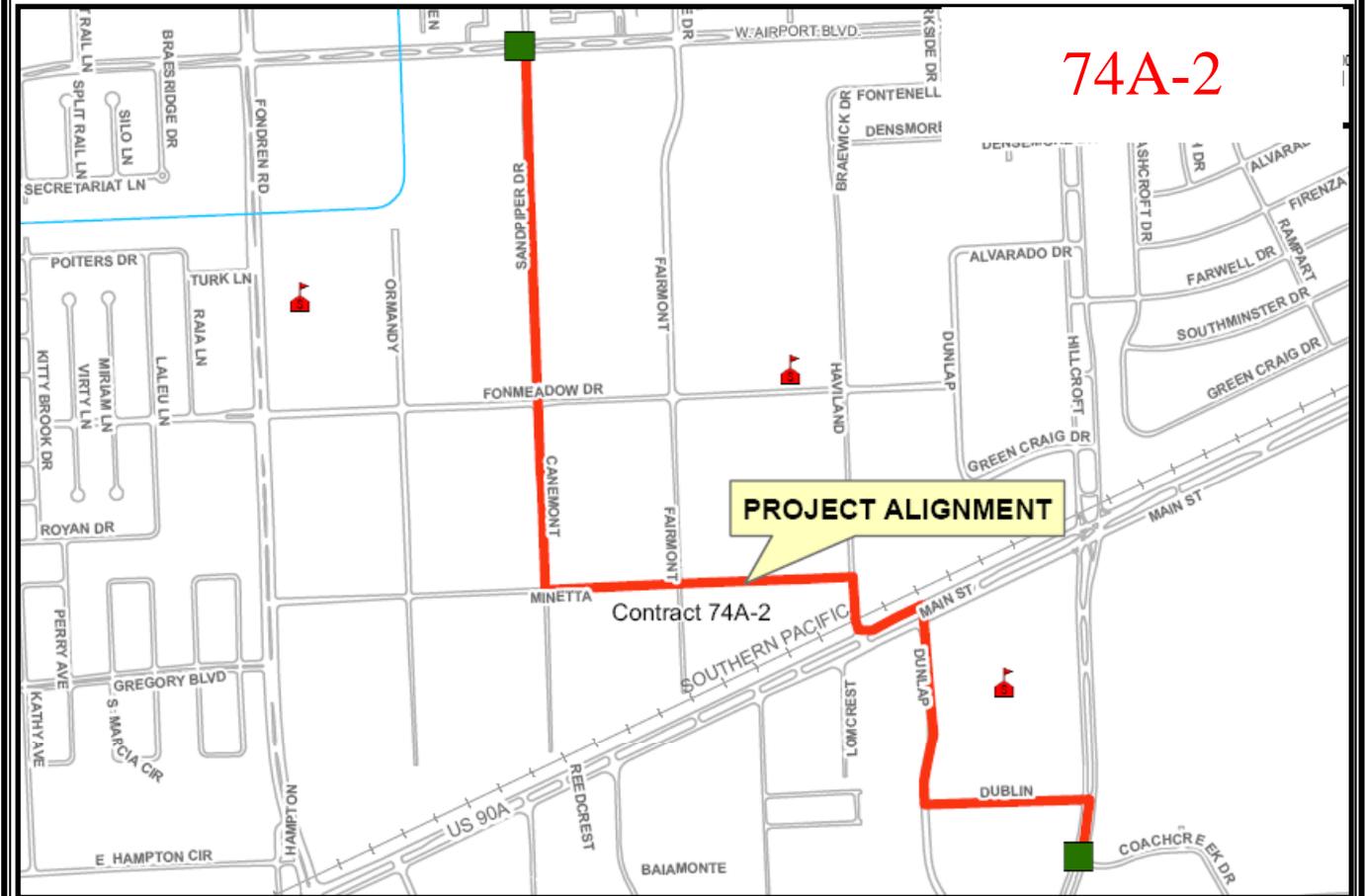
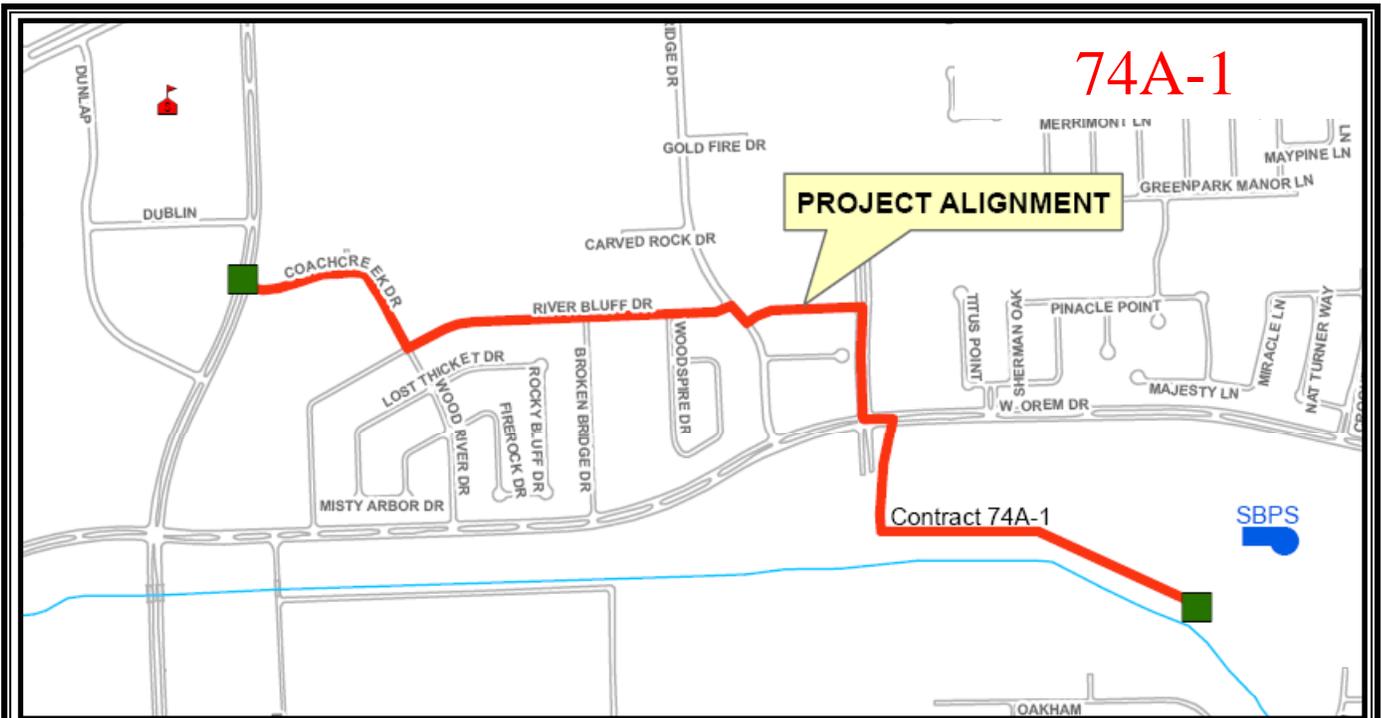
1.5 Professional Qualifications

The historical research, database review, interviews, site reconnaissance and reporting that was performed for this Phase I ESA was completed by Ms. Ami Lillard, Field Geologist of Corrigan Consulting, Inc. and was directed and overseen by Ms. Gail Corrigan, President and Principal Environmental Scientist. Ms. Corrigan certifies that she meets the definition of an Environmental Professional as defined in the ASTM Standard E1527-05 and Title 40 CFR Part 312, and has the specific qualifications based on education, training and experience to assess the nature, history, and setting of the property. Professional qualifications are included in Appendix A.

1.6 Certifications

This ESA has been performed in conformance with the standards and practices set forth in the ASTM E 1527-05 and the City of Houston's ECRE Standard Practice. Any limitations, exceptions to, or deletion from, these requirements are referenced in Section 1.2 and detailed in Appendix A of this report.


Gail A. Corrigan, President



Source: Lockwood, Andrews & Newnam

 Project Area

Project Area Map	<p>Lockwood, Andrews & Newnam, Inc City of Houston Water Line Project 74A-1 & 74A-2 WBS No. S-000900-0109-3 WBS No. S-000900-0110-3</p> <p><i>CORRIGAN CONSULTING, INC.</i></p>
Date: 04/10	
Figure 1-1	

SECTION 2

Location and Environmental Setting

2.1 Project Area Location and Description

The Project Area includes the ROWs along 13 street segments totaling 15,654 feet in length, located approximately ten miles southwest of downtown Houston, in Harris County, Texas. The approximate geographic center of the Project Area is latitude 29°37'50.79"N and longitude 95°29'36.44"W. The Project Area Vicinity Map is included as Figure 2-1 at the end of this section.

2.2 Topography and Surface Water Drainage

Based on a review of the U.S. Geological Survey (USGS) Topographic Map (Alief, Bellaire and Almeda Quadrangles), the Project Area is located in an area with an elevation of approximately 70 feet above mean sea level. The general terrain of Harris County is relatively flat, with numerous small streams and bayous.

The Project Area is located approximately 2 miles south of Buffalo Bayou, and 50 feet north of Sims Bayou. The surface water drainage in the vicinity of the Project Area flows to the City of Houston storm water collection system. A copy of the USGS topographic map is included as Figure 2-2.

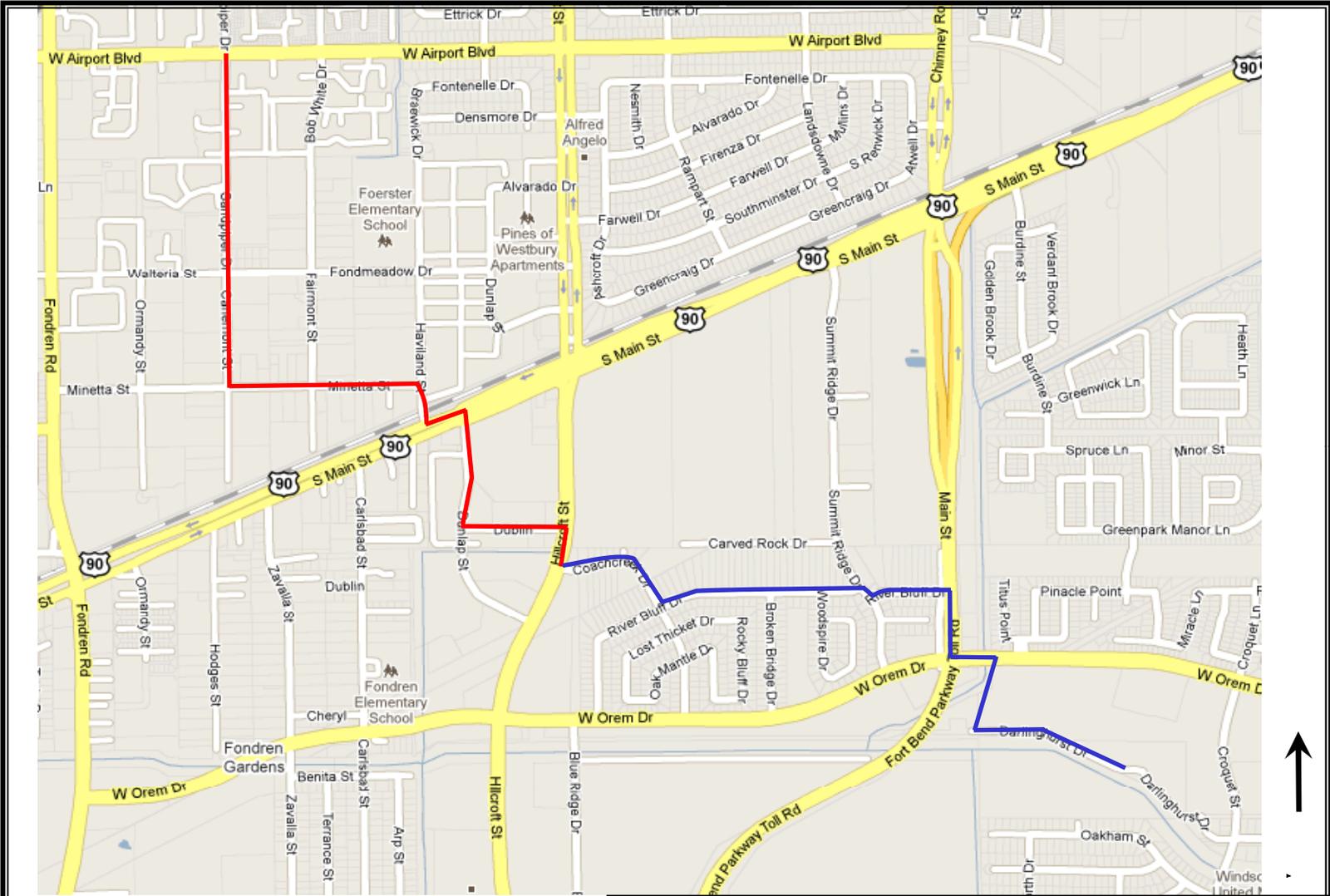
2.3 Geology

According to the 1982 Geologic Atlas of Texas, Beaumont Sheet, published by the University of Texas at Austin, Bureau of Economic Geology, the Project Area is mapped as the Beaumont Formation of the Pleistocene Age. The formation is predominantly clay, with some silt, sand and gravel, and includes inter-distributary muds, abandoned channel-fill muds, and overbank fluvial muds, as well as stream channel and point bar deposits. The surface is almost featureless, characterized by relict river channels shown by meander patterns and pimple mounds on meander belt ridges. Pimple mounds are sandy-loam mounds, rising approximately one foot above the surrounding clay-loam soils. The Beaumont Formation is characterized by low permeability, high water-holding capacity, high compressibility, poor drainage, level-to-depressed relief, low shear strength, and high plasticity. The Geologic Map is included as Figure 2-3 in this section.

2.4 Hydrogeology

The Beaumont Formation, along with the underlying Montgomery, Bentley, and Willis Sand Formations, comprise the Chicot Aquifer, which extends approximately 400 feet below surface in the Project Area. The Evangeline Aquifer is approximately 600 feet thick and extends from the base of the Chicot Aquifer to approximately 2,000 feet below surface (*Stratigraphic and Hydrogeologic framework of Part of the Coastal Plain of Texas*, 1979, Texas Department of Water Resources). Shallow groundwater can typically be encountered at a depth of 10 to 20 feet below the surface in the Harris County area. The Project Area is not located in a recharge area of the Chicot aquifer system. (*Approximate Areas of Recharge to the Chicot and Evangeline Aquifer Systems in the Houston-Galveston Area*, 1977, USGS). The Groundwater

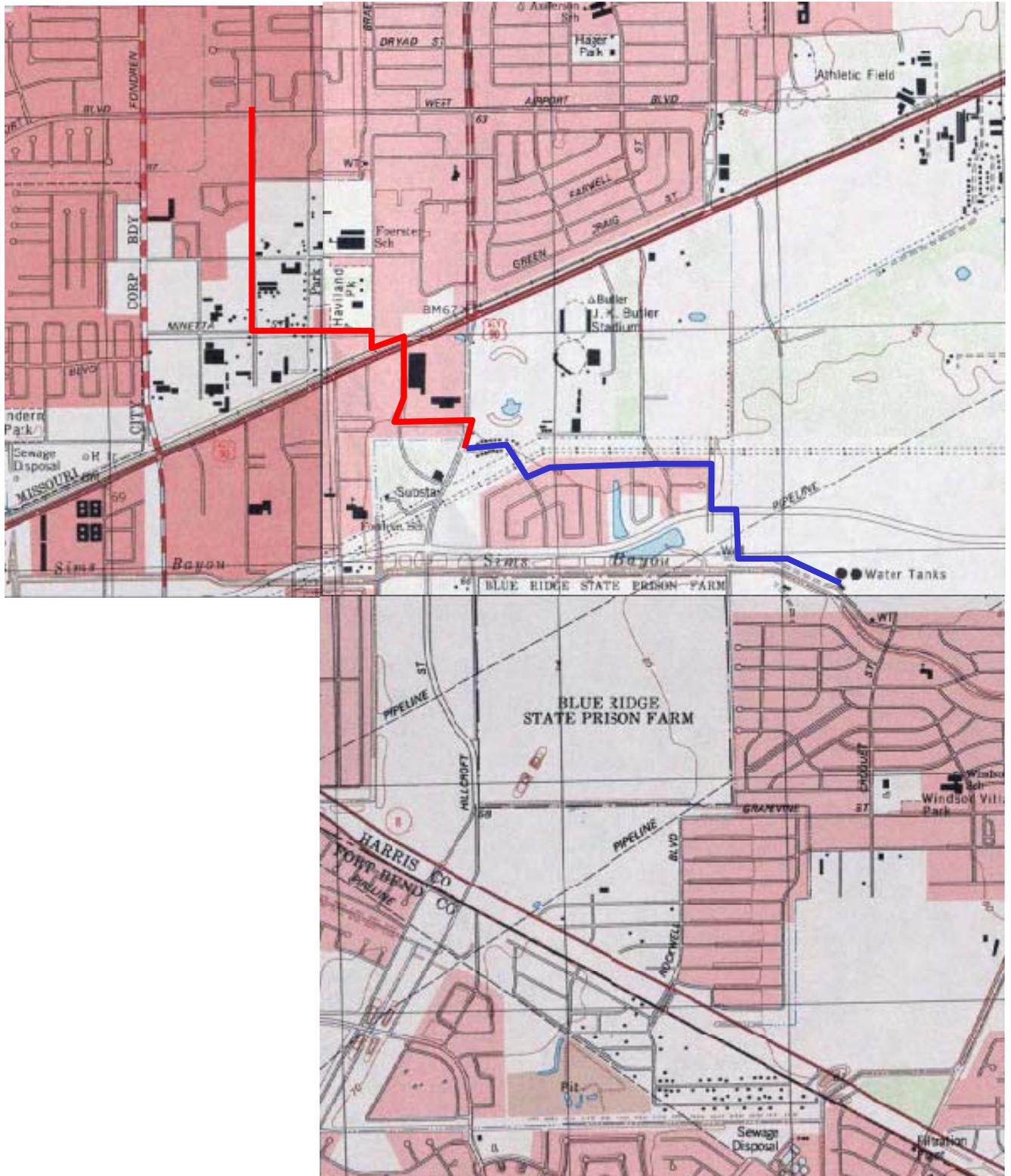
Recharge Map is included as Figure 2-4. The Chicot and Evangeline Aquifers are the principal sources of groundwater in the area of the Project Area. However, the drinking water in Harris County is primarily obtained from treated surface water. The general direction of groundwater flow in Harris County is toward the southeast, but can be influenced by local surface water features such as streams and bayous.



Source: Google Maps (2010)
 Approximate Scale: 1 in = 1500 ft

- 74A-1 Project Area
- 74A-2 Project Area

Project Area Vicinity Map	Lockwood, Andrews & Newnam, Inc . City of Houston Water Line Project 74A-1 & 74A-2 WBS No. S-000900-0109-3 WBS No. S-000900-0110-3
Date: 04/10	
Figure 2-1	<i>CORRIGAN CONSULTING, INC.</i>

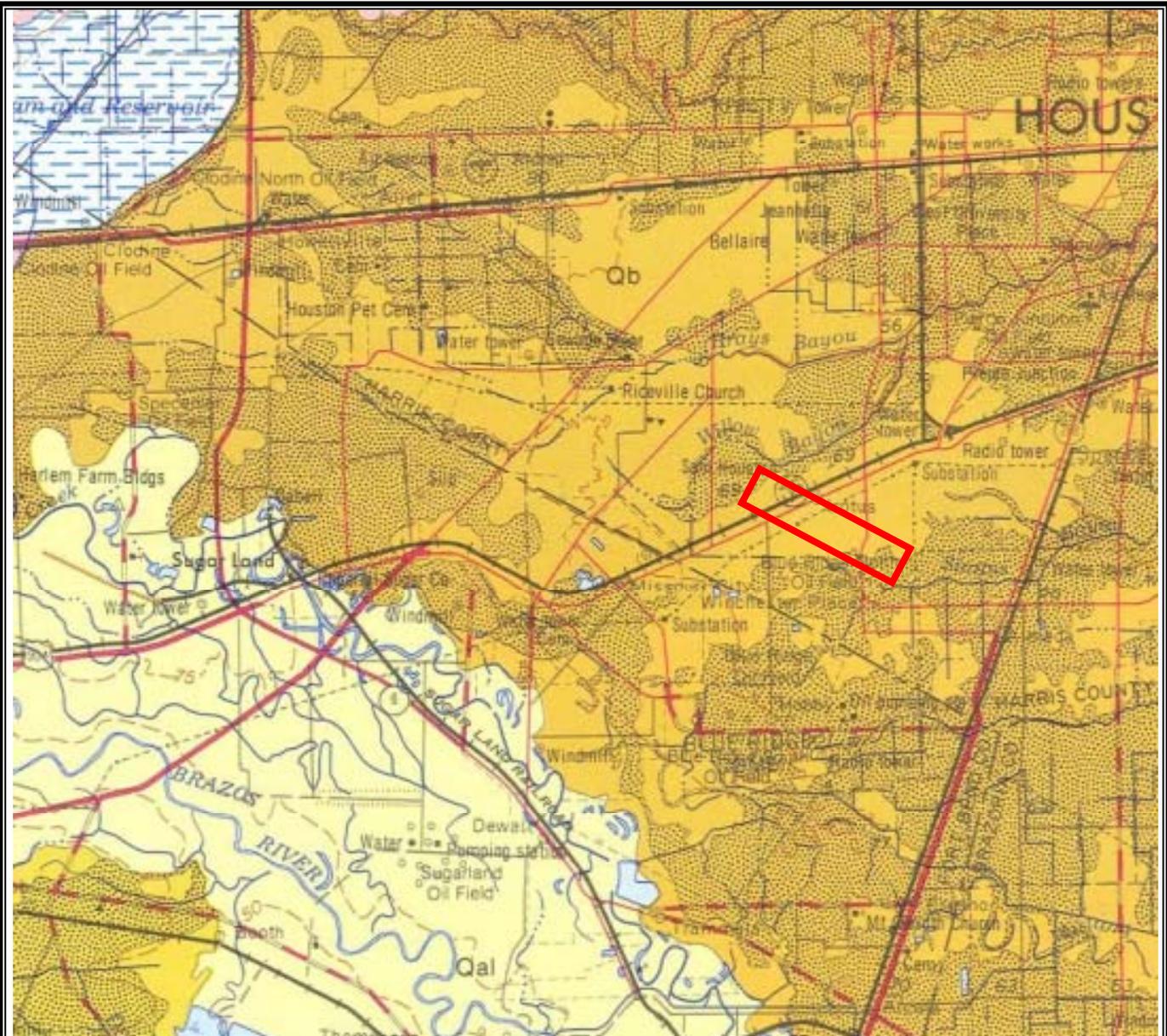


USGS Topographic Quadrangles
 Alief, Bellaire, and Almeda Texas. 1995
 Scale: 1:24,000
 Source: GeoSearch



- 74A-1 Project Area
- 74A-2 Project Area

Topographical Map	Lockwood, Andrews & Newnam, Inc. City of Houston Water Line Project 74A-1 & 74A-2 WBS No. S-000900-0109-3 WBS No. S-000900-0110-3
Date: 04/10	
Figure 2-2	<i>CORRIGAN CONSULTING, INC.</i>



Qb: Beaumont Formation

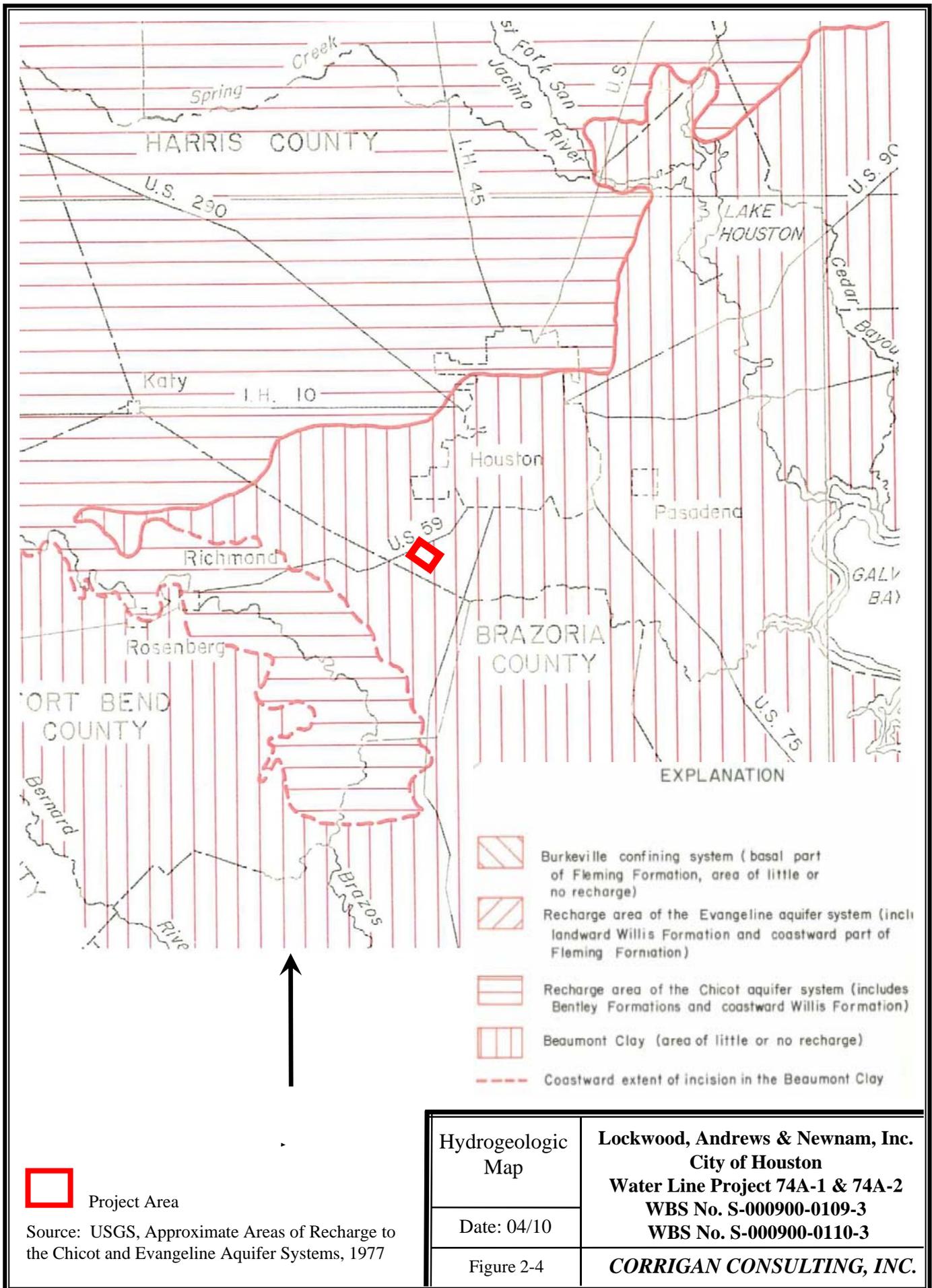
Mostly clay, silt and sands; includes mostly stream channel, point bar, natural levee, back swamps, and to a lesser extent coastal marsh and mud-flat deposits; concretions of calcium carbonate, iron oxide, and iron-manganese oxides in zones of weathering; surface almost featureless, characterized by relic river channels shown by meandering pattern and pimple mounds on meander ridges, separated by area of low, relatively smooth, featureless back swamp deposits without pimple mounds; thickness + 100 feet

Qb Dominantly Clay and mud of low permeability, high water-holding capacity, high compressibility, high to very high shrink-swell potential, poor drainage, level to depressed relief, low shear strength, and high plasticity; geologic units include interdistributary muds, abandoned channel-fill muds and overbank fluvial muds.



 Project Area
 Source: Bureau of Economic Geology (1982)
 Houston Sheet
 Scale: Approximately 1:250,000

Geologic Map	Lockwood, Andrews & Newnam, Inc. City of Houston Water Line Project 74A-1 & 74A-2 WBS No. S-000900-0109-3 WBS No. S-000900-0110-3
Date: 04/10	
Figure 2-3	<i>CORRIGAN CONSULTING, INC.</i>



Hydrogeologic Map	Lockwood, Andrews & Newnam, Inc. City of Houston Water Line Project 74A-1 & 74A-2 WBS No. S-000900-0109-3 WBS No. S-000900-0110-3
Date: 04/10	
Figure 2-4	
<i>CORRIGAN CONSULTING, INC.</i>	

SECTION 3

User Provided Information

In accordance with the ASTM E-1527-05 Standard Practice for ESAs, the user (Lockwood, Andrews, & Newnam, Inc. and the City of Houston) are responsible for providing the information listed below. Mr. Osvaldo Garza of Lockwood, Andrews & Newnam, Inc. (LAN) completed a questionnaire on April 9, 2010. The information provided is summarized below and copies of the questionnaires are included in Appendix F.

3.1 Chain-of-Title Review

A chain-of-title review was not included in the scope of work for this ESA because this was an infrastructure project with no planned property acquisition.

3.2 Review of Environmental Liens and Activity and Use Limitations

No information regarding environmental liens or activity and use limitations was provided by LAN. A records search for environmental liens was not included in the scope of work for this ESA.

3.3 Specialized Knowledge or Experience

LAN reported no specialized knowledge or experience related to recognized environmental conditions associated with the Project Area.

3.4 Actual Knowledge of the User

LAN reported no actual knowledge or experience related to recognized environmental conditions associated with the Project Area.

3.5 Reason for Significantly Lower Purchase Price

An evaluation of the purchase price was not necessary for this ESA because this was an infrastructure project with no planned property acquisition.

3.6 Commonly Known or Reasonably Ascertainable Information

LAN reported no information related to recognized environmental conditions associated with the Project Area.

3.7 Previous Environmental Reports

No previous environmental reports were provided during this ESA.

3.8 Other User Provided Information

LAN provided a map and list of the street segments where the waterline is to be replaced.

SECTION 4

Historical Use of Project Area

4.1 Review of Historical Aerial Photographs and Topographic Maps

Historical aerial photographs and topographic maps were reviewed to help establish prior land use and to identify on-site activities or obvious surface features that might indicate a recognized environmental condition. Aerial photographs and topographic maps were obtained from GeoSearch and reviewed for potential recognized environmental conditions within the Project Area, which are listed below. A copy of the aerial photographs and topographic maps is included in Appendix B.

Date	Property	Adjoining Properties
1915 Topo	Undeveloped, Railroad (90 & Main St.)	Undeveloped
1929 Topo	Portion of 74A-2 unavailable. Same as 1915 Topo	Residential development present to the southeast
1944 Aerial	Residential development present along Sandpiper and Minetta (74A-2), Hillcroft St. present	Sam Houston Airport visible to the north
1946 Topo	Portion of 74A-2 unavailable, same as 1944 Aerial	Additional commercial development present to the south
1953 Aerial	Additional residential development along Minetta (74A-2)	(Poor Quality), additional development to the south and west.
1955 Topo	Same as 1953 Aerial except there is possible commercial development along Minetta/ poor quality topo map.	Additional residential and commercial development present to the south/ poor quality topo map.
1967-1970 Topo	West Airport Blvd in process of being developed.	Additional residential development to the south and west and commercial development to the north, (Meyers Speedway, Butler Stadium), airport has been replaced by residences, first commercial structures on Marcus Oil & Chemical site
1969 Aerial	West Airport Blvd completed	Same as 1967-1970 Topo
1979 Aerial	Additional residential present along the street segments (74A-2), water tank present at south end of Project Area (74A-1), apartments present along Dunlap and Dublin and commercial development present along Minetta and Haviland.	Additional residential and commercial development present to the north, west, and south

Date	Property	Adjoining Properties
1982 Topo	Commercial development present to the north and east of Dunlap and Dublin (74A-2)	Same as 1979 Aerial except for a “well” at the west end of the current location of Darlington.
1989 Aerial	Additional commercial business along Minetta, additional residential development present along project areas, River Bluff Road and Darlington present (74A-1)	Additional residential development present to the south, Meyers Speedway dismantled
1995 Topo	Same as 1989 Aerial, additional water tank (2 total) at Sims Bayou Pump Station	Same as 1989 Aerial
1996 Aerial	Additional residential development present along River Bluff and Coachcreek in Project Area 74A-1.	Commercial development present to the east
2004 Aerial	Same as 1996 Aerial, additional two water tanks (4 total) at Sims Bayou Pump Station, additional commercial along Sandpiper and Dublin, and land scarring on the north side of Darlington.	Residential development present to the east

Based on a review of historical aerial photographs and topographic maps, the majority of the Project Area was undeveloped until the 1940s. The Southern Pacific Railroad (Highway 90 and Main St) was present as early as 1915. Ongoing residential development was present in the project area until the 1990s. Commercial development was present in Project Area 74A-1 throughout the 2004 aerial. The street segments of Project Area 74A-1 were not visible until the 1980s. There was no obvious evidence of oil and gas exploration or production, large scale industrial activities or commercial waste disposal activities within the Project Area. However, there were commercial facilities and land scarring noted within the Project Area.

The surrounding area was developed as early as the 1920s. The Sam Houston Airport was present to the north from the 1940s through the 1960s. By the late 1960s, residential development replaced the airport and the stadium and speedway were built to the north. Continued residential and commercial development was present in the surrounding areas through the 1990s. There was no obvious evidence of commercial waste disposal activities within the immediate surrounding areas. However, there was an oil well located at the west end of Darlington, and an industrial facility, Marcus Oil & Chemical, located at the southwest corner of Minetta and Sandpiper. There were also commercial facilities and land scarring noted in the surrounding area.

4.2 Review of City Directories

City directories, which identify businesses located by address, have been published from the 1700s to present. City directories were not ordered for the Project Area because the vicinity CCI Job # 10-112, 10-113

was developed as residential and after reviewing aerials and topographic maps it was deemed unnecessary.

4.3 Review of Fire Insurance Maps

Fire insurance maps were developed in the mid 1800s to determine insurance rates by identifying fire hazards (such as gasoline), building construction materials, and the locations of fire protection equipment and fire stations. Fire insurance maps were not available for the Project Area.

4.4 Interviews Regarding Historical Use and Development

LAN provided no information regarding environmental conditions within the Project Area. Other interviews were conducted during the site reconnaissance as discussed in Section 5 and Appendix E.

4.5 Summary of Historical Information

Based on a review of historical aerial photographs and topographic maps, the majority of the Project Area was undeveloped until the 1940s. The Southern Pacific Railroad (Highway 90 and Main St) was present as early as 1915. Ongoing residential development was present in the project area until the 1990s. Commercial development was present in Project Area 74A-1 throughout the 2004 aerial. The street segments of Project Area 74A-1 were not visible until the 1980s. There was no obvious evidence of oil and gas exploration or production, large scale industrial activities or commercial waste disposal activities within the Project Area. However, there were commercial facilities and land scarring noted within the Project Area.

The surrounding area was developed as early as the 1920s. The Sam Houston Airport was present to the north from the 1940s through the 1960s. By the late 1960s, residential development replaced the airport and the stadium and speedway were built to the north. Continued residential and commercial development was present in the surrounding areas through the 1990s. There was no obvious evidence of commercial waste disposal activities within the immediate surrounding areas. However, there was an oil well located at the west end of Darlinghurst, and an industrial facility, Marcus Oil & Chemical, located at the southwest corner of Minetta and Sandpiper. There were also commercial facilities and land scarring noted in the surrounding area.

The availability of historical aerial photographs and topographic maps was limited and/or missing and there were data gaps (over 5 year intervals). In addition, the review of potential recognized environmental conditions was limited by the scale and quality of the aerial photographs and the entire Project Area was not included in some of the topographic maps. Due to the scale of the photographs, it was impossible to identify all of the commercial/light industrial structures and/or the type of commercial/light industrial activities and impossible to distinguish between land scarring and poor aerial photograph quality. City directories were not ordered for the Project Areas due to the heavy residential and late development within and surrounding the areas. In addition, there were no fire insurance maps for the Project Area.

SECTION 5

Regulatory Database Records Review

5.1 Database Search Distances & Assumptions

A regulatory agency database list was obtained and reviewed to identify listed hazardous material sites located within the Project Area and in the vicinity of the Project Area. The agency records were obtained on April 1, 2010 from a commercial source, GeoSearch, which reportedly updates their records at least every 90 days, or within 90 days of the last update published by the agency. This records review included information that was reasonably ascertainable, publicly available agency database records, retrievable by geographical location in relation to the Project Area. A copy of this report is included in Appendix C. The databases searched and the search distances are listed below:

<u>Federal Records</u>	<u>Search Distance*</u>
Superfund Sites	1 mile
CERCLIS Sites	500 feet
RCRA Corrective Action Sites	1 mile
RCRA TSD Sites	1 mile
RCRA Generator Sites	500 feet
ERNS/NRS Sites	500 feet
<u>State Records</u>	<u>Search Distance*</u>
Superfund Sites	1 mile
Landfill/Solid Waste Sites	500 feet
LPST	500 feet
PST Sites	500 feet
Voluntary Cleanup Sites	500 feet
Brownfields Sites	500 feet
Spill Sites	Property only
<u>Additional Records</u>	<u>Search Distance*</u>
Oil & gas wells and pipelines (TRC web site)	Property only
Floodplains	Property only
Wetlands	Property only

The regulatory records were reviewed for sites within 500 feet of the Project Area, except for the NPL Sites, RCRA CORRACTS Sites, State Superfund Sites and State Hazardous Waste Sites, which were reviewed for sites within 1 mile (per the City of Houston's ECRA Standard Practice). There were no listed sites identified within this modified search distance, except for the sites discussed in the following sections.

The Project Area is located approximately 2 ½ miles south of Buffalo Bayou. The Project Area is also located anywhere from 50 feet to ½ mile north of Sims Bayou. The topography is relatively flat within the Project Area. The direction of groundwater flow in the Project Area is assumed to be to the southeast, towards Sims Bayou for the purposes of assessing potential impacts from regulated sites.

5.2 Summary of Listed Facilities

The following table summarizes the listed facilities located within 500 feet of the Project Area. A map of all regulated sites is included as Figure 5-1. Additional discussion of selected facilities follows the table.

Facility Name and Location	Distance from Project Area	Database Listing	Figure 5-1 Site No.
14549 Minetta	Adjoining 74A-2 at Minetta and Sandpiper, (down-gradient)	Spills	1
S & R Oil Company 14549 Minetta	Adjoining 74A-2 at Minetta and Sandpiper (down-gradient)	CERCLIS	1
Marcus Oil & Chemical, 14549 Minetta	Adjoining 74A-2 at Minetta and Sandpiper (down-gradient)	RCRAG, PST	1
Marcus Oil & Chemical Explosion 14000 Minetta	Adjoining 74A-2 at Minetta and Haviland (up-gradient)	CERCLIS	2
Sims Bayou Plant 13840 Croquet	Adjoining 74A-1 at Sims Bayou Plant and Darlingtonhurst, (down-gradient)	ERNS, PST	3
Clean Scene #11 14117 S. Main	Adjoining 74A-2 at Main and Dunlap (side-gradient and up-gradient)	RCRAG	4
Fuel Depot #11 14111 S. Main	Adjoining 74A-2 at Main and Dunlap (side-gradient and up-gradient)	PST	4
Petro Equipment X-Change 11800 Fairmont	300 feet south from 74A-2 at Fairmont and Main, (down-gradient)	PST	5
PB-KBB 11414 Fairmont	600 feet east from 74A-2 at Fairmont and Walteria, (side gradient and up-gradient)	PST	6

Spill sites at 14549 Minetta – Site 1

This site is listed as having three separate spills. The first spill was in 1985 and included 30 gallons of waste lube oil. There were no affected waterways. The second spill was in December 2003. Mr. Craig Crawley of Marcus Oil & Chemical recalled this event and said it was caused by a gasket on a tank and was cleaned up without any off-site release (See Appendix E). The third spill occurred in December 2004. According to the regulatory database, 1,000,000 pounds of polymer were spilled due to a fire. The area affected was ¼

mile long and extended to Fondren Street to the west, away from the Project Area. The City of Houston took samples in a nearby ditch and took the lead on cleanup. The incident status has been closed. Mr. Crawley recalled this event as well and stated that the polymer never left their facility and was cleaned up in a matter of days. Due to the closed status of these three spills, no impacts are anticipated onto the Project Areas.

S&R Oil Company – Site 1

This site is the current location of Marcus Oil & Chemical. According to Mr. Crawley of Marcus Oil & Chemical, S&R Oil Company was a waste lube oil company with a retention pond on site. The site was put on the NPL list in the 1980s. Marcus Oil & Chemical purchased the property, cleaned up the retention pond to TCEQ standards and they were removed from the NPL list in 1994. Mr. Crawley gave me two letters verifying the closure of the site, both dated in 1992. Copies of these letters are included in Appendix E. There are potential impacts from this site within the ROW.

Marcus Oil & Chemical Explosion – Site 2

This facility is currently Haviland Park. Mr. Crawley of Marcus Oil & Chemical stated that Marcus Oil & Chemical was never near that location. Based on the historical aerials and topo maps, this site appears to be undeveloped before becoming Haviland Park.

Clean Scene #11 – Site 4

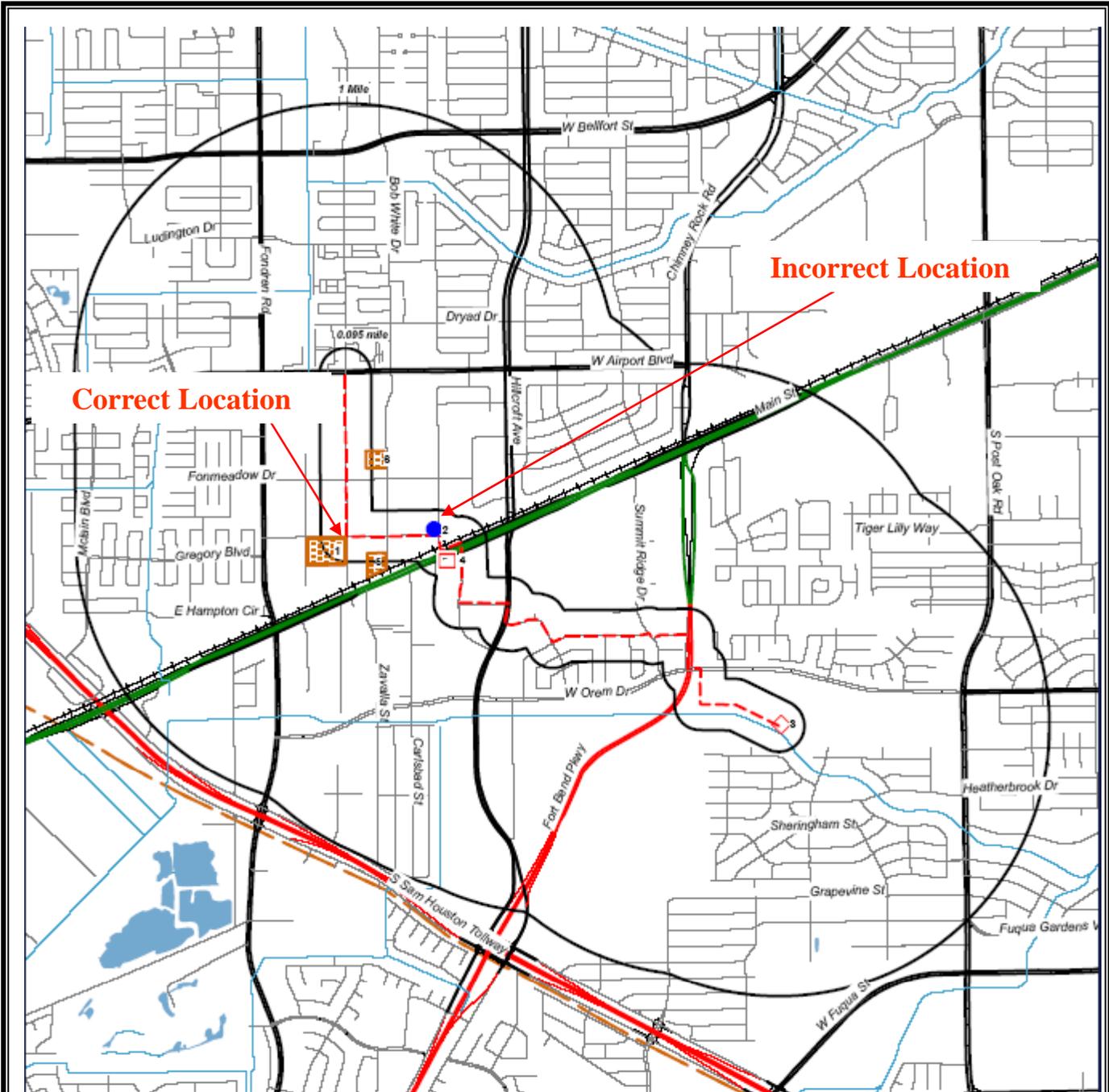
This facility is currently a washateria. It is listed in the regulatory database as a conditionally exempt small quantity generator. An interview was conducted with an employee during the site reconnaissance who stated that no dry cleaning is done at the facility and the business does not take dropoffs for dry cleaning. The sign outside indicates that dry cleaning was present previously, but whether it was a drop-off or an on-site location could not be determined at the time of the site reconnaissance.

5.3 Oil and Gas Well and Pipeline Sites

The Railroad Commission of Texas (RRC) maintains maps of exploration and production oil and gas well locations. The closest oil well is located at least 500 feet northwest of the water line location along W. Orem. A total of six underground pipelines transect the Project Area, including four gas transmission pipelines, one crude transmission and one highly volatile liquid (HVL Products) line. There was no obvious evidence of spills or releases from the pipelines noted during the site reconnaissance. The Oil and Gas Map is included as Figure 5-2.

5.4 Summary of Records Review

Based on a review of the regulatory database obtained from GeoSearch on April 1, 2010, there were three spill sites, one CERCLIS site, two RCRA generator facilities and one ERNS site. In addition, there are six underground pipelines which transect the Project Area. There are potential impacts from the Clean Scene Washateria (previously a dry cleaning facility), the pipelines, and the Marcus Oil & Chemical site (formerly S&R Oil Company).



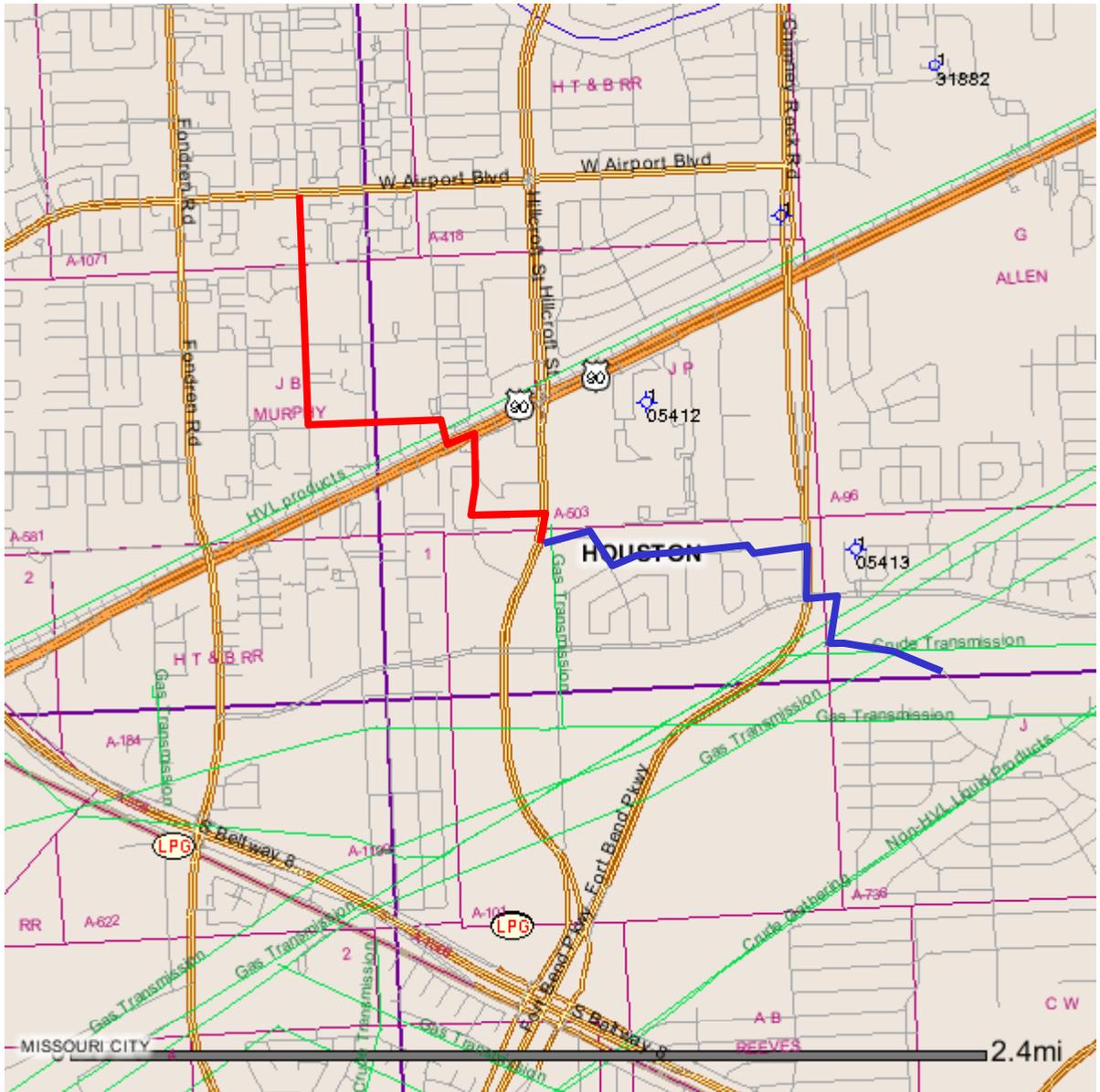
**74A-1 & 74A-2
HOUSTON, Texas
77085**

- Target Property (TP)
- SPILLS
- CERCLIS
- RCRA
- PST
- CERCLIS
- PST
- RCRAG

— Project Area
Source: GeoSearch



Regulated Sites Map	Lockwood, Andrews & Newnam, Inc. City of Houston Water Line Project 74A-1 & 74A-2 WBS No. S-000900-0109-3 WBS No. S-000900-0110-3
Date: 04/10	
Figure 5-1	
<i>CORRIGAN CONSULTING, INC.</i>	



- 74A-1 Project Area
- 74A-2 Project Area

Source: RRC Public GIS Map Viewer, 2010

<p>Oil and Gas Well and Pipeline Map</p>	<p>Lockwood, Andrews & Newnam, Inc. City of Houston Water Line Project 74A-1 & 74A-2 WBS No. S-000900-0109-3 WBS No. S-000900-0110-3</p>
<p>Date: 02/10</p>	
<p>Figure 5-2</p>	<p><i>CORRIGAN CONSULTING, INC.</i></p>

SECTION 6

Results of the Site Reconnaissance

6.1 Site Reconnaissance Methodology

On April 7, 2010 a site reconnaissance of the Project Area was performed by a field geologist of Corrigan Consulting, Inc. After obtaining access to the project area south of W. Orem Drive, on June 29, 2010, a site reconnaissance and wetlands survey was performed by a project biologist of Corrigan Consulting, Inc. Observations were made regarding the presence of hazardous substances and petroleum products, and obvious evidence of past spills or releases within the Project Area and adjoining properties.

The Project Area was inspected by walking and/or driving each street segment of the planned water line project. There were access restrictions which limited observations along the ROW including parked vehicles along many of the street segments within the Project Area, and parked vehicles in parking lots on adjoining properties. There were also fences that limited observations of adjoining properties. A Site Features Map is included as Figure 6-1. Selected photographs are included in Appendix D.

6.2 Site Observations

6.2.1 Current Use of Project Area

The Project Area was mostly residential, with several commercial businesses located throughout. An industrial facility, Marcus Oil & Chemical, was located in Project Area 74A-2.

6.2.2 Description of On-site Structures

There were no structures located within the Project Area, defined as a 60-foot wide right-of-way (ROW) along the street segments except for Hillcroft and US90A, which have wider ROWs.

6.2.3 Hazardous Substances and Petroleum Product Use and Storage

There were no obvious hazardous substances or petroleum products used or stored within the Project Area noted during the site reconnaissance. However, there were several businesses with hazardous substances and petroleum product use and storage located adjoining the Project areas. These are listed in Table 6.1.

6.2.4 Solid and Hazardous Wastes

There were several locations where household trash was left on the streets or in abandoned commercial parking lots. Mr. Craig Crawley of Marcus Oil & Chemical stated the area has a lot of problems with residents dumping trash out on the nearby streets of Sandpiper and Minetta. In addition, there was abandoned trash in a fenced area at the abandoned strip mall located at the southeast corner of S. Main and Dunlap. No obvious evidence of hazardous waste was observed.

6.2.5 Landfills

There was no obvious evidence of a landfill within the Project Area.

6.2.6 Surface Impoundments

There was no obvious evidence of surface impoundments, pits, ponds or lagoons within the Project Area.

6.2.7 Underground Storage Tanks

There was no obvious evidence of underground storage tanks (USTs) located within the Project Area. However, there were USTs located at several of the businesses listed in Table 6.1.

6.2.8 Aboveground Storage Tanks

There was no obvious evidence of aboveground storage tanks (ASTs) observed within the Project Area or adjacent to the project area. However, Marcus Oil & Chemical is a polyethylene wax chemical refinery located at the southwestern corner of Sandpiper and Minetta. There were several aboveground storage tanks (ASTs) containing chemicals located at the Marcus Oil & Chemical site, but there was no obvious evidence of a release.

6.2.9 Wastewater

There was no obvious evidence of wastewater discharges or septic tanks observed within the Project Area.

6.2.10 Storm Water and Surface Water Drainage

There was no obvious evidence of contaminated storm water discharges within the Project Area. The surface water drainage in the vicinity of the Project Area flows to roadside ditches and the City of Houston storm water collection system.

There was one stream/ditch crossing south of W. Orem. However, the water line construction plans include directional drilling under the stream/ditch in order to avoid any impacts.

6.2.11 Wetlands

There were roadside ditches with standing water located throughout the Project Area. However, the ditches are maintained and there was no obvious wetland vegetation noted during the site reconnaissance.

6.2.12 Electrical Transformers, Capacitors and other Polychlorinated Biphenyls Sources

There were pole-mounted electrical transformers observed throughout the Project Area but there was no obvious evidence of spills or releases, such as stressed or stained vegetation.

6.2.13 Railroads

There is a railroad track within the Project Area of 74A-2 that intersects Haviland and runs parallel with S. Main. There were no obvious evidence of spills or releases near the railroad tracks, but no sampling or analysis was performed.

6.2.14 Water Wells

There was no obvious evidence of water wells observed within the Project Area. However, there was what appeared to be a fire hydrant stand pipe at Dunlap near the abandoned strip center.

6.2.15 Oil and Gas Wells

There was no obvious evidence of oil and gas wells observed within the Project Area.

6.2.16 Pipelines

A total of six underground pipelines transect the Project Area, including four gas transmission pipelines, one crude transmission and one highly volatile liquid (HVL Products) line. During the site reconnaissance, two pipelines were observed within the Project Areas. These were two gas transmission lines; one transecting Coach Creek, and one which runs parallel to Orem Drive. Four pipelines are located south of Orem Drive. No obvious evidence of spills or releases was observed near the pipelines.

6.2.17 Utilities

There were overhead utility lines, underground water lines, and underground cable lines observed throughout the Project Area.

6.3 Adjoining and Surrounding Project Area Reconnaissance

A site reconnaissance of the adjoining and surrounding properties was conducted by vehicle and interviews were conducted at commercial businesses that typically store and/or use hazardous chemicals and petroleum products (see Appendix E). These properties are summarized below and the sites with potential impacts are noted in bold text.

Table 6-1

No.	Site	Address	Information	Distance from Project Area
1	Meadows Washateria	6403 W. Airport	Presently a laundry facility. A sign above the door indicated it was a former dry cleaner. The owner was interviewed and did not recall if dry cleaning was done on site before her ownership. There were no monitoring wells noted. There is potential for releases from this property within Project Area 74A-2.	Along Sandpiper ROW

No.	Site	Address	Information	Distance from Project Area
2	Marcus Oil & Chemical	14549 Minetta	Marcus Oil & Chemical is a polyethylene wax refinery. This is the previous location of S&R Oil Company. This site is listed as having multiple spills, previous CERCLIS, and RCRA listings. An interview was conducted with general manager Craig Crawley who stated that the CERCLIS site was closed more than 15 years ago. He provided letters verifying the closure (Appendix E). He also stated all spills were contained onsite and there were no off-site releases. Due to the location of this site, adjoining the Project Area, there are potential impacts within Project Area 74A-2.	Adjoining south west of Minetta and Sandpiper Intersection
3	Nova Drilling Technologies	11800 Fairmont	Listed as a PST site. Interview was conducted with Mr. Randy West who stated that they had not had any releases. Due to the location and status of this site, no impacts are anticipated within Project Area 74A-2.	500 feet south of Minetta ROW
4	PB-KBB	11414 Fairmont	This site was secured and inaccessible during the site visit. No interviews were conducted but due to the distance from the Project Area, no impacts are anticipated within Project Area 74A-2.	1500 feet north of Minetta ROW
5	Ice cream storage and vehicle location	14349 Minetta	This site was a storage location with >50 ice cream trucks. No employees or residents were present during the site reconnaissance for an interview. There is a potential for Freon and oil spills from this site within Project Area 74A-2.	Along Minetta ROW
6	Best Used Tires and Auto Service	14131 S Main	This site is an auto and tire shop. According to the interview, the site has been a car care facility for many years. Used oil is stored in a tank and taken off site for disposal. No obvious evidence of spills, releases, or monitoring wells was observed during the site reconnaissance. This site is located on the south side of US90A (down-gradient) and no impacts are anticipated from this site within Project Area 74A-2.	Along S. Main ROW

No.	Site	Address	Information	Distance from Project Area
7	Washateria	14117 S. Main	Presently a laundry facility. A sign indicated it was previously a dry cleaner. The employee was interviewed and stated that no dry cleaning is done at the location. However, no additional information could be obtained due to a language barrier. This location is listed as Clean Scene #11, a small quantity generator. No monitoring wells were noted. There is potential for releases from this property within Project Area 74A-2.	Along S. Main ROW
8	Fuel Depot #11	14111 S. Main	This site is listed as a PST site. An interview was conducted but no additional information could be obtained. Due to the location of this site along the Dunlap ROW, there are potential releases within Project Area 74A-2.	Along S. Main and Dunlap ROW
9	Abandoned Mall	Southeast corner of Dunlap and W. Main	During the site reconnaissance the mall was abandoned, secured and inaccessible. However, there were 2 truck service bays and 5 or 6 vehicle service bays located along the Dunlap ROW. There were possible hydraulic lifts and underground storage tanks at this site and there are potential releases within Project Area 74A-2.	Along Dunlap ROW
10	Sims Bayou Pump Station	13840 Croquet	This site was not observed due to inaccessible roads. It is listed as ERNS and PST. Due to the status and location of this facility, no impacts are anticipated within Project Area 74A-1.	Along Darlinghurst ROW
11	Railroad Tracks	Along S. Main	Southern Pacific railroad track has been present since the early 1900s. There were no obvious evidence of spills or releases near the railroad tracks, but no sampling or analysis was performed. There is a potential for releases within Project Area 74A-2 from the railroad tracks.	Along S. Main ROW

No.	Site	Address	Information	Distance from Project Area
12	High-Tech, Inc.	11645 Fairmont	This site is currently a lighting company and was formerly a cabinet and shutter manufacturer. There were possible paints, paint thinners, varnishes and solvents used at this facility, but the waterline will be on the south side of Minetta and no impacts are anticipated from this site.	Along Minetta ROW (north side)
13	Hispanic Church	Southwest corner of Haviland and Minetta	There is currently a church located at this site, but there was evidence of previous light industrial activity and/or an auto salvage yard present. There are potential releases from this site along the Minetta ROW within the Project Area 74A-2.	Along Minetta ROW
14	Pipelines	Throughout the Project Area	There are a total of six underground pipelines located throughout the Project Areas. No obvious evidence of a release was noted, but there are potential impacts, in particular, from the crude oil pipeline within Project Area 74A-1.	Within Project Area ROW and intersecting ROWs

There were other commercial businesses located in the surrounding area, but due to the location and distances of these businesses from the ROWs, no impacts to the Project Area are anticipated.

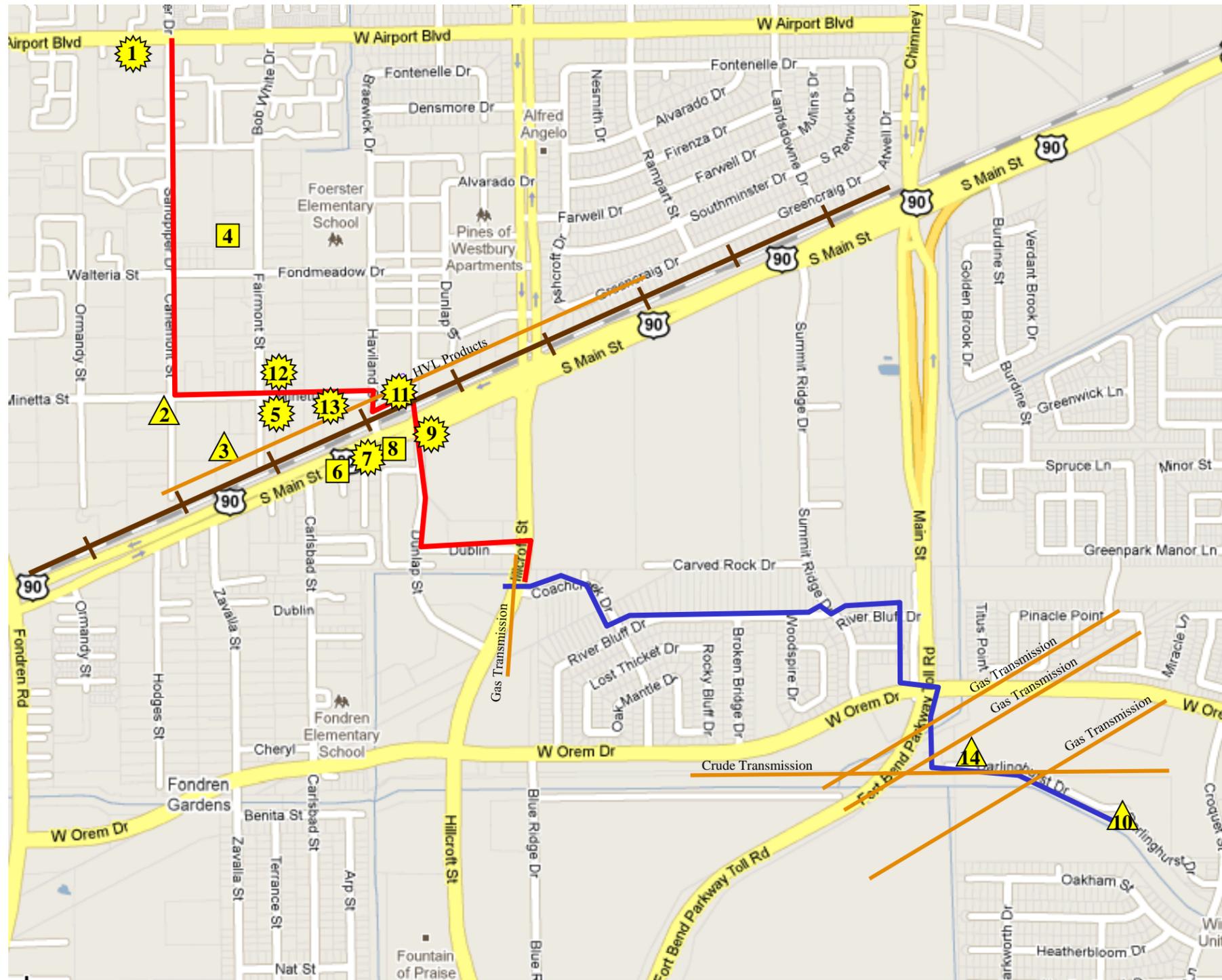
6.4 Summary of Site Reconnaissance

On April 7, 2010, a site reconnaissance of the Project Area was performed by a field geologist of Corrigan Consulting, Inc. After obtaining access to the project area south of W. Orem Drive on June 29, 2010, a site reconnaissance and wetlands survey was performed by a project biologist of Corrigan Consulting, Inc. The Project Area was mostly residential with several commercial businesses located throughout and an industrial facility located in Project Area 74A-2. The Project Area was inspected by walking and/or driving each street segment of the planned water line project. There were access restrictions which limited observations along the ROW including parked vehicles along many of the street segments within the Project Area, and parked vehicles in parking lots on adjoining properties. There were also fences that limited observations of adjoining properties.

There was one stream/ditch crossing south of W. Orem. However, the water line construction plans include directional drilling under the stream/ditch in order to avoid any impacts. There were roadside ditches with standing water located throughout the Project Area. However, the ditches are maintained and there was no obvious wetland vegetation noted during the site reconnaissance. There were several recognized environmental conditions that could impact the Project Area including the following:

No.	Site	Address	Information	Distance from Project Area
1	Meadows Washateria	6403 W. Airport	Presently a laundry facility. A sign above the door indicated it was a former dry cleaner. The owner was interviewed and did not recall if dry cleaning was done on site before her ownership. There were no monitoring wells noted. There is potential for releases from this property within Project Area 74A-2.	Along Sandpiper ROW
2	Marcus Oil & Chemical	14549 Minetta	Marcus Oil & Chemical is a polyethylene wax refinery. This is the previous location of S&R Oil Company. This site is listed as having multiple spills, previous CERCLIS, and RCRA listings. An interview was conducted with general manager Craig Crawley who stated that the CERCLIS site was closed more than 15 years ago. He provided letters verifying the closure (Appendix E). He also stated all spills were contained onsite and there were no off-site releases. Due to the location of this site, adjoining the Project Area, there are potential impacts within Project Area 74A-2.	Adjoining south west of Minetta and Sandpiper Intersection
5	Ice cream storage and vehicle location	14349 Minetta	This site was a storage location with >50 ice cream trucks. No employees or residents were present during the site reconnaissance for an interview. There is a potential for Freon and oil spills from this site within Project Area 74A-2.	Along Minetta ROW
7	Washateria	14117 S. Main	Presently a laundry facility. A sign indicated it was previously a dry cleaner. The employee was interviewed and stated that no dry cleaning is done at the location. However, no additional information could be obtained due to a language barrier. This location is listed as Clean Scene #11, a small quantity generator. No monitoring wells were noted. There is potential for releases from this property within Project Area 74A-2.	Along S. Main ROW

No.	Site	Address	Information	Distance from Project Area
8	Fuel Depot #11	14111 S. Main	This site is listed as a PST site. An interview was conducted but no additional information could be obtained. Due to the location of this site along the Dunlap ROW, there are potential releases within Project Area 74A-2.	Along S. Main and Dunlap ROW
9	Abandoned Mall	Southeast corner of Dunlap and W. Main	During the site reconnaissance the mall was abandoned, secured and inaccessible. However, there were 2 truck service bays and 5 or 6 vehicle service bays located along the Dunlap ROW. There were possible hydraulic lifts and underground storage tanks at this site and there are potential releases within Project Area 74A-2.	Along Dunlap ROW
11	Railroad Tracks	Along S. Main	Southern Pacific railroad track has been present since the early 1900s. There were no obvious evidence of spills or releases near the railroad tracks, but no sampling or analysis was performed. There is a potential for releases within Project Area 74A-2 from the railroad tracks.	Along S. Main ROW
13	Hispanic Church	Southwest corner of Haviland and Minetta	There is currently a church located at this site, but there was evidence of previous light industrial activity and/or an auto salvage yard present. There are potential releases from this site along the Minetta ROW within the Project Area 74A-2.	Along Minetta ROW
14	Pipelines	Throughout the Project Area	There are a total of six underground pipelines located throughout the Project Areas. No obvious evidence of a release was noted, but there are potential impacts, in particular, from the crude oil pipeline within Project Area 74A-1	Within Project Area ROW and intersecting ROWs



No	Site	Address
1	Meadows Washateria (former dry cleaner)	6403 W. Airport
2	Marcus Oil and Chemical (former S & R Oil)	14549 Minetta
3	Nova Drilling Technologies (former Petro Equipment x-change)	11800 Fairmont
4	Gated site (PB-KBB)	11414 Fairmont
5	Ice cream truck and vehicle storage location	14349 Minetta
6	Best Used Tires & Auto Service	14131 S. Main
7	Washateria (former Clean Scene #11 dry cleaner)	14117 S. Main
8	Fuel Depot #11	14111 S. Main
9	Abandoned mall (previous vehicle service center)	Southeast corner of S. Main and Dunlap
10	Sims Bayou Pump Station	13840 Croquet
11	Railroad Track	Along S. Main
12	High-Tech, Inc. (former cabinet and shutter manufacturer)	11645 Fairmont
13	Hispanic Church (former light industrial and/or an auto salvage yard)	Southwest corner of Minetta and Haviland
14	Gas & HVL Pipelines Crude Oil Pipeline	Throughout Project Area Darlinghurst

Approximate Scale : 1 inch = 0.25 mile

- Gas Station / Service Station / Auto Repair / UST and LPST sites
- ▲ Regulated Sites (other than UST and LPST sites)
- ★ Commercial or Historical Concern
- 74A-1 Project Area
- 74A-2 Project Area
- + Railroad Tracks
- Underground Pipeline



Site Features Map	Lockwood, Andrews & Newnam, Inc. City of Houston Water Line Project 74A-1 & 74A-2
Date: 08/10	
Figure 6-1	CORRIGAN CONSULTING, INC.

SECTION 7

Summary, Conclusions and Recommendations

7.1 Summary

Corrigan Consulting, Inc. was retained by Lockwood, Andrews & Newnam, Inc. (LAN) on behalf of the City of Houston to conduct a Phase I Environmental Site Assessment (ESA) to support the City of Houston Water Line 74A-1 and 74A-2 Projects (WBS No. S-000900-0109-3 & WBS No. S-000900-0110-3). The project is located approximately ten miles southwest of downtown Houston, Texas and includes the rights-of-way (ROWs) along 13 street segments totaling 15,654 feet in length (herein referred to as the “Project Area”). The rights-of-way are assumed to be 60 feet wide along the street segments except for Hillcroft and US90A, which have wider ROWs.

The City of Houston has requested this Phase I ESA to assess recognized environmental conditions associated with the Project Area. The main focus of this ESA is to assess the potential for encountering contaminated media during the construction activities for the waterline installation.

7.1.1 Summary of Historical Information

Based on a review of historical aerial photographs and topographic maps, the majority of the Project Area was undeveloped until the 1940s. The Southern Pacific Railroad (Highway 90 and Main St) was present as early as 1915. Ongoing residential development was present in the project area until the 1990s. Commercial development was present in Project Area 74A-1 throughout the 2004 aerial. The street segments of Project Area 74A-1 were not visible until the 1980s. There was no obvious evidence of oil and gas exploration or production, large scale industrial activities or commercial waste disposal activities within the Project Area. However, there were commercial facilities and land scarring noted within the Project Area.

The surrounding area was developed as early as the 1920s. The Sam Houston Airport was present to the north from the 1940s through the 1960s. By the late 1960s, residential development replaced the airport, and the stadium and speedway were built to the north. Continued residential and commercial development was present in the surrounding areas through the 1990s. There was no obvious evidence of commercial waste disposal activities within the immediate surrounding areas. However, there was an oil well located at the west end of Darlinghurst, and an industrial facility, Marcus Oil & Chemical, located at the southwest corner of Minetta and Sandpiper. There were also commercial facilities and land scarring noted in the surrounding area.

7.1.2 Summary of Records Review

Based on a review of the regulatory database obtained from GeoSearch on April 1, 2010, there were three spill sites, one CERCLIS site, two RCRA generator facilities and one ERNS site. In addition, there are six underground pipelines which transect the Project Area. There are potential impacts from the Clean Scene Washateria (previously a dry cleaning facility), the pipelines, and the Marcus Oil & Chemical site (formerly S&R Oil Company).

7.1.3 Summary of Site Reconnaissance

On April 7, 2010, a site reconnaissance of the Project Area was performed by a field geologist of Corrigan Consulting, Inc. After obtaining access to the project area south of W. Orem Drive, on June 29, 2010, a site reconnaissance and wetlands survey was performed by a project biologist of Corrigan Consulting, Inc. The Project Area was mostly residential with several commercial businesses located throughout and an industrial facility located in Project Area 74A-2. The Project Area was inspected by walking and/or driving each street segment of the planned water line project. There were access restrictions which limited observations along the ROW including parked vehicles along many of the street segments within the Project Area, and parked vehicles in parking lots on adjoining properties. There were also fences that limited observations of adjoining properties.

There was one stream/ditch crossing south of W. Orem. However, the water line construction plans include directional drilling under the stream/ditch in order to avoid any impacts. There were roadside ditches with standing water located throughout the Project Area. However, the ditches are maintained and there was no obvious wetland vegetation noted during the site reconnaissance. There were several recognized environmental conditions that could impact the Project Area including dry cleaners, light industrial facilities, vehicle storage and service centers, a gas station and railroad tracks as detailed below.

7.2 Summary of Recognized Environmental Conditions

Based on the results of this Phase I ESA, there were recognized environmental conditions associated with the Project Area including:

No.	Site	Address	Information	Distance from Project Area
1	Meadows Washateria	6403 W. Airport	Presently a laundry facility. A sign above the door indicated it was a former dry cleaner. The owner was interviewed and did not recall if dry cleaning was done on site before her ownership. There were no monitoring wells noted. There is potential for releases from this property within Project Area 74A-2.	Along Sandpiper ROW

No.	Site	Address	Information	Distance from Project Area
2	Marcus Oil & Chemical	14549 Minetta	Marcus Oil & Chemical is a polyethylene wax refinery. This is the previous location of S&R Oil Company. This site is listed as having multiple spills, previous CERCLIS, and RCRA listings. An interview was conducted with general manager Craig Crawley who stated that the CERCLIS site was closed more than 15 years ago. He provided letters verifying the closure (Appendix E). He also stated all spills were contained onsite and there were no off-site releases. Due to the location of this site, adjoining the Project Area, there are potential impacts within Project Area 74A-2.	Adjoining south west of Minetta and Sandpiper Intersection
5	Ice cream storage and vehicle location	14349 Minetta	This site was a storage location with >50 ice cream trucks. No employees or residents were present during the site reconnaissance for an interview. There is a potential for Freon and oil spills from this site within Project Area 74A-2.	Along Minetta ROW
7	Washateria	14117 S. Main	Presently a laundry facility. A sign indicated it was previously a dry cleaner. The employee was interviewed and stated that no dry cleaning is done at the location. However, no additional information could be obtained due to a language barrier. This location is listed as Clean Scene #11, a small quantity generator. No monitoring wells were noted. There is potential for releases from this property within Project Area 74A-2.	Along S. Main ROW
8	Fuel Depot #11	14111 S. Main	This site is listed as a PST site. An interview was conducted but no additional information could be obtained. Due to the location of this site along the Dunlap ROW, there are potential releases within Project Area 74A-2.	Along S. Main and Dunlap ROW
9	Abandoned Mall	Southeast corner of Dunlap and W. Main	During the site reconnaissance, the mall was abandoned, secured, and inaccessible. However, there were 2 truck service bays and 5 or 6 vehicle service bays located along the Dunlap ROW. There were possible hydraulic lifts and underground storage tanks at this site and there are potential releases within Project Area 74A-2.	Along Dunlap ROW

No.	Site	Address	Information	Distance from Project Area
11	Railroad Tracks	Along S. Main	Southern Pacific railroad track has been present since the early 1900s. There were no obvious evidence of spills or releases near the railroad tracks, but no sampling or analysis was performed. There is a potential for releases within Project Area 74A-2 from the railroad tracks.	Along S. Main ROW
13	Hispanic Church	Southwest corner of Haviland and Minetta	There is currently a church located at this site, but there was evidence of previous light industrial activity and/or an auto salvage yard present. There are potential releases from this site along the Minetta ROW within the Project Area 74A-2.	Along Minetta ROW
14	Pipelines	Throughout the Project Area	There are a total of six underground pipelines located throughout the Project Areas. No obvious evidence of a release was noted, but there are potential impacts, in particular, from the crude oil pipeline within Project Area 74A-1	Within Project Area ROW at Darlinghurst

7.3 Data Gaps

The availability of historical aerial photographs and topographic maps was limited and/or missing and there were data gaps (over 5 year intervals). In addition, the review of potential recognized environmental conditions was limited by the scale and quality of the aerial photographs and the entire Project Area was not included in some of the topographic maps. Due to the scale of the photographs, it was impossible to identify all of the commercial/light industrial structures and/or the type of commercial/light industrial activities and impossible to distinguish between land scarring and poor aerial photograph quality. In addition, there were no fire insurance maps for the Project Area. The lack of fire insurance maps and City Directories are not likely to affect the findings of this ESA.

No information was provided by LAN, other than a map of the Project Area and the questionnaires in Appendix F. There were access restrictions which limited observations along the ROW and adjoining properties. The possible presence of hazardous substances and petroleum products could not be determined in these areas. The impact of these data gaps on the findings of this report is unknown.

7.4 Conclusions

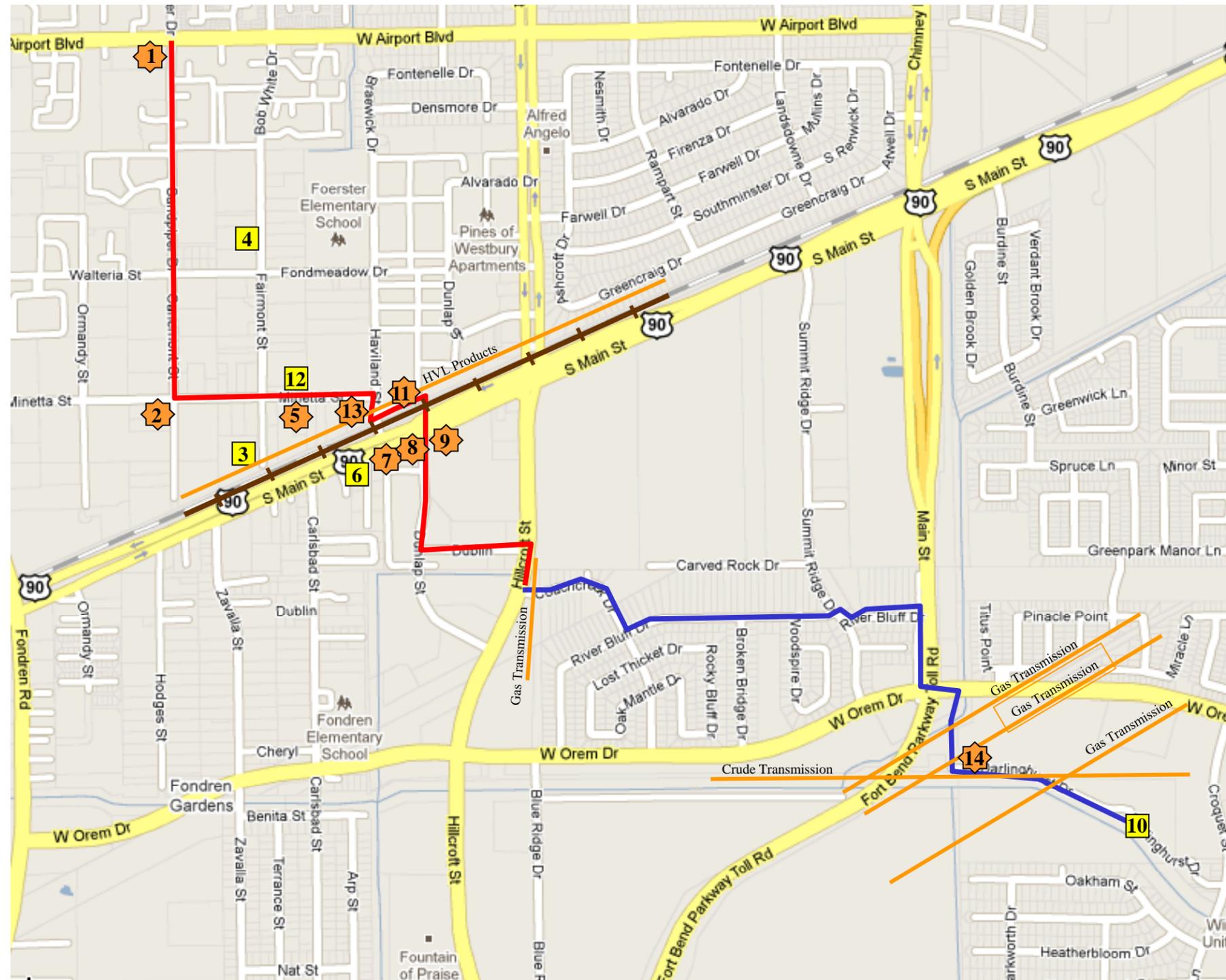
In the professional opinion of Corrigan Consulting, Inc., an appropriate level of inquiry has been made into the previous uses of the Project Area to support the water line project as part of this Phase I ESA, but additional investigation is warranted to further evaluate the potential RECs listed above.

7.5 Opinions

It is CCI's opinion that hazardous substances or petroleum products could be present at locations or could have historical concerns regarding hazardous substances, as shown in Figure 7-1. Based on the current City of Houston guidelines, which require investigating areas of anticipated contamination, a Phase II ESA should be conducted at several sites, as discussed below. Site locations are included in Figure 7-1.

Site 1	Meadows Washateria (former dry cleaner)	6403 W. Airport
Site 2	Marcus Oil & Chemical	14549 Minetta
Site 5	Ice Cream Truck Storage Yard	14349 Minetta
Site 7	Washateria (former dry cleaner)	14117 S. Main
Site 8	Fuel Depot #11 (gas station)	14111 S. Main
Site 9	Abandoned Mall (former auto service center)	S. Main and Dunlap
Site 11	Railroad Tracks	S. Main
Site 13	Church (former light industrial and/or an auto salvage yard)	Minetta and Haviland
Site 14	Pipelines, particularly the crude oil pipeline	Darlinghurst

If groundwater is encountered during the Phase II Investigations, a groundwater sample from each site should be collected for laboratory analysis. Several pipelines transect the Project Area and before any drilling operations, the exact location of these pipelines should be verified. In addition, the contractor should be informed that, during the construction of the water lines, if any evidence of spills or releases is encountered, the contractor should immediately notify LAN for further instructions.



No	Site	Address
1	Meadows Washateria (former dry cleaner)	6403 W. Airport
2	Marcus Oil & Chemical (former S & R Oil)	14549 Minetta
3	Nova Drilling Technologies (former Petro Equipment x-change)	11800 Fairmont
4	Gated site (PB-KBB)	11414 Fairmont
5	Ice cream truck and vehicle storage location	14349 Minetta
6	Best Used Tires & Auto Service	14131 S. Main
7	Washateria (former Clean Scene #11 dry cleaner)	14117 S. Main
8	Fuel Depot #11	14111 S. Main
9	Abandoned mall (previous vehicle service center)	Southeast corner of S. Main and Dunlap
10	Sims Bayou Pump Station	13840 Croquet
11	Railroad Track	Along S. Main
12	High-Tech, Inc. (former cabinet and shutter manufacturer)	11645 Fairmont
13	Hispanic Church (former light industrial and/or an auto salvage yard)	Southwest corner of Minetta and Haviland
14	Crude Oil Pipeline	Darlinghurst

Approximate Scale : 1 inch = 0.25 mile

- Sites Recommended for Phase II ESA
- Other Sites of Concern
- 74A-1 Project Area
- 74A-2 Project Area
- Railroad Tracks
- Underground Pipeline



Potential RECs Map	Lockwood, Andrews & Newnam, Inc City of Houston Water Line Project 74A-1 & 74A-2 <i>CORRIGAN CONSULTING, INC.</i>
Date: 08/10	
Figure 7-1	

APPENDIX A

Scope of Work, Agreement, and Qualifications

**Standard Scope of Work
Phase I Environmental Site Assessment
For Property Acquisitions**

Corrigan Consulting, Inc. will conduct Phase I Environmental Site Assessments (ESAs) for the City of Houston (City) projects according to the ASTM E1527-05 Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process and Title 40 CFR Part 312 – Innocent Landowners, Standard for Conducting All Appropriate Inquiries, with exceptions and/or limitations as noted below. The ESA will be performed and/or directed by an Environmental Professional, as required in these standards. The purpose of the ESA will be to assess the presence of recognized environmental conditions (RECs) associated with the property. In the case of a water line project, the term “property” refers to the “project area”.

Item 1: Project Coordination and Kickoff

CCI will coordinate with the City in order to obtain the required information according to the ASTM E 1527-05 Appendix X3: User Questionnaire including:

- A site map with the property boundaries and legal description;
- The name and contact number for the property owner;
- Confirm access arrangements and/or confirm any access restrictions; and
- Obtain any previous reports or information about the property from the City;

CCI will also prepare a Site-specific Health and Safety Plan and will conduct an internal kick-off meeting to review the objectives and any site specific information.

Item 2: Historical Research

In order to assess the current and historical use and development of the property and the possible presence of recognized environmental conditions associated with the property, the following items will be performed:

- Obtain historical aerial photographs and USGS topographic maps (5 year intervals);
- Obtain historical fire insurance maps; and
- Obtain city directories only as needed to confirm historical information

The standard scope of work will not include the following items unless requested by the City. If any of the other items are subsequently deemed necessary, we will notify you and provide recommendations.

- Chain-of-Title with the historical property ownership;
- City building department records;
- Zoning/Land use records;
- Property tax records;
- Other historical sources (local historians, libraries, etc.); and
- Purchase price and market value.

Upon reviewing the historical information, maps will be prepared including any obvious potential RECs for use during the site reconnaissance.

**Standard Scope of Work
Phase I Environmental Site Assessment
For Property Acquisitions**

Item 3: Regulatory Database Review

In order to assess the presence of regulated sites on the property or in the surrounding area, a database list of regulated sites will be obtained from a commercial source including the following environmental regulatory agency records and search distances as specified below:

<u>Federal Records</u>	<u>Search Distance*</u>
Superfund Sites	1 mile
CERCLIS Sites	1 mile
RCRA Corrective Action Sites	1 mile
RCRA TSD Sites	0.5 mile
RCRA Generator Sites	Property & adjoining properties
ERNS/NRS Sites	Property only
<u>State Records</u>	<u>Search Distance*</u>
Superfund Sites	1 mile
Landfill/Solid Waste Sites	0.5 mile
LPST	0.5 mile
PST Sites	Property & adjoining properties
Voluntary Cleanup Sites	0.5 mile
Brownfields Sites	0.5 mile (if included in database)
Spill Sites	Property only
<u>Additional Records</u>	<u>Search Distance*</u>
Fire Department Response Sites	Property only
Tribal records	Property only

**The search distance will be from the center point in the project area.*

The standard scope of work will not include the following items unless requested by the City. If any of these items are subsequently deemed necessary, we will notify you and provide recommendations.

- Abandoned landfill sites;
- Water well records;
- Harris County Public Health & Environmental Services records
- Other municipality environmental and health department records; and
- Utility company records (related to PCBs).

The standard scope of work will include reviewing site-specific files on regulated sites at the TCEQ Houston office, such as Superfund site records, leaking petroleum storage tank site files, etc. but only the sites adjoining or adjacent to the project area will be reviewed. TCEQ files will not be ordered and reviewed from the TCEQ Austin office.

Upon reviewing the database records, maps will be prepared including any obvious potential RECs for use during the site reconnaissance.

**Standard Scope of Work
Phase I Environmental Site Assessment
For Property Acquisitions**

Item 4: Site Reconnaissance and Interviews

In order to assess the potential presence of RECs on the property or on adjoining properties, a site reconnaissance will be performed according to ASTM E 1527-05, Section 9.1 – 9.4, including the following items:

- The property will be visually inspected by driving or walking all areas that are accessible and any areas that are not accessible will be noted;
- The presence and management of hazardous substances and/or petroleum products and any obvious signs of environmental releases or threat of releases on the property will be noted;
- The obvious presence of possible wetlands will be noted;
- The property boundaries will be driven or walked to assess the potential for releases from off-site sources and the direction of storm water flow will be noted.
- Adjoining properties will be visually inspected to the extent possible from the property and publicly accessible areas to assess the presence of RECs;
- Interviews will be conducted as deemed necessary;
- Areas of suspect RECs identified in the historical research and regulatory database review will be visually inspected during the site reconnaissance;
- The locations of listed regulated sites will be field verified, but only within one block of the property; and
- Photographic documentation will be obtained for potential RECs;
- A site map will be prepared including the locations of site features and the locations of potential RECs.

The following items will not be conducted during the site reconnaissance:

- The interior of residential and commercial/industrial buildings will not be inspected;
- Site reconnaissance of surrounding properties, except the listed regulated sites within one block of the property;
- No interviews will be conducted with past property owners or operators;
- No interviews will be conducted with residential property owners; and
- No sampling or analysis of environmental media will be performed.

Item 6: Site Assessment Report

Upon reviewing all information obtained during the historical research, the regulatory database review, and the site reconnaissance, an assessment report will be prepared similar to the attached Table of Contents and will include:

- The scope of work, limitations, and assessment procedures;
- The environmental setting including property location, topography, surface drainage features, hydrogeology (but will not include description of soils, or geological formations);

**Standard Scope of Work
Phase I Environmental Site Assessment
For Property Acquisitions**

- The historical research results;
- The regulatory database results;
- The site reconnaissance findings;
- A discussion of RECs along with our professional opinion regarding the impact of these RECs on the property;
- A discussion of any data failures, data gaps, and the impact on the ability to identify RECs on the property;
- A discussion of conclusions and recommendations; and
- Copies of all relevant information (aerial photographs, topographic maps, fire insurance maps, regulatory database, site maps with the locations of any RECs, selected site photographs, interview memoranda, etc.).

Two draft reports will be prepared and submitted for review. Any comments will be addressed and two copies of the final report and one copy in pdf format on a CD will be provided. *If the waterline area is modified to change any of the street segments, the ESA report can be modified as an additional scope of work.*

Out-of-Scope Items

As an additional scope of work, the following items can be included in the ESA:

- Lead-based paint survey;
- Mold survey;
- Wetlands delineation and, if needed, submittal for a jurisdictional determination by the U.S. Army Corps of Engineers;
- Threatened and endangered species studies;
- Archeology survey;
- Historical buildings assessment;
- Naturally-occurring radioactive material survey; and
- Compliance assessment (generally warranted for operating facilities).

Standard Limitations

The performance of an ESA is intended to reduce, but not eliminate, the uncertainty of RECs associated with a property. The ESA will include assessing the presence of hazardous substances defined in CERCLA (Section 101(33)), and petroleum products, but will not include controlled substances (21 U.S.C. 802). This assessment will be limited to information that is “reasonably ascertainable” and “practically reviewable” according to the ASTM E-1527-05 standards, considering the time and cost associated with the assessment. For the purposes of this ESA, reasonably ascertainable data is defined as historical aerial photographs, historical topographic maps, fire insurance maps, chain-of-title, city directories, regulatory database records, and tribal records obtained from a commercial source, and information provided by the City and by persons interviewed during the site reconnaissance. The scope of work did not include obtaining or reviewing oil and gas maps, city building permits, zoning/land use records, property tax records, other historical sources, water well records, local municipality environmental, health and

**Standard Scope of Work
Phase I Environmental Site Assessment
For Property Acquisitions**

planning department records, utility company records, purchase price/market value, interviews with the past property owners, and only included interviews as deemed necessary with persons at adjoining commercial and industrial facilities that were available during the site reconnaissance. There is no guarantee of the completeness or accuracy of the information provided by outside sources. The report will be based on the information obtained during the ESA, the site conditions present during the site reconnaissance and the regulations in effect at the time of the assessment. No sampling is included in this scope of work.

Certain conditions, such as those listed below, are not within this scope of work.

- Regulatory compliance;
- Health and safety, and industrial hygiene;
- Radon or other naturally occurring radioactive materials;
- Indoor air quality and mold;
- Drinking water quality including lead in drinking water;
- Health effects of electromagnetic radiation from high-voltage power lines;
- Naturally-occurring toxins in the subsurface soils, rocks, water, or toxicity of on-site flora;
- Biological hazards;
- Flood plain areas;
- Faults;
- Ecological resources;
- Cultural and historical resources; and
- Surface or subsurface contamination.

There is no guarantee that not finding an indicator of hazardous substances or petroleum products during this ESA means that these materials do not exist on property. If additional research or investigation appears warranted based on the findings, we will advise you and provide recommendations. This ESA report will be prepared for the sole use of the City of Houston and their engineers and should not be distributed to or relied upon by any other party without written authorization and signed contract from Corrigan Consulting, Inc.



Lockwood, Andrews
& Newnam, Inc.
A LEO A DALY COMPANY

March 29, 2010

Corrigan Consulting, Inc.
12000 Aerospace Ave., Suite 450
Houston, Texas 77034

Attention: Gail A. Corrigan

Reference: Surface Water Transmission Program
WBS No. S-000900-0109-3
Task Order for Phase I Environmental Site Assessment Services – Contract 74A-1

Dear Ms. Corrigan:

Attached is Task Order 819/2 for Phase I Environmental Site Assessment services for the referenced project.

This Task Order is issued in accordance with your proposal dated March 29, 2010. The work performed under this Task Order is to be invoiced separately from other authorized work.

If you have any further questions or need additional information, please feel free to contact Mackrena Ramos or Ozzie Garza at (713) 266-6900.

Sincerely,

Callie Patton, P.E.
Project Manager

MLR:kb:og:gr
CP:MLR:kb:og:gr

Attachments: 1. Task Order 819/2
2. Corrigan Proposal dated March 29, 2010
3. Invoice Due Dates

cc: File

SURFACE WATER TRANSMISSION PROGRAM

Task Order No. 819/2

(Contract 74A-1 – 48/42-inch WL from Sims Bayou Pump Station (SBPS) to Hillcroft)

I. Project Designation

Surface Water Transmission Program Contract 74A-1

II. General Project Description

Surface Water Transmission Program Contract 74A-1:

Approximately 7,400 LF of 48/42-inch water line along existing easements, W. Orem, Chimney Rock, River Bluff, Summit Ridge, and Coachcreek from Sims Bayou Pump Station (SBPS) to Hillcroft.

III. Authorization

This Task Order is issued to Corrigan Consulting Inc., herein referred to as the "Consultant".

IV. Scope of Work

1. The Consultant will prepare one Phase I Environmental Site Assessment report to provide information regarding potential areas of environmental concern, if any, along the proposed project alignment. Report will be submitted to LAN for review. Final version will be submitted after necessary changes are made.

Work shall be done according to the attached proposal dated March 29, 2010, the contract between Corrigan Consulting, Inc. and LAN, the SWTP Design Manual, the City of Houston's ECRA Standard Practice, and ASTM E1527-05.

V. Date of Execution

This Task Order is effective as of March 29, 2010.

VI. Project Schedule

The work performed under this Task Order shall be completed no later than as indicated in the schedule below:

Draft Report: April 15, 2010.

Final Report: May 7, 2010

VII. Budget

"Consultant's" services under this Task Order are not to exceed the amount of . . . for the scope of work without specific written approval from the Program Manager, Lockwood, Andrews & Newnam, Inc.

CORRIGAN CONSULTING, INC.

12000 Aerospace Ave., Suite 450
Houston, Texas 77034
(281) 922-4766 • Fax (281) 922-4767

March 29, 2010

Mr. Osvaldo Garza
Lockwood, Andrews & Newnam, Inc.
2925 Briarpark, Ste. 400
Houston, TX 77042

**Re: Phase I Environmental Site Assessment
City of Houston Water Line Project
Contract 74A-1, WBS No. S-000900-0109-3
CCI Proposal No. 10PR-1028R1**

Dear Mr. Garza;

Corrigan Consulting, Inc. (CCI) appreciates this opportunity to propose our services to complete a Phase I Environmental Site Assessment (ESA) for Lockwood Andrews & Newnam, Inc. (LAN) to support the City of Houston water line project listed below. LAN provided a map of the water line project area, including the following:

Proposed 48-inch / 42-inch Water Line along existing easements and easements to be acquired, W. Orem, Chimney Rock, River Bluff, Summit Ridge, and Coachcreek, from the Sims Bayou Pump Station (SBPS) to Hilleroff

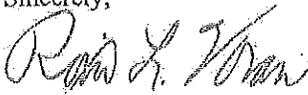
We understand that the City of Houston is requesting these services to assess recognized environmental conditions prior to the proposed water line design and construction project. The Phase I ESA will be conducted according to the City of Houston Surface Water Transmission Program Design Manual Section 7.2 Environmental Site Assessments guidelines and the City's ECRA Standard Practice. However, the ESA will be conducted according to the general provisions of the ASTM E1527-05 Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process. The detailed scope of work for completing this project is attached.

Schedule and Cost

CCI is prepared to begin work upon receipt of a signed purchase order or contract. We can complete the Phase I ESA within 3 weeks to meet the April 15th deadline for a Lump Sum Cost of

We appreciate this opportunity to work with you. If there are any questions, please feel free to call me or Mr. Roxie Voran, PG, Senior Associate, at (281) 922-4766.

Sincerely,


for Gail A. Corrigan
President

Attachments

LOCKWOOD, ANDREWS, & NEWNAM, INC.
2010/2011 - DATES

LAN Accounting Periods			Consultants Due Dates to LAN
Beginning	Ending		
12/26/2009	1/22/2010		1/18/2010
1/23/2010	2/19/2010		2/15/2010
	2/28/2010	Yearend	
3/1/2010	4/2/2010	(6 Weeks)	3/29/2010
4/3/2010	4/30/2010		4/26/2010
5/1/2010	5/28/2010		5/24/2010
5/29/2010	6/25/2010		6/21/2010
6/26/2010	7/23/2010		7/19/2010
7/24/2010	9/3/2010	(6 Weeks)	8/30/2010
9/4/2010	10/1/2010		9/27/2010
10/2/2010	10/29/2010		10/25/2010
10/30/2010	11/26/2010		11/22/2010
1/27/2010	12/24/2010		12/20/2010
12/25/2010	1/21/2011		1/17/2011
1/22/2011	2/18/2011		2/14/2011
	2/28/2011	Yearend	



Lockwood, Andrews
& Newnam, Inc.
A LEO A DALY COMPANY

March 29, 2010

Corrigan Consulting, Inc.
12000 Aerospace Ave., Suite 450
Houston, Texas 77034

Attention: Gail A. Corrigan

Reference: Surface Water Transmission Program
WBS No. S-000900-0110-3
Task Order for Phase I Environmental Site Assessment Services – Contract 74A-2

Dear Ms. Corrigan:

Attached is Task Order 820/2 for Phase I Environmental Site Assessment services for the referenced project.

This Task Order is issued in accordance with your proposal dated March 29, 2010. The work performed under this Task Order is to be invoiced separately from other authorized work.

If you have any further questions or need additional information, please feel free to contact Mackrena Ramos or Ozzie Garza at (713) 266-6900.

Sincerely,

Callie Patton, P.E.
Project Manager

MLR:kb:og:gr
CP:MLR:kb:og:gr

Attachments: 1. Task Order 820/2
2. Corrigan Proposal dated March 29, 2010
3. Invoice Due Dates

cc: File

SURFACE WATER TRANSMISSION PROGRAM
Task Order No. 820/2
(Contract 74A-2 – 42-inch WL from Coachcreek to W. Airport Blvd.)

I. Project Designation

Surface Water Transmission Program Contract 74A-2

II. General Project Description

Surface Water Transmission Program Contract 74A-2:

Approximately 8,300 LF of 42-inch water line along Hillcroft, Dublin, Dunlap, Main (US 90A), Haviland, Minetta, and Canemont/Sandpiper from Coachcreek to W. Airport Blvd.

III. Authorization

This Task Order is issued to Corrigan Consulting Inc., herein referred to as the "Consultant".

IV. Scope of Work

1. The Consultant will prepare one Phase I Environmental Site Assessment report to provide information regarding potential areas of environmental concern, if any, along the proposed project alignment. Report will be submitted to LAN for review. Final version will be submitted after necessary changes are made.

Work shall be done according to the attached proposal dated March 29, 2010, the contract between Corrigan Consulting, Inc. and LAN, the SWTP Design Manual, the City of Houston's ECRA Standard Practice, and ASTM E1527-05.

V. Date of Execution

This Task Order is effective as of March 29, 2010.

VI. Project Schedule

The work performed under this Task Order shall be completed no later than as indicated in the schedule below:

Draft Report: May 14, 2010

Final Report: June 2, 2010

VII. Budget

"Consultant's" services under this Task Order are not to exceed the amount of _____ for the scope of work without specific written approval from the Program Manager, Lockwood, Andrews & Newnam, Inc.

CORRIGAN CONSULTING, INC.

12000 Aerospace Ave., Suite 450
Houston, Texas 77034
(281) 922-4766 • Fax (281) 922-4767

March 29, 2010

Mr. Osvaldo Garza
Lockwood, Andrews & Newnam, Inc.
2925 Briarpark, Ste. 400
Houston, TX 77042

**Re: Phase I Environmental Site Assessment
City of Houston Water Line Project
Contract 74A-2, WBS No. S-000900-0110-3
CCI Proposal No. 10PR-1027R1**

Dear Mr. Garza;

Corrigan Consulting, Inc. (CCI) appreciates this opportunity to propose our services to complete a Phase I Environmental Site Assessment (ESA) for Lockwood Andrews & Newnam, Inc. (LAN) to support the City of Houston water line project listed below. LAN provided a map of the water line project area, including the following:

Proposed 42-inch Water Line along Hillcroft, Dublin, Dunlap, Main, Haviland, Minetta, and Canemont/Sandpiper from Coachcreek to W. Airport Blvd.

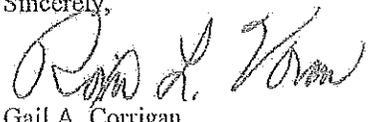
We understand that the City of Houston is requesting these services to assess recognized environmental conditions prior to the proposed water line design and construction project. The Phase I ESA will be conducted according to the City of Houston Surface Water Transmission Program Design Manual Section 7.2 Environmental Site Assessments guidelines and the City's ECRA Standard Practice. It is assumed that there will not be any real property acquisition. However, the ESA will be conducted according to the general provisions of the ASTM E1527-05 Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process. The detailed scope of work for completing this project is attached.

Schedule and Cost

CCI is prepared to begin work upon receipt of a signed purchase order or contract. We can complete the Phase I ESA within 4 weeks for a Lump Sum Cost of

We appreciate this opportunity to work with you. If there are any questions, please feel free to call me or Mr. Roxie Voran, PG, Senior Associate, at (281) 922-4766.

Sincerely,


for Gail A. Corrigan
President

Attachments

LOCKWOOD, ANDREWS, & NEWNAM, INC.
2010/2011 - DATES

LAN Accounting Periods			Consultants Due Dates to LAN
Beginning	Ending		
12/26/2009	1/22/2010		1/18/2010
1/23/2010	2/19/2010		2/15/2010
	2/28/2010	Yearend	
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4/3/2010	4/30/2010		4/26/2010
5/1/2010	5/28/2010		5/24/2010
5/29/2010	6/25/2010		6/21/2010
6/26/2010	7/23/2010		7/19/2010
7/24/2010	9/3/2010	(6 Weeks)	8/30/2010
9/4/2010	10/1/2010		9/27/2010
10/2/2010	10/29/2010		10/25/2010
10/30/2010	11/26/2010		11/22/2010
1/27/2010	12/24/2010		12/20/2010
12/25/2010	1/21/2011		1/17/2011
1/22/2011	2/18/2011		2/14/2011
	2/28/2011	Yearend	

Gail A. Corrigan President/Principal-In-Charge

Ms. Corrigan has 20 years of environmental experience including former experience as a Texas Commission on Environmental Quality (TCEQ) enforcement field representative. She is recognized for her regulatory knowledge and extensive expertise in environmental site assessments (ESAs). She has directed hundreds of comprehensive compliance audits and ESAs, as well as site investigations, at commercial, industrial, and Superfund Sites. She developed and taught a 3-day RCRA/CERCLA regulations course under contract to Texas A&M for 5 years. She has also assisted the City of Houston and Houston METRO to develop ESA Standards for their infrastructure projects.

Years of Experience: 20

M.S./1984/Environmental Management,
University of Houston, Clear Lake, Texas

B.S./1977/Chemistry, Purdue University

Texas Hazardous Waste Management Society,
Founder 1985, President 1985, Board of
Directors 1986-88

American Consulting Engineers Council/
Hazardous Waste Action Coalition, Small
Business Chair & Board of Directors 1994-96

Society of Military Engineers, Member 1995-07

ASTM E-50 Phase I ESA Committee 1997-07

40-hour OSHA Certification

Relevant Project Experience

Environmental Site Assessments: Ms. Corrigan has directed over 300 Phase I-III ESAs. She currently provides Senior Review of all Phase I ESAs. Ms. Corrigan has also directed Phase II and Phase III ESAs to investigate and remediate sites including abandoned hazardous substances, PCB-contaminated oil, radioactive wastes, explosive wastes, wastewater, pesticide wastes, asbestos, lab chemicals, oil and gas exploration wastes, naturally occurring radioactive materials and contaminated soil and groundwater. She managed a large Phase I ESA of a 70-year old pulp and paper mill on an accelerated schedule.

Environmental Compliance Audits: Ms. Corrigan has extensive experience conducting compliance audits of a wide range of facilities including commercial hazardous waste disposal facilities, recycling facilities (used oil, solvents, lithium batteries), refineries, chemical plants, pulp and paper mills, airports, schools and universities, pipeline compressor and metering stations, bulk storage terminals, gas processing facilities, brine storage facilities, oil field service companies, and a multitude of commercial facilities. She also conducted the gap analysis audits of NASA's Johnson Space Center and developed the strategies and procedures for implementing the Environmental Management System (EMS) for the center.

RCRA Compliance & Permitting: She developed and instructed RCRA Hazardous Waste Regulations Courses throughout Texas under contract with Texas A&M Engineering Extension Service (TEEX) for 5 years including a 3-day comprehensive RCRA course,

a 1-day refresher course and a special RCRA personnel training at the DOE Pantex Plant.

Ms. Corrigan has conducted and managed compliance and permitting projects for over 20 years on RCRA-regulated sites. She has audited and developed waste classification systems, waste manifesting procedures, personnel training programs, contingency plans and SPCC plans, SWMU inspection procedures, and recordkeeping for drum storage units, tanks, surface impoundments, treatment units, etc. She has assisted many facilities during TCEQ inspections and responded to notice of violations on behalf of the facilities.

Environmental Site Investigations: Ms. Corrigan has directed complex waste classification projects; RCRA facility closures; remediation and corrective action projects; agency negotiations; and risk-based closures as well as Superfund Site remedial investigations. She managed over 6 RCRA Facility Investigations (RFI's) and over 20 RCRA waste storage unit closures. She is also responsible for establishing CCI's QC procedures and ensuring that investigations are conducted in strict compliance with all regulations and in a manner that will support litigation.

Expert Witness Testimony: She testified as an expert witness in a CERCLA cost recovery case and as a fact witness in a Superfund Site hearing on behalf of the TCEQ. She also provided litigation support during property transactions, including five cases with adjacent property owner damage claims involving releases and a high-profile case involving a historical oil pit discovered in an elementary school playground.

Ami K. Lillard
Field Geologist

Ms. Lillard has more than three years of environmental consulting experience conducting field assessments and investigations and preparing technical reports for commercial, industrial and government projects. She has extensive field experience in Environmental Site Assessments.

Years of Experience: 3

B.S. Geology, Morehead State University,
Morehead, KY 2006

40- Hour OSHA HAZWOPER Training

8-Hour OSHA Supervisor Health and Safety
Training

CCI Project Management Training

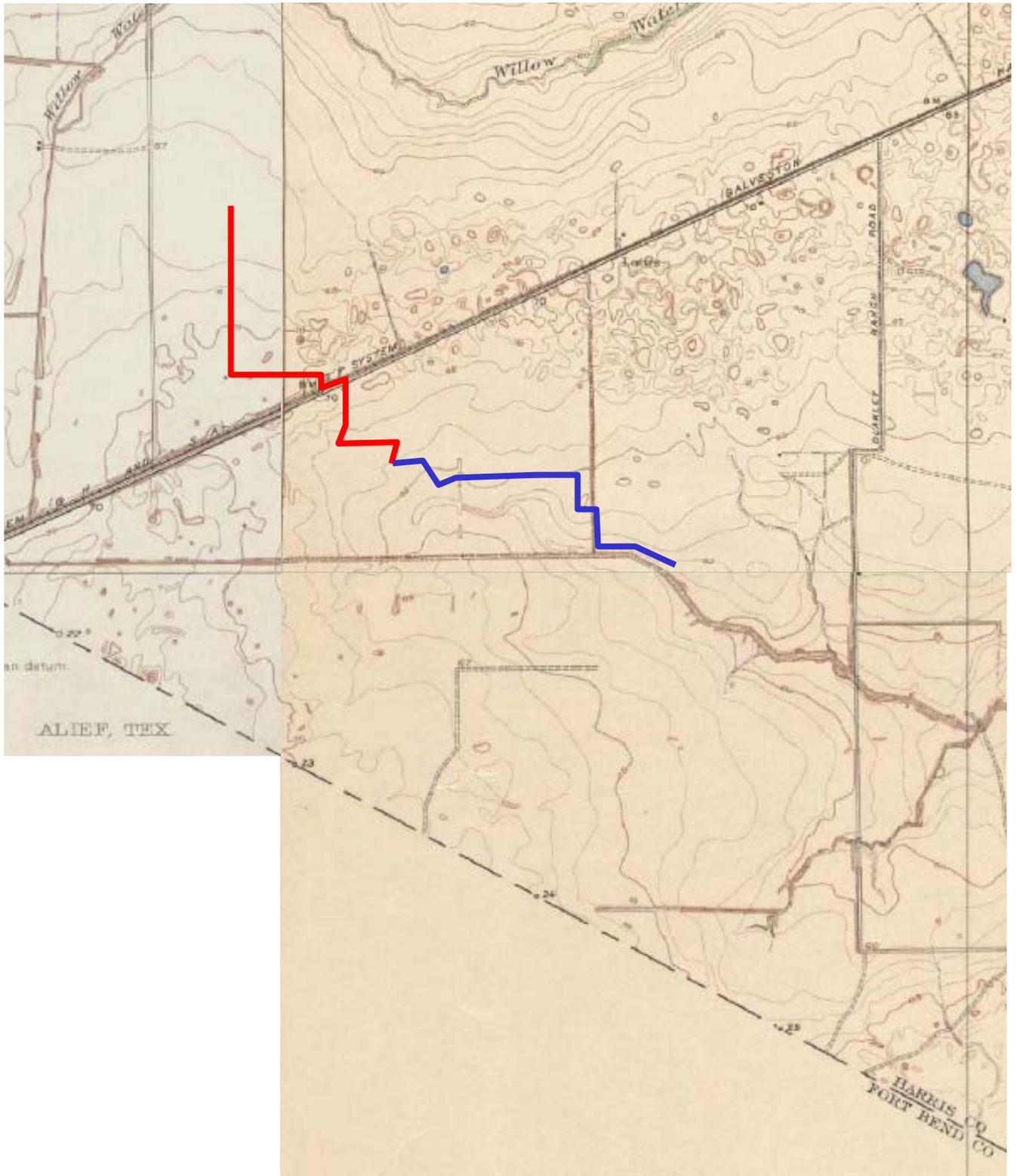
Relevant Project Experience

Project Experience:

- Ms. Lillard has conducted records reviews and field work for >10 Phase I Environmental Site Assessments and assisted in the preparation of the ESA reports. She conducted Phase I ESAs of right-of-way parcels prior to their acquisition for the expansion of light rail service
- She logged soil borings and collected soil samples for analysis of volatile (VOCs) and semi-volatile organic compounds (SVOCs) (including chlorinated hydrocarbon compounds), heavy metals, and total petroleum hydrocarbons (TPH).
- She assisted in site-wide groundwater gauging events involving a network of >150 monitoring wells and piezometers.
- Ms. Lillard conducted low-flow sampling of >70 ground-water monitoring wells and collected samples for VOCs, SVOCs, heavy metals, TPH, and specialty analyses (low-level metals and VOCs).
- She followed a comprehensive TCEQ-approved Quality Assurance Project Plan (QAPP) in the collection of >20 groundwater samples to be analyzed for polychlorinated biphenyls using low-level congener analyses.
- Ms. Lillard assisted in conducting aquifer field tests including slug tests and stepped pumping tests. Her responsibilities included the installation of pressure transducers, monitoring pumping rates, and manually gauging selected observation wells.
- She was also responsible for conducting specialized field tests including assessment for phase-separated product using ultraviolet light instruments and Sudan IV dye testing.
- As field geologist, she was responsible for the preparation of field sampling plans and site-specific health & safety plans and for maintaining field budgets (time and equipment).
- Her field duties also included the preparation of soil boring logs, well construction records, well purge records, well development logs, sample chains-of-custody and keeping up with daily activities in a field notebook.
- Ms. Lillard conducted sampling of drummed waste soils (investigation derived waste – drill cuttings) for RCRA hazardous waste determination. Sampling involved individual drum grab sampling and composite sampling programs.
- She also performed inspections on pipelines, tanks, valves, and instrumentation devices.
- Ms. Lillard has served as field geologist overseeing the installation of >60 soil borings and installation and development of > 20 single and multi-cased monitoring wells. The majority of this work was conducted at a site where three aquifers are impacted by chlorinated ethane and ethane compounds.

APPENDIX B

Aerial Photographs and USGS Topographic Maps

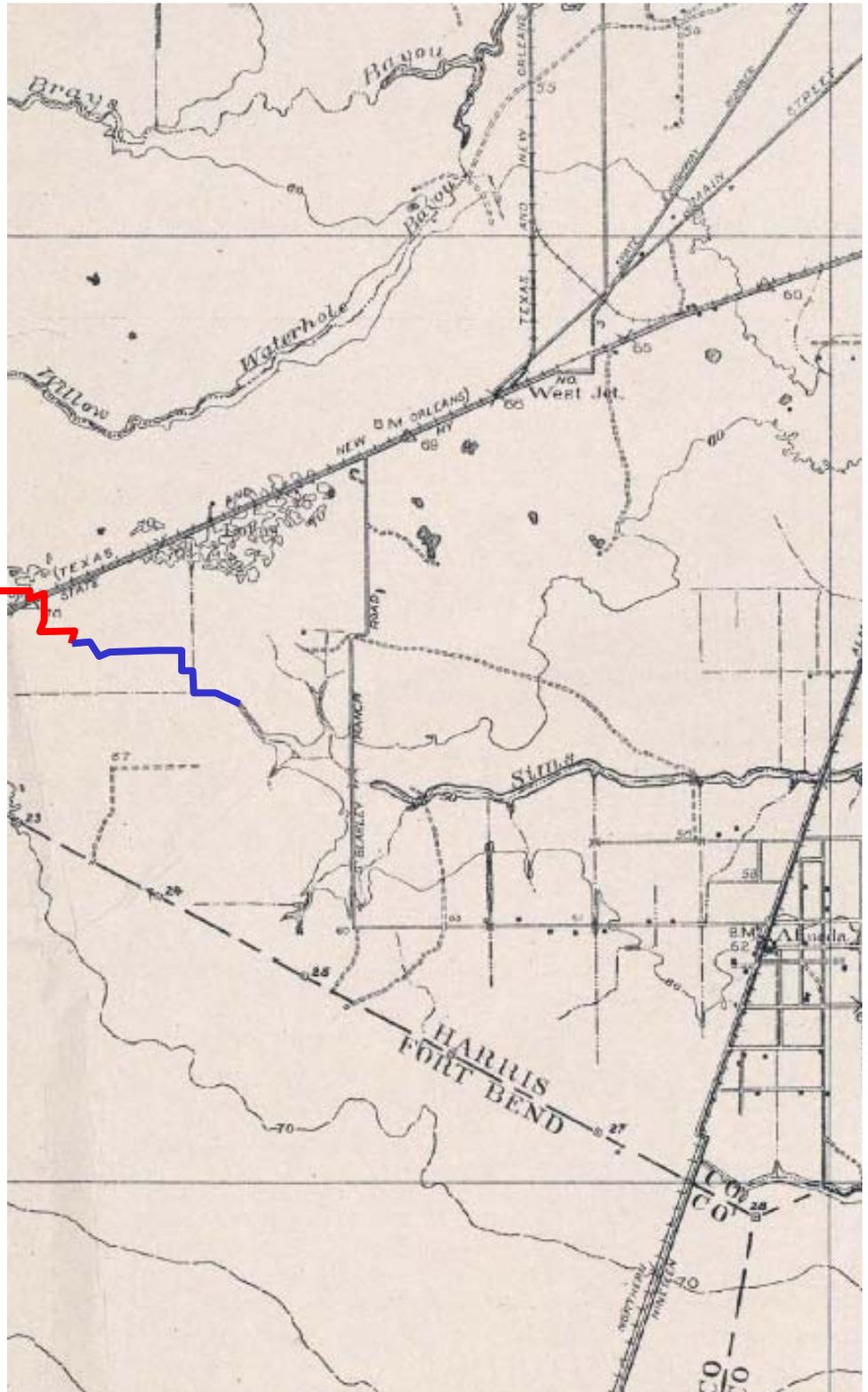


USGS Topographic Quadrangles
 Alief, Bellaire, and Almeda Texas. 1915
 Scale: 1:31,680
 Source: GeoSearch

- 74A-1 Project Area
- 74A-2 Project Area



1915 Topographic Map	Lockwood, Andrews, Newnam, Inc. City of Houston Water Line Replacement in 74A-1 and 74A-2 Areas WBS Nos. S-000900-0109-3 & S-000900-0110-3
Date: 04/10	CORRIGAN CONSULTING, INC.

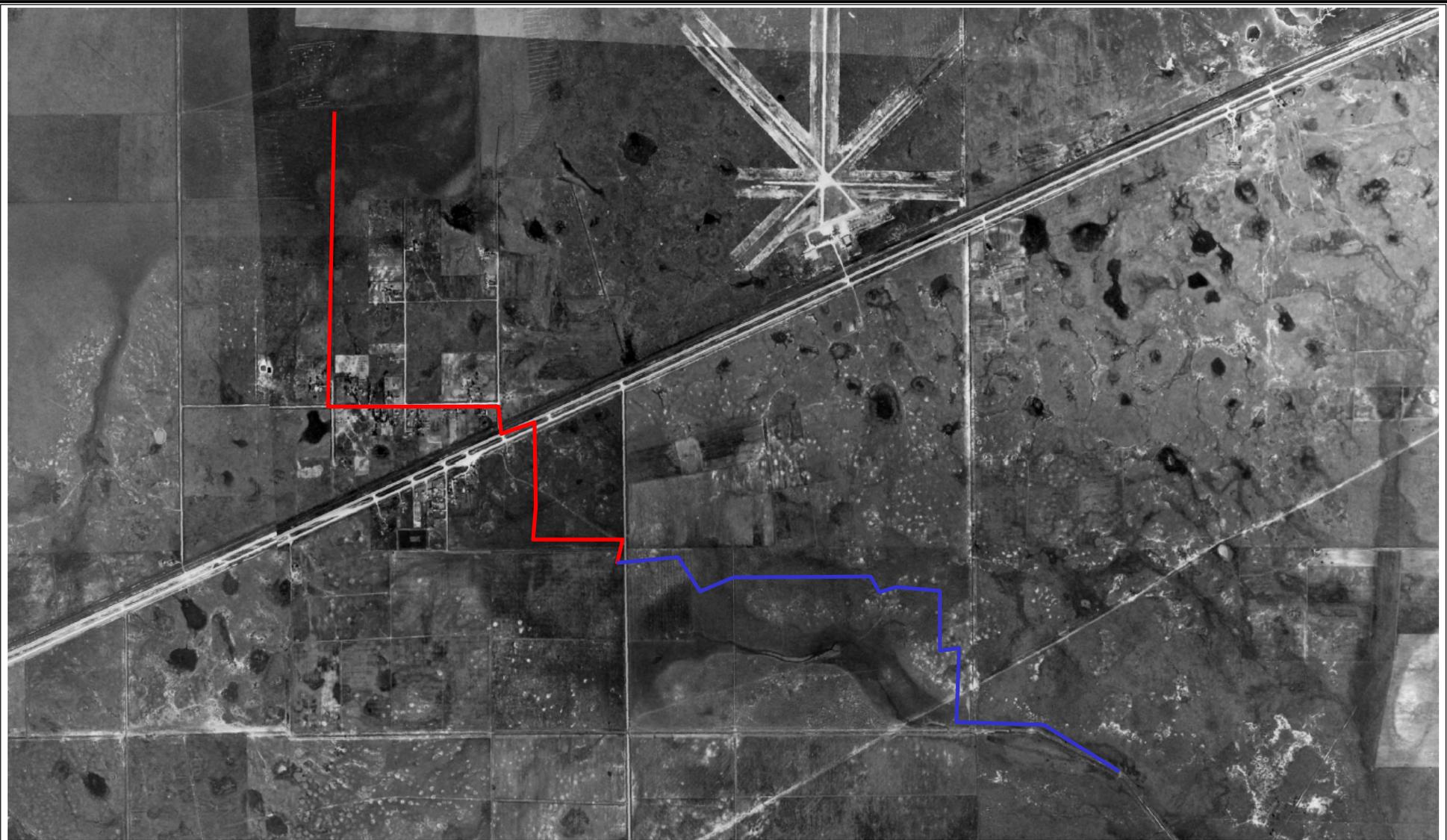


USGS Topographic Quadrangle
 Pearland, Texas. 1929
 Scale: 1:62,500
 Source: GeoSearch

- 74A-1 Project Area
- 74A-2 Project Area



1929 Topographic Map	Lockwood, Andrews, Newnam, Inc. City of Houston Water Line Replacement in 74A-1 and 74A-2 Areas WBS Nos. S-000900-0109-3 & S-000900-0110-3
Date: 04/10	<i>CORRIGAN CONSULTING, INC.</i>

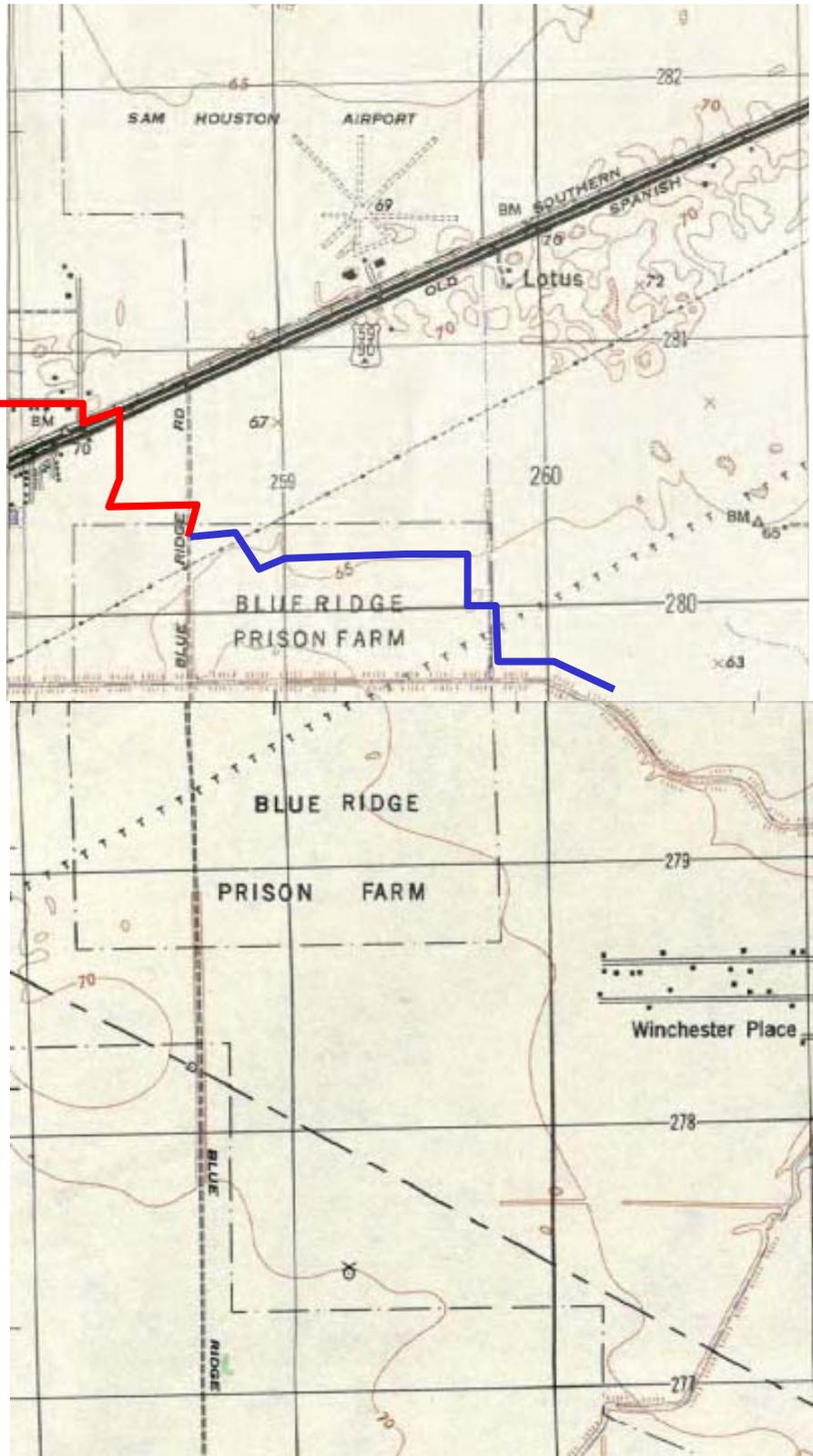


Source: GeoSearch
Scale: Approximately 1" = 1000'

— 74A-1 Project Area
— 74A-2 Project Area



1944 Aerial Photograph	Lockwood, Andrews, Newnam, Inc. City of Houston Water Line Replacement in 74A-1 and 74A-2 Areas WBS Nos. S-000900-0109-3 & S-000900-0110-3
Date: 04/10	<i>CORRIGAN CONSULTING, INC.</i>

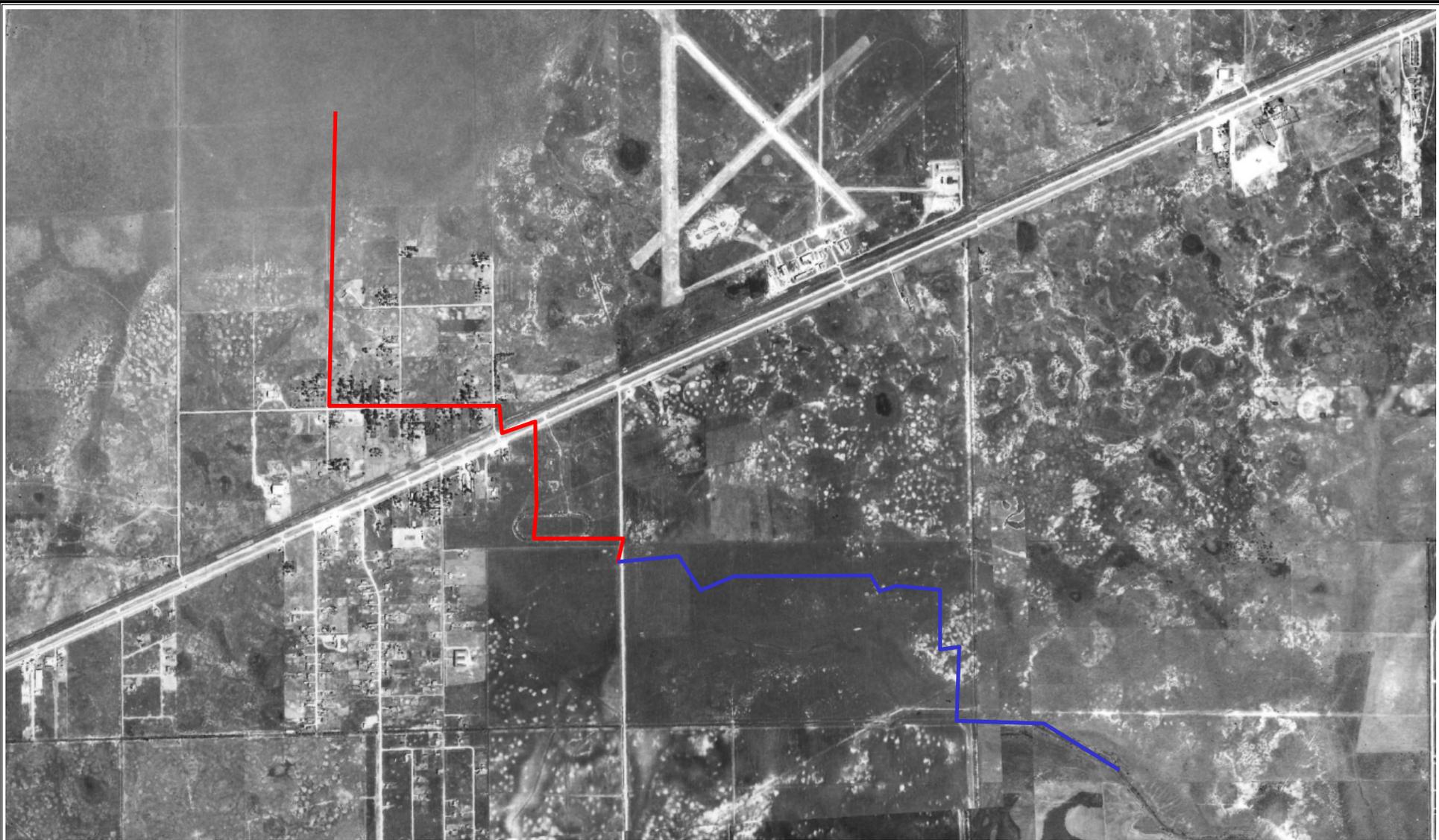


USGS Topographic Quadrangles
 Bellaire and Alameda Texas. 1946
 Scale: 1:25,000
 Source: GeoSearch

- 74A-1 Project Area
- 74A-2 Project Area



1946 Topographic Map	Lockwood, Andrews, Newnam, Inc. City of Houston Water Line Replacement in 74A-1 and 74A-2 Areas WBS Nos. S-000900-0109-3 & S-000900-0110-3
Date: 04/10	<i>CORRIGAN CONSULTING, INC.</i>

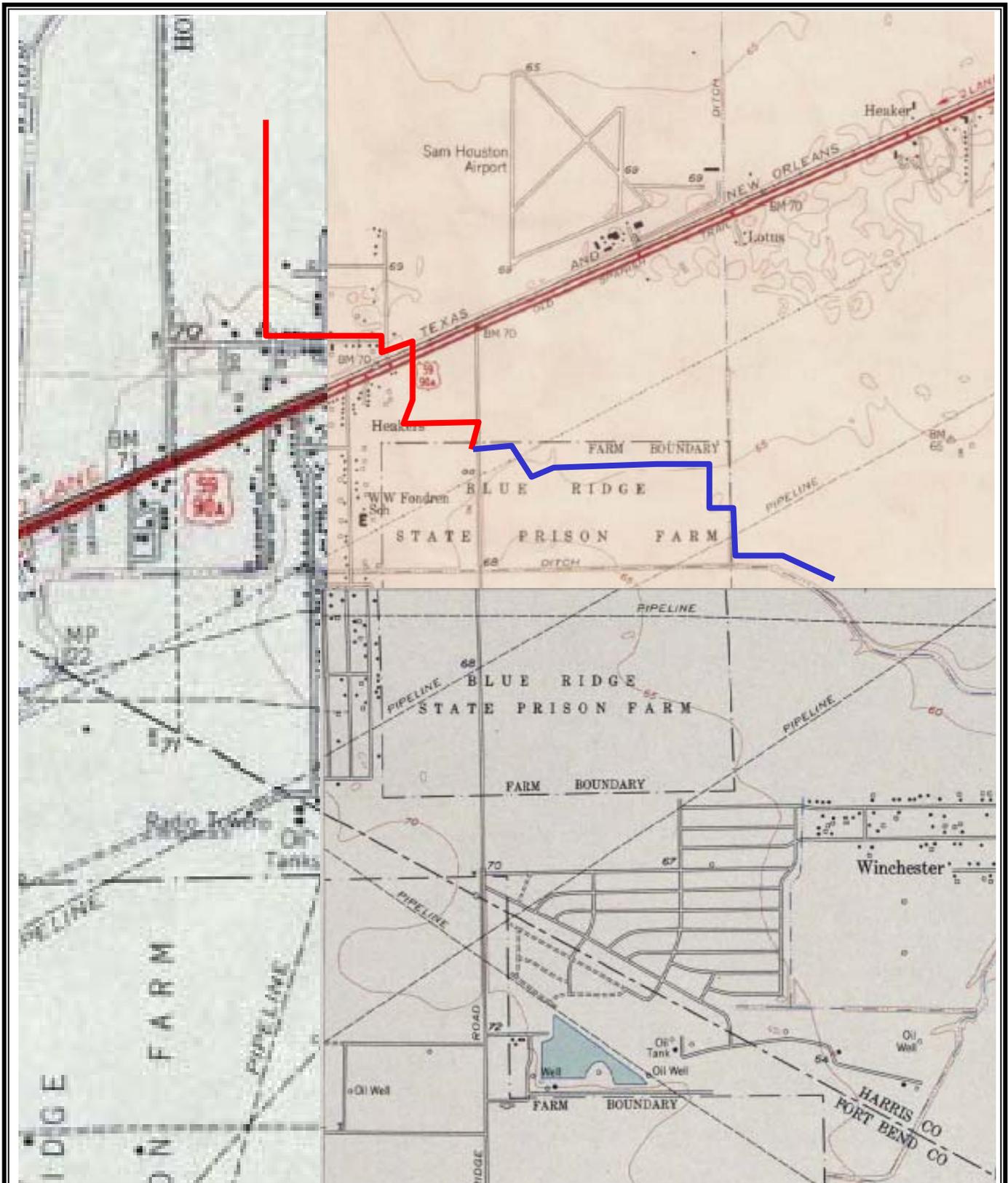


Source: GeoSearch
Scale: Approximately 1" = 1000'

— 74A-1 Project Area
— 74A-2 Project Area



1953 Aerial Photograph	Lockwood, Andrews, Newnam, Inc. City of Houston Water Line Replacement in 74A-1 and 74A-2 Areas WBS Nos. S-000900-0109-3 & S-000900-0110-3
Date: 04/10	CORRIGAN CONSULTING, INC.

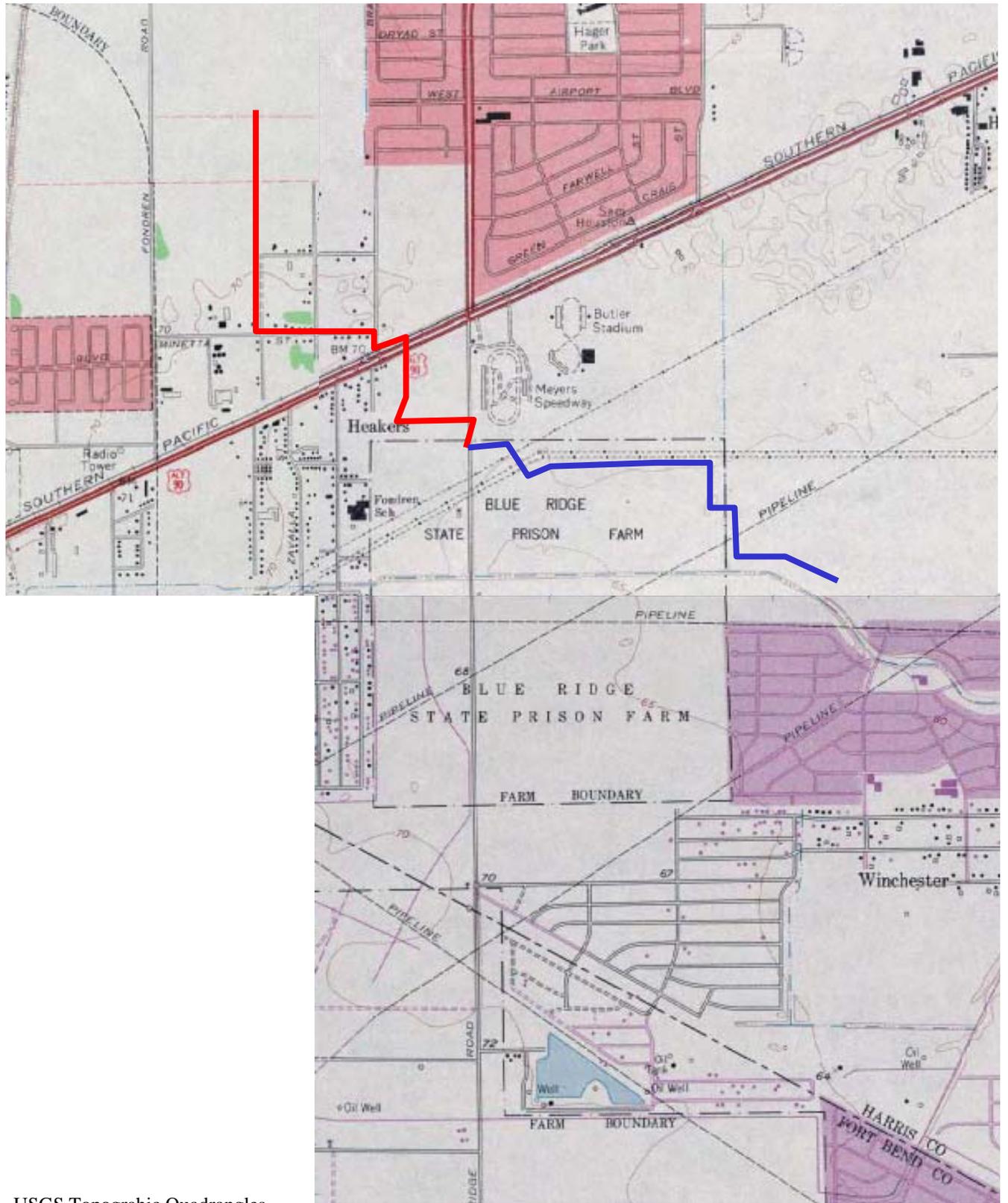


USGS Topographic Quadrangles
 Sugarland, Bellaire, and Almeda Texas. 1955
 Scale: 1:24,000
 Source: GeoSearch

- 74A-1 Project Area
- 74A-2 Project Area



1955 Topographic Map	Lockwood, Andrews, Newnam, Inc. City of Houston Water Line Replacement in 74A-1 and 74A-2 Areas WBS Nos. S-000900-0109-3 & S-000900-0110-3
Date: 04/10	<i>CORRIGAN CONSULTING, INC.</i>

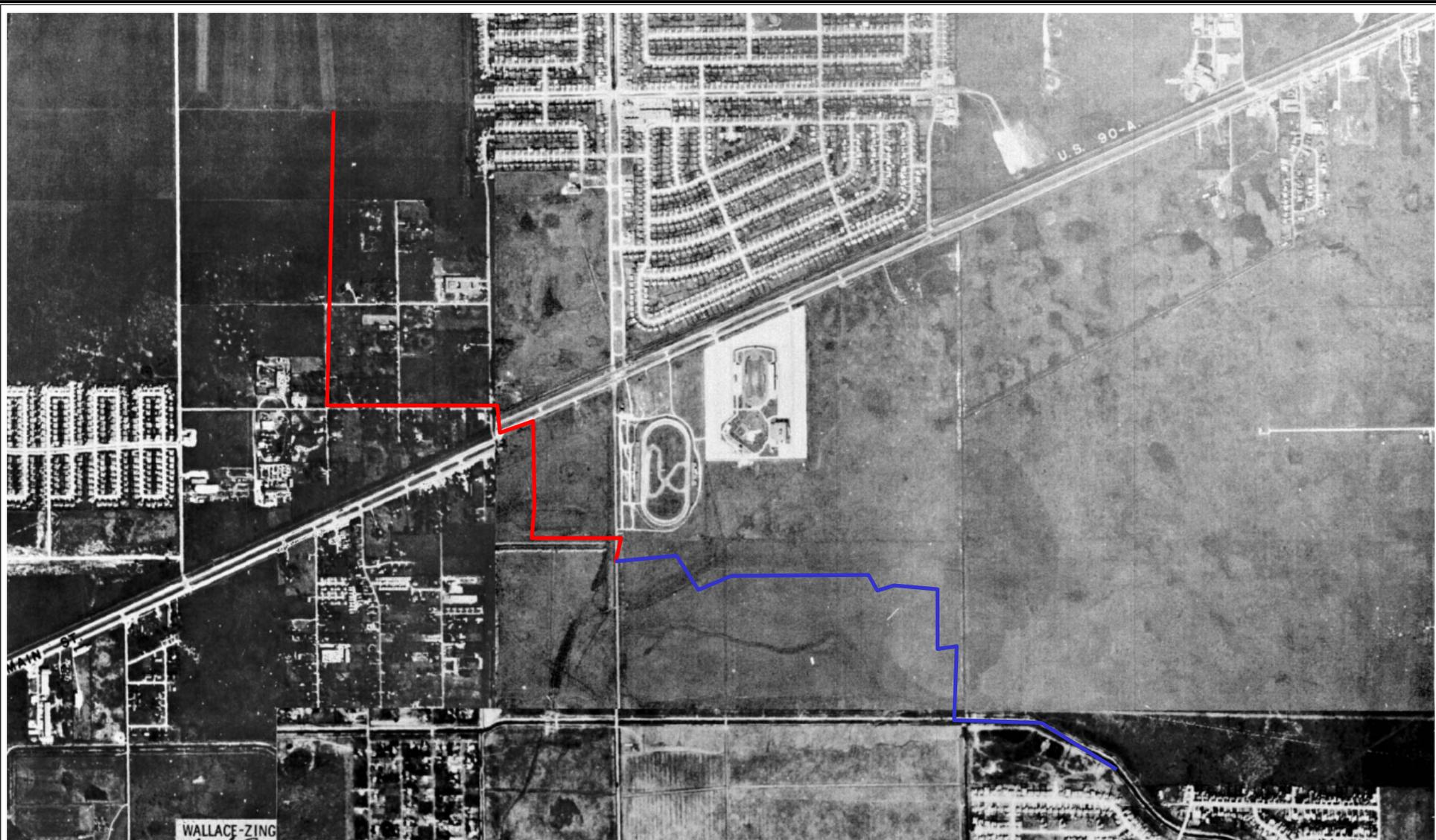


USGS Topographic Quadrangles
 Alief (1970), Bellaire (1967),
 and Almeda (1969) Texas.
 Scale: 1:24,000
 Source: GeoSearch

- 74A-1 Project Area
- 74A-2 Project Area



1967-1970 Topographic Map	Lockwood, Andrews, Newnam, Inc. City of Houston Water Line Replacement in 74A-1 and 74A-2 Areas WBS Nos. S-000900-0109-3 & S-000900-0110-3
Date: 04/10	<i>CORRIGAN CONSULTING, INC.</i>

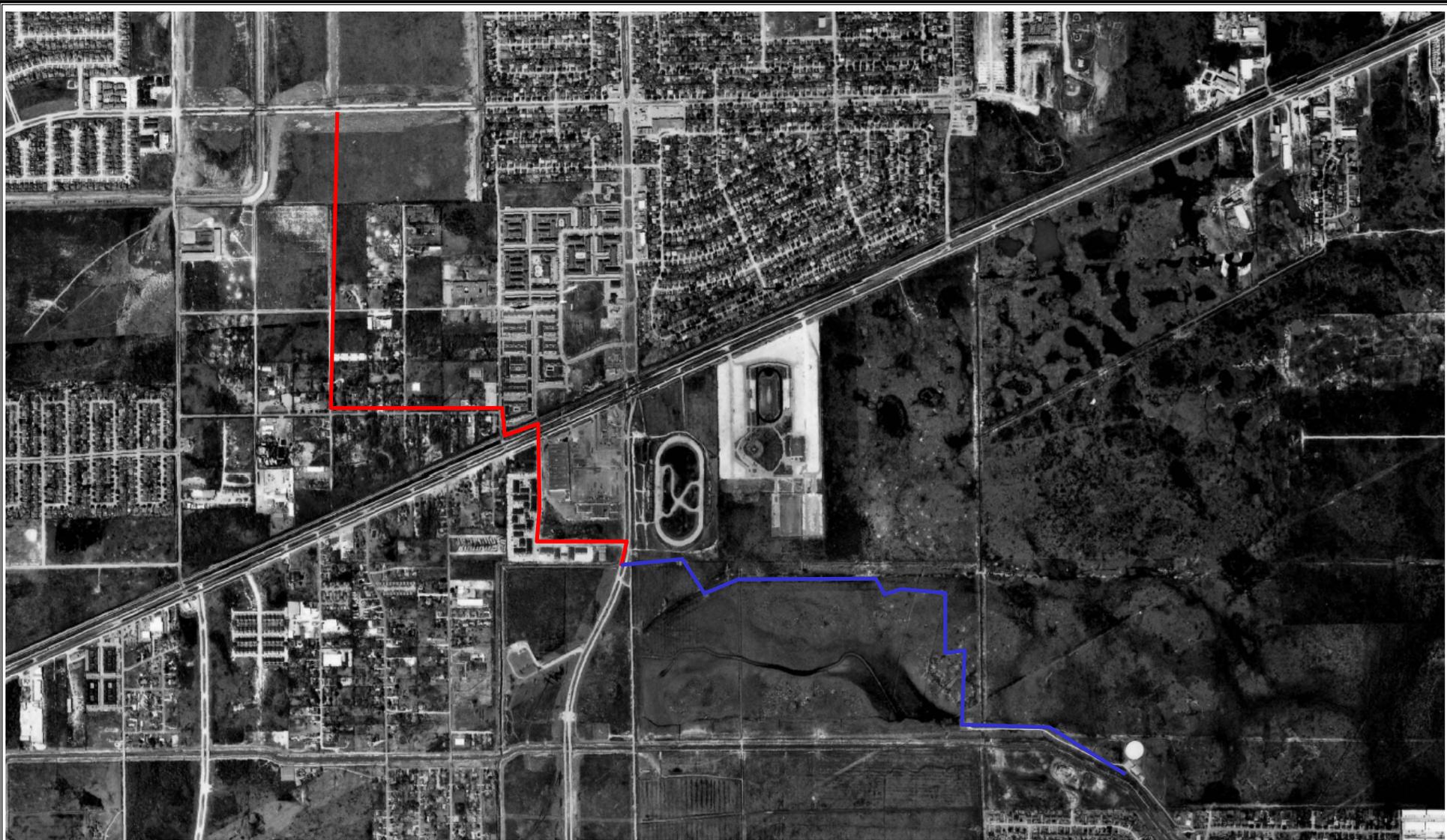


Source: GeoSearch
Scale: Approximately 1" = 1000'

— 74A-1 Project Area
— 74A-2 Project Area



1969 Aerial Photograph	Lockwood, Andrews, Newnam, Inc. City of Houston Water Line Replacement in 74A-1 and 74A-2 Areas WBS Nos. S-000900-0109-3 & S-000900-0110-3
Date: 04/10	<i>CORRIGAN CONSULTING, INC.</i>

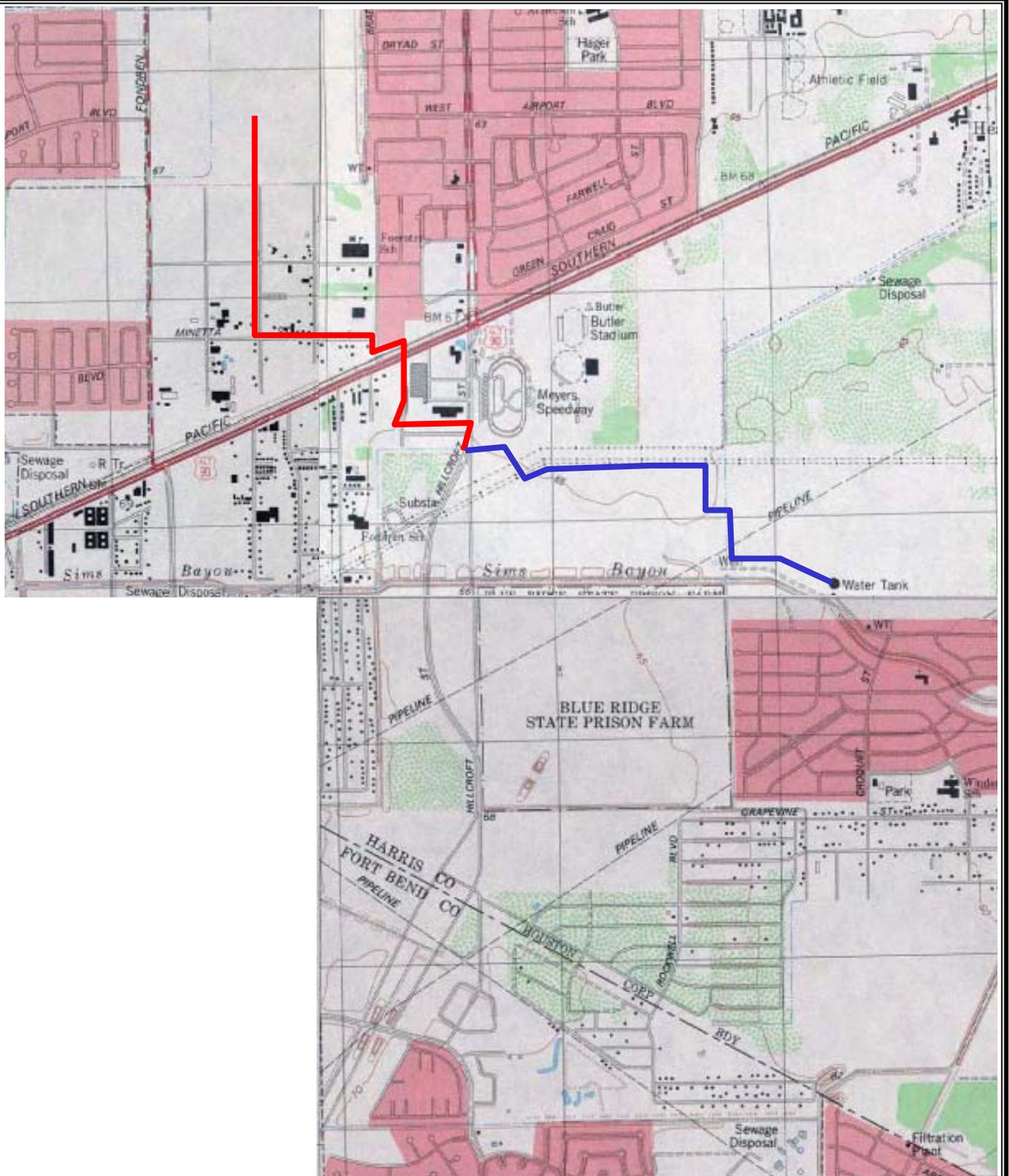


Source: GeoSearch
Scale: Approximately 1" = 1000'

— 74A-1 Project Area
— 74A-2 Project Area



1979 Aerial Photograph	Lockwood, Andrews, Newnam, Inc. City of Houston Water Line Replacement in 74A-1 and 74A-2 Areas WBS Nos. S-000900-0109-3 & S-000900-0110-3
Date: 04/10	CORRIGAN CONSULTING, INC.

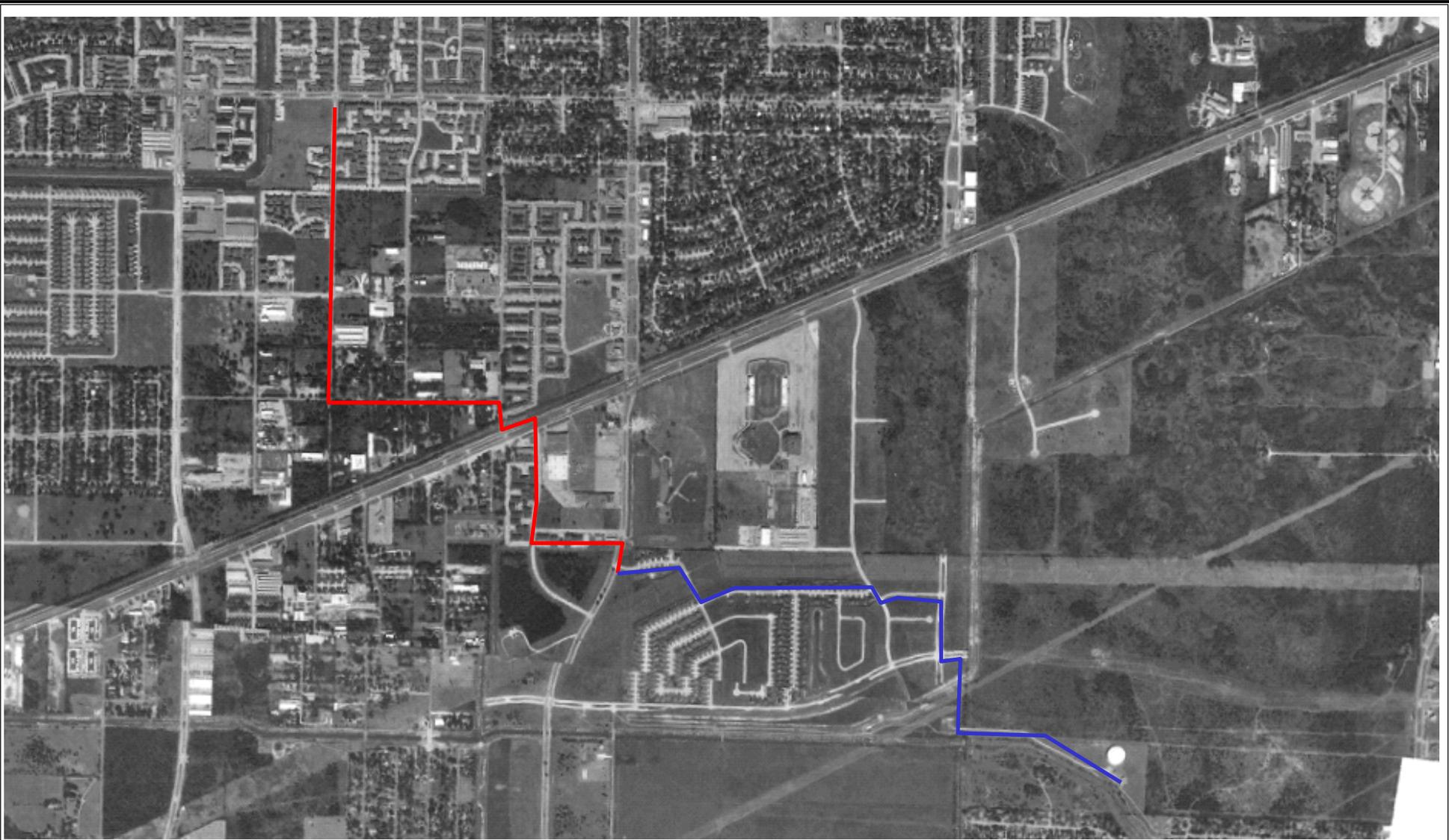


USGS Topographic Quadrangles
 Alief, Bellaire, and Almeda Texas. 1982
 Scale: 1:24,000
 Source: GeoSearch

- 74A-1 Project Area
- 74A-2 Project Area



1982 Topographic Map	Lockwood, Andrews, Newnam, Inc. City of Houston Water Line Replacement in 74A-1 and 74A-2 Areas WBS Nos. S-000900-0109-3 & S-000900-0110-3
Date: 04/10	<i>CORRIGAN CONSULTING, INC.</i>

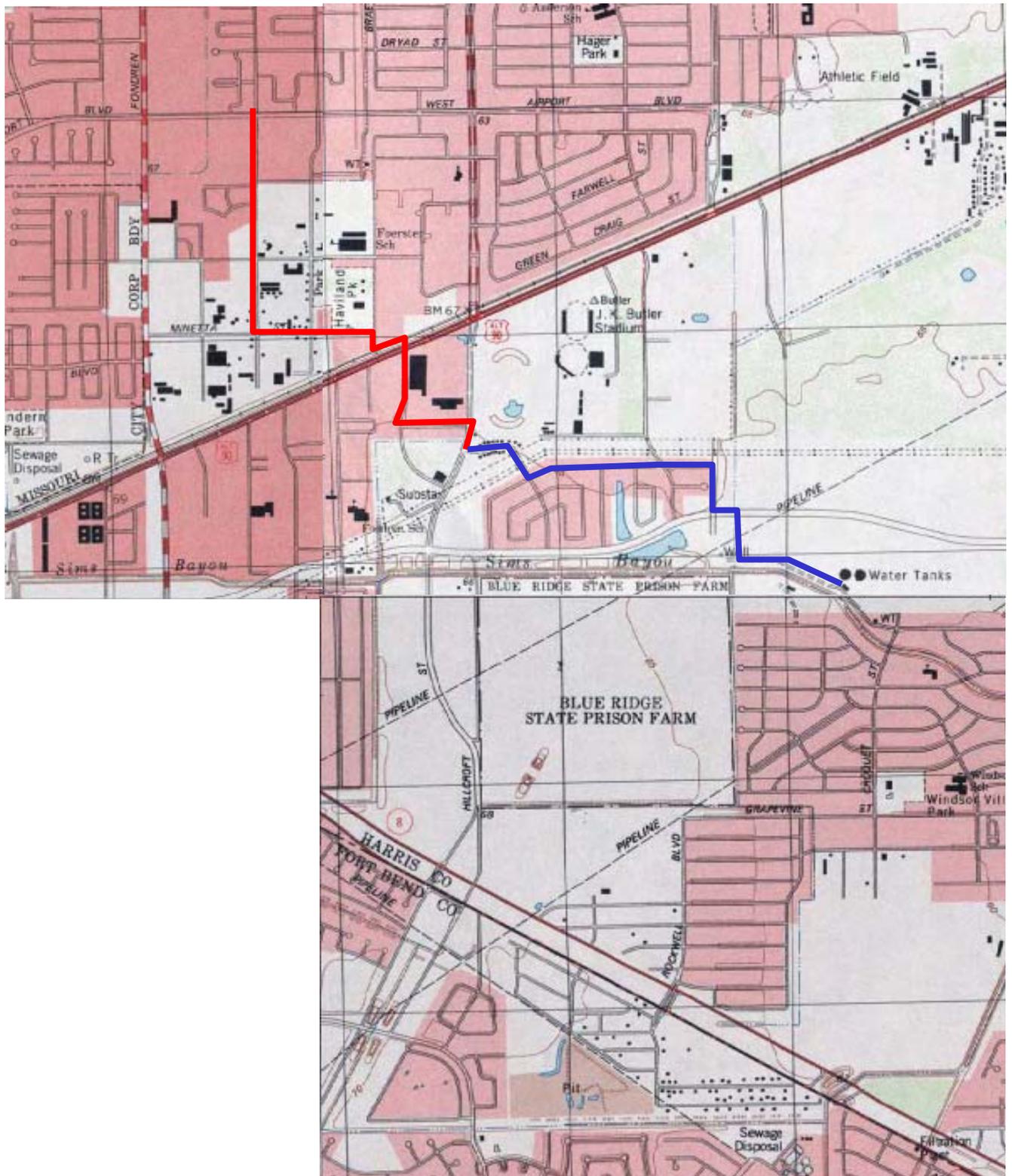


Source: GeoSearch
Scale: Approximately 1" = 1000'

— 74A-1 Project Area
— 74A-2 Project Area



1989 Aerial Photograph	Lockwood, Andrews, Newnam, Inc. City of Houston Water Line Replacement in 74A-1 and 74A-2 Areas WBS Nos. S-000900-0109-3 & S-000900-0110-3
Date: 04/10	<i>CORRIGAN CONSULTING, INC.</i>



USGS Topographic Quadrangles
 Alief, Bellaire, and Almeda Texas. 1995
 Scale: 1:24,000
 Source: GeoSearch

- 74A-1 Project Area
- 74A-2 Project Area



1995 Topographic Map	Lockwood, Andrews, Newnam, Inc. City of Houston Water Line Replacement in 74A-1 and 74A-2 Areas WBS Nos. S-000900-0109-3 & S-000900-0110-3
Date: 04/10	<i>CORRIGAN CONSULTING, INC.</i>



Source: GeoSearch
Scale: Approximately 1" = 1000'

— 74A-1 Project Area
— 74A-2 Project Area



1996 Aerial Photograph	Lockwood, Andrews, Newnam, Inc. City of Houston Water Line Replacement in 74A-1 and 74A-2 Areas WBS Nos. S-000900-0109-3 & S-000900-0110-3
Date: 04/10	<i>CORRIGAN CONSULTING, INC.</i>



Source: GeoSearch
Scale: Approximately 1" = 1000'

— 74A-1 Project Area
— 74A-2 Project Area



2004 Aerial Photograph	Lockwood, Andrews, Newnam, Inc. City of Houston Water Line Replacement in 74A-1 and 74A-2 Areas WBS Nos. S-000900-0109-3 & S-000900-0110-3
Date: 04/10	<i>CORRIGAN CONSULTING, INC.</i>

APPENDIX C

Regulatory Database Search



Radius Report

<http://www.geo-search.net/QuickMap/index.htm?DataID=Standard0000016136>

Click on link above to access the map and satellite view of current property

Target Property:
74A-1 & 74A-2
HOUSTON, Harris County, Texas 77085

Prepared For:
Corrigan Consulting, Inc.

Order #: 6935
Job #: 16136
Date: 04/06/2010

TARGET PROPERTY SUMMARY

74A-1 & 74A-2

HOUSTON, Harris County, Texas 77085

USGS Quadrangle: **Alief, TX**

Target Property Geometry: **Corridor**

Target Property Longitude(s)/Latitude(s):

(-95.503182, 29.644204), (-95.503158, 29.639892), (-95.503110, 29.635532), (-95.497449, 29.635580), (-95.497328, 29.634786), (-95.496076, 29.635243), (-95.496004, 29.633196), (-95.496148, 29.632593), (-95.496172, 29.631991), (-95.493137, 29.631943), (-95.493257, 29.631437), (-95.493378, 29.630931), (-95.493402, 29.630835), (-95.492896, 29.630787), (-95.492463, 29.630907), (-95.491909, 29.631076), (-95.491427, 29.631100), (-95.491234, 29.631052), (-95.490439, 29.629872), (-95.489596, 29.630209), (-95.485573, 29.630233), (-95.484947, 29.630257), (-95.484537, 29.630353), (-95.484272, 29.630088), (-95.483839, 29.630257), (-95.482105, 29.630281), (-95.482080, 29.628450), (-95.481382, 29.628450), (-95.481358, 29.626571), (-95.479190, 29.626547), (-95.476540, 29.625415)

County/Parish Covered:

Harris (TX)

Zipcode(s) Covered:

Houston TX: 77035, 77045, 77053, 77071, 77085, 77096

State(s) Covered:

TX

***Target property is located in Radon Zone 3.**

Zone 3 areas have a predicted average indoor radon screening level less than 2 pCi/L.

Disclaimer - The information provided in this report was obtained from a variety of public sources. GeoSearch cannot ensure and makes no warranty or representation as to the accuracy, reliability, quality, errors occurring from data conversion or the customer's interpretation of this report. This report was made by GeoSearch for exclusive use by its clients only. Therefore, this report may not contain sufficient information for other purposes or parties. GeoSearch and its partners, employees, officers And independent contractors cannot be held liable For actual, incidental, consequential, special or exemplary damages suffered by a customer resulting directly or indirectly from any information provided by GeoSearch.

DATABASE FINDINGS SUMMARY (SOURCE)

DATABASE	ACRONYM	LOCA- TABLE	UNLOCA- TABLE	SEARCH RADIUS (miles)
<u>FEDERAL</u>				
EMERGENCY RESPONSE NOTIFICATION SYSTEM	ERNS	1	0	Target Property
BROWNFIELDS MANAGEMENT SYSTEM	BF	0	0	0.0950
COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION & LIABILITY INFORMATION SYSTEM	CERCLIS	2	0	0.0950
NO LONGER REGULATED RCRA GENERATOR FACILITIES	NLRRCRAG	0	0	0.0950
OPEN DUMP INVENTORY	ODI	0	0	0.0950
RESOURCE CONSERVATION & RECOVERY ACT - GENERATOR FACILITIES	RCRAG	2	0	0.0950
DELISTED NATIONAL PRIORITIES LIST	DNPL	0	0	1.0000
NO LONGER REGULATED RCRA CORRECTIVE ACTION FACILITIES	NLRRCRAC	0	0	1.0000
NO LONGER REGULATED RCRA NON-CORRACTS TSD FACILITIES	NLRRCRAT	0	0	1.0000
NATIONAL PRIORITIES LIST	NPL	0	0	1.0000
PROPOSED NATIONAL PRIORITIES LIST	PNPL	0	0	1.0000
RESOURCE CONSERVATION & RECOVERY ACT - CORRECTIVE ACTION FACILITIES	RCRAC	0	0	1.0000
RESOURCE CONSERVATION & RECOVERY ACT - TREATMENT, STORAGE & DISPOSAL FACILITIES	RCRAT	0	0	1.0000
RECORD OF DECISION SYSTEM	RODS	0	0	1.0000
SUB-TOTAL		5	0	

STATE (TX)

SPILLS LISTING	SPILLS	3	0	Target Property
BROWNFIELDS SITE ASSESSMENTS	BSA	0	0	0.0950
CLOSED & ABANDONED LANDFILL INVENTORY	CALF	0	0	0.0950
LEAKING PETROLEUM STORAGE TANKS	LPST	0	0	0.0950
MUNICIPAL SOLID WASTE LANDFILL SITES	MSWLF	0	0	0.0950
PETROLEUM STORAGE TANKS	PST	5	0	0.0950
RAILROAD COMMISSION VCP AND BROWNFIELD SITES	RRCVCP	0	0	0.0950



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DATABASE FINDINGS SUMMARY (SOURCE)

DATABASE	ACRONYM	LOCA- TABLE	UNLOCA- TABLE	SEARCH RADIUS (miles)
VOLUNTARY CLEANUP PROGRAM SITES	VCP	0	0	0.0950
RECYCLING FACILITIES	WMRF	0	0	0.0950
STATE SUPERFUND SITES	SF	0	0	1.0000
SUB-TOTAL		8	0	

TRIBAL

LEAKING UNDERGROUND STORAGE TANKS ON TRIBAL LANDS	LUSTR06	0	0	0.0950
OPEN DUMP INVENTORY ON TRIBAL LANDS	ODINDIAN	0	0	0.0950
UNDERGROUND STORAGE TANKS ON TRIBAL LANDS	USTR06	0	0	0.0950
SUB-TOTAL		0	0	

TOTAL		13	0	
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DATABASE FINDINGS SUMMARY (DETAIL)

ACRONYM	Target Property	SEARCH RADIUS (miles)	1/8 Mile (> TP)	1/4 Mile (> 1/8)	1/2 Mile (> 1/4)	1 Mile (> 1/2)	> 1 Mile	Total
<u>FEDERAL</u>								
ERNS	1	.0200	0	0	0	0	0	1
BF		.0950	0	0	0	0	0	0
CERCLIS	2	.0950	0	0	0	0	0	2
NLRRCRAG		.0950	0	0	0	0	0	0
ODI		.0950	0	0	0	0	0	0
RCRAG	1	.0950	1	0	0	0	0	2
DNPL		1.000	0	0	0	0	0	0
NLRRCRAC		1.000	0	0	0	0	0	0
NLRRCRAT		1.000	0	0	0	0	0	0
NPL		1.000	0	0	0	0	0	0
PNPL		1.000	0	0	0	0	0	0
RCRAC		1.000	0	0	0	0	0	0
RCRAT		1.000	0	0	0	0	0	0
RODS		1.000	0	0	0	0	0	0
SUB-TOTAL	4		1	0	0	0	0	5

STATE (TX)

SPILLS	3	.0200	0	0	0	0	0	3
BSA		.0950	0	0	0	0	0	0
CALF		.0950	0	0	0	0	0	0
LPST		.0950	0	0	0	0	0	0
MSWLF		.0950	0	0	0	0	0	0
PST	2	.0950	3	0	0	0	0	5
RRCVCP		.0950	0	0	0	0	0	0
VCP		.0950	0	0	0	0	0	0
WMRF		.0950	0	0	0	0	0	0
SF		1.000	0	0	0	0	0	0

DATABASE FINDINGS SUMMARY (DETAIL)

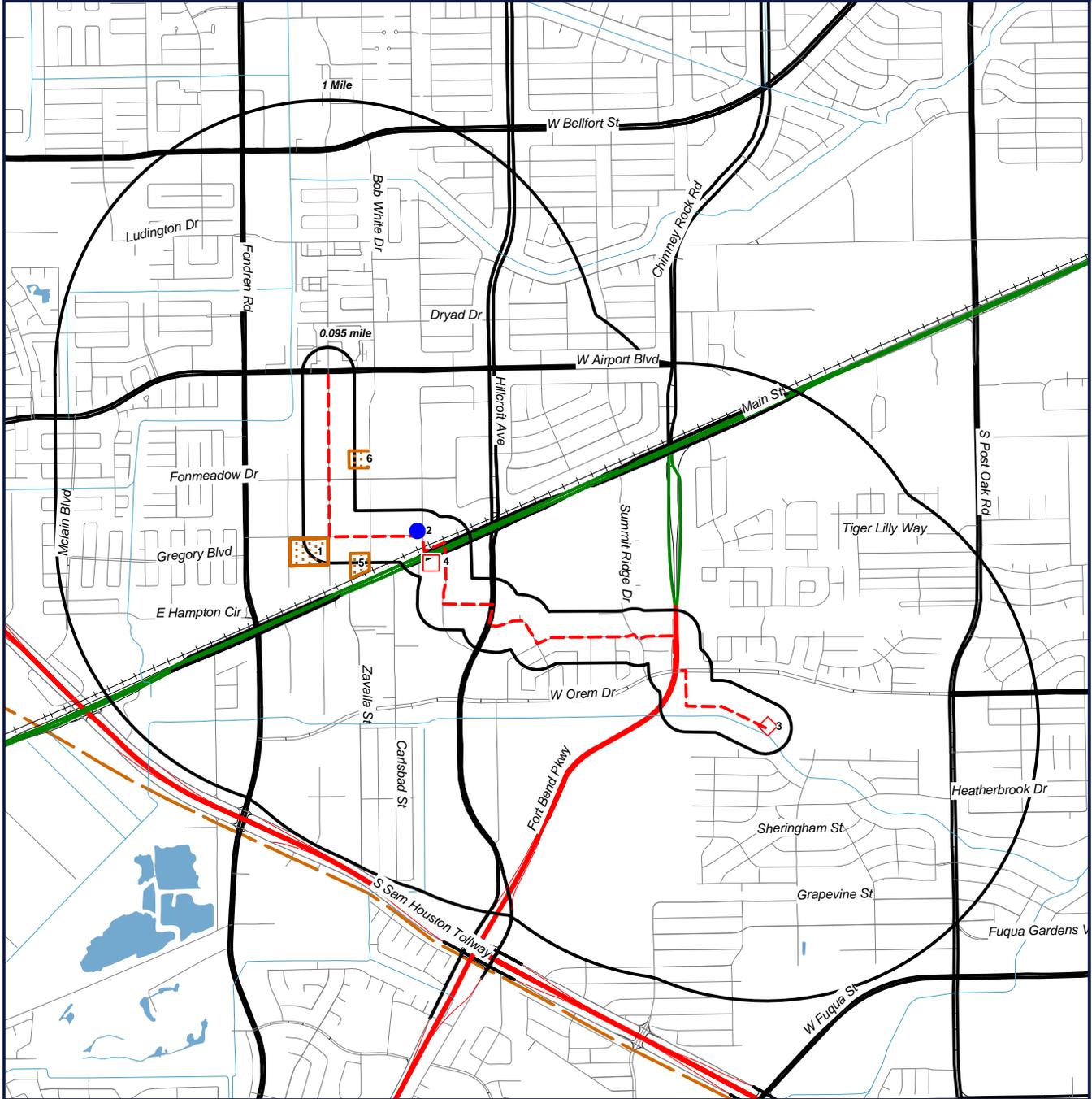
ACRONYM	Target Property	SEARCH RADIUS (miles)	1/8 Mile (> TP)	1/4 Mile (> 1/8)	1/2 Mile (> 1/4)	1 Mile (> 1/2)	> 1 Mile	Total
SUB-TOTAL	5		3	0	0	0	0	8
TRIBAL								
LUSTR06		.0950	0	0	0	0	0	0
ODINDIAN		.0950	0	0	0	0	0	0
USTR06		.0950	0	0	0	0	0	0
SUB-TOTAL			0	0	0	0	0	0

TOTAL	9		4	0	0	0	0	13
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RADIUS MAP



**74A-1 & 74A-2
HOUSTON, Texas
77085**

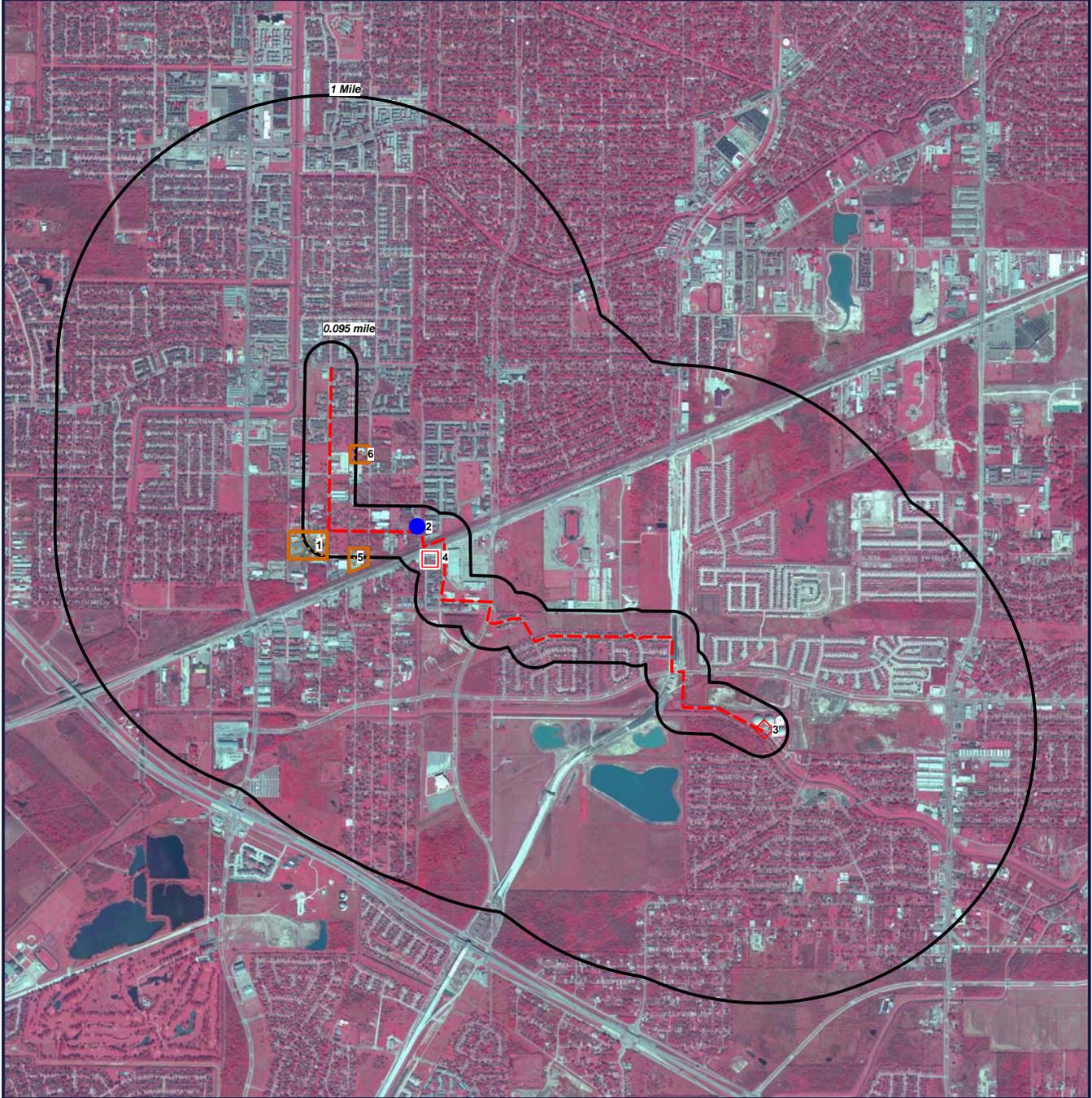
- Target Property (TP)
- SPILLS
- CERCLIS
- RCRA
- PST
- CERCLIS
- PST
- RCRA



GeoSearch

2705 Bee Caves Rd, Suite 330 - Austin, Texas 78746 - phone: 866-396-0042 - fax: 512-472-9967

ORTHOPHOTO MAP



-  Target Property (TP)
-  SPILLS
-  CERCLIS
-  RCRA
-  PST
-  CERCLIS
-  PST
-  RCRA

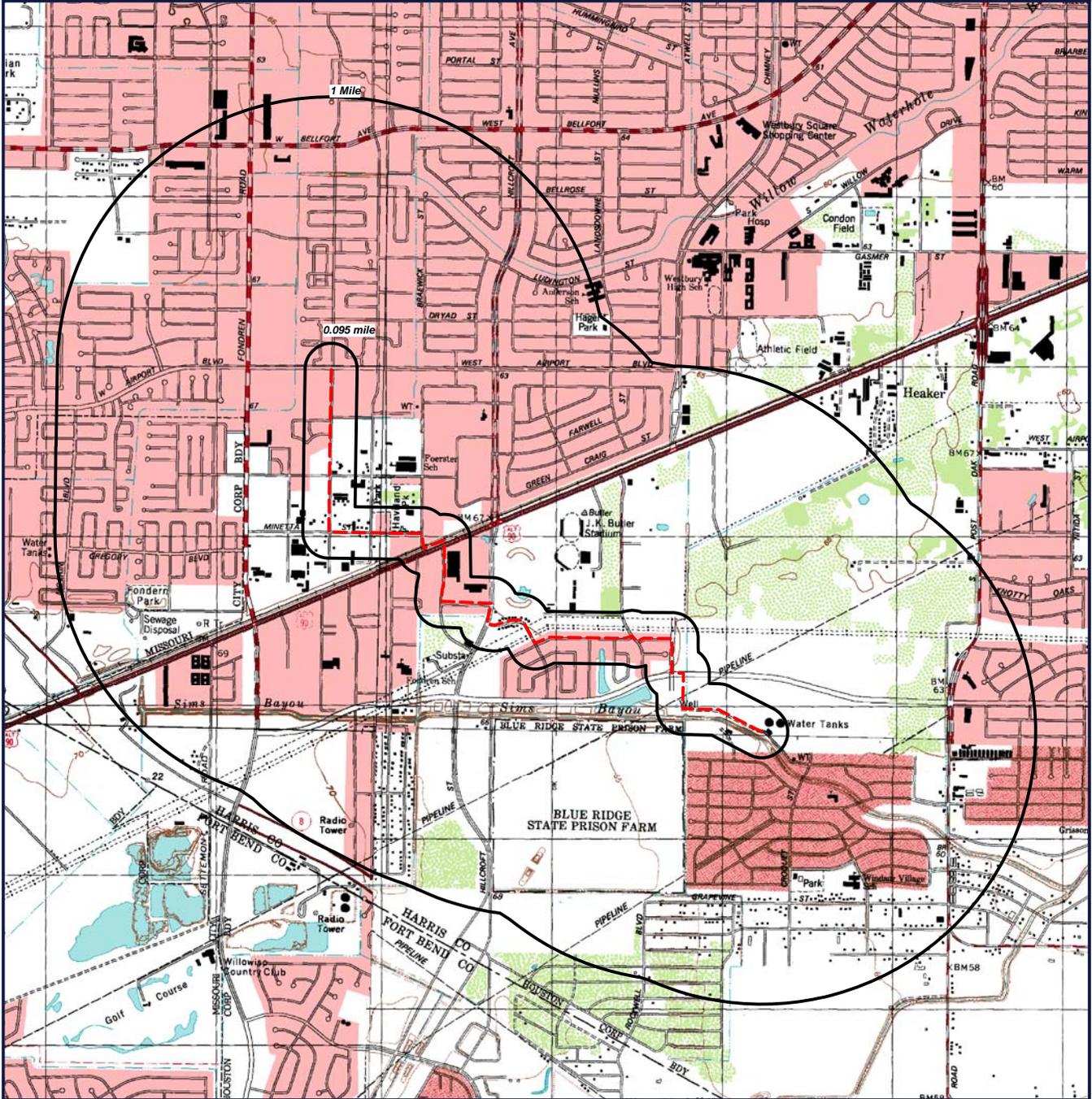
Quadrangle(s): Alief, Bellaire
Source: USDA (2004)
74A-1 & 74A-2
HOUSTON, Texas
77085



GeoSearch

2705 Bee Caves Rd, Suite 330 - Austin, Texas 78746 - phone: 866-396-0042 - fax: 512-472-9967

TOPOGRAPHIC MAP



 Target Property (TP)

Quadrangle(s): Alief, Bellaire
Source: USGS, 2000
74A-1 & 74A-2
HOUSTON, Texas
77085



GeoSearch

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REPORT SUMMARY OF LOCATABLE SITES

MAP ID#	DATABASE NAME	SITE ID#	DISTANCE FROM SITE	SITE NAME	ADDRESS	CITY, ZIP CODE	PAGE #
1	SPILLS	52223	0.010 SW		14549 MINETTA ST, HOUSTON, TX	HOUSTON, 77035	1
1	SPILLS	32468	0.010 SW		14549 MINETTA ST, HOUSTON, TX	HOUSTON, 77035	2
1	SPILLS	5/8/85003	0.010 SW		14549 MINETTA, DRAINAGE DITCH TO COW		3
1	CERCLIS	TXD008063190	0.010 SW	S & R OIL COMPANY	14549 MINETTA	HOUSTON, 77035	4
1	RCRAG	TXD008063190	0.010 SW	MARCUS OIL & CHEMICAL	14549 MINETTA ST	HOUSTON, 77035	5
1	PST	0033998	0.010 SW	MARCUS OIL & CHEMICAL DIV OF HRD CORP	14549 MINETTA ST	HOUSTON, 77035	6
2	CERCLIS	TXN000606572	0.020 NW	MARCUS OIL & CHEMICAL EXPLOSION	14000 MINETTA	HOUSTON	8
3	ERNS	192386367	0.020 E		13840 CROQUET RD.	HOUSTON	9
3	PST	0059939	0.020 E	SIMS BAYOU PLANT	13840 CROQUET	HOUSTON, 77085	10
4	RCRAG	TXR000071001	0.050 S	CLEAN SCENE #11	14117 S MAIN ST	HOUSTON, 77035	12
4	PST	0016976	0.040 W	FUEL DEPOT 11	14111 S MAIN ST	HOUSTON, 77035	13
5	PST	0060163	0.070 SW	PETRO EQUIPMENT X-CHANGE INC	11800 FAIRMONT	HOUSTON, 77035	17
6	PST	0069105	0.080 NE	PB-KBB	11414 FAIRMONT ST	HOUSTON, 77035	18

SPILLS LISTING (SPILLS)

MAP ID# 1

Distance from Property: 0.01 mi. SW

INCIDENT INFORMATION

UNIQUE ID: 52223

SPILL DATE: 12/03/2004

SPILL LOCATION / COUNTY:

14549 MINETTA ST, HOUSTON, TX / HARRIS (77035)

RESPONSIBLE PARTY: MARCUS OIL AND CHEMICAL

REGULATED ENTITY #: RN100869601

CUSTOMER: MARCUS OIL & CHEMICAL

MATERIAL SPILLED / AMOUNT: POLYMER / 1000000 POUND

MEDIA: WASTE

NATURE: INDUSTRIAL

WATER BODY: NA

AIR SOURCE: MARCUS OIL FIRE

DISPUTED STATUS: NOT REPORTED

DISPUTED DATE: 1/12/2005

INCIDENT STATUS: CLOSED

CLASS: CLOSED

COMMENTS:

THE HOUSTON HAZMAT TEAM WAS TAXED OUT ON MANPOWER AND ASK THAT THE TCEQ RENDER SOME AIR MONITORING DURING THE INCIDENT. THE HARRIS COUNTY POLLUTION CONTROL PERSONNEL CONDUCTED SOME AIR MONITORIN AND WATER SAMPLING OF THE DITCH. THE CITY OF HOUSTON TOOK WATER SAMPLE OF THE DITCH AND TOOK LEAD ON THE CLEANUP OF THE DITCH. THE AREA AFFECTED WAS AT LEAST 1/4 MILE LONG, EXTENDING TO A STREET CALLED FONDREN. THE MATERIAL SOLIDIFIED AS IT WAS COOLED. IT WAS ESTIMATED THAT AT LEAST 1 MILLION POUNDS OF RAW MATERIAL WAS MELTED AND SOLIDIFIED IN THE STORM DITCH. EAGLE CONSTRUCTION CONDUCTED THE PLACING OF HARD BOOMS IN THE STORM DITCH TO CONFINE THE MATERIAL CLOSE TO THE PROPERTY AS IT COOLED. EAGLE CONSTRUCTION ALSO CONDUCTED THE REMOVAL OF ALL MATERIAL AND GATHERED IT ON THE SITE FOR DISPOSAL.

SPILLS LISTING (SPILLS)

MAP ID# 1

Distance from Property: 0.01 mi. SW

INCIDENT INFORMATION

UNIQUE ID: **32468**

SPILL DATE: **12/20/2003**

SPILL LOCATION / COUNTY:

14549 MINETTA ST, HOUSTON, TX / HARRIS (77035)

RESPONSIBLE PARTY: **MARCUS OIL AND CHEMICAL**

REGULATED ENTITY #: **RN100869601**

CUSTOMER: **MARCUS OIL & CHEMICAL**

MATERIAL SPILLED / AMOUNT: **POLYDIMETHYLSILOXANE / 0**

MEDIA: **WATER**

NATURE: **OTHER**

WATER BODY: **N/A**

AIR SOURCE: **MARCUS OIL AND CHEMICAL**

DISPUTED STATUS: **NOT REPORTED**

DISPUTED DATE: **12/29/2003**

INCIDENT STATUS: **CLOSED**

CLASS: **CLOSED**

COMMENTS:

THE HOUSTON HAZ-MAT TEAM EXTINGUISHED THE FIRE AND USED WATER TO COOL THE HEXANE TANKS. A SMALL AMOUNT OF FOAM WAS INITIALLY APPLIED TO THE FIRE. FIRE WATER RUN-OFF WAS ROUTED INTO SECONDARY CONTAINMENT WHERE IT WAS THEN PUMPED INTO STORAGE TANKS FOR LATER USE IN THEIR PROCESS. 1 SAMPLE WAS TAKEN FROM THE STORM WATER DITCH IN FRONT OF THE FACILITY WHERE A PIPE WAS DISCHARGING A TRICKLE (APPROX 1 GALLON PER MINUTE). THIS PIPE WAS REPORTED BY THE RP TO COME FROM THEIR API SPERATOR.

SPILLS LISTING (SPILLS)

MAP ID# 1

Distance from Property: 0.01 mi. SW

INCIDENT INFORMATION

UNIQUE ID: **5/8/85003**

SPILL DATE: **5/8/85**

SPILL LOCATION / COUNTY:

14549 MINETTA, DRAINAGE DITCH TO COW WILLOW WATER HOLE BAYOU / HARRIS

RESPONSIBLE PARTY: **CAM-OR OF TEXAS INC.**

MATERIAL SPILLED / AMOUNT: **WASTE LUBE OIL / 30 GALLONS**

AFFECTED WATERWAY: **NONE**

AMOUNT IN WATER: **NONE**

BASIN: **SAN JACINTO**

**COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION & LIABILITY INFORMATION SYSTEM
(CERCLIS)**

MAP ID# 1

Distance from Property: 0.01 mi. SW

FACILITY INFORMATION

EPA ID#: TXD008063190

SITE ID#: 601697

NAME: S & R OIL COMPANY

ADDRESS: 14549 MINETTA
HOUSTON, TX 77035

COUNTY: HARRIS

NATIONAL PRIORITY LISTING: N - NOT ON THE NPL

FEDERAL FACILITY CLASSIFICATION: N - NOT A FEDERAL FACILITY

NON-NPL STATUS: NF - NFRAP

NON-NPL STATUS DATE: 08/24/94

PHYSICAL CLASSIFICATION OF SITE / INCIDENT: NO INFORMATION AVAILABLE

SITE DESCRIPTION - NO SITE DESCRIPTION INFORMATION AVAILABLE -

SITE HISTORY - NO SITE HISTORY INFORMATION AVAILABLE -

ACTIONS

<u>START DATE</u>	<u>COMPLETION DATE</u>	<u>TYPE</u>
NR	08/24/1994	VS - ARCHIVE SITE
12/01/1980	12/01/1980	SI - SITE INSPECTION
11/01/1980	11/01/1980	PA - PRELIMINARY ASSESSMENT
NR	11/01/1979	DS - DISCOVERY

RESOURCE CONSERVATION & RECOVERY ACT - GENERATOR FACILITIES (RCRAG)

MAP ID# 1 Distance from Property: 0.01 mi. SW

FACILITY INFORMATION

EPA ID#: TXD008063190
NAME: **MARCUS OIL & CHEMICAL**
ADDRESS: 14549 MINETTA ST
HOUSTON, TX 77035
CONTACT NAME: **ABBAS HASSAN**
CONTACT ADDRESS: PO DRAWER 450267
HOUSTON, TX 77245
CONTACT PHONE: 713-721-9131 EX
NON-NOTIFIER: **NOT A NON-NOTIFIER**
INDUSTRY CLASSIFICATION (NAICS)
324191 - PETROLEUM LUBRICATING OIL AND GREASE MANUFACTURIN

OWNER TYPE: **PRIVATE**
OWNER NAME: **MARCUS OIL & CHEMICAL**
OPERATOR TYPE: **PRIVATE**
OPERATOR NAME: **MARCUS OIL & CHEMICAL**

ACTIVITY INFORMATION

GENERATOR STATUS: **CONDITIONALLY EXEMPT SMALL QUANTITY GENERATOR**
SUBJECT TO CORRECTIVE ACTION UNIVERSE: **NO**
TDSFs POTENTIALLY SUBJECT TO CORRECTIVE ACTION UNDER 3004 (u)/(v) UNIVERSE: **NO**
TDSFs ONLY SUBJECT TO CORRECTIVE ACTION UNDER DISCRETIONARY AUTHORITIES UNIVERSE: **NO**
NON TDSFs WHERE RCRA CORRECTIVE ACTION HAS BEEN IMPOSED UNIVERSE: **NO**
CORRECTIVE ACTION WORKLOAD UNIVERSE: **NO**
IMPORTER: **NO**
MIXED WASTE GENERATOR: **NO**
RECYCLER: **NO**
TRANSPORTER: **YES**
ONSITE BURNER EXEMPTION: **NO**
FURNACE EXEMPTION: **NO**
USED OIL REFINER: **NO**
USED OIL TRANSFER FACILITY: **NO**
OFF-SITE WASTE RECEIPT: **UNKNOWN**
UNDERGROUND INJECTION: **NO**
UNIVERSAL WASTE DESTINATION FACILITY: **NO**
TRANSFER FACILITY: **NOT REPORTED**
USED OIL FUEL BURNER: **NO**
USED OIL PROCESSOR: **NO**
USED OIL FUEL MARKETER TO BURNER: **NO**
SPECIFICATION USED OIL MARKETER: **NO**
USED OIL TRANSPORTER: **NO**

COMPLIANCE, MONITORING AND ENFORCEMENT INFORMATION

EVALUATIONS

1985/02/26 CEI COMPLIANCE EVALUATION INSPECTION ON-SITE
1989/01/20 FCI FOCUSED COMPLIANCE INSPECTION
2008/04/30 CEI COMPLIANCE EVALUATION INSPECTION ON-SITE

VIOLATIONS

1989/01/20 XXS STATE STATUTE OR REGULATION
2008/04/30 XXS STATE STATUTE OR REGULATION

ENFORCEMENTS

1989/04/07 120 WRITTEN INFORMAL
2008/04/30 110 VERBAL INFORMAL

HAZARDOUS WASTE

D002 CORROSIVE WASTE



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PETROLEUM STORAGE TANKS (PST)

MAP ID# 1

Distance from Property: 0.01 mi. SW

FACILITY INFORMATION

FACILITY ID #: 0033998
NAME: **MARCUS OIL & CHEMICAL DIV OF HRD CORP**
ADDRESS: 14549 MINETTA ST
HOUSTON, TX 77035
TYPE: **UNIDENTIFIED**
TCEQ REGION: 12
FACILITY IN OZONE NON-ATTAINMENT AREA: **YES**
NUMBER OF UNDERGROUND TANKS AT FACILITY: 2
NUMBER OF ABOVEGROUND TANKS AT FACILITY: 0
FACILITY CONTACT: **JAMES P NOVAK, VP**
PHONE: 713-729-8740
DATE REGISTRATION FORM RECEIVED: 05/08/86
SIGNATURE ON REGISTRATION FORM: **JAMES P NOVAK, VP**
DATE OF SIGNATURE ON REGISTRATION FORM: 05/08/86

SELF-CERTIFICATION INFORMATION

NO SELF-CERTIFICATION DATA REPORTED FOR THIS FACILITY

UNDERGROUND STORAGE TANK INFORMATION

TANK ID #: 2 TANK STATUS: **TEMPORARILY OUT OF USE**
INSTALL DATE: 01/01/1964 STATUS DATE: 01/01/2000
REGISTRATION DATE: 05/08/1986
CAPACITY: 8009 GALLONS SUBSTANCE STORED: **GASOLINE**
TANK DESIGN AND EXTERNAL CONTAINMENT (I thru IV)

NOT REPORTED

PIPING DESIGN AND EXTERNAL CONTAINMENT (I thru IV)

NOT REPORTED

TYPE OF PIPING: **NOT REPORTED**
TANK INTERNAL PROTECTION (INTERNAL LINING) DATE: **NOT REPORTED**
TANK MATERIAL: **STEEL**
OTHER TANK MATERIAL:
PIPE MATERIAL: **UNKNOWN**
OTHER PIPE MATERIAL:

PIPE CONNECTORS AND VALVES (I thru III)

NOT REPORTED

TANK CORROSION PROTECTION (I thru III)

NOT REPORTED

TANK CORROSION PROTECTION VARIANCE: **NO VARIANCE**

PIPE CORROSION PROTECTION (I thru III)

NOT REPORTED

PIPE CORROSION PROTECTION VARIANCE: **NO VARIANCE**
STAGE 1 VAPOR RECOVERY EQUIPMENT STATUS: **NOT REPORTED**
STAGE 1 EQUIPMENT INSTALL DATE: **NOT REPORTED**
STAGE 2 VAPOR RECOVERY EQUIPMENT STATUS: **NOT REPORTED**
STAGE 2 EQUIPMENT INSTALL DATE: **NOT REPORTED**
TANK TESTED ? : **NO**
INSTALLER NAME:

OWNER INFORMATION

CUSTOMER #: 31377
NAME: **MARCUS OIL & CHEMICAL**
ADDRESS: PO DRAWER 450267
HOUSTON, TX 77245
TYPE: **PRIVATE OR CORPORATE**
NUMBER OF FACILITIES REPORTED BY CURRENT OWNER: 1
NUMBER OF UNDERGROUND TANKS FOR CURRENT OWNER: 2
NUMBER OF ABOVEGROUND TANKS FOR CURRENT OWNER: 0
OWNER CONTACT:
PHONE:



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PETROLEUM STORAGE TANKS (PST)

TANK ID #: 1 TANK STATUS: **IN USE**
INSTALL DATE: 01/01/1964 STATUS DATE: **NOT REPORTED**
REGISTRATION DATE: 05/08/1986
CAPACITY: **8009 GALLONS** SUBSTANCE STORED: **DIESEL**
TANK DESIGN AND EXTERNAL CONTAINMENT (I thru IV)

NOT REPORTED

PIPING DESIGN AND EXTERNAL CONTAINMENT (I thru IV)

NOT REPORTED

TYPE OF PIPING: **NOT REPORTED**
TANK INTERNAL PROTECTION (INTERNAL LINING) DATE: **NOT REPORTED**

TANK MATERIAL: **STEEL**

OTHER TANK MATERIAL:

PIPE MATERIAL: **UNKNOWN**

OTHER PIPE MATERIAL:

PIPE CONNECTORS AND VALVES (I thru III)

NOT REPORTED

TANK CORROSION PROTECTION (I thru III)

NOT REPORTED

TANK CORROSION PROTECTION VARIANCE: **NO VARIANCE**

PIPE CORROSION PROTECTION (I thru III)

NOT REPORTED

PIPE CORROSION PROTECTION VARIANCE: **NO VARIANCE**
STAGE 1 VAPOR RECOVERY EQUIPMENT STATUS: **NOT REPORTED**
STAGE 1 EQUIPMENT INSTALL DATE: **NOT REPORTED**
STAGE 2 VAPOR RECOVERY EQUIPMENT STATUS:
STAGE 2 EQUIPMENT INSTALL DATE: **NOT REPORTED**

TANK TESTED?: **NO**

INSTALLER NAME:

UNIT ID: **00089956** TANK ID: 2 COMPARTMENT LETTER: A

TANK RELEASE DETECTION METHOD

NONE

TANK RELEASE DETECTION VARIANCE: **NO VARIANCE**

PIPE RELEASE DETECTION METHOD

NONE

PIPE RELEASE DETECTION VARIANCE: **NO VARIANCE**

SPILL AND OVERFILL PREVENTION

NOT REPORTED

SPILL AND OVERFILL PREVENTION VARIANCE: **NO VARIANCE**

UNIT ID: **00089957** TANK ID: 1 COMPARTMENT LETTER: A

TANK RELEASE DETECTION METHOD

NOT REPORTED

TANK RELEASE DETECTION VARIANCE: **NO VARIANCE**

PIPE RELEASE DETECTION METHOD

NOT REPORTED

PIPE RELEASE DETECTION VARIANCE: **NO VARIANCE**

SPILL AND OVERFILL PREVENTION

NOT REPORTED

SPILL AND OVERFILL PREVENTION VARIANCE: **NO VARIANCE**

ABOVEGROUND STORAGE TANK INFORMATION

NO ABOVEGROUND STORAGE TANK DATA REPORTED FOR THIS FACILITY



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**COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION & LIABILITY INFORMATION SYSTEM
(CERCLIS)**

MAP ID# 2

Distance from Property: 0.02 mi. NW

FACILITY INFORMATION

EPA ID#: **TXN000606572**

SITE ID#: **606572**

NAME: **MARCUS OIL & CHEMICAL EXPLOSION**

ADDRESS: **14000 MINETTA
HOUSTON, TX**

COUNTY:

NATIONAL PRIORITY LISTING: **N - NOT ON THE NPL**

FEDERAL FACILITY CLASSIFICATION: **N - NOT A FEDERAL FACILITY**

NON-NPL STATUS: **RO - REMOVAL ONLY SITE (NO SITE ASSESSMENT**

NON-NPL STATUS DATE: **12/3/2004**

PHYSICAL CLASSIFICATION OF SITE / INCIDENT: **NO INFORMATION AVAILABLE**

SITE DESCRIPTION - **NO SITE DESCRIPTION INFORMATION AVAILABLE -**

SITE HISTORY - **NO SITE HISTORY INFORMATION AVAILABLE -**

ACTIONS

START DATE COMPLETION DATE TYPE

12/03/2004 12/03/2004 PJ - POTENTIALLY RESPONSIBLE PARTY EMERGENCY REMOVAL



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EMERGENCY RESPONSE NOTIFICATION SYSTEM (ERNS)

MAP ID# 3

Distance from Property: 0.02 mi. E

INCIDENT INFORMATION

GSID#: 192386367

NRC ID#: 72700

INCIDENT LOCATION: NOT REPORTED

INCIDENT ADDRESS: 13840 CROQUET RD.

INCIDENT CITY: HOUSTON

INCIDENT STATE: TX

INCIDENT ZIP: NOT REPORTED

INCIDENT COUNTY: HARRIS

RESPONSIBLE PARTY

COMPANY: CITY OF HOUSTON

ADDRESS: 105 SAVINE ST.

CITY: HOUSTON

STATE: TX

ZIP: 77007

INCIDENT DETAILS

INCIDENT DATE: 19-MAY-91

INCIDENT CAUSE: EQUIPMENT FAILURE

MATERIAL REACHED WATER: YES

REMEDIAL ACTION: HOUSTON FD RESPONDED; LEAK SECURED; CONTAINER REMOVED

INCIDENT DESCRIPTION: 1 TON CONTAINER / FAULTY VALVE

MATERIAL RELEASED/AMOUNT: CHLORINE (LIQUID)/678 POUND(S)



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PETROLEUM STORAGE TANKS (PST)

MAP ID# 3

Distance from Property: 0.02 mi. E

FACILITY INFORMATION

FACILITY ID #: 0059939
NAME: SIMS BAYOU PLANT
ADDRESS: 13840 CROQUET
HOUSTON, TX 77085
TYPE: OTHER
TCEQ REGION: 12
FACILITY IN OZONE NON-ATTAINMENT AREA: YES
NUMBER OF UNDERGROUND TANKS AT FACILITY: 1
NUMBER OF ABOVEGROUND TANKS AT FACILITY: 1
FACILITY CONTACT: JOHN GRUBBS
PHONE: 713--75-4-08 72
DATE REGISTRATION FORM RECEIVED: 09/17/91
SIGNATURE ON REGISTRATION FORM: MARY ANN HUNT, ASST DIR
DATE OF SIGNATURE ON REGISTRATION FORM: 09/10/91

SELF-CERTIFICATION INFORMATION

NO SELF-CERTIFICATION DATA REPORTED FOR THIS FACILITY

UNDERGROUND STORAGE TANK INFORMATION

TANK ID #: 1 TANK STATUS: IN USE
INSTALL DATE: 01/01/1987 STATUS DATE: NOT REPORTED
REGISTRATION DATE: 09/17/1991
CAPACITY: 2000 GALLONS SUBSTANCE STORED: DIESEL
TANK DESIGN AND EXTERNAL CONTAINMENT (I thru IV)

SINGLE WALL

PIPING DESIGN AND EXTERNAL CONTAINMENT (I thru IV)

DOUBLE WALL

TYPE OF PIPING: NOT REPORTED
TANK INTERNAL PROTECTION (INTERNAL LINING) DATE: NOT REPORTED
TANK MATERIAL: FRP(FIBERGLASS-REINFORCED PLASTIC)
OTHER TANK MATERIAL:
PIPE MATERIAL: FRP(FIBERGLASS-REINFORCED PLASTIC)
OTHER PIPE MATERIAL:
PIPE CONNECTORS AND VALVES (I thru III)

NOT REPORTED

TANK CORROSION PROTECTION (I thru III)

FIBERGLASS-REINFORCED PLASTIC TANK OR PIPING (NONCORRODIBLE)

TANK CORROSION PROTECTION VARIANCE: NO VARIANCE
PIPE CORROSION PROTECTION (I thru III)

FIBERGLASS-REINFORCED PLASTIC TANK OR PIPING (NONCORRODIBLE)

PIPE CORROSION PROTECTION VARIANCE: NO VARIANCE
STAGE 1 VAPOR RECOVERY EQUIPMENT STATUS: NOT REPORTED
STAGE 1 EQUIPMENT INSTALL DATE: NOT REPORTED
STAGE 2 VAPOR RECOVERY EQUIPMENT STATUS:
STAGE 2 EQUIPMENT INSTALL DATE: NOT REPORTED
TANK TESTED ? : NO
INSTALLER NAME:

UNIT ID: 00141209 TANK ID: 1 COMPARTMENT LETTER: A

TANK RELEASE DETECTION METHOD

GROUNDWATER MONITORING

TANK RELEASE DETECTION VARIANCE: NO VARIANCE
PIPE RELEASE DETECTION METHOD

INTERSTITIAL MONITORING WITHIN SECONDARY WALL/JACKET

PIPE RELEASE DETECTION VARIANCE: NO VARIANCE
SPILL AND OVERFILL PREVENTION

AUTO. DELIVERY SHUT/OFF VALVE, FACTORY/BUILT SPILL CONTAINER/BUCKET/SUMP, TIGHT-FILL FITTING

SPILL AND OVERFILL PREVENTION VARIANCE: NO VARIANCE

OWNER INFORMATION

CUSTOMER #: 06049
NAME: CITY OF HOUSTON
ADDRESS: GENERAL SERVICES DEPT-ENVIRONMENTAL PO BOX 1562
HOUSTON, TX 77251
TYPE: LOCAL GOVERNMENT
NUMBER OF FACILITIES REPORTED BY CURRENT OWNER: 211
NUMBER OF UNDERGROUND TANKS FOR CURRENT OWNER: 651
NUMBER OF ABOVEGROUND TANKS FOR CURRENT OWNER: 41
OWNER CONTACT: MICHAEL C JOZWIAK
PHONE: 832-393-8043



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RESOURCE CONSERVATION & RECOVERY ACT - GENERATOR FACILITIES (RCRAG)

MAP ID# 4 Distance from Property: 0.05 mi. S

FACILITY INFORMATION

EPA ID#: **TXR000071001**
NAME: **CLEAN SCENE #11**
ADDRESS: **14117 S MAIN ST**
HOUSTON, TX 77035

OWNER TYPE: **NOT REPORTED**
OWNER NAME: **NOT REPORTED**
OPERATOR TYPE: **NOT REPORTED**
OPERATOR NAME: **NOT REPORTED**

CONTACT NAME: **NOT REPORTED**
CONTACT ADDRESS: **14117 S MAIN ST**
HOUSTON, TX 77035

CONTACT PHONE: **NOT REPORTED**

NON-NOTIFIER: **E - INITIALLY A NON-NOTIFIER, SUBSEQUENTLY DETERMINED TO BE EXEMPT FROM REQUIREMENTS TO NOTIFY.**

INDUSTRY CLASSIFICATION (NAICS) - **NO NAICS INFORMATION REPORTED**

— **ACTIVITY INFORMATION** —

GENERATOR STATUS: **CONDITIONALLY EXEMPT SMALL QUANTITY GENERATOR**

SUBJECT TO CORRECTIVE ACTION UNIVERSE: **NO**

TDSFs POTENTIALLY SUBJECT TO CORRECTIVE ACTION UNDER 3004 (u)/(v) UNIVERSE: **NO**

TDSFs ONLY SUBJECT TO CORRECTIVE ACTION UNDER DISCRETIONARY AUTHORITIES UNIVERSE: **NO**

NON TDSFs WHERE RCRA CORRECTIVE ACTION HAS BEEN IMPOSED UNIVERSE: **NO**

CORRECTIVE ACTION WORKLOAD UNIVERSE: **NO**

IMPORTER: **NO**

UNDERGROUND INJECTION: **NO**

MIXED WASTE GENERATOR: **NO**

UNIVERSAL WASTE DESTINATION FACILITY: **NO**

RECYCLER: **NO**

TRANSFER FACILITY: **NOT REPORTED**

TRANSPORTER: **NO**

USED OIL FUEL BURNER: **NO**

ONSITE BURNER EXEMPTION: **NO**

USED OIL PROCESSOR: **NO**

FURNACE EXEMPTION: **NO**

USED OIL FUEL MARKETER TO BURNER: **NO**

USED OIL REFINER: **NO**

SPECIFICATION USED OIL MARKETER: **NO**

USED OIL TRANSFER FACILITY: **NO**

USED OIL TRANSPORTER: **NO**

OFF-SITE WASTE RECEIPT: **UNKNOWN**

— **COMPLIANCE, MONITORING AND ENFORCEMENT INFORMATION** —

EVALUATIONS - **NO EVALUATIONS REPORTED -**

VIOLATIONS - **NO VIOLATIONS REPORTED -**

ENFORCEMENTS - **NO ENFORCEMENTS REPORTED -**

— **HAZARDOUS WASTE** — **NO HAZARDOUS WASTE INFORMATION REPORTED**

PETROLEUM STORAGE TANKS (PST)

MAP ID# 4

Distance from Property: 0.04 mi. W

FACILITY INFORMATION

FACILITY ID #: **0016976**
NAME: **FUEL DEPOT 11**
ADDRESS: **14111 S MAIN ST**
HOUSTON, TX 77035
TYPE: **RETAIL**
TCEQ REGION: **12**
FACILITY IN OZONE NON-ATTAINMENT AREA: **YES**
NUMBER OF UNDERGROUND TANKS AT FACILITY: **4**
NUMBER OF ABOVEGROUND TANKS AT FACILITY: **0**
FACILITY CONTACT: **JIGAR ALI**
PHONE: **713--72-3-55 45**
DATE REGISTRATION FORM RECEIVED: **05/08/86**
SIGNATURE ON REGISTRATION FORM: **A S SIKAND, OWNER**
DATE OF SIGNATURE ON REGISTRATION FORM: **04/21/86**

SELF-CERTIFICATION INFORMATION

* MOST RECENT INFORMATION REPORTED

CERTIFICATION DATE: **11/10/09**
TYPE OF CERTIFICATION SUBMITTED: **INITIAL**
UST DELIVERY CERTIFICATE EXPIRATION DATE: **2010/09**
SIGNATURE ON CERTIFICATION: **KHALID M KHAN, REP, LEGALLY-AUTHORIZED REP OF OWNER**

* MOST RECENT INFORMATION REPORTED

CERTIFICATION DATE: **03/31/05**
TYPE OF CERTIFICATION SUBMITTED: **INITIAL**
UST DELIVERY CERTIFICATE EXPIRATION DATE: **2006/03**
SIGNATURE ON CERTIFICATION: **RISHAD MMERCHANT, DIRECTOR, OWNER**

* MOST RECENT INFORMATION REPORTED

CERTIFICATION DATE: **08/27/02**
TYPE OF CERTIFICATION SUBMITTED: **ANNUAL RENEWAL**
UST DELIVERY CERTIFICATE EXPIRATION DATE: **2003/08**
SIGNATURE ON CERTIFICATION: **FRED GILANI, , OPERATOR**

* MOST RECENT INFORMATION REPORTED

CERTIFICATION DATE: **04/02/01**
TYPE OF CERTIFICATION SUBMITTED: **INITIAL**
UST DELIVERY CERTIFICATE EXPIRATION DATE: **2002/08**
SIGNATURE ON CERTIFICATION: **BRUNO T TOWA, ENV CONSULTANT, OWNER**

* MOST RECENT INFORMATION REPORTED

CERTIFICATION DATE: **04/01/01**
TYPE OF CERTIFICATION SUBMITTED: **INITIAL**
UST DELIVERY CERTIFICATE EXPIRATION DATE: **2002/08**
SIGNATURE ON CERTIFICATION: **BRUNO T TOWA, ENVIR CON, LEGALLY-AUTHORIZED REP OF OWNER**

UNDERGROUND STORAGE TANK INFORMATION

OWNER INFORMATION

CUSTOMER #: **70399**
NAME: **JALIS VENTURES INC**
ADDRESS: **14111 S MAIN ST**
HOUSTON, TX 77035
TYPE: **CORPORATION**
NUMBER OF FACILITIES REPORTED BY CURRENT OWNER: **1**
NUMBER OF UNDERGROUND TANKS FOR CURRENT OWNER: **4**
NUMBER OF ABOVEGROUND TANKS FOR CURRENT OWNER: **0**
OWNER CONTACT: **JIGAR ALI**
PHONE: **713-723-5545**



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PETROLEUM STORAGE TANKS (PST)

TANK ID #: 1 TANK STATUS: **REMOVED FROM GROUND**
INSTALL DATE: **04/01/1966** STATUS DATE: **02/01/1995**
REGISTRATION DATE: **05/08/1986**
CAPACITY: **10000 GALLONS** SUBSTANCE STORED: **GASOLINE**
TANK DESIGN AND EXTERNAL CONTAINMENT (I thru IV)

SINGLE WALL

PIPING DESIGN AND EXTERNAL CONTAINMENT (I thru IV)

SINGLE WALL

TYPE OF PIPING: **PRESSURIZED**
TANK INTERNAL PROTECTION (INTERNAL LINING) DATE: **NOT REPORTED**
TANK MATERIAL: **STEEL**
OTHER TANK MATERIAL:
PIPE MATERIAL: **FRP(FIBERGLASS-REINFORCED PLASTIC)**
OTHER PIPE MATERIAL:
PIPE CONECTORS AND VALVES (I thru III)

NOT REPORTED

TANK CORROSSION PROTECTION (I thru III)

CATHODIC PROTECTION - FIELD INSTALLATION

TANK CORROSSION PROTECTION VARIANCE: **NO VARIANCE**
PIPE CORROSSION PROTECTION (I thru III)

FIBERGLASS-REINFORCED PLASTIC TANK OR PIPING (NONCORRODIBLE)

PIPE CORROSSION PROTECTION VARIANCE: **NO VARIANCE**
STAGE 1 VAPOR RECOVERY EQUIPMENT STATUS: **NOT REPORTED**
STAGE 1 EQUIPMENT INSTALL DATE: **NOT REPORTED**
STAGE 2 VAPOR RECOVERY EQUIPMENT STATUS: **NOT REPORTED**
STAGE 2 EQUIPMENT INSTALL DATE: **NOT REPORTED**
TANK TESTED ? : **YES**
INSTALLER NAME:

TANK ID #: 2 TANK STATUS: **REMOVED FROM GROUND**
INSTALL DATE: **04/01/1966** STATUS DATE: **02/01/1995**
REGISTRATION DATE: **05/08/1986**
CAPACITY: **10000 GALLONS** SUBSTANCE STORED: **GASOLINE**
TANK DESIGN AND EXTERNAL CONTAINMENT (I thru IV)

SINGLE WALL

PIPING DESIGN AND EXTERNAL CONTAINMENT (I thru IV)

SINGLE WALL

TYPE OF PIPING: **PRESSURIZED**
TANK INTERNAL PROTECTION (INTERNAL LINING) DATE: **NOT REPORTED**
TANK MATERIAL: **STEEL**
OTHER TANK MATERIAL:
PIPE MATERIAL: **FRP(FIBERGLASS-REINFORCED PLASTIC)**
OTHER PIPE MATERIAL:
PIPE CONECTORS AND VALVES (I thru III)

NOT REPORTED

TANK CORROSSION PROTECTION (I thru III)

CATHODIC PROTECTION - FIELD INSTALLATION

TANK CORROSSION PROTECTION VARIANCE: **NO VARIANCE**
PIPE CORROSSION PROTECTION (I thru III)

FIBERGLASS-REINFORCED PLASTIC TANK OR PIPING (NONCORRODIBLE)

PIPE CORROSSION PROTECTION VARIANCE: **NO VARIANCE**
STAGE 1 VAPOR RECOVERY EQUIPMENT STATUS: **NOT REPORTED**
STAGE 1 EQUIPMENT INSTALL DATE: **NOT REPORTED**
STAGE 2 VAPOR RECOVERY EQUIPMENT STATUS: **NOT REPORTED**
STAGE 2 EQUIPMENT INSTALL DATE: **NOT REPORTED**
TANK TESTED ? : **YES**
INSTALLER NAME:



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PETROLEUM STORAGE TANKS (PST)

TANK ID #: 1 TANK STATUS: **IN USE**
INSTALL DATE: 02/01/1995 STATUS DATE: **NOT REPORTED**
REGISTRATION DATE: 05/04/2001
CAPACITY: **10000 GALLONS** SUBSTANCE STORED: **GASOLINE**
TANK DESIGN AND EXTERNAL CONTAINMENT (I thru IV)

SINGLE WALL

PIPING DESIGN AND EXTERNAL CONTAINMENT (I thru IV)

SINGLE WALL

TYPE OF PIPING: **PRESSURIZED**
TANK INTERNAL PROTECTION (INTERNAL LINING) DATE: **NOT REPORTED**
TANK MATERIAL: **FRP(FIBERGLASS-REINFORCED PLASTIC)**
OTHER TANK MATERIAL:
PIPE MATERIAL: **FRP(FIBERGLASS-REINFORCED PLASTIC)**
OTHER PIPE MATERIAL:
PIPE CONECTORS AND VALVES (I thru III)

NOT REPORTED

TANK CORROSSION PROTECTION (I thru III)

FIBERGLASS-REINFORCED PLASTIC TANK OR PIPING (NONCORRODIBLE)

TANK CORROSSION PROTECTION VARIANCE: **NO VARIANCE**
PIPE CORROSSION PROTECTION (I thru III)

FIBERGLASS-REINFORCED PLASTIC TANK OR PIPING (NONCORRODIBLE)

PIPE CORROSSION PROTECTION VARIANCE: **NO VARIANCE**
STAGE 1 VAPOR RECOVERY EQUIPMENT STATUS: **TWO-POINT SYSTEM OR COAXIAL SYSTEM TYPE**
STAGE 1 EQUIPMENT INSTALL DATE: 02/01/1995
STAGE 2 VAPOR RECOVERY EQUIPMENT STATUS: **BALANCE SYSTEM OR ASSIST SYSTEM TYPE**
STAGE 2 EQUIPMENT INSTALL DATE: **NOT REPORTED**
TANK TESTED ? : **NO**
INSTALLER NAME:

TANK ID #: 2 TANK STATUS: **IN USE**
INSTALL DATE: 02/01/1995 STATUS DATE: **NOT REPORTED**
REGISTRATION DATE: 05/04/2001
CAPACITY: **10000 GALLONS** SUBSTANCE STORED: **GASOLINE**
TANK DESIGN AND EXTERNAL CONTAINMENT (I thru IV)

SINGLE WALL

PIPING DESIGN AND EXTERNAL CONTAINMENT (I thru IV)

SINGLE WALL

TYPE OF PIPING: **PRESSURIZED**
TANK INTERNAL PROTECTION (INTERNAL LINING) DATE: **NOT REPORTED**
TANK MATERIAL: **FRP(FIBERGLASS-REINFORCED PLASTIC)**
OTHER TANK MATERIAL:
PIPE MATERIAL: **FRP(FIBERGLASS-REINFORCED PLASTIC)**
OTHER PIPE MATERIAL:
PIPE CONECTORS AND VALVES (I thru III)

FLEXIBLE CONNECTORS (AT ENDS OF PIPING), STEEL SWING-JOINTS (AT ENDS OF PIPING), SHEAR/IMPACT VALVES (UNDER DISPENSER)

TANK CORROSSION PROTECTION (I thru III)

FIBERGLASS-REINFORCED PLASTIC TANK OR PIPING (NONCORRODIBLE)

TANK CORROSSION PROTECTION VARIANCE: **NO VARIANCE**
PIPE CORROSSION PROTECTION (I thru III)

FIBERGLASS-REINFORCED PLASTIC TANK OR PIPING (NONCORRODIBLE)

PIPE CORROSSION PROTECTION VARIANCE: **NO VARIANCE**
STAGE 1 VAPOR RECOVERY EQUIPMENT STATUS: **TWO-POINT SYSTEM OR COAXIAL SYSTEM TYPE**
STAGE 1 EQUIPMENT INSTALL DATE: 02/01/1995
STAGE 2 VAPOR RECOVERY EQUIPMENT STATUS: **BALANCE SYSTEM OR ASSIST SYSTEM TYPE**
STAGE 2 EQUIPMENT INSTALL DATE: **NOT REPORTED**
TANK TESTED ? : **NO**
INSTALLER NAME:



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PETROLEUM STORAGE TANKS (PST)

UNIT ID: 00043145 TANK ID: 1 COMPARTMENT LETTER: A

TANK RELEASE DETECTION METHOD

GROUNDWATER MONITORING, TIGHTNESS TESTING

TANK RELEASE DETECTION VARIANCE: **NO VARIANCE**

PIPE RELEASE DETECTION METHOD

AUTOMATIC LINE LEAK DETECTOR (3.0 GPH FOR PRESSURE PIPIN, TIGHTNESS TESTING)

PIPE RELEASE DETECTION VARIANCE: **NO VARIANCE**

SPILL AND OVERFILL PREVENTION

AUTO. DELIVERY SHUT/OFF VALVE, FACTORY/BUILT SPILL CONTAINER/BUCKET/SUMP, TIGHT-FILL FITTING

SPILL AND OVERFILL PREVENTION VARIANCE: **NO VARIANCE**

UNIT ID: 00043146 TANK ID: 2 COMPARTMENT LETTER: A

TANK RELEASE DETECTION METHOD

GROUNDWATER MONITORING, TIGHTNESS TESTING

TANK RELEASE DETECTION VARIANCE: **NO VARIANCE**

PIPE RELEASE DETECTION METHOD

AUTOMATIC LINE LEAK DETECTOR (3.0 GPH FOR PRESSURE PIPIN, TIGHTNESS TESTING)

PIPE RELEASE DETECTION VARIANCE: **NO VARIANCE**

SPILL AND OVERFILL PREVENTION

AUTO. DELIVERY SHUT/OFF VALVE, FACTORY/BUILT SPILL CONTAINER/BUCKET/SUMP, TIGHT-FILL FITTING

SPILL AND OVERFILL PREVENTION VARIANCE: **NO VARIANCE**

UNIT ID: 00197409 TANK ID: 1 COMPARTMENT LETTER: A

TANK RELEASE DETECTION METHOD

SIR (STATISTICAL INVENTORY RECONCILIATION) & INVENTORY C, AUTO TANK GAUGING & INV. CONTR

TANK RELEASE DETECTION VARIANCE: **NO VARIANCE**

PIPE RELEASE DETECTION METHOD

SIR (STATISTICAL INVENTORY RECONCILIATION) & INVENTORY C, ANNUAL PIPING TIGHTNESS TEST (@ 0.1 GPH)

PIPE RELEASE DETECTION VARIANCE: **NO VARIANCE**

SPILL AND OVERFILL PREVENTION

AUTO. FLOW RESTRICTOR VALVE, FACTORY/BUILT SPILL CONTAINER/BUCKET/SUMP, TIGHT-FILL FITTING

SPILL AND OVERFILL PREVENTION VARIANCE: **NO VARIANCE**

UNIT ID: 00197410 TANK ID: 2 COMPARTMENT LETTER: A

TANK RELEASE DETECTION METHOD

SIR (STATISTICAL INVENTORY RECONCILIATION) & INVENTORY C, AUTO TANK GAUGING & INV. CONTR

TANK RELEASE DETECTION VARIANCE: **NO VARIANCE**

PIPE RELEASE DETECTION METHOD

SIR (STATISTICAL INVENTORY RECONCILIATION) & INVENTORY C, ANNUAL PIPING TIGHTNESS TEST (@ 0.1 GPH)

PIPE RELEASE DETECTION VARIANCE: **NO VARIANCE**

SPILL AND OVERFILL PREVENTION

AUTO. FLOW RESTRICTOR VALVE, FACTORY/BUILT SPILL CONTAINER/BUCKET/SUMP, TIGHT-FILL FITTING

SPILL AND OVERFILL PREVENTION VARIANCE: **NO VARIANCE**

ABOVEGROUND STORAGE TANK INFORMATION

NO ABOVEGROUND STORAGE TANK DATA REPORTED FOR THIS FACILITY



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PETROLEUM STORAGE TANKS (PST)

MAP ID# 5

Distance from Property: 0.07 mi. SW

FACILITY INFORMATION

FACILITY ID #: 0060163
NAME: PETRO EQUIPMENT X-CHANGE INC
ADDRESS: 11800 FAIRMONT
HOUSTON, TX 77035
TYPE: OTHER
TCEQ REGION: 12
FACILITY IN OZONE NON-ATTAINMENT AREA: YES
NUMBER OF UNDERGROUND TANKS AT FACILITY: 0
NUMBER OF ABOVEGROUND TANKS AT FACILITY: 1
FACILITY CONTACT: BILL WEST, PRESIDENT
PHONE: 713--72-6-01 51
DATE REGISTRATION FORM RECEIVED: 09/26/59
SIGNATURE ON REGISTRATION FORM: BILL WEST, PRESIDENT
DATE OF SIGNATURE ON REGISTRATION FORM: 09/11/91

SELF-CERTIFICATION INFORMATION

NO SELF-CERTIFICATION DATA REPORTED FOR THIS FACILITY

UNDERGROUND STORAGE TANK INFORMATION

NO UNDERGROUND STORAGE TANK DATA REPORTED FOR THIS FACILITY

ABOVEGROUND STORAGE TANK INFORMATION

TANK ID #: 1 TANK STATUS: OUT OF USE
INSTALL DATE: 01/01/1988
REGISTRATION DATE: 09/26/1959
CAPACITY: 6000 GALLONS
SUBSTANCE STORED: DIESEL
TANK MATERIAL: STEEL
CONTAINMENT: NOT REPORTED,

OWNER INFORMATION

CUSTOMER #: 35558
NAME: PETRO-EQUIPMENT X-CHANGE INC
ADDRESS: PO BOX 31729
HOUSTON, TX 77231
TYPE: PRIVATE OR CORPORATE
NUMBER OF FACILITIES REPORTED BY CURRENT OWNER: 1
NUMBER OF UNDERGROUND TANKS FOR CURRENT OWNER: 0
NUMBER OF ABOVEGROUND TANKS FOR CURRENT OWNER: 1
OWNER CONTACT: BILL WEST
PHONE: 713-726-0151



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PETROLEUM STORAGE TANKS (PST)

MAP ID# 6

Distance from Property: 0.08 mi. NE

FACILITY INFORMATION

FACILITY ID #: 0069105
NAME: **PB-KBB**
ADDRESS: 11414 FAIRMONT ST
HOUSTON, TX 77035
TYPE: **FLEET REFUELING**
TCEQ REGION: 12
FACILITY IN OZONE NON-ATTAINMENT AREA: **YES**
NUMBER OF UNDERGROUND TANKS AT FACILITY: 2
NUMBER OF ABOVEGROUND TANKS AT FACILITY: 0
FACILITY CONTACT: **DUANE HARRIS**
PHONE: 713--58-9-58 03
DATE REGISTRATION FORM RECEIVED: 12/03/96
SIGNATURE ON REGISTRATION FORM: **DUANE HARRIS, VP FINANCE**
DATE OF SIGNATURE ON REGISTRATION FORM: 11/25/96

SELF-CERTIFICATION INFORMATION

NO SELF-CERTIFICATION DATA REPORTED FOR THIS FACILITY

UNDERGROUND STORAGE TANK INFORMATION

TANK ID #: 1 TANK STATUS: **REMOVED FROM GROUND**
INSTALL DATE: 08/31/1987 STATUS DATE: 07/24/1996
REGISTRATION DATE: 12/03/1996
CAPACITY: 8000 GALLONS SUBSTANCE STORED: **GASOLINE**
TANK DESIGN AND EXTERNAL CONTAINMENT (I thru IV)

SINGLE WALL

PIPING DESIGN AND EXTERNAL CONTAINMENT (I thru IV)

SINGLE WALL

TYPE OF PIPING: **SUCTION**
TANK INTERNAL PROTECTION (INTERNAL LINING) DATE: **NOT REPORTED**
TANK MATERIAL: **STEEL**
OTHER TANK MATERIAL:
PIPE MATERIAL: **STEEL**
OTHER PIPE MATERIAL:

PIPE CONNECTORS AND VALVES (I thru III)

NOT REPORTED

TANK CORROSION PROTECTION (I thru III)

NOT REPORTED

TANK CORROSION PROTECTION VARIANCE: **NO VARIANCE**

PIPE CORROSION PROTECTION (I thru III)

NOT REPORTED

PIPE CORROSION PROTECTION VARIANCE: **NO VARIANCE**
STAGE 1 VAPOR RECOVERY EQUIPMENT STATUS: **NOT REPORTED**
STAGE 1 EQUIPMENT INSTALL DATE: **NOT REPORTED**
STAGE 2 VAPOR RECOVERY EQUIPMENT STATUS: **NOT REPORTED**
STAGE 2 EQUIPMENT INSTALL DATE: **NOT REPORTED**
TANK TESTED ? : **NO**
INSTALLER NAME:

OWNER INFORMATION

CUSTOMER #: 49350
NAME: **PB-KBB INC**
ADDRESS: 11757 KATY FRWY #600
HOUSTON, TX 77079
TYPE: **PRIVATE OR CORPORATE**
NUMBER OF FACILITIES REPORTED BY CURRENT OWNER: 1
NUMBER OF UNDERGROUND TANKS FOR CURRENT OWNER: 2
NUMBER OF ABOVEGROUND TANKS FOR CURRENT OWNER: 0
OWNER CONTACT: **DUANE HARRIS**
PHONE: 713-589-5803



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PETROLEUM STORAGE TANKS (PST)

TANK ID #: 2 TANK STATUS: REMOVED FROM GROUND
INSTALL DATE: 08/31/1987 STATUS DATE: 07/24/1996
REGISTRATION DATE: 12/03/1996
CAPACITY: 8000 GALLONS SUBSTANCE STORED: DIESEL
TANK DESIGN AND EXTERNAL CONTAINMENT (I thru IV)

SINGLE WALL

PIPING DESIGN AND EXTERNAL CONTAINMENT (I thru IV)

SINGLE WALL

TYPE OF PIPING: SUCTION
TANK INTERNAL PROTECTION (INTERNAL LINING) DATE: NOT REPORTED
TANK MATERIAL: STEEL
OTHER TANK MATERIAL:
PIPE MATERIAL: STEEL
OTHER PIPE MATERIAL:
PIPE CONNECTORS AND VALVES (I thru III)

NOT REPORTED

TANK CORROSION PROTECTION (I thru III)

NOT REPORTED

TANK CORROSION PROTECTION VARIANCE: NO VARIANCE
PIPE CORROSION PROTECTION (I thru III)

NOT REPORTED

PIPE CORROSION PROTECTION VARIANCE: NO VARIANCE
STAGE 1 VAPOR RECOVERY EQUIPMENT STATUS: NOT REPORTED
STAGE 1 EQUIPMENT INSTALL DATE: NOT REPORTED
STAGE 2 VAPOR RECOVERY EQUIPMENT STATUS:
STAGE 2 EQUIPMENT INSTALL DATE: NOT REPORTED
TANK TESTED?: NO
INSTALLER NAME:

UNIT ID: 00181929 TANK ID: 1 COMPARTMENT LETTER: A

TANK RELEASE DETECTION METHOD

NONE

TANK RELEASE DETECTION VARIANCE: NO VARIANCE
PIPE RELEASE DETECTION METHOD

NONE

PIPE RELEASE DETECTION VARIANCE: NO VARIANCE
SPILL AND OVERFILL PREVENTION

NOT REPORTED

SPILL AND OVERFILL PREVENTION VARIANCE: NO VARIANCE
UNIT ID: 00181930 TANK ID: 2 COMPARTMENT LETTER: A

TANK RELEASE DETECTION METHOD

NONE

TANK RELEASE DETECTION VARIANCE: NO VARIANCE
PIPE RELEASE DETECTION METHOD

NONE

PIPE RELEASE DETECTION VARIANCE: NO VARIANCE
SPILL AND OVERFILL PREVENTION

NOT REPORTED

SPILL AND OVERFILL PREVENTION VARIANCE: NO VARIANCE

ABOVEGROUND STORAGE TANK INFORMATION

NO ABOVEGROUND STORAGE TANK DATA REPORTED FOR THIS FACILITY



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ENVIRONMENTAL RECORDS DEFINITIONS - FEDERAL

BF Brownfields Management System

VERSION DATE: 1/2010

Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. The United States Environmental Protection Agency maintains the activities, including grantee assessment, cleanup and redevelopment, of the various Brownfield grant programs through the Brownfields Management System database.

CERCLIS Comprehensive Environmental Response, Compensation & Liability Information System

VERSION DATE: 2/2010

CERCLIS is the repository for site and non-site specific Superfund information in support of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA). This United States Environmental Protection Agency database contains an extract of sites that have been investigated or are in the process of being investigated for potential environmental risk.

DNPL Delisted National Priorities List

VERSION DATE: 2/2010

This database includes sites from the United States Environmental Protection Agency's Final National Priorities List (NPL) where remedies have proven to be satisfactory or sites where the original analyses were inaccurate, and the site is no longer appropriate for inclusion on the NPL, and final publication in the Federal Register has occurred.

ERNS Emergency Response Notification System

VERSION DATE: 12/2009

This National Response Center database contains data on reported releases of oil, chemical, radiological, biological, and/or etiological discharges into the environment anywhere in the United States and its territories. The data comes from spill reports made to the U.S. Environmental Protection Agency, U.S. Coast Guard, the National Response Center and/or the U.S. Department of Transportation.

NLRRCRAC No Longer Regulated RCRA Corrective Action Facilities

VERSION DATE: 2/2010

This database includes RCRA Corrective Action facilities that are no longer regulated by the United States Environmental Protection Agency or do not meet other RCRA reporting requirements.



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ENVIRONMENTAL RECORDS DEFINITIONS - FEDERAL

NLRRCRAG No Longer Regulated RCRA Generator Facilities

VERSION DATE: 2/2010

This database includes RCRA Generator facilities that are no longer regulated by the United States Environmental Protection Agency or do not meet other RCRA reporting requirements. This listing includes facilities that formerly generated hazardous waste.

NLRRCRAT No Longer Regulated RCRA Non-CORRACTS TSD Facilities

VERSION DATE: 2/2010

This database includes RCRA Non-Corrective Action TSD facilities that are no longer regulated by the United States Environmental Protection Agency or do not meet other RCRA reporting requirements. This listing includes facilities that formerly treated, stored or disposed of hazardous waste.

NPL National Priorities List

VERSION DATE: 2/2010

This database includes United States Environmental Protection Agency (EPA) National Priorities List sites that fall under the EPA's Superfund program, established to fund the cleanup of the most serious uncontrolled or abandoned hazardous waste sites identified for possible long-term remedial action.

ODI Open Dump Inventory

VERSION DATE: 6/1985

The open dump inventory was published by the United States Environmental Protection Agency. An "open dump" is defined as a facility or site where solid waste is disposed of which is not a sanitary landfill which meets the criteria promulgated under section 4004 of the Solid Waste Disposal Act (42 U.S.C. 6944) and which is not a facility for disposal of hazardous waste. This inventory has not been updated since June 1985.

PNPL Proposed National Priorities List

VERSION DATE: 2/2010

This database contains sites proposed to be included on the National Priorities List (NPL) in the Federal Register. The United States Environmental Protection Agency investigates these sites to determine if they may present long-term threats to public health or the environment.

RCRAC Resource Conservation & Recovery Act - Corrective Action Facilities

VERSION DATE: 2/2010

This database includes hazardous waste sites listed with corrective action activity in the RCRAInfo system. The Corrective Action Program requires owners or operators of RCRA facilities (or



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ENVIRONMENTAL RECORDS DEFINITIONS - FEDERAL

treatment, storage, and disposal facilities) to investigate and cleanup contamination in order to protect human health and the environment. The United States Environmental Protection Agency defines RCRAInfo as the comprehensive information system which provides access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. RCRAInfo replaces the data recording and reporting abilities of the Resource Conservation and Recovery Information System (RCRIS) and the Biennial Reporting System (BRS).

RCRAG Resource Conservation & Recovery Act - Generator Facilities

VERSION DATE: 2/2010

This database includes sites listed as generators of hazardous waste (large, small, and exempt) in the RCRAInfo system. See RCRA Description page for more information. The United States Environmental Protection Agency defines RCRAInfo as the comprehensive information system which provides access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. RCRAInfo replaces the data recording and reporting abilities of the Resource Conservation and Recovery Information System (RCRIS) and the Biennial Reporting System (BRS).

RCRAT Resource Conservation & Recovery Act - Treatment, Storage & Disposal Facilities

VERSION DATE: 2/2010

This database includes Non-Corrective Action sites listed as treatment, storage and/or disposal facilities of hazardous waste in the RCRAInfo system. The United States Environmental Protection Agency defines RCRAInfo as the comprehensive information system which provides access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. RCRAInfo replaces the data recording and reporting abilities of the Resource Conservation and Recovery Information System (RCRIS) and the Biennial Reporting System (BRS).

RODS Record of Decision System

VERSION DATE: 1/2010

These decision documents maintained by the United States Environmental Protection Agency describe the chosen remedy for NPL (Superfund) site remediation. They also include site history, site description, site characteristics, community participation, enforcement activities, past and present activities, contaminated media, the contaminants present, and scope and role of response action.



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ENVIRONMENTAL RECORDS DEFINITIONS - STATE (TX)

BSA Brownfields Site Assessments

VERSION DATE: 1/2010

The BSA database includes relevant information on contaminated Brownfields properties that are being cleaned.

CALF Closed & Abandoned Landfill Inventory

VERSION DATE: 11/2005

TCEQ, under a contract with Texas State University, and in cooperation with the 24 regional Council of Governments in the State, has located over 4,000 closed and abandoned municipal solid waste landfills throughout Texas. This listing contains "unauthorized sites". Unauthorized sites have no permit and are considered abandoned. The information available for each site varies in detail.

LPST Leaking Petroleum Storage Tanks

VERSION DATE: 1/2010

The Leaking Petroleum Storage Tank listing is derived from the Petroleum Storage Tank (PST) database and is maintained by the Texas Commission on Environmental Quality (TCEQ). This listing includes aboveground and underground storage tank facilities with reported leaks.

MSWLF Municipal Solid Waste Landfill Sites

VERSION DATE: 3/2010

Sites listed within a solid waste landfill database may include active landfills and inactive landfills, where solid waste is treated or stored.

PST Petroleum Storage Tanks

VERSION DATE: 1/2010

The Petroleum Storage Tank database is administered by the TCEQ (Texas Commission on Environmental Quality). Both Underground storage tanks (USTs) and Aboveground storage tanks (ASTs) are included in this report. Petroleum Storage Tank registration has been a requirement with the TCEQ since 1986.

RRCVCP Railroad Commission VCP and Brownfield Sites

VERSION DATE: 9/2009

According to the Railroad Commission of Texas, their Voluntary Cleanup Program (RRC-VCP) provides an incentive to remediate Oil & Gas related pollution by participants as long as they did not cause or contribute to the contamination. Applicants to the program receive a release of liability to the state in exchange for a successful cleanup.



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ENVIRONMENTAL RECORDS DEFINITIONS - STATE (TX)

SF State Superfund Sites

VERSION DATE: 1/2010

The state Superfund program mission is to remediate abandoned or inactive sites within the state that pose an unacceptable risk to public health and safety or the environment, but which do not qualify for action under the federal Superfund program (NPL - National Priority Listing). Information in this database includes any recent developments and the anticipated action for these sites.

SPILLS Spills Listing

VERSION DATE: 12/2009

This Texas Commission on Environmental Quality (TCEQ) database includes releases of hazardous or potentially hazardous materials into the environment.

VCP Voluntary Cleanup Program Sites

VERSION DATE: 1/2010

The Texas Voluntary Cleanup Program (VCP) provides administrative, technical, and legal incentives to encourage the cleanup of contaminated sites in Texas. Since all non-responsible parties, including future lenders and landowners, receive protection from liability to the state of Texas for cleanup of sites under the VCP, most of the constraints for completing real estate transactions at those sites are eliminated. As a result, many unused or underused properties may be restored to economically productive or community beneficial uses.

WMRF Recycling Facilities

VERSION DATE: 3/2009

This listing of recycling facilities is provided by the Texas Commission on Environmental Quality's Recycle Texas Online service. The company information provided in this database is self-reported. Since recyclers post their own information, a facility or company appearing on the list does not imply that it is in compliance with TCEQ regulations or other applicable laws.



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ENVIRONMENTAL RECORDS DEFINITIONS - TRIBAL

LUSTR06 Leaking Underground Storage Tanks On Tribal Lands

VERSION DATE: 5/2009

This database, provided by the United States Environmental Protection Agency (EPA), contains leaking underground storage tanks on Tribal lands located in EPA Region 6. This region includes the following states: Arkansas, Louisiana, New Mexico, Oklahoma, and Texas.

ODINDIAN Open Dump Inventory on Tribal Lands

VERSION DATE: 11/2006

This Indian Health Service database contains information about facilities and sites on tribal lands where solid waste is disposed of, which are not sanitary landfills or hazardous waste disposal facilities, and which meet the criteria promulgated under section 4004 of the Solid Waste Disposal Act (42 U.S.C. 6944).

USTR06 Underground Storage Tanks On Tribal Lands

VERSION DATE: 5/2009

This database, provided by the United States Environmental Protection Agency (EPA), contains underground storage tanks on Tribal lands located in EPA Region 6. This region includes the following states: Arkansas, Louisiana, New Mexico, Oklahoma, and Texas.



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RCRA DESCRIPTIONS

Acronyms

- RCRAG** - Generator
RCRAT - Treatment, Storage & Disposal (Non-Corrupts)
RCRAC - Corrective Action

Generator Types

Large Quantity Generators

- Generate 1,000 kg or more of hazardous waste during any calendar month; or
- Generate more than 1 kg of acutely hazardous waste during any calendar month; or
- Generate more than 100 kg of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, or acutely hazardous waste during any calendar month; or
- Generate 1 kg or less of acutely hazardous waste during any calendar month, and accumulate more than 1kg of acutely hazardous waste at any time; or
- Generate 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulated more than 100 kg of that material at any time.

Small Quantity Generators

- Generate more than 100 and less than 1000 kilograms of hazardous waste during any calendar month and accumulate less than 6000 kg of hazardous waste at any time; or
- Generate 100 kg or less of hazardous waste during any calendar month, and accumulate more than 1000 kg of hazardous waste at any time.

Conditionally Exempt Small Quantity Generators

- Generate 100 kilograms or less of hazardous waste per calendar month, and accumulate 1000 kg or less of hazardous waste at any time; or
- Generate one kilogram or less of acutely hazardous waste per calendar month, and accumulate at any time:
 - 1 kg or less of acutely hazardous waste; or
 - 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, or acutely hazardous waste; or
- Generate 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, or acutely hazardous waste during any calendar month, and accumulate at any time:
 - 1 kg or less of acutely hazardous waste; or
 - 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste.

Note: Descriptions also apply to No Longer Regulated RCRA sites
(NLRRCRAG, NLRRCRAT, and NLRRCRAC)



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APPENDIX D

Selected Site Photographs



Photograph No. 1 – Lockwood, Andrews & Newnam, Inc., Water Line Replacement
View of Meadows Washateria (previous dry cleaner), located at West Airport and Sandpiper,
(Project Area 74A-2), facing southeast. (AKL 04/07/10)



Photograph No. 2 – Lockwood, Andrews & Newnam, Inc., Water Line Replacement
View of Marcus Oil & Chemical, previously S&R Oil, located at Sandpiper and Minetta,
(Project Area 74A-2), facing southeast. (AKL 04/07/10)



Photograph No. 3 – Lockwood, Andrews & Newnam, Inc., Water Line Replacement
View of household dumping located along Minetta, (Project Area 74A-2), facing east.
(AKL 04/07/10)



Photograph No. 4 – Lockwood, Andrews & Newnam, Inc., Water Line Replacement
View of ice cream truck storage location along Minetta (Project Area 74A-2), facing south.
(AKL 04/07/10)



Photograph No. 5 – Lockwood, Andrews & Newnam, Inc., Water Line Replacement
View of Nova Drilling Technologies, two ASTs located south of Minetta along Fairmont, (Project Area 74A-2), facing west. (AKL 04/07/10)



Photograph No. 6 – Lockwood, Andrews & Newnam, Inc., Water Line Replacement
View of former PB-KBB, gated and secured (Project Area 74A-2), facing northwest. (AKL 04/07/10)



Photograph No. 7 – Lockwood, Andrews & Newnam, Inc., Water Line Replacement
View of Haviland Park, located at Haviland and Minetta, regulatory database location of
CERCLIS Site (14000 Minetta) (Project Area 74A-2), facing north. (AKL 04/07/10)



Photograph No. 8 – Lockwood, Andrews & Newnam, Inc., Water Line Replacement
View of railroad tracks that intersect Project area at Haviland and S. Main, (Project Area 74A-2),
facing east. (AKL 04/07/10)



Photograph No. 9 – Lockwood, Andrews & Newnam, Inc., Water Line Replacement
View of former strip mall located along S. Main and Dunlap, possible auto care center previously, (Project Area 74A-2), facing southwest . (AKL 04/07/10)



Photograph No. 10 – Lockwood, Andrews & Newnam, Inc., Water Line Replacement
View of trash located behind former strip mall located at S. Main and Dunlap, (Project Area 74A-2), facing east. (AKL 04/07/10)



Photograph No. 11 – Lockwood, Andrews & Newnam, Inc., Water Line Replacement
View of washateria and former dry cleaners (Clean Scene #11) located along S. Main,
(Project Area 74A-2), facing south. (AKL 04/07/10)



Photograph No. 12 – Lockwood, Andrews & Newnam, Inc., Water Line Replacement
View of Fuel Depot #11 (PST site) located along S. Main and Dunlap, (Project Area 74A-2),
facing southeast. (AKL 04/07/10)



Photograph No. 13 – Lockwood, Andrews & Newnam, Inc., Water Line Replacement
View of Best Used Tires & Auto Service located at S. Main, (Project Area 74A-2), facing south.
(AKL 04/07/10)



Photograph No. 14 – Lockwood, Andrews & Newnam, Inc., Water Line Replacement
View of Sims Bayou Pump Station located at Darlinghurst (Project Area 74A-1), facing southwest, not accessible, road closed due to construction. (AKL 04/07/10)



Photograph No. 15 – Lockwood, Andrews & Newnam, Inc., Water Line Replacement
View of Project Area between Orem and Darlington (Project Area 74A-1),
facing southwest. No obvious wetlands were noted. (AKL 04/07/10)



Photograph No. 16 – Lockwood, Andrews & Newnam, Inc., Water Line Replacement
View of Darlington and Amble, (Project Area 74A-1), facing west. (AKL 04/07/10)

APPENDIX E

Records of Communication

Interview with Nearby Property Owner/Operator/Occupant

Person Interviewed: Randy West	Date: 4/7/2010
Title: Owner	By: Ami Lillard
Co./Agency: Nova Drilling	Client: LAN
<input checked="" type="checkbox"/> Owner <input type="checkbox"/> Operator <input type="checkbox"/> Occupant	Project: COH Waterline
Phone No.:	Job No: 10-112, 10-113
Address: 11800 Fairmont	

Type of Communication: Telephone Call On-site Interview Other: _____

How long have you worked or lived here? 10 years

Regarding the subject Property, have there ever been any of the following?

- | | |
|--|---|
| <input type="checkbox"/> Spills or releases to the soil, or water | <input type="checkbox"/> Waste Oil Tanks |
| <input type="checkbox"/> Unauthorized dumping | <input type="checkbox"/> USTs |
| <input type="checkbox"/> Monitoring wells | <input checked="" type="checkbox"/> ASTs |
| <input type="checkbox"/> Dry cleaners – On Site? | <input type="checkbox"/> Petroleum Products |
| <input type="checkbox"/> Gas stations | <input type="checkbox"/> Chemicals |
| <input type="checkbox"/> Hydraulic Lifts | <input type="checkbox"/> |
| <input type="checkbox"/> Complaints, violations, litigation regarding environmental issues | |

Regarding your Property, have there ever been any of the above? Yes No Unknown

Describe:

Mr. Randy West indicated that there are two ASTs with diesel contents located at the entrance of his property for the construction equipment on-site. He said that a storm water permit plan was developed in January 2010 for his company and the only hazardous material indicated on that report was the diesel.

Any other Comments or Concern?

Yes No Unknown

Describe:

Interview with Nearby Property Owner/Operator/Occupant

Person Interviewed: Hue Thitto	Date: 4/7/2010
Title: Owner	By: Ami Lillard
Co./Agency: Meadows Washateria	Client: LAN
<input checked="" type="checkbox"/> Owner <input type="checkbox"/> Operator <input type="checkbox"/> Occupant	Project: COH Waterline
Phone No.:	Job No: 10-112, 10-113
Address: 6403 W Airport	

Type of Communication: Telephone Call On-site Interview Other: _____

How long have you worked or lived here? Owned for 7 years

Regarding the subject Property, have there ever been any of the following?

- | | |
|--|---|
| <input type="checkbox"/> Spills or releases to the soil, or water | <input type="checkbox"/> Waste Oil Tanks |
| <input type="checkbox"/> Unauthorized dumping | <input type="checkbox"/> USTs |
| <input type="checkbox"/> Monitoring wells | <input type="checkbox"/> ASTs |
| <input type="checkbox"/> Dry cleaners – On Site? | <input type="checkbox"/> Petroleum Products |
| <input type="checkbox"/> Gas stations | <input type="checkbox"/> Chemicals |
| <input type="checkbox"/> Hydraulic Lifts | <input type="checkbox"/> |
| <input type="checkbox"/> Complaints, violations, litigation regarding environmental issues | |

Regarding your Property, have there ever been any of the above? Yes No Unknown

Describe:

No hazardous chemicals used and or stored. Since her ownership she has never had dry cleaning available even for drop – off. She does not know the history of the site or the previous dry cleaning activities. There is a sign above the door indicating that dry cleaning was available previously.

Any other Comments or Concern?

Yes No Unknown

Describe:

Interview with Nearby Property Owner/Operator/Occupant

Person Interviewed: Craig Crawley **Date:** 4/7/2010
Title: General Manager **By:** Ami Lillard
Co./Agency: Marcus Oil and Chemical **Client:** LAN
 Owner *Operator* *Occupant* **Project:** COH Waterline
Phone No.: _____ **Job No:** 10-112, 10-113
Address: 14549 Minetta

Type of Communication: Telephone Call On-site Interview Other: _____

How long have you worked or lived here? 30 years

Regarding the subject Property, have there ever been any of the following?

- | | |
|--|--|
| <input checked="" type="checkbox"/> Spills or releases to the soil, or water | <input type="checkbox"/> Waste Oil Tanks |
| <input checked="" type="checkbox"/> Unauthorized dumping | <input checked="" type="checkbox"/> USTs |
| <input checked="" type="checkbox"/> Monitoring wells | <input checked="" type="checkbox"/> ASTs |
| <input type="checkbox"/> Dry cleaners – On Site? | <input checked="" type="checkbox"/> Petroleum Products |
| <input type="checkbox"/> Gas stations | <input checked="" type="checkbox"/> Chemicals |
| <input type="checkbox"/> Hydraulic Lifts | <input type="checkbox"/> |
| <input type="checkbox"/> Complaints, violations, litigation regarding environmental issues | |

Regarding your Property, have there ever been any of the above? Yes No Unknown

Describe:

Mr. Craig Crawley, general manager, stated that Marcus Oil and Chemical is a polyethylene wax company . The site was previously S& R Oil and on site was a retention pond that was put on the NPL list in the 1980s. Marcus Oil and Chemical spent business dollars to clean up the site, and have placed a warehouse in that location now. Mr. Crawley gave me two letters of closure for the site. He also was aware of the spills listed on the regulatory database and stated that all spills were maintained on property, and reported to the TCEQ. On the regulatory database, there is a location indicating that Marcus Oil and Chemical is also responsible for a CERCLIS site down Minetta.

Mr. Crawley indicated this is an incorrect location and there has only been one CERCLIS listing for the site of Marcus Oil and Chemical.

Any other Comments or Concern?

Yes No Unknown

Describe:

Mr. Crawley indicated there is a problem within the area of residents dumping household items and trash on the streets.

Interview with Nearby Property Owner/Operator/Occupant

Person Interviewed: Nassir Khan	Date: 4/7/2010
Title: Employee	By: Ami Lillard
Co./Agency: Fuel Depot 11	Client: LAN
<input type="checkbox"/> Owner <input checked="" type="checkbox"/> Operator <input type="checkbox"/> Occupant	Project: COH Waterline
Phone No.:	Job No: 10-112, 10-113
Address: 14117 S Main	

Type of Communication: Telephone Call On-site Interview Other: _____

How long have you worked or lived here? 1 years

Regarding the subject Property, have there ever been any of the following?

- | | |
|--|--|
| <input type="checkbox"/> Spills or releases to the soil, or water | <input type="checkbox"/> Waste Oil Tanks |
| <input type="checkbox"/> Unauthorized dumping | <input checked="" type="checkbox"/> USTs |
| <input type="checkbox"/> Monitoring wells | <input type="checkbox"/> ASTs |
| <input type="checkbox"/> Dry cleaners – On Site? | <input checked="" type="checkbox"/> Petroleum Products |
| <input checked="" type="checkbox"/> Gas stations | <input type="checkbox"/> Chemicals |
| <input type="checkbox"/> Hydraulic Lifts | <input type="checkbox"/> |
| <input type="checkbox"/> Complaints, violations, litigation regarding environmental issues | |

Regarding your Property, have there ever been any of the above? Yes No Unknown

Describe:

The employee stated that he was unsure of how many years the gas station was in operation. He does not know any history of the property or the area. There are two tanks in operation and other hazardous chemicals are stored on-site.

Any other Comments or Concern?

Yes No Unknown

Describe:

Interview with Nearby Property Owner/Operator/Occupant

Person Interviewed: Ike Nwang	Date: 4/7/2010
Title: Owner	By: Ami Lillard
Co./Agency: Best Used Tires and Auto Care	Client: LAN
<input checked="" type="checkbox"/> Owner <input type="checkbox"/> Operator <input type="checkbox"/> Occupant	Project: COH Waterline
Phone No.:	Job No: 10-112, 10-113
Address: 14131 S Main	

Type of Communication: Telephone Call On-site Interview Other: _____

How long have you worked or lived here? 8 years

Regarding the subject Property, have there ever been any of the following?

- | | |
|--|---|
| <input type="checkbox"/> Spills or releases to the soil, or water | <input checked="" type="checkbox"/> Waste Oil Tanks |
| <input type="checkbox"/> Unauthorized dumping | <input type="checkbox"/> USTs |
| <input type="checkbox"/> Monitoring wells | <input type="checkbox"/> ASTs |
| <input type="checkbox"/> Dry cleaners – On Site? | <input type="checkbox"/> Petroleum Products |
| <input type="checkbox"/> Gas stations | <input type="checkbox"/> Chemicals |
| <input type="checkbox"/> Hydraulic Lifts | <input type="checkbox"/> |
| <input type="checkbox"/> Complaints, violations, litigation regarding environmental issues | |

Regarding your Property, have there ever been any of the above? Yes No Unknown

Describe:

Mr. Nwang stated that they do tire and car repair on-site. There is a waste oil tank located on-site that is periodically emptied by a company for disposal off-site.

Any other Comments or Concern?

Yes No Unknown

Describe:

Interview with Nearby Property Owner/Operator/Occupant

Person Interviewed: Employee refused name _____	Date: <u>4/7/2010</u>
Title: <u>Employee</u>	By: <u>Ami Lillard</u>
Co./Agency: <u>Washateria</u>	Client: <u>LAN</u>
<input type="checkbox"/> Owner <input checked="" type="checkbox"/> Operator <input type="checkbox"/> Occupant	Project: <u>COH Waterline</u>
Phone No.: _____	Job No: <u>10-112, 10-113</u>
Address: <u>14117 S Main</u>	

Type of Communication: Telephone Call On-site Interview Other: _____
How long have you worked or lived here? 3 years

Regarding the subject Property, have there ever been any of the following?

- | | |
|--|---|
| <input type="checkbox"/> Spills or releases to the soil, or water | <input type="checkbox"/> Waste Oil Tanks |
| <input type="checkbox"/> Unauthorized dumping | <input type="checkbox"/> USTs |
| <input type="checkbox"/> Monitoring wells | <input type="checkbox"/> ASTs |
| <input type="checkbox"/> Dry cleaners – On Site? | <input type="checkbox"/> Petroleum Products |
| <input type="checkbox"/> Gas stations | <input type="checkbox"/> Chemicals |
| <input type="checkbox"/> Hydraulic Lifts | <input type="checkbox"/> |
| <input type="checkbox"/> Complaints, violations, litigation regarding environmental issues | |

Regarding your Property, have there ever been any of the above? Yes No Unknown

Describe:

The employee stated that no dry cleaning was performed at the location and never has had any.
The sign out front indicated that the dry cleaning was “now open”. There was slight language barrier when speaking to the employee.

Any other Comments or Concern?

Yes No Unknown

Describe:

JOHN HALL, Chairman
Pam Reed, Commissioner
Peggy Garner, Commissioner



TEXAS WATER COMMISSION

PROTECTING TEXANS' HEALTH AND SAFETY BY PREVENTING AND REDUCING POLLUTION

August 27, 1992

Mr. Abbas Hassan
President
HRD Corporation dba Marcus Oil and Chemical
P.O. Drawer 450267
Houston, Texas 77245

RE: Annual Compliance Inspection
Permit No. 01063

An annual compliance inspection of the Marcus Oil and Chemical facility was conducted on August 5, 1992. The inspection confirmed that the entire contaminated stormwater collection and treatment system has been removed. The activities that in the past had caused contamination of stormwater are no longer conducted at this location.

The contaminated lagoon that was on your property when you purchased it had been an environmental concern for quite some time. Each step in the process of the closure of the lagoon was monitored closely. We realize that a great deal of effort, time and money went into this project. The results are impressive, and it must be very satisfying to be able to finally show your facility with pride.

In light of the fact that there is no possibility of contaminating stormwater that falls onto and runs off of the property, the discharge permit that you currently have is no longer necessary. Please feel free to contact our Permits Section in Austin at (512) 463-8201 to discuss cancellation of Permit Number 01063.

Should you or your staff have any questions, please contact me.

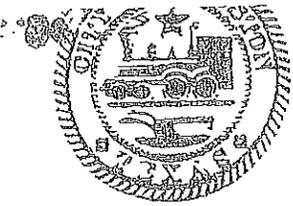
Sincerely,

Donna G. Phillips

Donna G. Phillips
Program Manager
Water Quality Program

DGP/jld

REPLY TO: DISTRICT 7 / 5144 E. SAM HOUSTON PARKWAY N. / HOUSTON, TEXAS 77015 / AREA CODE 713/457-5191



CITY OF HOUSTON

Health and Human Services Department

8000 N. Stadium Dr. Houston, Texas 77054 713/794-9341

Bob Lanier, Mayor

CITY COUNCIL MEMBERS Helen Huay Ernest McGower, Sr. Vince Ryan Alfred J. Calloway Frank O. Mancuso John G. Goodner Christin Hartung
Dale M. Goczynski Ben T. Reyes Gracie Guzman Saenz Eleanor Tinsley Jim Greenwood Sheila Jackson Lee Judson W. Robinson, III CITY CONTROLLER: George Greined

John E. Arredondo, M.D., M.P.H.
Director of Health and Human Services

March 20, 1992

Mr. Abbas Hassan
President
HRD Corporation
P. O. Drawer 450267
Houston, Texas 77245

Dear Mr. Hassan:

This letter is written in response to the completion of the closure of the waste pond that was located on the property at 14549 Minetta Street in Houston.

Seldom does it happen that an environmental liability (such as the old pond on the old S& R Oil Company or Cam-Or company) become remediated by a new property owner. All too often the government (or superfund monies) have to pay the cost of the remediation.

We can now consider this old site to be no longer a liability and are glad your firm can now build a warehouse on the site of the old pond.

The city of Houston Environmental Health Division of the Health and Human Services Department is pleased to have citizens and business who are willing to invest in the future of this city through positive actions like this one at your facility. We hope that your future business ventures in our city can be as productive for our citizens as this venture has been to them.

E. M. Quevedo, P.E.
Assistant Director for Health and Human Services
EMQ:tgf

APPENDIX F

User Questionnaires

CORRIGAN CONSULTING, INC.

Information Required For Phase I ESA To Be Completed By Client

Client:	<u>City of Houston</u>
Site Name:	<u>Proposed 48-inch / 42-inch Water Line along Existing Easements, W. Orem, Chimney Rock, River Bluff, Summit Ridge, and Coach Creek from Sims Bayou Pump Station to Hillcroft Ave</u>
Completed By:	<u>Oswaldo Garza</u>
Date:	<u>04/09/10</u>

(If you do not know the answer to a question, please write "Unknown" in the provided space. References to the "property" include the project area.)

1. Confirm the purpose of this ESA? X Required prior to acquisition
 Required for loan Required for refinancing
 X Other – Water Line project
2. Name of site contact: Mackrena Ramos, PE
Phone number: 713-821-0423
3. Name of current property owner: City of Houston – Arthur Morris, PE
Phone number: 832-359-2317
4. Names of previous property owner(s) and phone numbers, if available:
Unknown
5. Name(s) and phone number(s) of any other person(s) knowledgeable of the property:
Unknown
6. Are you aware of any environmental cleanup liens against the property that are filed or recorded under federal, tribal, state or local law?
Unknown
7. Are you aware of any activity or land use limitations, such as engineering controls, land use restrictions or institutional controls that are in place, filed, or recorded on the property?
Unknown

CORRIGAN CONSULTING, INC.

8. Do you have any specialized knowledge or experience related to the property or nearby properties?

Unknown

9. Are you aware of commonly known or reasonably ascertainable information about the property that would help CCI identify conditions indicative of a release or threatened release? For example:

Past uses of property? Unknown

Specific chemicals that were present? Unknown

Spills or other chemical releases that have taken place? Unknown

Environmental clean-ups on the property? Unknown

6. Based on your knowledge of the property, are there any obvious indicators of the presence or likely presence of contamination on the property?

Unknown

7. Do you have any previous environmental reports regarding the property?

No

CORRIGAN CONSULTING, INC.

**Information Required For Phase I ESA
To Be Completed By Client**

Continued

Client: _____
Site Name: _____

Additional Information:

Return To: _____ **By:** _____

(Date)
Fax Number: (281) 922-4767
Email: _____

CORRIGAN CONSULTING, INC.

Information Required For Phase I ESA To Be Completed By Client

Client:	<u>City of Houston</u>
Site Name:	<u>Proposed 42-inch Water Line along Hillcroft, Dublin, Dunlap, Main, Haviland, Minetta, and Canemont/Sandpiper from Coachcreek to W. Airport Blvd.</u>
Completed By:	<u>Oswaldo Garza</u>
Date:	<u>04/09/10</u>

(If you do not know the answer to a question, please write "Unknown" in the provided space. References to the "property" include the project area.)

1. Confirm the purpose of this ESA? _____ Required prior to acquisition
_____ Required for loan _____ Required for refinancing
 X Other – Water Line project
2. Name of site contact: Mackrena Ramos, PE
Phone number: 713-821-0423
3. Name of current property owner: City of Houston – Arthur Morris, PE
Phone number: 832-359-2317
4. Names of previous property owner(s) and phone numbers, if available:
Unknown
5. Name(s) and phone number(s) of any other person(s) knowledgeable of the property:
Unknown
6. Are you aware of any environmental cleanup liens against the property that are filed or recorded under federal, tribal, state or local law?
Unknown
7. Are you aware of any activity or land use limitations, such as engineering controls, land use restrictions or institutional controls that are in place, filed, or recorded on the property?
Unknown

CORRIGAN CONSULTING, INC.

8. Do you have any specialized knowledge or experience related to the property or nearby properties?

Unknown

9. Are you aware of commonly known or reasonably ascertainable information about the property that would help CCI identify conditions indicative of a release or threatened release? For example:

Past uses of property? Unknown

Specific chemicals that were present? Unknown

Spills or other chemical releases that have taken place? Unknown

Environmental clean-ups on the property? Unknown

6. Based on your knowledge of the property, are there any obvious indicators of the presence or likely presence of contamination on the property?

Unknown

7. Do you have any previous environmental reports regarding the property?

No

CORRIGAN CONSULTING, INC.

**Information Required For Phase I ESA
To Be Completed By Client**

Continued

Client: _____
Site Name: _____

Additional Information:

Return To: _____ **By:** _____

(Date)
Fax Number: (281) 922-4767
Email: _____

FINAL REPORT

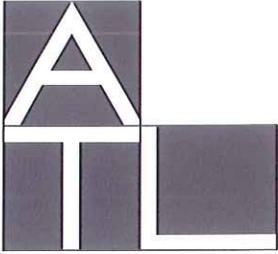
**LIMITED PHASE II
ENVIRONMENTAL SITE ASSESSMENT
FOR PROPOSED WATERLINE PROJECT,
CITY OF HOUSTON
SWTP CONTRACTS 74A-1 & 74A-2
HOUSTON, TEXAS**

PREPARED FOR

**LOCKWOOD, ANDREWS & NEWNAM, INC
2925 BRIARPARK DRIVE, # 400
HOUSTON, TEXAS 77042**

PREPARED BY

**ASSOCIATED TESTING LABORATORIES, INC.
3143 YELLOWSTONE BLVD.
HOUSTON, TEXAS 77054
REPORT NO. E10-115
JANUARY, 2011**



ESTABLISHED 1959

JANUARY 24, 2011

LOCKWOOD, ANDREWS & NEWNAM, INC
2925 BRIARPARK DRIVE, # 400
HOUSTON, TEXAS - 77042

ATTN: MR. ALFREDO SAENZ, P.E.

Reference: LIMITED PHASE II ENVIRONMENTAL SITE ASSESSMENT REPORT
FOR PROPOSED WATERLINE PROJECT,
CITY OF HOUSTON SWTP CONTRACT NO: 74A-1 & 74A-2
HOUSTON, TEXAS
ATL REPORT NO. E10-115

GENTLEMEN:

Associated Testing Laboratories, Inc. is pleased to submit the attached revised final report that covers the limited Phase II Environmental Site Assessment (ESA) activities conducted in reference to the proposed Surface Water Transmission Program's (SWTP) Waterline project in the vicinity of South Main Street (Hwy 90) and Hillcroft Avenue in southwest Houston. The City of Houston (COH) provided comments, dated December 22, 2010, on the draft Phase II ESA report submitted on November 15, 2010. The attached report, under cover of this letter, addresses the COH's comments by incorporating a station-to-station reference for each of the potentially contaminated areas (PCA) identified. The station-to-station references were extracted from the 90% submittal design drawings provided to ATL on December 29, 2010.

We appreciate the opportunity to work with you on this project and look forward to serving you again on future environmental consulting needs. Please do not hesitate to contact us if you need more information or have any questions. Thank you for considering Associated Testing Laboratories, Inc. for this project.

Respectfully,
Associated Testing Laboratories, Inc.

Niranj Reddy, P.E.
Project Engineer

1/24/11



Jasbir Singh, P.E.
Project Manager

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1.0 Executive Summary

Associated Testing Laboratories, Inc. (ATL) performed a limited Phase II Environmental Site Assessment (ESA II) associated with the City of Houston's proposed Waterline Project Contracts 74A-1 and 74A-2 (Project), under direction of Lockwood, Andrews, and Newnam, Inc (LAN). The project area is located approximately 10 miles southwest of Houston, adjacent to and within the rights-of-way (ROW), beginning from W. Airport Blvd / Sandpiper Drive and extending to the intersection (approximate) of W. Orem Drive / Fort Bend Parkway Toll Road. The alignment traverses along 13 street segments extending over a distance of 15,654 linear feet.

In August, 2010, Corrigan Consulting Inc of Houston, Texas, conducted a Phase I ESA along the project alignment and identified several sites of concern herein referred to as Recognized Environmental Conditions (REC). ATL completed the field investigation activities of this limited Phase II ESA in October 2010. Appendix A includes a series of figures (originally prepared by Corrigan, used in this report for reference) showing the general location of the project alignment with the identified RECs. Appendix B includes figures showing the boring locations, selected for the Phase II investigation. A photographic documentation of site activity is included in Appendix C.

- A total of eleven (11) environmental borings (EB-1 through EB-11) were drilled to a completion depth ranging from 17 feet to 27 feet each along the project alignment as per design consultants. Based on the field screening, fourteen (14) soil samples were selected for analytical testing for TPH, BTEX, MTBE, and VOCs. A matrix of borings, soil samples and analytical testing performed is included in Table 3-1, on Page 6 of this report.
- Field investigation revealed the on-site soils to consist of Clay (CH), Sandy Clay (CL) and Silty Sand (SM) based on visual classification. The Silty Sand was recorded in certain boring locations EB-8, EB-9, EB-10 and EB-11 at relatively deep depths ranging between 12 to 27 feet. Ground water was encountered in borings EB-3, EB-5, EB-6, EB-8, EB-9, EB-10 and EB-11 during drilling. Boring EB-6 did not have enough groundwater for sampling. Groundwater samples were collected from six borings EB-3, EB-5, EB-8, EB-9, EB-10, and EB-11 for analysis.
- Field screening of the samples using the FID indicated relatively high concentration of organic vapor in borings EB-2 (60 ppm) and EB-6 (425ppm, 373 ppm) within the shallow depths, up to 6ft, as shown in Table 4-1 on Page 7. Subsequent testing of these samples for constituents listed above did not confirm presence of any constituents of concern. However, as a precautionary measure, ATL recommends that the contractor exercise caution in executing work activities within 50 feet of the two borings. Any soil removed from this area may be potentially impacted with petroleum products and shall be evaluated for proper handling and disposal in accordance with applicable federal, state and local regulations.
- TPH for Sample Id. S102, boring EB-3 was detected at 24.5 mg/Kg, however this value is below the TRRP Tier 1 PCLs for $^{Gw}Soil_{ing.}$, of 198.00 mg/Kg.
- For all of the soil samples, BTEX compounds (see Table 4-3), MTBE (Table 4-4) and VOCs (Table 4-5) were reported below the laboratory reporting limit (BRL). The reporting values were below the appropriate TRRP Tier 1 PCLs.
- Groundwater samples were collected from six borings including EB-3, EB-5, EB-8, EB-9, EB-10 and EB-11. Groundwater sample from EB-10 (sample Id. W4) indicated TPH at a concentration of 6.77 mg/L (C12-C28) and 9.79 mg/L (C28-C35) which were above the TRRP Tier 1 PCL of 0.98 mg/l. The depth at which the groundwater was encountered in this boring is approximately 17.0 ft below ground surface.

- BTEX compounds and VOCs reported for all groundwater samples were below the reportable limits and were also below the TRRP Tier 1 PCLs.
- MTBE in groundwater from EB-3 (Sample Id: W2) was detected at 0.0029 mg/L, while all other groundwater samples reported MTBE below the reporting limits. All values were well below the TRRP Tier 1 PCL value of 0.24 mg/L. Groundwater sample results are summarized in Table 4-5 through 4-8 on Pages 11 and 12 of this report.
- Appendix D includes copies of laboratory analytical reports.

1.1 Conclusions and Recommendations

ATL's assessment of the RECs revealed no major soil contamination present along the Project alignment. A review of the gathered soil analytical data indicates no constituents of concern are present in the shallow subsurface media at concentrations above the Texas Risk Reduction Program Tier 1 PCLs. However, based on the FID readings, the shallow subsurface soil in areas represented by borings EB-2 (Contract 74A-2, Station (STA) 1+80 to STA 3+80) and EB-6 (Contract 74A-2, STA 60+60 to STA 62+60), appear to be potentially impacted with organic material. Although the subsequent analytical testing indicates no presence of constituents that were tested for, ATL recommends that the contractor exercise caution prior to beginning excavation work in this area. Additionally, it is likely that any shallow subsurface soil removed from these locations may have to be disposed off accordingly.

TPH was detected in the soil and MTBE was detected in the groundwater at boring EB-3. Both of the detected constituents were below TRRP Tier I PCL values, however, it is recommended that the area of 50' to 100' radius around the boring EB-3, (Contract 74A-2, STA 32+00 to STA 33+00, STA 33+00 to 200LF West of STA 33+00 and STA 33+00 to 130LF South of STA 33+00), should be designated as a potentially petroleum contaminated area (PPCA).

Groundwater at the REC represented by EB-10 appears to have been impacted as evidenced by the presence of TPH (Sample Id. W4) above the TRRP standards. However the groundwater at this location was encountered at a depth of 17.0 ft below ground surface. Therefore, in accordance with The City of Houston, Department of Public Works & Engineering, Geotechnical and Environmental Requirements, Design Manual, the area around the location of boring EB-10 is considered as a PPCA due to the presence of TPH in groundwater above the applicable TRRP PCL standard. The horizontal extent of the PPCA cannot be determined with the available data; however, it may be assumed that the PPCA zone is present within a 50' to 100' radius of EB-10. Therefore, it is recommended that the area starting at EB-7, STA 65+50 (Contract 74A-1), and extending to 100' past EB-10, STA 69+00, may be considered as a PPCA.

For executing any excavation and trenching activities within or around the PPCA described above, which may potentially encounter groundwater, the contractor/subcontractor shall prepare a site specific Health & Safety plan to protect construction personnel from coming into contact with potentially impacted ground water and to prevent exposure to petroleum hydrocarbons. During the construction activities within the identified area, the contractor personnel shall monitor for groundwater and shall be prepared to implement the protective measures outlined in the H&S plan. The site specific H&S Plan shall cover hazard recognition, potential exposure routes, effects of exposure to petroleum products, and most importantly describe the personal protective equipment to be used.

If dewatering activities are planned for this area, the removed water may be impacted and shall be evaluated and characterized for proper disposition in accordance with federal, state and local environmental requirements. The scope of ATL's limited Phase II assessment has not covered collection of any broad datasets to provide any further specific guidance on any required activities along the Project alignment.

2.0 Introduction

2.1 General

ATL performed a limited Phase II ESA in accordance with the ASTM E 1903 standards. This investigation was authorized by Lockwood, Andrews & Newnam, Inc (LAN) with the acceptance of ATL's Proposal No. EP10-0115, dated September 26, 2010. Project details were provided to ATL by Mr. Alfredo Saenz, P.E of LAN. This report includes results of the field investigation, laboratory testing, environmental analyses, a general description and extent of the potentially contamination area, recommendations regarding the presence or absence of contaminants at the sites of concern and the identification of general standards to protect contractor personnel against exposure to potential contaminants if present, and recommendations for further investigation/remediation if needed.

2.2 Location and Description of the Project

The proposed Surface Water Transmission Program (SWTP) site is located approximately ten miles southwest of Houston, adjacent to and within the rights-of-way (ROW), beginning from W. Airport Blvd / Sandpiper Drive and extending to the intersection (approximate) of W. Orem Drive / Fort Bend Parkway Toll Road. The alignment traverses along 13 street segments extending over a distance of 15,654 linear feet. For reference, figures and drawings from the Phase I ESA are included in Attachment 1 of this report.

Corrigan Consulting, Inc conducted a Phase I Environmental Site Assessment (ESA) on the project site in August, 2010 and identified several sites as containing recognized environmental conditions (REC). LAN retained Associated Testing Laboratories, Inc. (ATL) to conduct a limited Phase II ESA on the project site.

2.3 Scope of Work

The scope of work for this Limited Phase II ESA encompassed the following tasks:

- Drill and sample eleven (11) environmental borings at the predetermined locations and depths using an auger equipped drill rig.
- Decontaminate the boring and sampling equipment, before drilling each soil boring and collecting each soil sample, as required.
- Collect continuous soil samples, each at one foot intervals, from each soil boring and screen soil samples for organic vapor using a Photovac Micro FID and/or a PID in the field.
- Select a minimum of one soil sample, for laboratory analysis, from each boring based on highest FID and/or PID readings and visual observations.
- Collect one groundwater sample from each REC location if groundwater is encountered during the drilling. Analyze the sample(s) from the boring with highest FID reading as appropriate.
- Analyze samples for TPH using TCEQ Method 1005, BTEX and MTBE using EPA SW-846 and Method 8021B.

- Wastes generated during the assessment implemented as part of the Phase II ESA (for example, drill cuttings, personal protective equipment, purged ground water, etc.) will be handled and disposed of in accordance with federal, state, and/or local regulations.
- Following completion of sampling, plug and abandon bore holes using bentonite chips. Repair and patch the pavement surface, as required.
- Submit a report describing the investigation techniques and findings of the investigation, including the recommendations for further investigation, if needed.

3.0 Investigations

3.1 Preliminary Investigation

Corrigan Consulting, Inc conducted a Phase I Environmental Site Assessment (ESA) on the project site in August, 2010 and identified several sites as containing recognized environmental conditions (REC). The Phase I ESA findings were documented in the report, *Phase I Environmental Site Assessment, City of Houston Water Line Project Contract 74A-1 and 74A-2*, dated August, 2010.

3.2 Field Investigation

ATL performed a limited Phase II ESA for REC sites, located along the proposed SWTP alignment described in the previous sections. All work was performed in accordance with LAN's requirements/appropriate sections of the SWTP Design Manual and in accordance with the applicable ASTM standards.

ATL's environmental professionals performed the field subsurface investigation activities during the period October 1 through October 3, 2010. A total of eleven (11) subsurface environmental borings (EB-1 through EB-11) were drilled by a certified driller, using an auger equipped drill rig. ATL positioned the location of the borings per the client's requirements and in accordance with the SWTP Design Manual. Appendix A includes a series of figures (originally prepared by Corrigan, used in this report for reference) showing the general location of the Project alignment with RECs identified. Appendix B includes figures showing the boring locations, selected for the Phase II investigation. A photographic documentation of site activity is included in Appendix C.

Boring Logs:

A total of eleven (11) borings (EB-1 through EB-11) were advanced to a pre-determined depths ranging from 17 feet to 27 feet below ground surface. Continuous soil samples were retrieved and the samples were observed and classified in accordance with the US Soil Classification criteria. The presence of groundwater was observed and recorded on the boring logs along with a total depth of the boring. The boring logs included in Appendix B of this report, show a description of subsurface soil conditions, soil classification, presence of groundwater at depths and the total depth of each boring.

Field Screening of Samples:

The soil core samples were retrieved at one foot intervals to the termination depth of each boring, as shown in the boring logs in Appendix B. The soil samples were screened for organic vapor using a Photovac Micro FID instrument in the field. The observed reading(s) were recorded on the boring logs. The soil samples were also screened for any unusual odors and logged on the boring logs.

Sampling & Sample Preparation:

Subsurface sampling consisted of extracting continuous samples (at one foot interval each) from each of the eleven (11) boring locations. A total of 14 subsurface soil samples were collected from borings for laboratory analytical testing. Each sample was obtained from the one-foot interval zone, based on the Photovac Micro FID readings and visual inspection of the material. The boring logs indicate the depth(s) at which the soil sample is collected from each boring for analytical testing. A total of fourteen (14) soil samples were collected for TPH, BTEX, MTBE and VOCs analysis.

Additionally, six (6) groundwater samples from the borings, EB-3, EB-5, EB-8, EB-9, EB-10, EB-11, were collected for laboratory analysis.

The selected soil samples were placed into clean pre-labeled glass containers and sealed with Teflon-lined lids. The sample containers were placed on ice to prevent volatilization and placed in an insulated cooler prior to and during transport to the analytical testing laboratory. A chain-of-custody form was completed for custody transfer and requesting for analytical testing. A & B Laboratories, Inc. (A & B Labs) located in Houston, Texas provided the analytical testing services for this project.

Grouting & Surface Completion:

Following the investigation and sampling activities, each boring was closed using bentonite chips. The surrounding ground surface was cleared of all debris and the area was returned to pre-drilling conditions, as practical.

Soil Cuttings & Waste:

The excess soil cuttings and waste generated during the field activities were stored in tightly fitted 55-gallon steel containers. ATL will evaluate the available analytical data and determine the characteristics of the removed wastes for the purpose of disposal. ATL will coordinate the transportation and disposal of the waste materials within 90-days from the completion of this Phase II ESA.

3.3 Laboratory Detection Limits

A & B Environmental Services is a NELAC certified accredited laboratory. The detection limits and reporting limits used for this project were in accordance with the Texas Commission on Environmental Quality's (TCEQ) TRRP standards. The analytical reports included in Appendix D of this report provide the detection limits and reporting limits.

A total of fourteen (14) soil samples and six (6) groundwater samples were collected and analyzed for TPH utilizing TCEQ Method TX-1005, and BTEX and MTBE utilizing method 8021 B, and VOCs using Method 8260B. The following table shows a matrix of the samples and the corresponding analysis requested for each media. Analytical reports were provided to ATL on October 12, 2010.

Section 4.0 of this report provides a detailed summary of the analytical reports. Tables 4-1, 4-2, 4-3, 4-4, and 4-5 show the tabulated results of FID Readings, TPH, BTEX, MTBE and VOC analysis respectively, for soil samples. The analytical results of groundwater samples are summarized in Tables 4-5, 4-6, 4-7 and 4-8 showing TPH, BTEX, and MTBE+VOCs respectively.

Copies of the analytical reports provided by A & B Laboratories, Inc are included in Appendix D of this report.

Table 3-1 – Matrix of Samples and Analysis Requested

BORING NUMBER	SAMPLE I.D.	SOIL				GROUNDWATER			
		TPH	BTEX	MTBE	VOCs	TPH	BTEX	MTBE	VOCs
EB-1	S1	X	X	X					
EB-1	S2				X				
EB-2	S3	X	X	X					
EB-2	S4				X				
EB-3	S102	X	X	X					
EB-4	S103	X	X	X					
EB-5	S104	X	X	X					
EB-5	S6				X				
EB-6	S105	X	X	X					
EB-7	S106	X	X	X					
EB-8	S107	X	X	X					
EB-9	S101	X	X	X					
EB-10	S108	X	X	X					
EB-11	S109	X	X	X					
EB-3	W-2					X	X	X	X
EB-5	W1					X	X	X	X
EB-8	W-6					X	X	X	X
EB-9	W5					X	X	X	X
EB-10	W4					X	X	X	X
EB-11	W3					X	X	X	X

4.0 Results of Soil and Groundwater Testing

The analytical results were reported by A & B Labs on October 12, 2010. In accordance with City of Houston's Department of Public Works & Engineering Design Manual, and in accordance with the Surface Water Transmission Program (SWTP) Design Manual, the laboratory analytical results were compared to Texas Commission on Environmental Quality (TCEQ) Regulatory Guidance - Texas Risk Reduction Program (TRRP), Tier-1 Protective Concentration Levels (PCL) for Residential sites (0.5 Acres Source Area), ^{Gw}Soil_{Ing} and ^{Gw}GW_{Ing}. The following sections summarize the results in tabular format and also provide an evaluation of the results in comparison to the above stated standards.

Our field investigation revealed the on-site soils to consist of Clay (CH), Sandy Clay (CL) and Silty Sand (SM) based on visual classification. The Silty Sand was recorded in certain boring locations EB-8, EB-9, EB-10 and EB-11 at relatively deep depths ranging between 12 to 27 feet, the shallowest observed in EB-11. Groundwater samples were obtained from six borings EB-3, EB-5, EB-8, EB-9, EB-10 and EB-11. The highest field screening (FID reading) results from each boring is listed in the table 4-1, below.

4.1 Field FID Readings

The data provided in this table indicates an FID reading of 425 ppm at a shallow depth of 2-3 ft in boring EB-6. The boring log for EB-6 also shows readings of 373 ppm between 3 and 4ft, 87 ppm between 4 and 5 ft. The observed readings are generally lower at depths below 5 ft.

Table 4-1 – Field FID Readings

BORING NUMBER	SAMPLE I.D.	SAMPLE DEPTH	F.I.D. READING
		feet	ppm
EB-1	S1	20-21	17.7
EB-1	S2	1-2	10.9
EB-2	S3	1-2	60.1
EB-2	S4	5-6	8.1
EB-3	S102	3-4	7.9
EB-4	S103	3-4	3.9
EB-5	S104	21-22	Up to 1.6
EB-5	S6	10-11	3.6
EB-6	S105	2-3	425, 373
EB-7	S106	16-17	5.0
EB-8	S107	20-21	1.7
EB-9	S101	21-22	0
EB-10	S108	16-17	3.8
EB-11	S109	9-10	4.7

4.2 Soil - TPH Analysis

Twelve (12) soil samples from borings were tested for TPH utilizing TCEQ Method 1005. The test results are listed in the following table.

Table 4-2 – Summary of Soil TPH Analysis

BORING NUMBER	SAMPLE I.D.	TPH (C6-C12)	TPH (>C12-C28)	TPH (>C28-C35)
		mg/Kg	mg/Kg	mg/Kg
EB-1	S1	BRL	BRL	BRL
EB-2	S3	BRL	BRL	BRL
EB-3	S102	BRL	BRL	24.5
EB-4	S103	BRL	BRL	BRL
EB-5	S104	BRL	BRL	BRL
EB-5	S6	BRL	BRL	BRL
EB-6	S105	BRL	BRL	BRL
EB-7	S106	BRL	BRL	BRL
EB-8	S107	BRL	BRL	BRL
EB-9	S101	BRL	BRL	BRL
EB-10	S108	BRL	BRL	BRL
EB-11	S109	BRL	BRL	BRL
TRRP PCL				198.0

Notes: BRL - Below laboratory Reporting Limit
 TPH (C6-C12) laboratory reporting limit in soil = 14.7 mg/kg
 TPH (>C12-C28) laboratory reporting limit in soil = 18.4 mg/kg
 TPH (>C28-C35) laboratory reporting limit in soil = 19.1 mg/kg

4.3 Soil - BTEX Analysis

Fourteen (14) soil samples from borings were tested for BTEX utilizing EPA Method 8021B. The test results are listed in the following table.

Table 4-3 – Summary of Soil BTEX Analysis

BORING NUMBER	SAMPLE I.D.	BENZENE	TOLUENE	ETHYL BENZENE	TOTAL XYLENES
		mg/Kg	mg/Kg	mg/Kg	mg/Kg
EB-1	S1	BRL	BRL	BRL	BRL
EB-1	S2 ¹	BRL	BRL	BRL	BRL
EB-2	S3	BRL	BRL	BRL	BRL
EB-2	S4 ¹	BRL	BRL	BRL	BRL
EB-3	S102	BRL	BRL	BRL	BRL
EB-4	S103	BRL	BRL	BRL	BRL
EB-5	S104	BRL	BRL	BRL	BRL
EB-5	S6 ¹	BRL	BRL	BRL	BRL
EB-6	S105	BRL	BRL	BRL	BRL
EB-7	S106	BRL	BRL	BRL	BRL
EB-8	S107	BRL	BRL	BRL	BRL
EB-9	S101	BRL	BRL	BRL	BRL
EB-10	S108	BRL	BRL	BRL	BRL
EB-11	S109	BRL	BRL	BRL	BRL

Notes:

1 - For samples S-2, S-4 and S-6, BTEX analysis was not requested. However, since BTEX compounds are part of the VOC suite, they were reported below the laboratory reportable limits.

BRL = Below laboratory Reporting Limit

Benzene laboratory reporting limit in soil = 0.005 mg/kg

Toluene laboratory reporting limit in soil = 0.005 mg/kg

Ethyl Benzene laboratory reporting limit in soil = 0.005 mg/kg

Total Xylenes laboratory reporting limit in soil = 0.005 mg/kg

4.4 Soil - MTBE Analysis

Eleven (11) soil samples from borings were tested for MTBE utilizing EPA Method 8021B. The test results are listed in the following table.

Table 4-4 – Summary of Soil MTBE Analysis

BORING NUMBER	SAMPLE I.D.	MTBE
		mg/Kg
EB-1	S1	BRL
EB-1	S2	-
EB-2	S3	BRL
EB-2	S4	-
EB-3	S102	BRL
EB-4	S103	BRL
EB-5	S104	BRL
EB-5	S6	-
EB-6	S105	BRL
EB-7	S106	BRL
EB-8	S107	BRL
EB-9	S101	BRL
EB-10	S108	BRL
EB-11	S109	BRL

Notes: - = Samples S-2, S-4 and S-6, were not analyzed for MTBE.
BRL = Below laboratory Reporting Limit.
MTBE laboratory reporting limit in soil = 0.005 mg/Kg

4.5 Soil - Volatile Organic Compounds (VOCs) Analysis

Three (3) soil samples from borings were tested for VOCs utilizing EPA Method 8260B. The test results are listed in the following table.

Table 4-5 – Summary of Soil VOC Analysis

BORING NUMBER	SAMPLE I.D.	VOCs ¹
		mg/Kg
EB-1	S2	BRL
EB-2	S4	BRL
EB-5	S6	BRL

Notes: 1- For a list of VOCs, refer to lab reports in Appendix D.
BRL = Below laboratory Reporting Limit.
MTBE laboratory reporting limit in soil = 0.005 mg/Kg

4.6 Groundwater - TPH Analysis

Six (6) groundwater samples from borings listed below were tested for TPH, BTEX and MTBE using TCEQ Method 1005 and EPA Method 8021B respectively. The test results are listed in the following tables 4-6, 4-7 and 4-8.

Table 4-6 – Summary of Groundwater TPH

BORING NUMBER	SAMPLE I.D.	TPH (C6-C12) ¹	TPH (>C12-C28)	TPH (>C28-C35)
		mg/L	mg/L	mg/L
EB-3	W-2	BRL	BRL	BRL
EB-5	W1	BRL	BRL	BRL
EB-8	W-6	BRL	BRL	BRL
EB-9	W5	BRL	BRL	BRL
EB-10	W4	BRL	6.77	9.79
EB-11	W3	BRL	BRL	BRL
TRRP PCLs		0.98	0.98	0.98

Notes: BRL - Below laboratory reporting limit

- 1- TPH (C6-C12) laboratory reporting limit in groundwater = 1.25 mg/L (this reporting limit is higher than the TRRP Tier 1 PCL value of 0.98 mg/L)
 TPH (>C12-C28) laboratory reporting limit in groundwater = 1.72 mg/L
 TPH (>C28-C35) laboratory reporting limit in groundwater = 1.83 mg/L

4.7 Groundwater - BTEX Analysis

Table 4-7 – Summary of Groundwater BTEX Analysis

BORING NUMBER	SAMPLE I.D.	Benzene	Toluene	Ethyl benzene	Total Xylenes
		mg/L	mg/L	mg/L	mg/L
EB-3	W-2	BRL	BRL	BRL	BRL
EB-5	W1	BRL	BRL	BRL	BRL
EB-8	W-6	BRL	BRL	BRL	BRL
EB-9	W5	BRL	BRL	BRL	BRL
EB-10	W4	BRL	BRL	BRL	BRL
EB-11	W3	BRL	BRL	BRL	BRL

Notes:

- BRL – Below laboratory reporting limit
 Benzene laboratory reporting limit in groundwater = 0.002 mg/L
 Toluene laboratory reporting limit in groundwater = 0.002 mg/L
 Ethyl Benzene laboratory reporting limit in groundwater = 0.002 mg/L
 Total Xylenes laboratory reporting limit in groundwater = 0.002 mg/L

4.8 Groundwater - MTBE & VOCs Analysis

Table 4-8 – Summary of Groundwater MTBE & VOCs

BORING NUMBER	SAMPLE I.D.	MTBE	VOCs ¹
		mg/L	mg/L
EB-3	W-2	0.0029	BRL
EB-5	W1	BRL	BRL
EB-8	W-6	BRL	BRL
EB-9	W5	BRL	BRL
EB-10	W4	BRL	BRL
EB-11	W3	BRL	BRL
TRRP Limit		0.24	

Notes: BRL – Below laboratory reporting limit.

1 – For a list of VOCs, refer to lab reports in Appendix D.

MTBE laboratory reporting limit in groundwater = 0.002 mg/L

VOCs laboratory reporting limit in groundwater = 0.005 mg/L

5.0 Findings & Conclusions

Based on our limited field investigation, laboratory testing and analysis, our findings are as follows:

- A total of eleven (11) borings (EB-1 through EB-11) were advanced to a pre-determined depths ranging from 17 feet to 27 feet below ground surface. The soil samples were screened for organic vapor using a Photovac Micro FID (Flame Ionization Detector) instrument in the field. Based on the FID readings and visual inspection of the obtained samples, soil samples were selected from the borings for analytical testing for Benzene, Toluene, Ethylbenzene & Total Xylenes (BTEX), Methyl tert-butyl ether (MTBE), Total Petroleum Hydrocarbons (TPH), and Volatile Organic Compounds (VOCs). Groundwater was observed in six (6) borings and samples of groundwater were collected and analyzed for TPH, BTEX, MTBE and VOCs
- Field investigation revealed the on-site soils to consist of Clay (CH), Sandy Clay (CL) and Silty Sand (SM) based on visual classification. The Silty Sand was recorded in certain boring locations EB-8, EB-9, EB-10 and EB-11 at relatively deep depths ranging between 12 to 27 feet, the shallowest observed in EB-11.
- Field screening of the samples using the FID indicated relatively high concentration of organic vapor in borings EB-2 and EB-6 within the shallow depths. Table 4-1 on Page 7 of this report summarizes the borings, Samples, the depth of samples and the concentration of organic compounds recorded using the FID. Environmental Boring EB-6, sample depth from 2-3 ft, recorded the highest FID reading of 425 ppm. The soil zone immediately below, i.e., 3-6 ft also recorded FID readings ranging from 373 ppm to 28.4 ppm. Sample ID # S105, from the 2-3 ft depth was analyzed for TPH, BTEX, and MTBE, which were reported below the laboratory reporting limits, Tables 4-2, 4-3 and 4-4 of this report. Sample ID # S3 in EB-2 also exhibits similar characteristics (FID = 60ppm) where TPH, BTEX and MTBE were detected below the laboratory reportable limits. FID readings in the other borings ranged between 0 ppm and 18 ppm. Boring logs are included in Appendix B.
- The analytical results of soil samples, summarized in Tables 4-2 through 4-7, indicated that all results were below the laboratory reportable limits, except for TPH. TPH for Sample Id. S102, boring EB-3, was detected at 24.5 mg/Kg, however this value is below the TRRP Tier 1 PCLs for ^{GW}Soil_{ing}, of 198.00 mg/Kg. Tier- 1 Protective Concentration Limit (PCL) (TNRCC RG-366/TRRP-27), was most recently updated on March 31, 2010.
- For the soil samples, BTEX compounds, MTBE and VOCs (3 samples) were reported below the laboratory reporting limit (BRL). The reporting values were below the appropriate TRRP Tier 1 PCLs.
- Groundwater samples were collected from six borings including EB-3, EB-5, EB-8, EB-9, EB-10 and EB-11. Groundwater sample from EB-10 (sample Id. W4) indicated TPH at a concentration of 6.77 mg/L (C12-C28) and 9.79 mg/L (C28-C35) which were above the TRRP Tier 1 PCL of 0.98 mg/l. The depth at which the groundwater was encountered in this boring is approximately 17.0 ft below ground surface.
- BTEX and VOCs reported for all groundwater samples were below the reportable limits and were also below the TRRP Tier 1 PCLs.
- MTBE in groundwater from EB-3 (Sample Id: W2) was detected at 0.0029 mg/L, while all other groundwater samples reported MTBE below the reporting limits. All values were well below the TRRP Tier 1 PCL value of 0.24 mg/L. Groundwater sample results are summarized in Table 4-5 through 4-8 on Pages 11 and 12 of this report.

6.0 Recommendations

ATL's assessment of the RECs revealed no major soil contamination concerns present at the subject site. A review of the gathered soil analytical data indicates that there are no COC's present in the shallow subsurface media at concentrations above the Texas Risk Reduction Program Tier 1 PCLs. However, based on the FID readings and TPH values there are four (4) areas that should be identified as PCAs:

EB -2 (Intersection of Sandpiper at W. Airport). Field screening detected organic vapor at 60 ppm. Since the analytical lab results were below reporting limit, it is recommended that further analytical testing of soils at the time of construction should be done to classify the soils for proper disposal. The area of 50' to 100' radius around EB-2, (Contract 74A-2, Station (STA) 1+80 to STA 3+80) may be considered for testing.

EB-3 (Intersection of Minetta at Canemont). TPH was detected in the soil (EB-3) at 24.5 mg/kg. MTBE was detected in the groundwater at 0.0029 mg/L. Both of these levels are below TRRP Tier I PCL values. It is recommended that the area of 50' to 100' radius around the boring EB-3, (Contract 74A-2, STA 32+00 to STA 33+00, STA 33+00 to 200LF West of STA 33+00 and STA 33+00 to 130LF South of STA 33+00), should be designated as a potentially petroleum contaminated area (PPCA). Appropriate health and safety procedures are warranted as per Spec 02105.

EB-6 (Dunlap at Main Street – Tunnel). Field screening detected organic vapors at 425 ppm and 373 ppm. Even though analytical lab test results were below reporting limit, the area of 50' to 100' around this boring, (Contract 74A-2, STA 60+60 to STA 62+60), and the entire tunnel shaft area should be considered as PPCA and further analytical testing should be performed at the time of construction to properly classify the soils for disposal.

EB – 10 (Near petroleum pipeline crossing). Groundwater samples has TPH with concentrations of 6.77 mg/L and 9.79 mg/L. Groundwater at the REC appears to have been impacted as evidenced by the presence of TPH in EB-10 (Sample Id. W4) above the TRRP standards. However the groundwater at this location was encountered at a depth of 17.0 ft below ground surface. Therefore, in accordance with The City of Houston, Department of Public Works & Engineering, Geotechnical and Environmental Requirements, Design Manual, the area around the location of boring EB-10 is considered as a PPCA due to the presence of TPH in groundwater above the applicable TRRP PCL standard. It is recommended that the area starting at EB-7, STA 65+50 (SWTP Contract 74A-1), and extending to 100' past EB-10, i.e., to STA 69+00, may be considered as a PPCA..

For any excavation and trenching activities within or around the PPCAs described above, which may potentially encounter groundwater, the contractor/subcontractor shall prepare a site specific Health & Safety plan to protect construction personnel from coming into contact with potentially impacted ground water and to prevent exposure to petroleum hydrocarbons. During the construction activities within the identified area, the contractor personnel shall monitor for groundwater and shall be prepared to implement the protective measures outlined in the H&S plan. The site specific H&S Plan shall cover hazard recognition, potential exposure routes, effects of exposure to petroleum products, and most importantly describe the personal protective equipment to be used.

If dewatering activities are planned for this area, the removed water may be impacted and shall be evaluated and characterized for proper disposition in accordance with federal, state and local environmental requirements.

The scope of ATL's limited Phase II assessment has not covered collection of any broad datasets to provide any further specific guidance on any required activities at this site.

7.0 Qualifications of Interpretations

The methodology used in this investigation is consistent with those normally employed for projects of this type. The report was prepared based on documented information and information obtained during the field sampling.

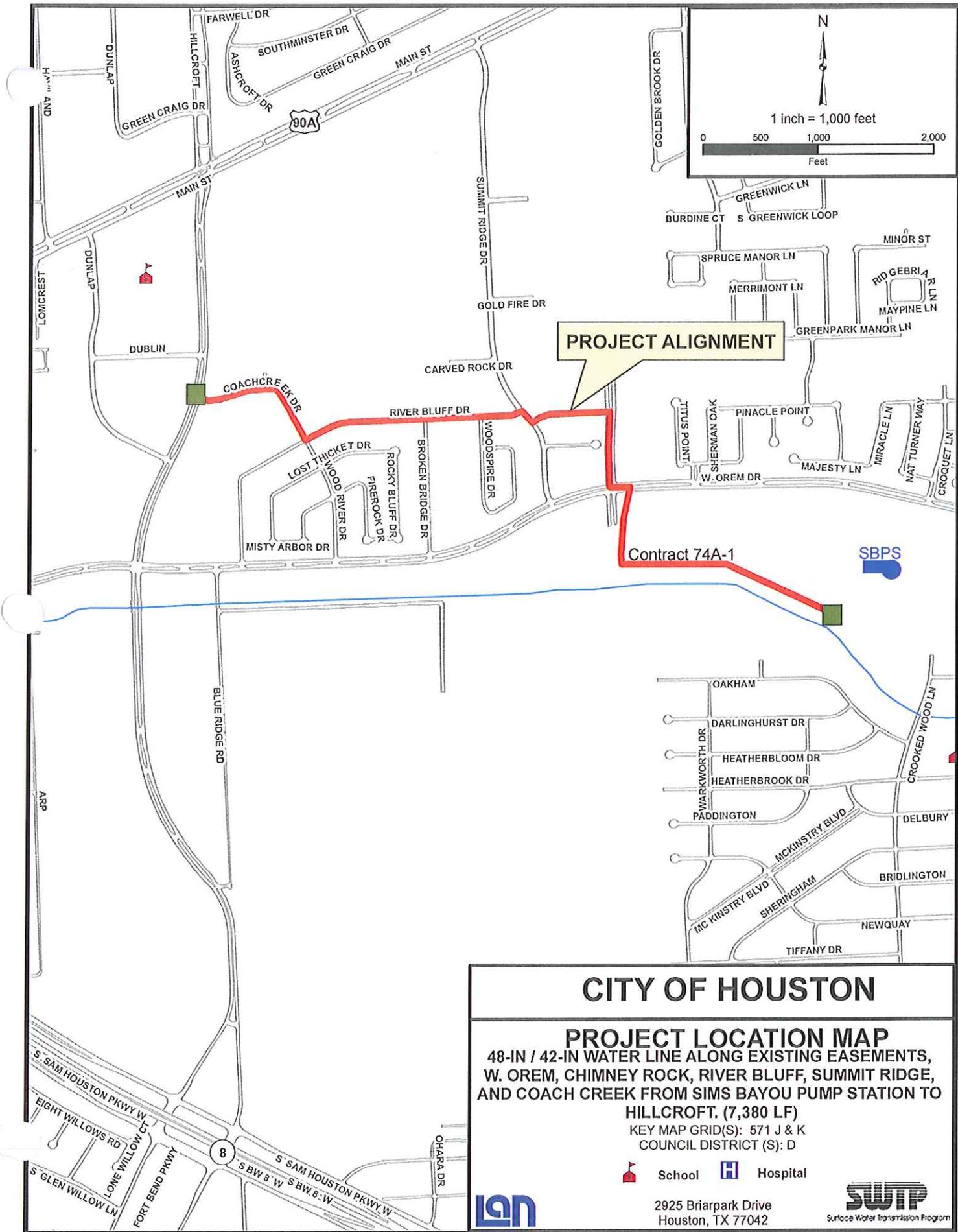
The interpretations provided are based in part on project information provided to us and only apply to the specific project discussed in this report. If the project information in this report needs to be updated or if additional information is available, you should convey the information to us and retain us to review our interpretations. We can then modify our interpretations after considering the updated information for this project.

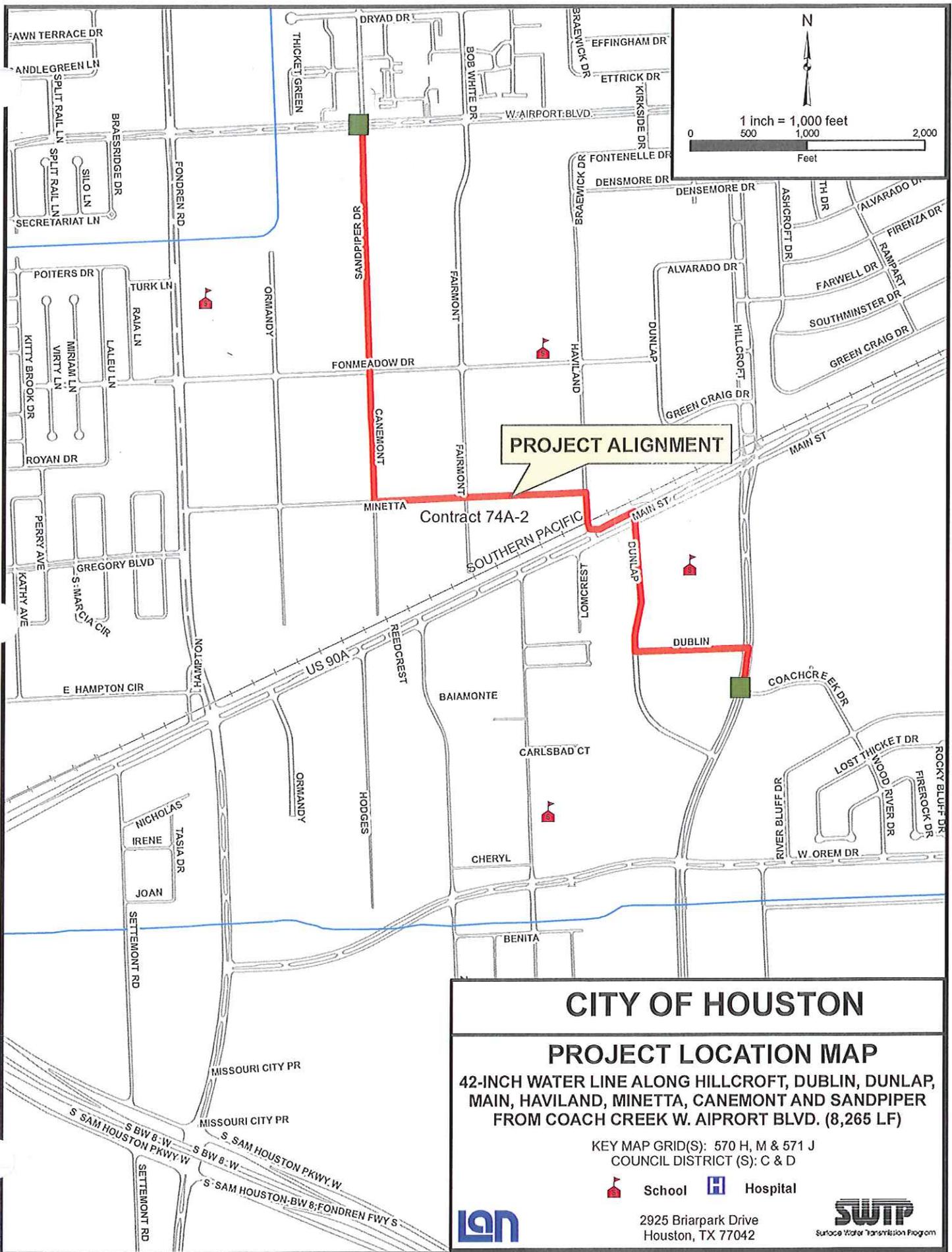
Under no circumstances does Associated Testing Laboratories, Inc. (ATL) accept responsibility for conditions at the boring locations, whether those conditions are identified in this report or not.

We will be happy to discuss our findings with you and would welcome the opportunity to provide additional studies or services necessary to complete any future projects.

Appendix – A

Project Site Location Maps





PROJECT ALIGNMENT

Contract 74A-2

CITY OF HOUSTON

PROJECT LOCATION MAP

42-INCH WATER LINE ALONG HILLCROFT, DUBLIN, DUNLAP, MAIN, HAVILAND, MINETTA, CANEMONT AND SANDPIPER FROM COACH CREEK W. AIRPORT BLVD. (8,265 LF)

KEY MAP GRID(S): 570 H, M & 571 J
 COUNCIL DISTRICT (S): C & D

 School  Hospital

2925 Briarpark Drive
 Houston, TX 77042





Source: Google Maps (2010)
 Approximate Scale: 1 in = 1500 ft

█ 74A-1 Project Area
█ 74A-2 Project Area

Lockwood, Andrews & Newnam, Inc. City of Houston Water Line Project 74A-1 & 74A-2 WBS No. S-000900-0109-3 WBS No. S-000900-0110-3	
Project Area	Figure 2-1
Vicinity Map	
Date: 04/10	

CORRIGAN CONSULTING, INC.

No	Site	Address
1	Meadows Washateria (former dry cleaner)	6403 W. Airport
2	Marcus Oil & Chemical (former S & R Oil)	14549 Minetta
3	Nova Drilling Technologies (former Petro Equipment X-change)	11800 Fairmont
4	Gated site (PB-KBB)	11414 Fairmont
5	Ice cream truck and vehicle storage location	14349 Minetta
6	Best Used Tires & Auto Service	14131 S. Main
7	Washateria (former Clean Scene #11 dry cleaner)	14117 S. Main
8	Fuel Depot #11	14111 S. Main
9	Abandoned mall (previous vehicle service center)	Southeast corner of S. Main and Dunlap
10	Sims Bayou Pump Station	13840 Croquet
11	Railroad Track	Along S. Main
12	High-Tech, Inc. (former cabinet and shutter manufacturer)	11645 Fairmont
13	Hispanic Church (former light industrial and/or an auto salvage yard)	Southwest corner of Minetta and Haviland
14	Crude Oil Pipeline	Darlinghurst



Approximate Scale : 1 inch = 0.25 mile

- Sites Recommended for Phase II ESA
- Other Sites of Concern
- 74A-1 Project Area
- 74A-2 Project Area
- Railroad Tracks
- Underground Pipeline

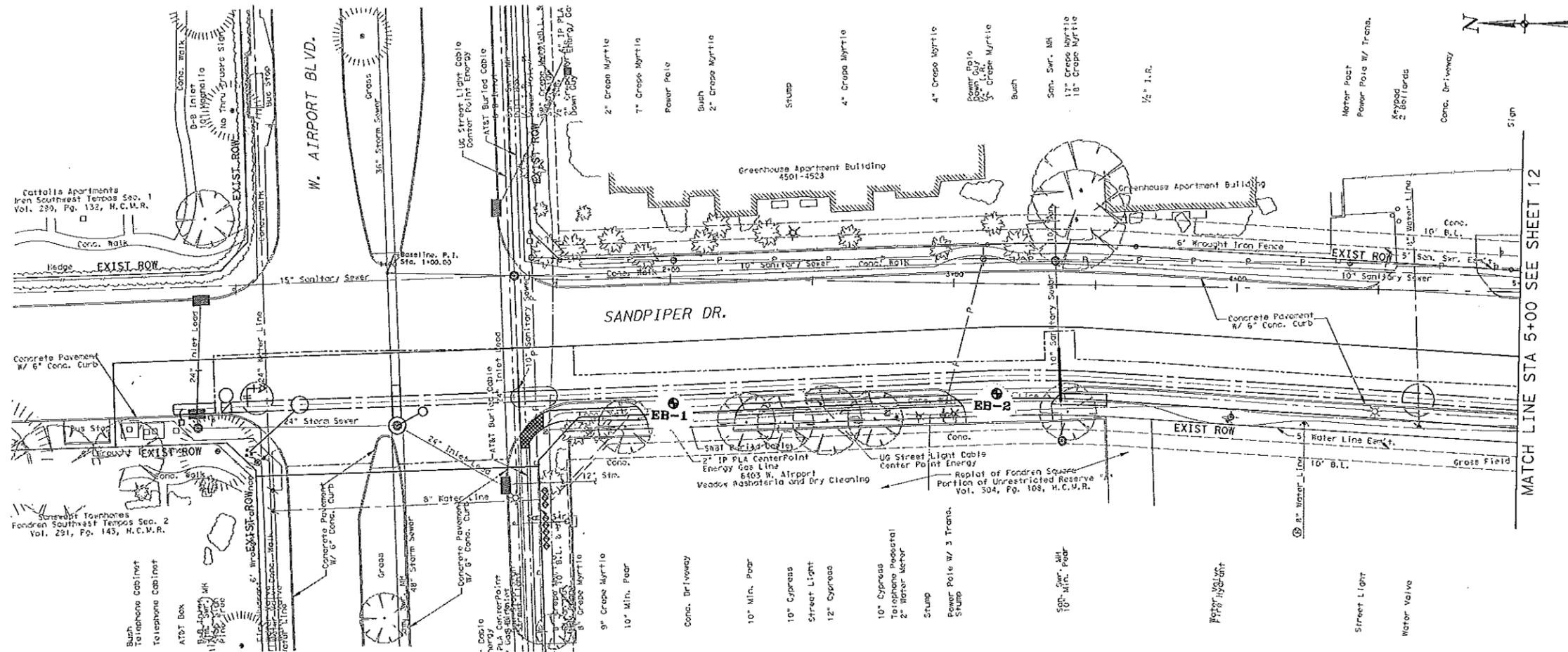
Potential RECs Map
 Date: 08/10
 Figure 7-1

Lockwood, Andrews & Newnam, Inc
 City of Houston
 Water Line Project 74A-1 & 74A-2
 CORRIGAN CONSULTING, INC.

Appendix – B

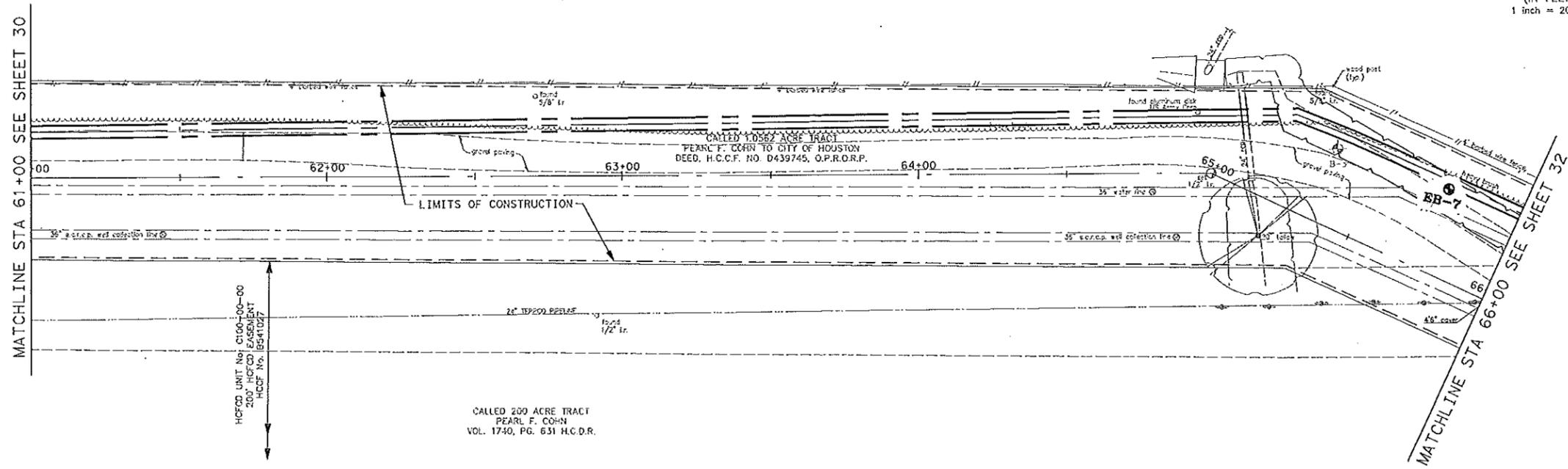
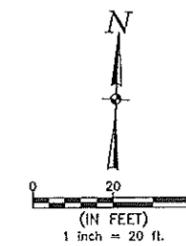
Boring Locations Map

Boring Logs

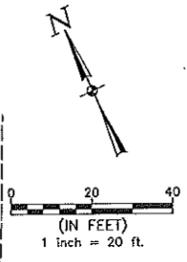
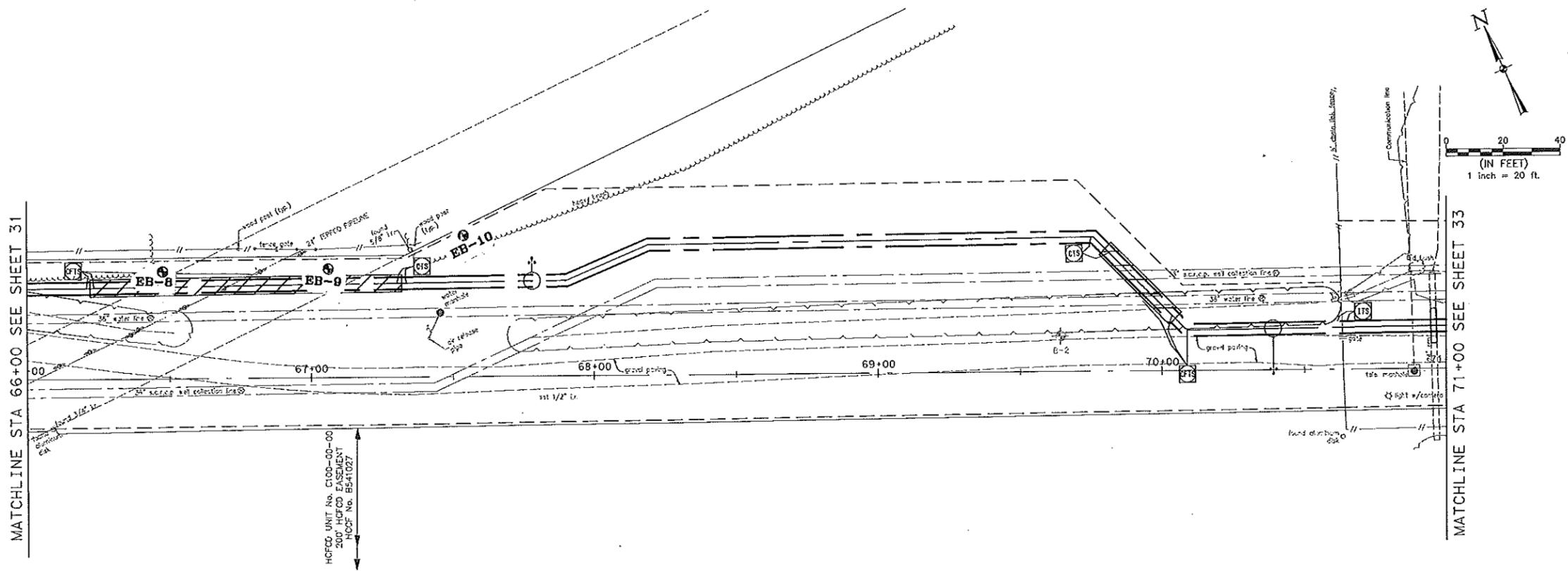


MATCH LINE STA 5+00 SEE SHEET 12

<h2 style="margin: 0;">SITE PLAN</h2> <p style="margin: 0;">PROPOSED WATER LINE SANDPIPER DR. STA 0+43 TO STA 5+00</p>	Associated Testing Laboratories, Inc. 3143 Yellowstone Blvd. Houston, Texas Tel: (713) 748-3717 Fax: (713) 748-3748	
	SCALE : N.T.S. PROJECT NO. E 10 - 115	DRAWN BY : PV FIGURE. 1A



<h2 style="margin: 0;">SITE PLAN</h2> <p style="margin: 0;">PROPOSED WATER LINE STA 61+00 TO STA 66+00</p>	Associated Testing Laboratories, Inc. 3143 Yellowstone Blvd. Houston, Texas Tel: (713) 748-3717 Fax: (713) 748-3748	
	SCALE : N.T.S PROJECT NO. E 10 - 115	DRAWN BY : PV FIGURE. 1D



MATCHLINE STA 66+00 SEE SHEET 31

MATCHLINE STA 71+00 SEE SHEET 33

HCFCO UNIT No. C100-00-00
 200' HCFCO EASEMENT
 HCCF No. BS-41027

SITE PLAN		Associated Testing Laboratories, Inc. 3143 Yellowstone Blvd. Houston, Texas Tel: (713) 748-3717 Fax: (713) 748-3748	
PROPOSED WATER LINE STA 66+00 TO STA 71+00		SCALE : N.T.S	DRAWN BY : PV
		PROJECT NO. E 10 - 115	FIGURE 1E

PROJECT NAME: COH Projects, SWTP Contracts 74A-1 & 74A-2						BORING LOG			
CLIENT NAME: Lockwood, Andrews & Newnam, Inc.						LOCATION : Sandpiper Drive			
ENVIRONMENTAL CONSULTANT: ASSOCIATED TESTING LABORATORIES, INC.						PROJECT NUMBER: E10-115		BORING NUMBER: EB-1	
DEPTH, FEET	SAMPLE TYPE	SAMPLE NUMBER	FID	PID	SAMPLE NUMBER	LEGEND	MATERIAL DESCRIPTION	ODOR	H2O
1.0			7.0	17.3			Gray Clay (CH) (Fill 3')	No	No
2.0			10.9	22	#S2			No	No
3.0			6.0	13.6				No	No
4.0			11.0	12.4			Gray and tan Clay (CH)	No	No
5.0			10.1	7.9				No	No
6.0			11.7	1.0			..light gray and tan below 6	No	No
7.0			12.0	0.2				No	No
8.0			11.7	0.0				No	No
9.0			12.5	0.5			..reddish brown below 9	No	No
10.0			14.2	0.3				No	No
11.0			10.5	0.7			..light gray and tan below 11	No	No
12.0			12.2	0.2			..reddish brown below 12	No	No
13.0			13.0	0.2				No	No
14.0			15.1	1.4				No	No
15.0			15.0	1.6				No	No
16.0			14.4	0.1			..light gray and tan below 16	No	No
17.0			13.6	1.6				No	No
18.0			13.5	0.3				No	No
19.0			12.4	0.0				No	No
20.0			13.1	0.2				No	No
21.0	# S1		17.7	0.0				No	No
22.0			14.9	1.7				No	No
23.0			14.1	1.1				No	No
24.0			12.6	0.6				No	No
							Boring terminated at 24 feet		
26.0									
28.0									
30.0									
Completion Depth: 24'			DRILLED BY: Brian			STARTED: 10/01/10		SHEET 1 OF 1	
Groundwater Encountered: No			LOGGED BY : Pankaj P			COMPLETED: 10/01/10			
Initial Groundwater Depth: No									
Final Groundwater Depth: No									

ASSOCIATED TESTING LABORATORIES, INC.

PROJECT NAME: COH Projects, SWTP Contracts 74A-1 & 74A-2						BORING LOG			
CLIENT NAME: Lockwood, Andrews & Newnam, Inc.						LOCATION : Sandpiper Drive			
ENVIRONMENTAL CONSULTANT: ASSOCIATED TESTING LABORATORIES, INC.						PROJECT NUMBER: E10-115		BORING NUMBER: EB-2	
DEPTH, FEET	SAMPLE TYPE	SAMPLE NUMBER	FID	PID	SAMPLE NUMBER	LEGEND	MATERIAL DESCRIPTION	ODOR	H2O
1.0			37.1	0.4			Gray Clay (CH) (Fill 2')	No	No
2.0		# S3	60.1	1.2				No	No
3.0			18.0	3.7			Gray Clay (CH)	No	No
4.0			14.5	2.4				No	No
5.0			5.0	4.9				No	No
6.0			8.1	4.9	#S4		..light gray and tan below 6'	No	No
7.0			4.6	1.0				No	No
8.0			5.4	3.1				No	No
9.0			3.6	0.8			..reddish brown below 9'	No	No
10.0			4.1	3.1				No	No
11.0			6.8	0.9				No	No
12.0			5.1	0.8				No	No
13.0			7.7	0.7				No	No
14.0			7.3	3.8				No	No
15.0			8.7	3.5				No	No
16.0			9.4	2.3				No	No
17.0			4.0	4.5			..light brown, gray & tan below 17'	No	No
18.0			6.8	0.9				No	No
19.0			5.5	2.4				No	No
20.0			7.8	1.9				No	No
21.0			7.4	3.8			..light gray & tan below 21'	No	No
22.0			6.3	3.2				No	No
23.0			6.0	4.1				No	No
24.0			7.3	2.2				No	No
							Boring terminated at 24 feet		
26.0									
28.0									
30.0									
Completion Depth: 24'			DRILLED BY: Brian			STARTED: 10/01/10		SHEET 1 OF 1	
Groundwater Encountered: No			LOGGED BY : Pankaj P			COMPLETED: 10/01/10			
Initial Groundwater Depth: No									
Final Groundwater Depth: No									

ASSOCIATED TESTING LABORATORIES, INC.

PROJECT NAME: COH Projects, SWTP Contracts 74A-1 & 74A-2						BORING LOG			
CLIENT NAME: Lockwood, Andrews & Newnam, Inc.						LOCATION : Minetta Drive			
ENVIRONMENTAL CONSULTANT: ASSOCIATED TESTING LABORATORIES, INC.						PROJECT NUMBER: E10-115		BORING NUMBER: EB-3	
DEPTH, FEET	SAMPLE TYPE	SAMPLE NUMBER	FID	PID	SAMPLE NUMBER	LEGEND	MATERIAL DESCRIPTION	ODOR	H2O
1.0			0.0				Dark Gray Sandy Clay (CL)	No	No
2.0			5.0					No	No
3.0			0.0					No	No
4.0	S102		7.9					No	No
5.0			0.0					No	No
6.0			0.0				...gray and tan below 6'	No	No
7.0			3.6					No	No
8.0			1.1				...dark gray below 8'	No	No
9.0			3.2					No	No
10.0			2.1				...gray and tan below 10'	No	No
11.0			0.0					No	No
12.0			4.0					No	No
13.0			0.0					No	No
14.0			1.5					No	No
15.0			0.0					No	No
16.0			0.0				...reddish brown below 16'	No	No
17.0			0.0					No	Yes
18.0			0.0					No	Yes
19.0			0.0				Reddish brown & gray CLAY (CH)	No	Yes
20.0			0.0					No	Yes
21.0			0.0					No	Yes
22.0							Boring terminated at 21 feet		
23.0									
24.0									
26.0									
28.0									
30.0									
Completion Depth: 21'						DRILLED BY: Brian		STARTED: 10/02/10	
Groundwater Encountered: 17'								SHEET 1 OF 1	
Initial Groundwater Depth: N/A						LOGGED BY : Pankaj P		COMPLETED: 10/02/10	
Final Groundwater Depth: N/A									

PROJECT NAME: COH Projects, SWTP Contracts 74A-1 & 74A-2						BORING LOG			
CLIENT NAME: Lockwood, Andrews & Newnam, Inc.						LOCATION : Minetta Drive			
ENVIRONMENTAL CONSULTANT: ASSOCIATED TESTING LABORATORIES, INC.						PROJECT NUMBER: E10-115		BORING NUMBER: EB-4	
DEPTH, FEET	SAMPLE TYPE	SAMPLE NUMBER	FID	PID	SAMPLE NUMBER	LEGEND	MATERIAL DESCRIPTION	ODOR	H2O
1.0			0.0				Dark Gray Sandy Clay (CL)	No	No
2.0			0.0					No	No
3.0			2.1					No	No
4.0	S103		3.9					No	No
5.0			2.0					No	No
6.0			0.0					No	No
7.0			0.0					No	No
8.0			1.1					No	No
9.0			0.0					No	No
10.0			0.0					No	No
11.0			1.3					No	No
12.0			0.0					No	No
13.0			0.0					No	No
14.0			0.0				...reddish brown below 14	No	No
15.0			0.2					No	No
16.0			0.0					No	No
17.0			0.0					No	No
18.0			0.0					No	No
19.0			0.0			Reddish brown & gray CLAY (CH)	No	No	
20.0			0.0			Light Gray & tan Sandy Clay (CL)	No	No	
21.0			0.0				No	No	
22.0						Boring terminated at 21 feet			
23.0									
24.0									
26.0									
28.0									
30.0									
Completion Depth: 21'						DRILLED BY: Brian	STARTED: 10/02/10	SHEET 1 OF 1	
Groundwater Encountered: No						LOGGED BY : Pankaj P	COMPLETED: 10/02/10		
Initial Groundwater Depth: No									
Final Groundwater Depth: No									

PROJECT NAME: COH Projects, SWTP Contracts 74A-1 & 74A-2						BORING LOG			
CLIENT NAME: Lockwood, Andrews & Newnam, Inc.						LOCATION : Dunlap St			
ENVIRONMENTAL CONSULTANT: ASSOCIATED TESTING LABORATORIES, INC.						PROJECT NUMBER: E10-115		BORING NUMBER: EB-5	
DEPTH, FEET	SAMPLE TYPE	SAMPLE NUMBER	FID	PID	SAMPLE NUMBER	LEGEND	MATERIAL DESCRIPTION	ODOR	H2O
1.0			0.0	2.3			Dark Gray Sandy Clay (CL) (Fill 2')	No	No
2.0			0.0	2.2				No	No
3.0			0.0	0.7			Dark Gray Sandy Clay (CL)	No	No
4.0			0.0	0.8				No	No
5.0			0.0	1.1			...light gray and tan below 5	No	No
6.0			0.0	1.1				No	No
7.0			0.0	2.0				No	No
8.0			0.0	1.5				No	No
9.0			0.0	0.6				No	No
10.0			0.0	1.3				No	No
11.0			0.0	3.8	#S6			No	Yes
12.0			0.0	3.4			Reddish brown CLAY (CH)	No	Yes
13.0			0.0	3.4				No	Yes
14.0			0.0	2.9				No	Yes
15.0			0.0	0.5				No	Yes
16.0			0.0	1.7				No	Yes
17.0			0.0	1.4				No	Yes
18.0			0.0	2.2			...light gray and tan below 18	No	Yes
19.0			0.0	1.4				No	Yes
20.0			0.0	2.6				No	Yes
21.0			0.0	3.7				No	Yes
22.0	S104		0.0	1.6					
23.0							Boring terminated at 22 feet		
24.0									
26.0									
28.0									
30.0									
Completion Depth: 22'						DRILLED BY: Brian		STARTED: 10/01/10	
Groundwater Encountered: 11'								SHEET 1 OF 1	
Initial Groundwater Depth: N/A						LOGGED BY : Pankaj P		COMPLETED: 10/01/10	
Final Groundwater Depth: N/A									

PROJECT NAME: COH Projects, SWTP Contracts 74A-1 & 74A-2						BORING LOG				
CLIENT NAME: Lockwood, Andrews & Newnam, Inc.						LOCATION : Dunlap St				
ENVIRONMENTAL CONSULTANT: ASSOCIATED TESTING LABORATORIES, INC.						PROJECT NUMBER: E10-115		BORING NUMBER: EB-6		
DEPTH, FEET	SAMPLE TYPE	SAMPLE NUMBER	FID	PID	SAMPLE NUMBER	LEGEND	MATERIAL DESCRIPTION	ODOR	H2O	
1.0			24.0				Dark Gray Clay (CH)	No	No	
2.0			61.0					No	No	
3.0	S105		425.0					No	No	
4.0			373.0					No	No	
5.0			87.0				Gray and Tan Sandy Clay (CL)	No	No	
6.0			26.4					No	No	
7.0			13.5					No	No	
8.0			8.6					...reddish brown below 9'	No	No
9.0			27.0						No	No
10.0			12.0						No	No
11.0			16.5						No	Yes
12.0			0.0				Reddish brown CLAY (CH)	No	Yes	
13.0			8.3					No	Yes	
14.0			2.6					No	Yes	
15.0			0.0					No	Yes	
16.0			7.6					No	Yes	
17.0			0.0					No	Yes	
18.0			5.9					No	Yes	
19.0			15.2					No	Yes	
20.0			1.8					...light gray and tan below 20'	No	Yes
21.0			5.8						No	Yes
22.0			0.0						No	Yes
23.0							Boring terminated at 22 feet			
24.0							There wasn't sufficient water for sampling			
26.0										
28.0										
30.0										
Completion Depth: 22'						DRILLED BY: Brian		STARTED: 10/02/10	SHEET 1 OF 1	
Groundwater Encountered: 11'						LOGGED BY : Pankaj P		COMPLETED: 10/02/10		
Initial Groundwater Depth: N/A										
Final Groundwater Depth: N/A										

PROJECT NAME: COH Projects, SWTP Contracts 74A-1 & 74A-2					BORING LOG				
CLIENT NAME: Lockwood, Andrews & Newnam, Inc.					LOCATION : STA 61+00 TO STA 66+00				
ENVIRONMENTAL CONSULTANT: ASSOCIATED TESTING LABORATORIES, INC.					PROJECT NUMBER: E10-115		BORING NUMBER: EB-7		
DEPTH, FEET	SAMPLE TYPE	SAMPLE NUMBER	FID	PID	SAMPLE NUMBER	LEGEND	MATERIAL DESCRIPTION	ODOR	H2O
1.0			1.3				Gray Clay (CH) (Fill 2')	No	No
2.0			1.2					No	No
3.0			1.4				Dark gray Sandy Clay (CL)	No	No
4.0			1.3					No	No
5.0			1.4				Gray Clay (CH)	No	No
6.0			1.3				Gray Sandy Clay (CL)	No	No
7.0			2.1				light gray and tan below 6'	No	No
8.0			2.3				reddish brown below 8'	No	No
9.0			2.4				Reddish brown Clay (CH)	No	No
10.0			1.4					No	No
11.0			1.7					No	No
12.0			1.9					No	No
13.0			2.4				Light gray and tan Sandy Clay (CL)	No	No
14.0			3.1					No	No
15.0			2.8					No	No
16.0			3.2					No	No
17.0	S106		5.0					No	No
18.0							Boring terminated at 17 feet		
19.0									
20.0									
21.0									
22.0									
23.0									
24.0									
26.0									
28.0									
30.0									
Completion Depth: 17'					DRILLED BY: Brian		STARTED: 10/03/10	SHEET 1 OF 1	
Groundwater Encountered: No					LOGGED BY : Pankaj P		COMPLETED: 10/03/10		
Initial Groundwater Depth: No									
Final Groundwater Depth: No									

ASSOCIATED TESTING LABORATORIES, INC.

PROJECT NAME: COH Projects, SWTP Contracts 74A-1 & 74A-2					BORING LOG				
CLIENT NAME: Lockwood, Andrews & Newnam, Inc.					LOCATION : STA 66+00 TO STA 71+00				
ENVIRONMENTAL CONSULTANT: ASSOCIATED TESTING LABORATORIES, INC.					PROJECT NUMBER: E10-115		BORING NUMBER: EB-8		
DEPTH, FEET	SAMPLE TYPE	SAMPLE NUMBER	FID	PID	SAMPLE NUMBER	LEGEND	MATERIAL DESCRIPTION	ODOR	H2O
1.0			1.7				Dark Gray Clay (CH) (Fill 2')	No	No
2.0			1.4					No	No
3.0			1.1				Dark gray Clay (CH)	No	No
4.0			0.9					No	No
5.0			0.5					No	No
6.0			1.0					No	No
7.0			0.5					No	No
8.0			0.3				...gray below 7'	No	No
9.0			0.1					No	No
10.0			0.1				Reddish brown Sandy Clay (CL)	No	No
11.0			0.0					No	No
12.0			0.0					No	No
13.0			0.0					No	No
14.0			0.0				...light gray and tan below 13	No	No
15.0			0.0					No	No
16.0			0.0					No	No
17.0			0.0					No	No
18.0			0.0					No	No
19.0			0.1					No	No
20.0			0.0					No	Yes
21.0	S107		1.7				Light gray and tan Silty Sand (SM)	No	Yes
22.0			0.0					No	Yes
23.0							Boring terminated at 22 feet		
24.0									
26.0									
28.0									
30.0									
Completion Depth: 22'					DRILLED BY: Brian		STARTED: 10/03/10		SHEET 1 OF 1
Groundwater Encountered: 20'					LOGGED BY : Pankaj P		COMPLETED: 10/03/10		
Initial Groundwater Depth: N/A									
Final Groundwater Depth: N/A									

PROJECT NAME: COH Projects, SWTP Contracts 74A-1 & 74A-2						BORING LOG			
CLIENT NAME: Lockwood, Andrews & Newnam, Inc.						LOCATION : STA 66+00 TO STA 71+00			
ENVIRONMENTAL CONSULTANT: ASSOCIATED TESTING LABORATORIES, INC.						PROJECT NUMBER: E10-115		BORING NUMBER: EB-9	
DEPTH, FEET	SAMPLE TYPE	SAMPLE NUMBER	FID	PID	SAMPLE NUMBER	LEGEND	MATERIAL DESCRIPTION	ODOR	H2O
1.0			0.0				Dark Gray Clay (CH)	No	No
2.0			0.0					No	No
3.0			0.0					No	No
4.0			0.0					No	No
5.0			0.0					No	No
6.0			0.0					No	No
7.0			0.0				Gray Sandy Clay (CL)	No	No
8.0			0.0				...light gray and tan below 8'	No	No
9.0			0.0					No	No
10.0			0.0					No	No
11.0			0.0					No	No
12.0			0.0					No	No
13.0			0.0					No	No
14.0			0.0					No	No
15.0			0.0					No	No
16.0			0.0					No	No
17.0			0.0					No	Yes
18.0			0.0					No	Yes
19.0			0.0				Light gray and tan Clay (CH)	No	Yes
20.0			0.0					No	Yes
21.0			0.0				Light gray and tan Silty Sand (SM)	No	Yes
22.0	S101		0.0					No	Yes
23.0							Boring terminated at 22 feet		
24.0									
26.0									
28.0									
30.0									
Completion Depth: 22'						DRILLED BY: Brian		STARTED: 10/03/10	SHEET 1 OF 1
Groundwater Encountered: 17'						LOGGED BY : Pankaj P		COMPLETED: 10/03/10	
Initial Groundwater Depth: N/A									
Final Groundwater Depth: N/A									

PROJECT NAME: COH Projects, SWTP Contracts 74A-1 & 74A-2					BORING LOG				
CLIENT NAME: Lockwood, Andrews & Newnam, Inc.					LOCATION : STA 66+00 TO STA 71+00				
ENVIRONMENTAL CONSULTANT: ASSOCIATED TESTING LABORATORIES, INC.					PROJECT NUMBER: E10-115		BORING NUMBER: EB-10		
DEPTH, FEET	SAMPLE TYPE	SAMPLE NUMBER	FID	PID	SAMPLE NUMBER	LEGEND	MATERIAL DESCRIPTION	ODOR	H2O
1.0			1.9				Dark Gray Clay (CH)	No	No
2.0			1.1					No	No
3.0			1.4					No	No
4.0			1.6					No	No
5.0			2.1				..light gray and tan below 4'	No	No
6.0			2.3					No	No
7.0			2.1					No	No
8.0			2.1				Reddish brown Sandy Clay (CL)	No	No
9.0			2.1					No	No
10.0			2.8					No	No
11.0			2.2				..light gray and tan below 10'	No	No
12.0			2.8					No	No
13.0			2.5					No	No
14.0			2.5					No	No
15.0			2.8					No	No
16.0			3.4					No	No
17.0	S108		3.8					No	Yes
18.0			3.5					No	Yes
19.0			3.4					No	Yes
20.0			3.2					No	Yes
21.0			3.3					Light gray Silty Sand (SM)	No
22.0			3.3					No	Yes
23.0							Boring terminated at 22 feet		
24.0									
26.0									
28.0									
30.0									
Completion Depth: 22'					DRILLED BY: Brian		STARTED: 10/03/10		SHEET 1 OF 1
Groundwater Encountered: 17'					LOGGED BY : Pankaj P		COMPLETED: 10/03/10		
Initial Groundwater Depth: N/A									
Final Groundwater Depth: N/A									

ASSOCIATED TESTING LABORATORIES, INC.

PROJECT NAME: COH Projects, SWTP Contracts 74A-1 & 74A-2					BORING LOG				
CLIENT NAME: Lockwood, Andrews & Newnam, Inc.					LOCATION : CANEMONT ST				
ENVIRONMENTAL CONSULTANT: ASSOCIATED TESTING LABORATORIES, INC.					PROJECT NUMBER: E10-115		BORING NUMBER: EB-11		
DEPTH, FEET	SAMPLE TYPE	SAMPLE NUMBER	FID	PID	SAMPLE NUMBER	LEGEND	MATERIAL DESCRIPTION	ODOR	H2O
1.0			2.9				Dark Gray Clay (CH)	No	No
2.0			2.5					No	No
3.0			1.8				Light gray and tan Sandy Clay (CL)	No	No
4.0			2.1					No	No
5.0			3.6					No	No
6.0			4.5					No	No
7.0			3.3				...gray below 6'	No	No
8.0			3.6					No	No
9.0			4.2					No	No
10.0	S109		4.7				...reddish brown below 10'	No	No
11.0			3.0					No	No
12.0			3.9					No	No
13.0			3.0				Light gray Silty Sand (SM)	No	Yes
14.0			2.4					No	Yes
15.0			3.2					No	Yes
16.0			2.3					No	Yes
17.0			3.1					No	Yes
18.0			3.5					No	Yes
19.0			2.9				Light gray and tan Sandy Clay (CL)	No	Yes
20.0			3.0					No	Yes
21.0			3.9					No	Yes
22.0			3.2				...reddish brown below 21'	No	Yes
23.0			3.1					No	Yes
24.0			3.2				...light gray and tan below 23'	No	Yes
25.0			2.4				Light gray Silty Sand (SM)	No	Yes
26.0			3.0					No	Yes
27.0			2.9					No	Yes
28.0							Boring terminated at 27 feet		
30.0									

Completion Depth: 22'	DRILLED BY: Brian	STARTED: 10/03/10	SHEET 1 OF 1
Groundwater Encountered: 12'			
Initial Groundwater Depth: N/A	LOGGED BY : Pankaj P	COMPLETED: 10/03/10	
Final Groundwater Depth: N/A			

ASSOCIATED TESTING LABORATORIES, INC.

Appendix – C

Project Photographs

Appendix C
Project Photographs

Phase II ESA: Proposed Waterline Project, COH Contracts 74A-1 & 74A-2



Appendix C
Project Photographs

Phase II ESA: Proposed Waterline Project, COH Contracts 74A-1 & 74A-2



Appendix C
Project Photographs

Phase II ESA: Proposed Waterline Project, COH Contracts 74A-1 & 74A-2



Appendix C
Project Photographs

Phase II ESA: Proposed Waterline Project, COH Contracts 74A-1 & 74A-2



Appendix C
Project Photographs

Phase II ESA: Proposed Waterline Project, COH Contracts 74A-1 & 74A-2



Appendix – D

*Laboratory Analytical
Reports*

AMENDED

Laboratory Analysis Report

Total Number of Pages: 56

Job ID : 10100064



10100 East Freeway, Suite 100, Houston, TX 77029 tel: 713-453-6060, fax: 713-453-6091, http://www.ablabs.com

Client Project Name :

E10-115 / COH projects, Contract 74A-1 & Contract 74A-2

Report To : Client Name: Associated Testing Lab
Attn: Jasbir Singh
Client Address: 3143 Yellowstone Blvd.
City, State, Zip: Houston, Texas, 77054

P.O.#.:
Sample Collected By: Pankaj Parikh
Date Collected: 10/01/10 - 10/03/10

A&B Labs has analyzed the following samples...

Client Sample ID	Matrix	A&B Sample ID
S1 / EB-1 Sand Piper Dr (20'-21')	Soil	10100064.01
S2 / EB-1 Sand Piper Dr (0'-1')	Soil	10100064.02
S3 / EB-2 Sand Piper Dr (1'-2')	Soil	10100064.03
S4 / EB-2 Sand Piper Dr (5'-6')	Soil	10100064.04
S102 / EB-3-Minetta Dr (3'-4')	Soil	10100064.05
S103 / EB-4-Minetta Dr (3'-4')	Soil	10100064.06
S104 / EB-5-Dunlap St (21'-22')	Soil	10100064.07
S6 / EB-5-Dunlap St (10'-11')	Soil	10100064.08
S105 / EB-6-Dunlap St (2'-3')	Soil	10100064.09
S106 / EB-7-between STA 65+00-66+00 (16'-17')	Soil	10100064.10
S107 / EB-8-between STA 66+00-67+00 (20'-21')	Soil	10100064.11
S101 / EB-9-11-STA 67+00-68+00 (21'-22')	Soil	10100064.12
S108 / EB-10 Near STA 68+00	Soil	10100064.13
S109 / EB-11 Canemont St (9'-10')	Soil	10100064.14
W-2 / EB-3 Minetta Dr. (W-2) Water	Water	10100064.15
W1 / EB-5 Dunlap St Water	Water	10100064.16
W6 /EB-8 between-STA 66+00+67+00 Water	Water	10100064.17

Melissa Gonzalez

Released By: Melissa Gonzalez
Title: Project Manager
Date: 10/12/2010



This Laboratory is NELAP (T104704213-10-2) accredited. Effective: 07/01/2010; Expires: 06/30/2011

Scope: Non-Potable Water, Drinking Water, Air, Solid, Hazardous Waste

I am the laboratory manager, or his/her designee, and I am responsible for the release of this data package. This laboratory data package has been reviewed and is complete and technically compliant with the requirements of the methods used, except where noted in the attached exception reports. I affirm, to the best of my knowledge that all problems/anomalies observed by this laboratory (and if applicable, any and all laboratories subcontracted through this laboratory) that might affect the quality of the data, have been identified in the Laboratory Review Checklist, and that no information or data have been knowingly withheld that would affect the quality of the data.

This report cannot be reproduced, except in full, without prior written permission of A&B Labs. Results shown relate only to the items tested. Samples are assumed to be in acceptable condition unless otherwise noted. Blank correction is not made unless otherwise noted. Air concentrations reported are based on field sampling information provided by client. Soil samples are reported on a wet weight basis unless otherwise noted.

Amended report.

Date Received : 10/04/2010 11:41

AMENDED
Laboratory Analysis Report

Total Number of Pages: 56

Job ID : 10100064



10100 East Freeway, Suite 100, Houston, TX 77029 tel: 713-453-6060, fax: 713-453-6091, http://www.ablabs.com

A&B Labs has analyzed the following samples...

Client Sample ID	Matrix	A&B Sample ID
W5 / EB-9-11-STA 67+00+68+00 Water	Water	10100064.18
W4 / EB-10 Near STA 68+00 Water	Water	10100064.19
W3 / EB-11 Canemont St Water	Water	10100064.20

Melissa Gonzalez

Released By: Melissa Gonzalez

Title: Project Manager

Date: 10/12/2010



This Laboratory is NELAP (T104704213-10-2) accredited. Effective: 07/01/2010; Expires: 06/30/2011

Scope: Non-Potable Water, Drinking Water, Air, Solid, Hazardous Waste

I am the laboratory manager, or his/her designee, and I am responsible for the release of this data package. This laboratory data package has been reviewed and is complete and technically compliant with the requirements of the methods used, except where noted in the attached exception reports. I affirm, to the best of my knowledge that all problems/anomalies observed by this laboratory (and if applicable, any and all laboratories subcontracted through this laboratory) that might affect the quality of the data, have been identified in the Laboratory Review Checklist, and that no information or data have been knowingly withheld that would affect the quality of the data.

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Amended report.

Date Received : 10/04/2010 11:41

LABORATORY TERM AND QUALIFIER DEFINITION REPORT



Job ID : 10100064

Date: 10/12/2010

General Term Definition

Back-Wt	Back Weight	Post-Wt	Post Weight
BRL	Below Reporting Limit	ppm	parts per million
cfu	colony-forming units	Pre-Wt	Previous Weight
Conc.	Concentration	Q	Qualifier
D.F.	Dilution Factor	RegLimit	Regulatory Limit
Front-Wt	Front Weight	RPD	Relative Percent Difference
LCS	Laboratory Check Standard	RptLimit	Reporting Limit
LCSD	Laboratory Check Standard Duplicate	SDL	Sample Detection Limit
MS	Matrix Spike	surr	Surrogate
MSD	Matrix Spike Duplicate	T	Time
MW	Molecular Weight	TNTC	Too numerous to count

Qualifier Definition

J	Estimation. Below calibration range but above MDL.
L2	Associated LCS/LCSD recovery is below acceptance limits for flagged analyte. Bias may be low.



LABORATORY TEST RESULTS

Job ID : 10100064

Date 10/12/2010

Client Name: Associated Testing Lab Attn: Jasbir Singh
Project Name: E10-115 / COH projects, Contract 74A-1 & Contract 74A-2

Client Sample ID: S1 / EB-1 Sand Piper Dr (20'-21') Job Sample ID: 10100064.01
Date Collected: 10/01/10 Sample Matrix: Soil
Time Collected:
Other Information:

Table with 9 columns: Test Method, Parameter/Test Description, Result, Units, DF, Rpt Limit, Reg Limit, Q, Date Time, Analyst. Rows include SW-846 8021B (Purgeable Aromatics) and TX 1005 (Total Petroleum Hydrocarbons).



LABORATORY TEST RESULTS

Job ID : 10100064

Date 10/12/2010

Client Name: Associated Testing Lab Attn: Jasbir Singh
Project Name: E10-115 / COH projects, Contract 74A-1 & Contract 74A-2

Client Sample ID: S2 / EB-1 Sand Piper Dr (0'-1') Job Sample ID: 10100064.02
Date Collected: 10/01/10 Sample Matrix: Soil
Time Collected:
Other Information:

Table with 9 columns: Test Method, Parameter/Test Description, Result, Units, DF, Rpt Limit, Reg Limit, Q, Date Time, Analyst. It lists various Volatile Organic Compounds and their test results.

Amended report.



LABORATORY TEST RESULTS

Job ID : 10100064

Date 10/12/2010

Client Name: Associated Testing Lab

Attn: Jasbir Singh

Project Name: E10-115 / COH projects, Contract 74A-1 & Contract 74A-2

Client Sample ID: S2 / EB-1 Sand Piper Dr (0'-1')

Job Sample ID: 10100064.02

Date Collected: 10/01/10

Sample Matrix Soil

Time Collected:

Other Information:

Test Method	Parameter/Test Description	Result	Units	DF	Rpt Limit	Reg Limit	Q	Date Time	Analyst
SW-846 8260B	Volatile Organic Compounds								
	Dibromomethane	BRL	mg/Kg	1	0.005			10/04/10 17:29	HW
	Dichlorodifluoromethane	BRL	mg/Kg	1	0.005			10/04/10 17:29	HW
	Ethylbenzene	BRL	mg/Kg	1	0.005			10/04/10 17:29	HW
	Isopropylbenzene	BRL	mg/Kg	1	0.005			10/04/10 17:29	HW
	m- & p-Xylenes	BRL	mg/Kg	1	0.005			10/04/10 17:29	HW
	MEK	BRL	mg/Kg	1	0.005			10/04/10 17:29	HW
	Methylene chloride	BRL	mg/Kg	1	0.005			10/04/10 17:29	HW
	Naphthalene	BRL	mg/Kg	1	0.005			10/04/10 17:29	HW
	n-Butylbenzene	BRL	mg/Kg	1	0.005			10/04/10 17:29	HW
	n-Propylbenzene	BRL	mg/Kg	1	0.005			10/04/10 17:29	HW
	o-Xylene	BRL	mg/Kg	1	0.005			10/04/10 17:29	HW
	sec-Butylbenzene	BRL	mg/Kg	1	0.005			10/04/10 17:29	HW
	Styrene	BRL	mg/Kg	1	0.005			10/04/10 17:29	HW
	t-butylbenzene	BRL	mg/Kg	1	0.005			10/04/10 17:29	HW
	Tetrachloroethylene	BRL	mg/Kg	1	0.005			10/04/10 17:29	HW
	Toluene	BRL	mg/Kg	1	0.005			10/04/10 17:29	HW
	trans-1,2-Dichloroethylene	BRL	mg/Kg	1	0.005			10/04/10 17:29	HW
	trans-1,3-Dichloropropene	BRL	mg/Kg	1	0.005			10/04/10 17:29	HW
	Trichloroethylene	BRL	mg/Kg	1	0.005			10/04/10 17:29	HW
	Trichlorofluoromethane	BRL	mg/Kg	1	0.005			10/04/10 17:29	HW
	Vinyl Chloride	BRL	mg/Kg	1	0.005			10/04/10 17:29	HW
	1,2-Dichloroethane-d4(surr)	108	%	1	70-130			10/04/10 17:29	HW
	Dibromofluoromethane(surr)	109	%	1	70-130			10/04/10 17:29	HW
	p-Bromofluorobenzene(surr)	97.1	%	1	70-130			10/04/10 17:29	HW
	Toluene-d8(surr)	99.4	%	1	70-130			10/04/10 17:29	HW

**LABORATORY TEST RESULTS**

Job ID : 10100064

Date 10/12/2010

Client Name: Associated Testing Lab

Attn: Jasbir Singh

Project Name: E10-115 / COH projects, Contract 74A-1 & Contract 74A-2

Client Sample ID: S3 / EB-2 Sand Piper Dr (1'-2')

Job Sample ID: 10100064.03

Date Collected: 10/01/10

Sample Matrix: Soil

Time Collected:

Other Information:

Test Method	Parameter/Test Description	Result	Units	DF	Rpt Limit	Reg Limit	Q	Date Time	Analyst
SW-846 8021B	Purgeable Aromatics								
	MTBE	BRL	mg/Kg	1	0.005			10/04/10 21:34	xa
	Benzene	BRL	mg/Kg	1	0.005			10/04/10 21:34	xa
	Toluene	BRL	mg/Kg	1	0.005			10/04/10 21:34	xa
	Ethylbenzene	BRL	mg/Kg	1	0.005			10/04/10 21:34	xa
	m- & p-Xylenes	BRL	mg/Kg	1	0.01			10/04/10 21:34	xa
	o-Xylene	BRL	mg/Kg	1	0.005			10/04/10 21:34	xa
	Xylenes	BRL	mg/Kg	1	0.005			10/04/10 21:34	xa
	Trifluorotoluene(surr)	98.5	%	1	81-111			10/04/10 21:34	xa
TX 1005	Total Petroleum Hydrocarbons								
	C6-C12	BRL	mg/Kg	1	14.7			10/05/10 20:06	KS
	>C12-C28	BRL	mg/Kg	1	18.4			10/05/10 20:06	KS
	>C28-C35	BRL	mg/Kg	1	19.1			10/05/10 20:06	KS
	Total C6-C35	BRL	mg/Kg	1				10/05/10 20:06	KS
	1-Chlorooctane(surr)	81.7	%	1	60-143			10/05/10 20:06	KS
	Chlorooctadecane(surr)	96.8	%	1	60-150			10/05/10 20:06	KS

Amended report.



LABORATORY TEST RESULTS

Job ID : 10100064

Date 10/12/2010

Client Name: Associated Testing Lab

Attn: Jasbir Singh

Project Name: E10-115 / COH projects, Contract 74A-1 & Contract 74A-2

Client Sample ID: S4 / EB-2 Sand Piper Dr (5'-6')

Job Sample ID: 10100064.04

Date Collected: 10/01/10

Sample Matrix Soil

Time Collected:

Other Information:

Test Method	Parameter/Test Description	Result	Units	DF	Rpt Limit	Reg Limit	Q	Date Time	Analyst
SW-846 8260B	Volatile Organic Compounds								
	1,1,1,2-Tetrachloroethane	BRL	mg/Kg	1	0.005			10/04/10 17:58	HW
	1,1,1-Trichloroethane	BRL	mg/Kg	1	0.005			10/04/10 17:58	HW
	1,1,2,2-Tetrachloroethane	BRL	mg/Kg	1	0.005			10/04/10 17:58	HW
	1,1,2-Trichloroethane	BRL	mg/Kg	1	0.005			10/04/10 17:58	HW
	1,1-Dichloroethane	BRL	mg/Kg	1	0.005			10/04/10 17:58	HW
	1,1-Dichloroethylene	BRL	mg/Kg	1	0.005			10/04/10 17:58	HW
	1,1-Dichloropropene	BRL	mg/Kg	1	0.005			10/04/10 17:58	HW
	1,2,3-trichlorobenzene	BRL	mg/Kg	1	0.005			10/04/10 17:58	HW
	1,2,3-Trichloropropane	BRL	mg/Kg	1	0.005			10/04/10 17:58	HW
	1,2,4-Trichlorobenzene	BRL	mg/Kg	1	0.005			10/04/10 17:58	HW
	1,2,4-Trimethylbenzene	BRL	mg/Kg	1	0.005			10/04/10 17:58	HW
	1,2-Dibromo-3-chloropropane	BRL	mg/Kg	1	0.005			10/04/10 17:58	HW
	1,2-Dibromoethane	BRL	mg/Kg	1	0.005			10/04/10 17:58	HW
	1,2-Dichlorobenzene	BRL	mg/Kg	1	0.005			10/04/10 17:58	HW
	1,2-Dichloroethane	BRL	mg/Kg	1	0.005			10/04/10 17:58	HW
	1,2-Dichloropropane	BRL	mg/Kg	1	0.005			10/04/10 17:58	HW
	1,3,5-Trimethylbenzene	BRL	mg/Kg	1	0.005			10/04/10 17:58	HW
	1,3-Dichlorobenzene	BRL	mg/Kg	1	0.005			10/04/10 17:58	HW
	1,3-Dichloropropane	BRL	mg/Kg	1	0.005			10/04/10 17:58	HW
	1,4-Dichlorobenzene	BRL	mg/Kg	1	0.005			10/04/10 17:58	HW
	2,2-Dichloropropane	BRL	mg/Kg	1	0.005			10/04/10 17:58	HW
	2-Chlorotoluene	BRL	mg/Kg	1	0.005			10/04/10 17:58	HW
	4-Chlorotoluene	BRL	mg/Kg	1	0.005			10/04/10 17:58	HW
	4-Isopropyltoluene	BRL	mg/Kg	1	0.005			10/04/10 17:58	HW
	Benzene	BRL	mg/Kg	1	0.005			10/04/10 17:58	HW
	Bromobenzene	BRL	mg/Kg	1	0.005			10/04/10 17:58	HW
	Bromochloromethane	BRL	mg/Kg	1	0.005			10/04/10 17:58	HW
	Bromodichloromethane	BRL	mg/Kg	1	0.005			10/04/10 17:58	HW
	Bromoform	BRL	mg/Kg	1	0.005			10/04/10 17:58	HW
	Bromomethane	BRL	mg/Kg	1	0.005			10/04/10 17:58	HW
	Carbon tetrachloride	BRL	mg/Kg	1	0.005			10/04/10 17:58	HW
	Chlorobenzene	BRL	mg/Kg	1	0.005			10/04/10 17:58	HW
	Chloroethane	BRL	mg/Kg	1	0.005			10/04/10 17:58	HW
	Chloroform	BRL	mg/Kg	1	0.005			10/04/10 17:58	HW
	Chloromethane	BRL	mg/Kg	1	0.005			10/04/10 17:58	HW
	cis-1,2-Dichloroethylene	BRL	mg/Kg	1	0.005			10/04/10 17:58	HW
	cis-1,3-Dichloropropene	BRL	mg/Kg	1	0.005			10/04/10 17:58	HW
	Dibromochloromethane	BRL	mg/Kg	1	0.005			10/04/10 17:58	HW

Amended report.



LABORATORY TEST RESULTS

Job ID : 10100064

Date 10/12/2010

Client Name: Associated Testing Lab Attn: Jasbir Singh
Project Name: E10-115 / COH projects, Contract 74A-1 & Contract 74A-2

Client Sample ID: S4 / EB-2 Sand Piper Dr (5'-6') Job Sample ID: 10100064.04
Date Collected: 10/01/10 Sample Matrix: Soil
Time Collected:
Other Information:

Table with 10 columns: Test Method, Parameter/Test Description, Result, Units, DF, Rpt Limit, Reg Limit, Q, Date Time, Analyst. Rows include Volatile Organic Compounds and various chemical species like Dibromomethane, Dichlorodifluoromethane, etc.



LABORATORY TEST RESULTS

Job ID : 10100064

Date 10/12/2010

Client Name: Associated Testing Lab Attn: Jasbir Singh
Project Name: E10-115 / COH projects, Contract 74A-1 & Contract 74A-2

Client Sample ID: S102 / EB-3-Minetta Dr (3'-4') Job Sample ID: 10100064.05
Date Collected: 10/02/10 Sample Matrix: Soil
Time Collected:
Other Information:

Table with 10 columns: Test Method, Parameter/Test Description, Result, Units, DF, Rpt Limit, Reg Limit, Q, Date Time, Analyst. Rows include SW-846 8021B (Purgeable Aromatics) and TX 1005 (Total Petroleum Hydrocarbons).



LABORATORY TEST RESULTS

Job ID : 10100064

Date 10/12/2010

Client Name: Associated Testing Lab Attn: Jasbir Singh
Project Name: E10-115 / COH projects, Contract 74A-1 & Contract 74A-2

Client Sample ID: S103 / EB-4-Minetta Dr (3'-4') Job Sample ID: 10100064.06
Date Collected: 10/02/10 Sample Matrix: Soil
Time Collected:
Other Information:

Table with 9 columns: Test Method, Parameter/Test Description, Result, Units, DF, Rpt Limit, Reg Limit, Q, Date Time, Analyst. Rows include SW-846 8021B (Purgeable Aromatics) and TX 1005 (Total Petroleum Hydrocarbons).



LABORATORY TEST RESULTS

Job ID : 10100064

Date 10/12/2010

Client Name: Associated Testing Lab Attn: Jasbir Singh
 Project Name: E10-115 / COH projects, Contract 74A-1 & Contract 74A-2

Client Sample ID: S104 / EB-5-Dunlap St (21'-22') Job Sample ID: 10100064.07
 Date Collected: 10/01/10 Sample Matrix: Soil
 Time Collected:
 Other Information:

Test Method	Parameter/Test Description	Result	Units	DF	Rpt Limit	Reg Limit	Q	Date Time	Analyst
SW-846 8021B	Purgeable Aromatics								
	MTBE	BRL	mg/Kg	1	0.005			10/04/10 22:41	xa
	Benzene	BRL	mg/Kg	1	0.005			10/04/10 22:41	xa
	Toluene	BRL	mg/Kg	1	0.005			10/04/10 22:41	xa
	Ethylbenzene	BRL	mg/Kg	1	0.005			10/04/10 22:41	xa
	m- & p-Xylenes	BRL	mg/Kg	1	0.01			10/04/10 22:41	xa
	o-Xylene	BRL	mg/Kg	1	0.005			10/04/10 22:41	xa
	Xylenes	BRL	mg/Kg	1	0.005			10/04/10 22:41	xa
	Trifluorotoluene(surr)	99	%	1	81-111			10/04/10 22:41	xa
TX 1005	Total Petroleum Hydrocarbons								
	C6-C12	BRL	mg/Kg	1	14.7			10/05/10 21:35	KS
	>C12-C28	BRL	mg/Kg	1	18.4			10/05/10 21:35	KS
	>C28-C35	BRL	mg/Kg	1	19.1			10/05/10 21:35	KS
	Total C6-C35	BRL	mg/Kg	1				10/05/10 21:35	KS
	1-Chlorooctane(surr)	69.9	%	1	60-143			10/05/10 21:35	KS
	Chlorooctadecane(surr)	83	%	1	60-150			10/05/10 21:35	KS



LABORATORY TEST RESULTS

Job ID : 10100064

Date 10/12/2010

Client Name: Associated Testing Lab Attn: Jasbir Singh
Project Name: E10-115 / COH projects, Contract 74A-1 & Contract 74A-2

Client Sample ID: S6 / EB-5-Dunlap St (10'-11') Job Sample ID: 10100064.08
Date Collected: 10/01/10 Sample Matrix: Soil
Time Collected:
Other Information:

Table with 10 columns: Test Method, Parameter/Test Description, Result, Units, DF, Rpt Limit, Reg Limit, Q, Date Time, Analyst. Rows include SW-846 8260B and various Volatile Organic Compounds like 1,1,1,2-Tetrachloroethane, 1,1,1-Trichloroethane, etc.

Amended report.



LABORATORY TEST RESULTS

Job ID : 10100064

Date 10/12/2010

Client Name: Associated Testing Lab Attn: Jasbir Singh
Project Name: E10-115 / COH projects, Contract 74A-1 & Contract 74A-2

Client Sample ID: S6 / EB-5-Dunlap St (10'-11') Job Sample ID: 10100064.08
Date Collected: 10/01/10 Sample Matrix: Soil
Time Collected:
Other Information:

Table with 10 columns: Test Method, Parameter/Test Description, Result, Units, DF, Rpt Limit, Reg Limit, Q, Date Time, Analyst. Rows include SW-846 8260B Volatile Organic Compounds and various chemical compounds like Dibromomethane, Dichlorodifluoromethane, etc.



LABORATORY TEST RESULTS

Job ID : 10100064

Date 10/12/2010

Client Name: Associated Testing Lab Attn: Jasbir Singh
Project Name: E10-115 / COH projects, Contract 74A-1 & Contract 74A-2

Client Sample ID: S105 / EB-6-Dunlap St (2'-3') Job Sample ID: 10100064.09
Date Collected: 10/02/10 Sample Matrix: Soil
Time Collected:
Other Information:

Table with 9 columns: Test Method, Parameter/Test Description, Result, Units, DF, Rpt Limit, Reg Limit, Q, Date Time, Analyst. Rows include SW-846 8021B (Purgeable Aromatics) and TX 1005 (Total Petroleum Hydrocarbons).



LABORATORY TEST RESULTS

Job ID : 10100064

Date 10/12/2010

Client Name: Associated Testing Lab Attn: Jasbir Singh
Project Name: E10-115 / COH projects, Contract 74A-1 & Contract 74A-2

Client Sample ID: S106 / EB-7-between STA 65+00-66+00 (16'-17') Job Sample ID: 10100064.10
Date Collected: 10/03/10 Sample Matrix: Soil
Time Collected:
Other Information:

Table with 9 columns: Test Method, Parameter/Test Description, Result, Units, DF, Rpt Limit, Reg Limit Q, Date Time, Analyst. Rows include SW-846 8021B (Purgeable Aromatics) and TX 1005 (Total Petroleum Hydrocarbons).



LABORATORY TEST RESULTS

Job ID : 10100064

Date 10/12/2010

Client Name: Associated Testing Lab Attn: Jasbir Singh
 Project Name: E10-115 / COH projects, Contract 74A-1 & Contract 74A-2

Client Sample ID: S107 / EB-8-between STA 66+00-67+00 (20'-21') Job Sample ID: 10100064.11
 Date Collected: 10/03/10 Sample Matrix: Soil
 Time Collected:
 Other Information:

Test Method	Parameter/Test Description	Result	Units	DF	Rpt Limit	Reg Limit	Q	Date Time	Analyst
SW-846 8021B	Purgeable Aromatics								
	MTBE	BRL	mg/Kg	0.97	0.0048309			10/04/10 23:48	xa
	Benzene	BRL	mg/Kg	0.97	0.0048309			10/04/10 23:48	xa
	Toluene	BRL	mg/Kg	0.97	0.0048309			10/04/10 23:48	xa
	Ethylbenzene	BRL	mg/Kg	0.97	0.0048309			10/04/10 23:48	xa
	m- & p-Xylenes	BRL	mg/Kg	0.97	0.0096618			10/04/10 23:48	xa
	o-Xylene	BRL	mg/Kg	0.97	0.0048309			10/04/10 23:48	xa
	Xylenes	BRL	mg/Kg	0.97	0.0048309			10/04/10 23:48	xa
	Trifluorotoluene(surr)	95	%	0.97	81-111			10/04/10 23:48	xa
TX 1005	Total Petroleum Hydrocarbons								
	C6-C12	BRL	mg/Kg	1	14.7			10/05/10 22:41	KS
	>C12-C28	BRL	mg/Kg	1	18.4			10/05/10 22:41	KS
	>C28-C35	BRL	mg/Kg	1	19.1			10/05/10 22:41	KS
	Total C6-C35	BRL	mg/Kg	1				10/05/10 22:41	KS
	1-Chlorooctane(surr)	71.8	%	1	60-143			10/05/10 22:41	KS
	Chlorooctadecane(surr)	91.8	%	1	60-150			10/05/10 22:41	KS



LABORATORY TEST RESULTS

Job ID : 10100064

Date 10/12/2010

Client Name: Associated Testing Lab Attn: Jasbir Singh
Project Name: E10-115 / COH projects, Contract 74A-1 & Contract 74A-2

Client Sample ID: S101 / EB-9-11-STA 67+00-68+00 (21'-22') Job Sample ID: 10100064.12
Date Collected: 10/03/10 Sample Matrix: Soil
Time Collected:
Other Information:

Table with 9 columns: Test Method, Parameter/Test Description, Result, Units, DF, Rpt Limit, Reg Limit, Q, Date Time, Analyst. Rows include SW-846 8021B (Purgeable Aromatics) and TX 1005 (Total Petroleum Hydrocarbons).



LABORATORY TEST RESULTS

Job ID : 10100064

Date 10/12/2010

Client Name: Associated Testing Lab Attn: Jasbir Singh
Project Name: E10-115 / COH projects, Contract 74A-1 & Contract 74A-2

Client Sample ID: S108 / EB-10 Near STA 68+00 Job Sample ID: 10100064.13
Date Collected: 10/03/10 Sample Matrix: Soil
Time Collected:
Other Information:

Table with 9 columns: Test Method, Parameter/Test Description, Result, Units, DF, Rpt Limit, Reg Limit, Q, Date Time, Analyst. Rows include SW-846 8021B (Purgeable Aromatics) and TX 1005 (Total Petroleum Hydrocarbons).



LABORATORY TEST RESULTS

Job ID : 10100064

Date 10/12/2010

Client Name: Associated Testing Lab Attn: Jasbir Singh
 Project Name: E10-115 / COH projects, Contract 74A-1 & Contract 74A-2

Client Sample ID: S109 / EB-11 Canemont St (9'-10') Job Sample ID: 10100064.14
 Date Collected: 10/03/10 Sample Matrix: Soil
 Time Collected:
 Other Information:

Test Method	Parameter/Test Description	Result	Units	DF	Rpt Limit	Reg Limit	Q	Date Time	Analyst
SW-846 8021B	Purgeable Aromatics								
	MTBE	BRL	mg/Kg	0.97	0.0048309			10/05/10 00:54	xa
	Benzene	BRL	mg/Kg	0.97	0.0048309			10/05/10 00:54	xa
	Toluene	BRL	mg/Kg	0.97	0.0048309			10/05/10 00:54	xa
	Ethylbenzene	BRL	mg/Kg	0.97	0.0048309			10/05/10 00:54	xa
	m- & p-Xylenes	BRL	mg/Kg	0.97	0.0096618			10/05/10 00:54	xa
	o-Xylene	BRL	mg/Kg	0.97	0.0048309			10/05/10 00:54	xa
	Xylenes	BRL	mg/Kg	0.97	0.0048309			10/05/10 00:54	xa
	Trifluorotoluene(surr)	95.5	%	0.97	81-111			10/05/10 00:54	xa
TX 1005	Total Petroleum Hydrocarbons								
	C6-C12	BRL	mg/Kg	1	14.7			10/05/10 23:48	KS
	>C12-C28	BRL	mg/Kg	1	18.4			10/05/10 23:48	KS
	>C28-C35	BRL	mg/Kg	1	19.1			10/05/10 23:48	KS
	Total C6-C35	BRL	mg/Kg	1				10/05/10 23:48	KS
	1-Chlorooctane(surr)	77.1	%	1	60-143			10/05/10 23:48	KS
	Chlorooctadecane(surr)	99	%	1	60-150			10/05/10 23:48	KS



LABORATORY TEST RESULTS

Job ID : 10100064

Date 10/12/2010

Client Name: Associated Testing Lab Attn: Jasbir Singh
Project Name: E10-115 / COH projects, Contract 74A-1 & Contract 74A-2

Client Sample ID: W-2 / EB-3 Minetta Dr. (W-2) Water Job Sample ID: 10100064.15
Date Collected: 10/02/10 Sample Matrix: Water
Time Collected:
Other Information:

Table with 10 columns: Test Method, Parameter/Test Description, Result, Units, DF, Rpt Limit, Reg Limit, Q, Date Time, Analyst. Rows include Purgeable Aromatics (MTBE, Benzene, Toluene, Ethylbenzene, m- & p-Xylenes, o-Xylene, Xylenes, Trifluorotoluene(surr)) and Volatile Organic Compounds (1,1,1,2-Tetrachloroethane, 1,1,1-Trichloroethane, 1,1,2,2-Tetrachloroethane, 1,1,2-Trichloroethane, 1,1-Dichloroethane, 1,1-Dichloroethylene, 1,1-Dichloropropene, 1,2,3-trichlorobenzene, 1,2,3-Trichloropropane, 1,2,4-Trichlorobenzene, 1,2,4-Trimethylbenzene, 1,2-Dibromo-3-chloropropane, 1,2-Dibromoethane, 1,2-Dichlorobenzene, 1,2-Dichloroethane, 1,2-Dichloropropane, 1,3,5-Trimethylbenzene, 1,3-Dichlorobenzene, 1,3-Dichloropropane, 1,4-Dichlorobenzene, 2,2-Dichloropropane, 2-Chlorotoluene, 4-Chlorotoluene, 4-Isopropyltoluene, Benzene, Bromobenzene, Bromochloromethane, Bromodichloromethane, Bromoform).

Amended report.



LABORATORY TEST RESULTS

Job ID : 10100064

Date 10/12/2010

Client Name: Associated Testing Lab

Attn: Jasbir Singh

Project Name: E10-115 / COH projects, Contract 74A-1 & Contract 74A-2

Client Sample ID: W-2 / EB-3 Minetta Dr. (W-2) Water

Job Sample ID: 10100064.15

Date Collected: 10/02/10

Sample Matrix: Water

Time Collected:

Other Information:

Test Method	Parameter/Test Description	Result	Units	DF	Rpt Limit	Reg Limit	Q	Date Time	Analyst
SW-846 8260B	Volatile Organic Compounds								
	Bromomethane	BRL	mg/L	1	0.005			10/04/10 16:15	HW
	Carbon tetrachloride	BRL	mg/L	1	0.005			10/04/10 16:15	HW
	Chlorobenzene	BRL	mg/L	1	0.005			10/04/10 16:15	HW
	Chloroethane	BRL	mg/L	1	0.005			10/04/10 16:15	HW
	Chloroform	BRL	mg/L	1	0.005			10/04/10 16:15	HW
	Chloromethane	BRL	mg/L	1	0.005			10/04/10 16:15	HW
	cis-1,2-Dichloroethylene	BRL	mg/L	1	0.005			10/04/10 16:15	HW
	cis-1,3-Dichloropropene	BRL	mg/L	1	0.005			10/04/10 16:15	HW
	Dibromochloromethane	BRL	mg/L	1	0.005			10/04/10 16:15	HW
	Dibromomethane	BRL	mg/L	1	0.005			10/04/10 16:15	HW
	Dichlorodifluoromethane	BRL	mg/L	1	0.005			10/04/10 16:15	HW
	Ethylbenzene	BRL	mg/L	1	0.005			10/04/10 16:15	HW
	Isopropylbenzene	BRL	mg/L	1	0.005			10/04/10 16:15	HW
	m- & p-Xylenes	BRL	mg/L	1	0.005			10/04/10 16:15	HW
	MEK	BRL	mg/L	1	0.005			10/04/10 16:15	HW
	Methylene chloride	BRL	mg/L	1	0.005			10/04/10 16:15	HW
	Naphthalene	BRL	mg/L	1	0.005			10/04/10 16:15	HW
	n-Butylbenzene	BRL	mg/L	1	0.005			10/04/10 16:15	HW
	n-Propylbenzene	BRL	mg/L	1	0.005			10/04/10 16:15	HW
	o-Xylene	BRL	mg/L	1	0.005			10/04/10 16:15	HW
	sec-Butylbenzene	BRL	mg/L	1	0.005			10/04/10 16:15	HW
	Styrene	BRL	mg/L	1	0.005			10/04/10 16:15	HW
	t-butylbenzene	BRL	mg/L	1	0.005			10/04/10 16:15	HW
	Tetrachloroethylene	BRL	mg/L	1	0.005			10/04/10 16:15	HW
	Toluene	BRL	mg/L	1	0.005			10/04/10 16:15	HW
	trans-1,2-Dichloroethylene	BRL	mg/L	1	0.005			10/04/10 16:15	HW
	trans-1,3-Dichloropropene	BRL	mg/L	1	0.005			10/04/10 16:15	HW
	Trichloroethylene	BRL	mg/L	1	0.005			10/04/10 16:15	HW
	Trichlorofluoromethane	BRL	mg/L	1	0.005			10/04/10 16:15	HW
	Vinyl Chloride	BRL	mg/L	1	0.005			10/04/10 16:15	HW
	Xylenes	BRL	mg/L	1	0.005			10/04/10 16:15	HW
	Dibromofluoromethane(surr)	107	%	1	70-130			10/04/10 16:15	HW
	1,2-Dichloroethane-d4(surr)	100	%	1	70-130			10/04/10 16:15	HW
	Toluene-d8(surr)	100	%	1	70-130			10/04/10 16:15	HW
	p-Bromofluorobenzene(surr)	92.8	%	1	70-130			10/04/10 16:15	HW
TX 1005	Total Petroleum Hydrocarbons								
	C6-C12	BRL	mg/L	1	1.25			10/06/10 05:19	KS
	>C12-C28	BRL	mg/L	1	1.72			10/06/10 05:19	KS

Amended report.



LABORATORY TEST RESULTS

Job ID : 10100064

Date 10/12/2010

Client Name: Associated Testing Lab Attn: Jasbir Singh
Project Name: E10-115 / COH projects, Contract 74A-1 & Contract 74A-2

Client Sample ID: W-2 / EB-3 Minetta Dr. (W-2) Water Job Sample ID: 10100064.15
Date Collected: 10/02/10 Sample Matrix: Water
Time Collected:
Other Information:

Test Method	Parameter/Test Description	Result	Units	DF	Rpt Limit	Reg Limit	Q	Date Time	Analyst
TX 1005	Total Petroleum Hydrocarbons								
	>C28-C35	BRL	mg/L	1	1.83			10/06/10 05:19	KS
	Total C6-C35	BRL	mg/L	1				10/06/10 05:19	KS
	1-Chlorooctane(surr)	79.3	%	1	60-120			10/06/10 05:19	KS
	Chlorooctadecane(surr)	102	%	1	53-122			10/06/10 05:19	KS



LABORATORY TEST RESULTS

Job ID : 10100064

Date 10/12/2010

Client Name: Associated Testing Lab Attn: Jasbir Singh
Project Name: E10-115 / COH projects, Contract 74A-1 & Contract 74A-2

Client Sample ID: W1 / EB-5 Dunlap St Water Job Sample ID: 10100064.16
Date Collected: 10/01/10 Sample Matrix: Water
Time Collected:
Other Information:

Table with 10 columns: Test Method, Parameter/Test Description, Result, Units, DF, Rpt Limit, Reg Limit, Q, Date Time, Analyst. Rows include Purgeable Aromatics (MTBE, Benzene, Toluene, Ethylbenzene, m- & p-Xylenes, o-Xylene, Xylenes, Trifluorotoluene(surr)) and Volatile Organic Compounds (1,1,1,2-Tetrachloroethane, 1,1,1-Trichloroethane, 1,1,2,2-Tetrachloroethane, 1,1,2-Trichloroethane, 1,1-Dichloroethane, 1,1-Dichloroethylene, 1,1-Dichloropropene, 1,2,3-trichlorobenzene, 1,2,3-Trichloropropane, 1,2,4-Trichlorobenzene, 1,2,4-Trimethylbenzene, 1,2-Dibromo-3-chloropropane, 1,2-Dibromoethane, 1,2-Dichlorobenzene, 1,2-Dichloroethane, 1,2-Dichloropropane, 1,3,5-Trimethylbenzene, 1,3-Dichlorobenzene, 1,3-Dichloropropane, 1,4-Dichlorobenzene, 2,2-Dichloropropane, 2-Chlorotoluene, 4-Chlorotoluene, 4-Isopropyltoluene, Benzene, Bromobenzene, Bromochloromethane, Bromodichloromethane, Bromoform).

Amended report.



LABORATORY TEST RESULTS

Job ID : 10100064

Date 10/12/2010

Client Name: Associated Testing Lab Attn: Jasbir Singh
Project Name: E10-115 / COH projects, Contract 74A-1 & Contract 74A-2

Client Sample ID: W1 / EB-5 Dunlap St Water Job Sample ID: 10100064.16
Date Collected: 10/01/10 Sample Matrix: Water
Time Collected:
Other Information:

Table with columns: Test Method, Parameter/Test Description, Result, Units, DF, Rpt Limit, Reg Limit, Q, Date Time, Analyst. Rows include SW-846 8260B (Volatile Organic Compounds) and TX 1005 (Total Petroleum Hydrocarbons).

Amended report.



LABORATORY TEST RESULTS

Job ID : 10100064

Date 10/12/2010

Client Name: Associated Testing Lab Attn: Jasbir Singh
Project Name: E10-115 / COH projects, Contract 74A-1 & Contract 74A-2

Client Sample ID: W1 / EB-5 Dunlap St Water Job Sample ID: 10100064.16
Date Collected: 10/01/10 Sample Matrix: Water
Time Collected:
Other Information:

Test Method	Parameter/Test Description	Result	Units	DF	Rpt Limit	Reg Limit	Q	Date Time	Analyst
TX 1005	Total Petroleum Hydrocarbons								
	>C28-C35	BRL	mg/L	1	1.83			10/06/10 05:41	KS
	Total C6-C35	BRL	mg/L	1				10/06/10 05:41	KS
	1-Chlorooctane(surr)	67.9	%	1	60-120			10/06/10 05:41	KS
	Chlorooctadecane(surr)	108	%	1	53-122			10/06/10 05:41	KS



LABORATORY TEST RESULTS

Job ID : 10100064

Date 10/12/2010

Client Name: Associated Testing Lab

Attn: Jasbir Singh

Project Name: E10-115 / COH projects, Contract 74A-1 & Contract 74A-2

Client Sample ID: W6 /EB-8 between-STA 66+00+67+00 Water

Job Sample ID: 10100064.17

Date Collected: 10/03/10

Sample Matrix Water

Time Collected:

Other Information:

Test Method	Parameter/Test Description	Result	Units	DF	Rpt Limit	Reg Limit	Q	Date Time	Analyst
SW-846 8021B	Purgeable Aromatics								
	MTBE	BRL	mg/L	1	0.002			10/04/10 17:11	xa
	Benzene	BRL	mg/L	1	0.002			10/04/10 17:11	xa
	Toluene	BRL	mg/L	1	0.002			10/04/10 17:11	xa
	Ethylbenzene	BRL	mg/L	1	0.002			10/04/10 17:11	xa
	m- & p-Xylenes	BRL	mg/L	1	0.004			10/04/10 17:11	xa
	o-Xylene	BRL	mg/L	1	0.002			10/04/10 17:11	xa
	Xylenes	BRL	mg/L	1	0.002			10/04/10 17:11	xa
	Trifluorotoluene(surr)	88.1	%	1	75-125			10/04/10 17:11	xa
SW-846 8260B	Volatile Organic Compounds								
	1,1,1,2-Tetrachloroethane	BRL	mg/L	1	0.005			10/04/10 17:47	HW
	1,1,1-Trichloroethane	BRL	mg/L	1	0.005			10/04/10 17:47	HW
	1,1,2,2-Tetrachloroethane	BRL	mg/L	1	0.005			10/04/10 17:47	HW
	1,1,2-Trichloroethane	BRL	mg/L	1	0.005			10/04/10 17:47	HW
	1,1-Dichloroethane	BRL	mg/L	1	0.005			10/04/10 17:47	HW
	1,1-Dichloroethylene	BRL	mg/L	1	0.005			10/04/10 17:47	HW
	1,1-Dichloropropene	BRL	mg/L	1	0.005			10/04/10 17:47	HW
	1,2,3-trichlorobenzene	BRL	mg/L	1	0.005			10/04/10 17:47	HW
	1,2,3-Trichloropropane	BRL	mg/L	1	0.005			10/04/10 17:47	HW
	1,2,4-Trichlorobenzene	BRL	mg/L	1	0.005			10/04/10 17:47	HW
	1,2,4-Trimethylbenzene	BRL	mg/L	1	0.005			10/04/10 17:47	HW
	1,2-Dibromo-3-chloropropane	BRL	mg/L	1	0.005			10/04/10 17:47	HW
	1,2-Dibromoethane	BRL	mg/L	1	0.005			10/04/10 17:47	HW
	1,2-Dichlorobenzene	BRL	mg/L	1	0.005			10/04/10 17:47	HW
	1,2-Dichloroethane	BRL	mg/L	1	0.005			10/04/10 17:47	HW
	1,2-Dichloropropane	BRL	mg/L	1	0.005			10/04/10 17:47	HW
	1,3,5-Trimethylbenzene	BRL	mg/L	1	0.005			10/04/10 17:47	HW
	1,3-Dichlorobenzene	BRL	mg/L	1	0.005			10/04/10 17:47	HW
	1,3-Dichloropropane	BRL	mg/L	1	0.005			10/04/10 17:47	HW
	1,4-Dichlorobenzene	BRL	mg/L	1	0.005			10/04/10 17:47	HW
	2,2-Dichloropropane	BRL	mg/L	1	0.005			10/04/10 17:47	HW
	2-Chlorotoluene	BRL	mg/L	1	0.005			10/04/10 17:47	HW
	4-Chlorotoluene	BRL	mg/L	1	0.005			10/04/10 17:47	HW
	4-Isopropyltoluene	BRL	mg/L	1	0.005			10/04/10 17:47	HW
	Benzene	BRL	mg/L	1	0.005			10/04/10 17:47	HW
	Bromobenzene	BRL	mg/L	1	0.005			10/04/10 17:47	HW
	Bromochloromethane	BRL	mg/L	1	0.005			10/04/10 17:47	HW
	Bromodichloromethane	BRL	mg/L	1	0.005			10/04/10 17:47	HW
	Bromoform	BRL	mg/L	1	0.005			10/04/10 17:47	HW

Amended report.



LABORATORY TEST RESULTS

Job ID : 10100064

Date 10/12/2010

Client Name: Associated Testing Lab Attn: Jasbir Singh
Project Name: E10-115 / COH projects, Contract 74A-1 & Contract 74A-2

Client Sample ID: W6 /EB-8 between-STA 66+00+67+00 Water Job Sample ID: 10100064.17
Date Collected: 10/03/10 Sample Matrix: Water
Time Collected:
Other Information:

Table with columns: Test Method, Parameter/Test Description, Result, Units, DF, Rpt Limit, Reg Limit, Q, Date Time, Analyst. Rows include SW-846 8260B Volatile Organic Compounds (listing various compounds like Bromomethane, Carbon tetrachloride, etc.) and TX 1005 Total Petroleum Hydrocarbons (listing C6-C12 and >C12-C28).

Amended report.



LABORATORY TEST RESULTS

Job ID : 10100064

Date 10/12/2010

Client Name: Associated Testing Lab Attn: Jasbir Singh
Project Name: E10-115 / COH projects, Contract 74A-1 & Contract 74A-2

Client Sample ID: W6 /EB-8 between-STA 66+00+67+00 Water Job Sample ID: 10100064.17
Date Collected: 10/03/10 Sample Matrix: Water
Time Collected:
Other Information:

Test Method	Parameter/Test Description	Result	Units	DF	Rpt Limit	Reg Limit	Q	Date Time	Analyst
TX 1005	Total Petroleum Hydrocarbons								
	>C28-C35	BRL	mg/L	1	1.83			10/06/10 06:04	KS
	Total C6-C35	BRL	mg/L	1				10/06/10 06:04	KS
	1-Chlorooctane(surr)	71.6	%	1	60-120			10/06/10 06:04	KS
	Chlorooctadecane(surr)	94.5	%	1	53-122			10/06/10 06:04	KS



LABORATORY TEST RESULTS

Job ID : 10100064

Date 10/12/2010

Client Name: Associated Testing Lab Attn: Jasbir Singh
Project Name: E10-115 / COH projects, Contract 74A-1 & Contract 74A-2

Client Sample ID: W5 / EB-9-11-STA 67+00+68+00 Water Job Sample ID: 10100064.18
Date Collected: 10/03/10 Sample Matrix: Water
Time Collected:
Other Information:

Table with 10 columns: Test Method, Parameter/Test Description, Result, Units, DF, Rpt Limit, Reg Limit, Q, Date Time, Analyst. Rows include Purgeable Aromatics (MTBE, Benzene, Toluene, Ethylbenzene, m- & p-Xylenes, o-Xylene, Xylenes, Trifluorotoluene(surr)) and Volatile Organic Compounds (1,1,1,2-Tetrachloroethane, 1,1,1-Trichloroethane, 1,1,2,2-Tetrachloroethane, 1,1,2-Trichloroethane, 1,1-Dichloroethane, 1,1-Dichloroethylene, 1,1-Dichloropropene, 1,2,3-trichlorobenzene, 1,2,3-Trichloropropane, 1,2,4-Trichlorobenzene, 1,2,4-Trimethylbenzene, 1,2-Dibromo-3-chloropropane, 1,2-Dibromoethane, 1,2-Dichlorobenzene, 1,2-Dichloroethane, 1,2-Dichloropropane, 1,3,5-Trimethylbenzene, 1,3-Dichlorobenzene, 1,3-Dichloropropane, 1,4-Dichlorobenzene, 2,2-Dichloropropane, 2-Chlorotoluene, 4-Chlorotoluene, 4-Isopropyltoluene, Benzene, Bromobenzene, Bromochloromethane, Bromodichloromethane, Bromoform).

Amended report.



LABORATORY TEST RESULTS

Job ID : 10100064

Date 10/12/2010

Client Name: Associated Testing Lab Attn: Jasbir Singh
Project Name: E10-115 / COH projects, Contract 74A-1 & Contract 74A-2

Client Sample ID: W5 / EB-9-11-STA 67+00+68+00 Water Job Sample ID: 10100064.18
Date Collected: 10/03/10 Sample Matrix: Water
Time Collected:
Other Information:

Table with 10 columns: Test Method, Parameter/Test Description, Result, Units, DF, Rpt Limit, Reg Limit, Q, Date Time, Analyst. Rows include SW-846 8260B (Volatile Organic Compounds) and TX 1005 (Total Petroleum Hydrocarbons).

Amended report.



LABORATORY TEST RESULTS

Job ID : 10100064

Date 10/12/2010

Client Name: Associated Testing Lab Attn: Jasbir Singh
Project Name: E10-115 / COH projects, Contract 74A-1 & Contract 74A-2

Client Sample ID: W5 / EB-9-11-STA 67+00+68+00 Water Job Sample ID: 10100064.18
Date Collected: 10/03/10 Sample Matrix: Water
Time Collected:
Other Information:

Test Method	Parameter/Test Description	Result	Units	DF	Rpt Limit	Reg Limit	Q	Date Time	Analyst
TX 1005	Total Petroleum Hydrocarbons								
	>C28-C35	BRL	mg/L	1	1.83			10/06/10 06:26	KS
	Total C6-C35	BRL	mg/L	1				10/06/10 06:26	KS
	1-Chlorooctane(surr)	78.5	%	1	60-120			10/06/10 06:26	KS
	Chlorooctadecane(surr)	95.5	%	1	53-122			10/06/10 06:26	KS



LABORATORY TEST RESULTS

Job ID : 10100064

Date 10/12/2010

Client Name: Associated Testing Lab Attn: Jasbir Singh
Project Name: E10-115 / COH projects, Contract 74A-1 & Contract 74A-2

Client Sample ID: W4 / EB-10 Near STA 68+00 Water Job Sample ID: 10100064.19
Date Collected: 10/03/10 Sample Matrix: Water
Time Collected:
Other Information:

Table with 10 columns: Test Method, Parameter/Test Description, Result, Units, DF, Rpt Limit, Reg Limit, Q, Date Time, Analyst. Rows include Purgeable Aromatics (MTBE, Benzene, Toluene, Ethylbenzene, m- & p-Xylenes, o-Xylene, Xylenes, Trifluorotoluene(surr)) and Volatile Organic Compounds (1,1,1,2-Tetrachloroethane, 1,1,1-Trichloroethane, 1,1,2,2-Tetrachloroethane, 1,1,2-Trichloroethane, 1,1-Dichloroethane, 1,1-Dichloroethylene, 1,1-Dichloropropene, 1,2,3-trichlorobenzene, 1,2,3-Trichloropropane, 1,2,4-Trichlorobenzene, 1,2,4-Trimethylbenzene, 1,2-Dibromo-3-chloropropane, 1,2-Dibromoethane, 1,2-Dichlorobenzene, 1,2-Dichloroethane, 1,2-Dichloropropane, 1,3,5-Trimethylbenzene, 1,3-Dichlorobenzene, 1,3-Dichloropropane, 1,4-Dichlorobenzene, 2,2-Dichloropropane, 2-Chlorotoluene, 4-Chlorotoluene, 4-Isopropyltoluene, Benzene, Bromobenzene, Bromochloromethane, Bromodichloromethane, Bromoform).

Amended report.



LABORATORY TEST RESULTS

Job ID : 10100064

Date 10/12/2010

Client Name: Associated Testing Lab Attn: Jasbir Singh
Project Name: E10-115 / COH projects, Contract 74A-1 & Contract 74A-2

Client Sample ID: W4 / EB-10 Near STA 68+00 Water Job Sample ID: 10100064.19
Date Collected: 10/03/10 Sample Matrix: Water
Time Collected:
Other Information:

Table with 10 columns: Test Method, Parameter/Test Description, Result, Units, DF, Rpt Limit, Reg Limit, Q, Date Time, Analyst. Rows include SW-846 8260B (Volatile Organic Compounds) and TX 1005 (Total Petroleum Hydrocarbons).

Amended report.



LABORATORY TEST RESULTS

Job ID : 10100064

Date 10/12/2010

Client Name: Associated Testing Lab

Attn: Jasbir Singh

Project Name: E10-115 / COH projects, Contract 74A-1 & Contract 74A-2

Client Sample ID: W4 / EB-10 Near STA 68+00 Water

Job Sample ID: 10100064.19

Date Collected: 10/03/10

Sample Matrix: Water

Time Collected:

Other Information:

Test Method	Parameter/Test Description	Result	Units	DF	Rpt Limit	Reg Limit	Q	Date Time	Analyst
TX 1005	Total Petroleum Hydrocarbons								
	>C28-C35	9.79	mg/L	1	1.83			10/06/10 06:48	KS
	Total C6-C35	16.56	mg/L	1				10/06/10 06:48	KS
	1-Chlorooctane(surr)	79.3	%	1	60-120			10/06/10 06:48	KS
	Chlorooctadecane(surr)	120	%	1	53-122			10/06/10 06:48	KS



LABORATORY TEST RESULTS

Job ID : 10100064

Date 10/12/2010

Client Name: Associated Testing Lab Attn: Jasbir Singh
Project Name: E10-115 / COH projects, Contract 74A-1 & Contract 74A-2

Client Sample ID: W3 / EB-11 Canemont St Water Job Sample ID: 10100064.20
Date Collected: 10/03/10 Sample Matrix: Water
Time Collected:
Other Information:

Table with 9 columns: Test Method, Parameter/Test Description, Result, Units, DF, Rpt Limit, Reg Limit, Q, Date Time, Analyst. Rows include Purgeable Aromatics (MTBE, Benzene, Toluene, Ethylbenzene, m- & p-Xylenes, o-Xylene, Xylenes, Trifluorotoluene(surr)) and Volatile Organic Compounds (1,1,1,2-Tetrachloroethane, 1,1,1-Trichloroethane, 1,1,2,2-Tetrachloroethane, 1,1,2-Trichloroethane, 1,1-Dichloroethane, 1,1-Dichloroethylene, 1,1-Dichloropropene, 1,2,3-trichlorobenzene, 1,2,3-Trichloropropane, 1,2,4-Trichlorobenzene, 1,2,4-Trimethylbenzene, 1,2-Dibromo-3-chloropropane, 1,2-Dibromoethane, 1,2-Dichlorobenzene, 1,2-Dichloroethane, 1,2-Dichloropropane, 1,3,5-Trimethylbenzene, 1,3-Dichlorobenzene, 1,3-Dichloropropane, 1,4-Dichlorobenzene, 2,2-Dichloropropane, 2-Chlorotoluene, 4-Chlorotoluene, 4-Isopropyltoluene, Benzene, Bromobenzene, Bromochloromethane, Bromodichloromethane, Bromoform).

Amended report.



LABORATORY TEST RESULTS

Job ID : 10100064

Date 10/12/2010

Client Name: Associated Testing Lab Attn: Jasbir Singh
 Project Name: E10-115 / COH projects, Contract 74A-1 & Contract 74A-2

Client Sample ID: W3 / EB-11 Canemont St Water Job Sample ID: 10100064.20
 Date Collected: 10/03/10 Sample Matrix: Water
 Time Collected:
 Other Information:

Test Method	Parameter/Test Description	Result	Units	DF	Rpt Limit	Reg Limit	Q	Date Time	Analyst
SW-846 8260B	Volatile Organic Compounds								
	Bromomethane	BRL	mg/L	1	0.005			10/04/10 19:20	HW
	Carbon tetrachloride	BRL	mg/L	1	0.005			10/04/10 19:20	HW
	Chlorobenzene	BRL	mg/L	1	0.005			10/04/10 19:20	HW
	Chloroethane	BRL	mg/L	1	0.005			10/04/10 19:20	HW
	Chloroform	BRL	mg/L	1	0.005			10/04/10 19:20	HW
	Chloromethane	BRL	mg/L	1	0.005			10/04/10 19:20	HW
	cis-1,2-Dichloroethylene	BRL	mg/L	1	0.005			10/04/10 19:20	HW
	cis-1,3-Dichloropropene	BRL	mg/L	1	0.005			10/04/10 19:20	HW
	Dibromochloromethane	BRL	mg/L	1	0.005			10/04/10 19:20	HW
	Dibromomethane	BRL	mg/L	1	0.005			10/04/10 19:20	HW
	Dichlorodifluoromethane	BRL	mg/L	1	0.005			10/04/10 19:20	HW
	Ethylbenzene	BRL	mg/L	1	0.005			10/04/10 19:20	HW
	Isopropylbenzene	BRL	mg/L	1	0.005			10/04/10 19:20	HW
	m- & p-Xylenes	BRL	mg/L	1	0.005			10/04/10 19:20	HW
	MEK	BRL	mg/L	1	0.005			10/04/10 19:20	HW
	Methylene chloride	BRL	mg/L	1	0.005			10/04/10 19:20	HW
	Naphthalene	BRL	mg/L	1	0.005			10/04/10 19:20	HW
	n-Butylbenzene	BRL	mg/L	1	0.005			10/04/10 19:20	HW
	n-Propylbenzene	BRL	mg/L	1	0.005			10/04/10 19:20	HW
	o-Xylene	BRL	mg/L	1	0.005			10/04/10 19:20	HW
	sec-Butylbenzene	BRL	mg/L	1	0.005			10/04/10 19:20	HW
	Styrene	BRL	mg/L	1	0.005			10/04/10 19:20	HW
	t-butylbenzene	BRL	mg/L	1	0.005			10/04/10 19:20	HW
	Tetrachloroethylene	BRL	mg/L	1	0.005			10/04/10 19:20	HW
	Toluene	BRL	mg/L	1	0.005			10/04/10 19:20	HW
	trans-1,2-Dichloroethylene	BRL	mg/L	1	0.005			10/04/10 19:20	HW
	trans-1,3-Dichloropropene	BRL	mg/L	1	0.005			10/04/10 19:20	HW
	Trichloroethylene	BRL	mg/L	1	0.005			10/04/10 19:20	HW
	Trichlorofluoromethane	BRL	mg/L	1	0.005			10/04/10 19:20	HW
	Vinyl Chloride	BRL	mg/L	1	0.005			10/04/10 19:20	HW
	Xylenes	BRL	mg/L	1	0.005			10/04/10 19:20	HW
	1,2-Dichloroethane-d4(surr)	103	%	1	70-130			10/04/10 19:20	HW
	Dibromofluoromethane(surr)	104	%	1	70-130			10/04/10 19:20	HW
	p-Bromofluorobenzene(surr)	96.8	%	1	70-130			10/04/10 19:20	HW
	Toluene-d8(surr)	96.6	%	1	70-130			10/04/10 19:20	HW
TX 1005	Total Petroleum Hydrocarbons								
	C6-C12	BRL	mg/L	1	1.25			10/06/10 07:10	KS
	>C12-C28	BRL	mg/L	1	1.72			10/06/10 07:10	KS

Amended report.



LABORATORY TEST RESULTS

Job ID : 10100064

Date 10/12/2010

Client Name: Associated Testing Lab Attn: Jasbir Singh
Project Name: E10-115 / COH projects, Contract 74A-1 & Contract 74A-2

Client Sample ID: W3 / EB-11 Canemont St Water Job Sample ID: 10100064.20
Date Collected: 10/03/10 Sample Matrix: Water
Time Collected:
Other Information:

Test Method	Parameter/Test Description	Result	Units	DF	Rpt Limit	Reg Limit	Q	Date Time	Analyst
TX 1005	Total Petroleum Hydrocarbons								
	>C28-C35	BRL	mg/L	1	1.83			10/06/10 07:10	KS
	Total C6-C35	BRL	mg/L	1				10/06/10 07:10	KS
	1-Chlorooctane(surr)	70.3	%	1	60-120			10/06/10 07:10	KS
	Chlorooctadecane(surr)	92.3	%	1	53-122			10/06/10 07:10	KS

QUALITY CONTROL CERTIFICATE



Job ID : 10100064

Date : 10/12/2010

Analysis : Volatile Organic Compounds Method : SW-846 8260B Reporting Units : mg/Kg

QC Batch ID : Qb10100520 Created Date : 10/04/10 Created By : Whuimei

Samples in This QC Batch : 10100064.02,04,08

Sample Preparation : PB10100517 Prep Method : SW-846 5035A Prep Date : 10/04/10 15:00 Prep By : Whuimei

QC Type: Method Blank

Parameter	CAS #	Result	Units	D.F.	RptLimit	Qual
1,1,1,2-Tetrachloroethane	630-20-6	BRL	mg/Kg	1	0.005	
1,1,1-Trichloroethane	71-55-6	BRL	mg/Kg	1	0.005	
1,1,2,2-Tetrachloroethane	79-34-5	BRL	mg/Kg	1	0.005	
1,1,2-Trichloroethane	79-00-5	BRL	mg/Kg	1	0.005	
1,1-Dichloroethane	75-34-3	BRL	mg/Kg	1	0.005	
1,1-Dichloroethylene	75-35-4	BRL	mg/Kg	1	0.005	
1,1-Dichloropropene	563-58-6	BRL	mg/Kg	1	0.005	
1,2,3-trichlorobenzene	87-61-6	BRL	mg/Kg	1	0.005	
1,2,3-Trichloropropane	96-18-4	BRL	mg/Kg	1	0.005	
1,2,4-Trichlorobenzene	120-82-1	BRL	mg/Kg	1	0.005	
1,2,4-Trimethylbenzene	95-63-6	BRL	mg/Kg	1	0.005	
1,2-Dibromo-3-chloropropa	96-12-8	BRL	mg/Kg	1	0.005	
1,2-Dibromoethane	106-93-4	BRL	mg/Kg	1	0.005	
1,2-Dichlorobenzene	95-50-1	BRL	mg/Kg	1	0.005	
1,2-Dichloroethane	107-06-2	BRL	mg/Kg	1	0.005	
1,2-Dichloropropane	78-87-5	BRL	mg/Kg	1	0.005	
1,3,5-Trimethylbenzene	108-67-8	BRL	mg/Kg	1	0.005	
1,3-Dichlorobenzene	541-73-1	BRL	mg/Kg	1	0.005	
1,3-Dichloropropane	142-28-9	BRL	mg/Kg	1	0.005	
1,4-Dichlorobenzene	106-46-7	BRL	mg/Kg	1	0.005	
2,2-Dichloropropane	594-20-7	BRL	mg/Kg	1	0.005	
2-Chlorotoluene	95-49-8	BRL	mg/Kg	1	0.005	
4-Chlorotoluene	106-43-4	BRL	mg/Kg	1	0.005	
4-Isopropyltoluene	99-87-6	BRL	mg/Kg	1	0.005	
Benzene	71-43-2	BRL	mg/Kg	1	0.005	
Bromobenzene	108-86-1	BRL	mg/Kg	1	0.005	
Bromochloromethane	74-97-5	BRL	mg/Kg	1	0.005	
Bromodichloromethane	75-27-4	BRL	mg/Kg	1	0.005	
Bromoform	75-25-2	BRL	mg/Kg	1	0.005	
Bromomethane	74-83-9	BRL	mg/Kg	1	0.005	
Carbon tetrachloride	56-23-5	BRL	mg/Kg	1	0.005	
Chlorobenzene	108-90-7	BRL	mg/Kg	1	0.005	
Chloroethane	75-00-3	BRL	mg/Kg	1	0.005	
Chloroform	67-66-3	BRL	mg/Kg	1	0.005	
Chloromethane	74-87-3	BRL	mg/Kg	1	0.005	
cis-1,2-Dichloroethylene	156-59-2	BRL	mg/Kg	1	0.005	
cis-1,3-Dichloropropene	10061-01-5	BRL	mg/Kg	1	0.005	
Dibromochloromethane	124-48-1	BRL	mg/Kg	1	0.005	
Dibromomethane	74-95-3	BRL	mg/Kg	1	0.005	
Dichlorodifluoromethane	75-71-8	BRL	mg/Kg	1	0.005	

Amended report.

Refer to the Definition page for terms.

QUALITY CONTROL CERTIFICATE



Job ID : 10100064

Date : 10/12/2010

Analysis : Volatile Organic Compounds Method : SW-846 8260B Reporting Units : mg/Kg

QC Batch ID : Qb10100520 Created Date : 10/04/10 Created By : Whuimei

Samples in This QC Batch : 10100064,02,04,08

QC Type: Method Blank

Parameter	CAS #	Result	Units	D.F.	RptLimit	Qual
Ethylbenzene	100-41-4	BRL	mg/Kg	1	0.005	
Isopropylbenzene	98-82-8	BRL	mg/Kg	1	0.005	
m- & p-Xylenes	108-38-3&106-42-3	BRL	mg/Kg	1	0.01	
MEK	78-93-3	BRL	mg/Kg	1	0.005	
Methylene chloride	75-09-2	BRL	mg/Kg	1	0.005	
Naphthalene	91-20-3	BRL	mg/Kg	1	0.005	
n-Butylbenzene	104-51-8	BRL	mg/Kg	1	0.005	
n-Propylbenzene	103-65-1	BRL	mg/Kg	1	0.005	
o-Xylene	95-47-6	BRL	mg/Kg	1	0.005	
sec-Butylbenzene	135-98-8	BRL	mg/Kg	1	0.005	
Styrene	100-42-5	BRL	mg/Kg	1	0.005	
t-butylbenzene	98-06-6	BRL	mg/Kg	1	0.005	
Tetrachloroethylene	127-18-4	BRL	mg/Kg	1	0.005	
Toluene	108-88-3	BRL	mg/Kg	1	0.005	
trans-1,2-Dichloroethylene	156-60-5	BRL	mg/Kg	1	0.005	
trans-1,3-Dichloropropene	10061-02-6	BRL	mg/Kg	1	0.005	
Trichloroethylene	79-01-6	BRL	mg/Kg	1	0.005	
Trichlorofluoromethane	75-69-4	BRL	mg/Kg	1	0.005	
Vinyl Chloride	75-01-4	BRL	mg/Kg	1	0.005	

QC Type: LCS and LCSD

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
1,1,1,2-Tetrachloroethane	0.02	0.02	100	0.02	0.02	100	0	35	78-126	
1,1,1-Trichloroethane	0.02	0.02	100	0.02	0.023	115	14	35	75-134	
1,1,2,2-Tetrachloroethane	0.02	0.027	135	0.02	0.025	125	7.7	35	72-138	
1,1,2-Trichloroethane	0.02	0.023	115	0.02	0.022	110	4.4	35	64-117	
1,1-Dichloroethane	0.02	0.022	110	0.02	0.023	115	4.4	35	79-129	
1,1-Dichloroethylene	0.02	0.021	105	0.02	0.023	115	9.1	35	74-139	
1,1-Dichloropropene	0.02	0.019	95	0.02	0.023	115	19	35	80-128	
1,2,3-trichlorobenzene	0.02	0.017	85	0.02	0.019	95	11.1	35	42-139	
1,2,3-Trichloropropane	0.02	0.02	100	0.02	0.022	110	9.5	35	74-130	
1,2,4-Trichlorobenzene	0.02	0.015	75	0.02	0.019	95	23.5	35	80-120	L2
1,2,4-Trimethylbenzene	0.02	0.018	90	0.02	0.02	100	10.5	35	58-130	
1,2-Dibromo-3-chloropropa	0.02	0.02	100	0.02	0.021	105	4.9	35	69-135	
1,2-Dibromoethane	0.02	0.021	105	0.02	0.021	105	0	35	74-133	
1,2-Dichlorobenzene	0.02	0.019	95	0.02	0.02	100	5.1	35	81-126	
1,2-Dichloroethane	0.02	0.021	105	0.02	0.022	110	4.6	35	78-128	
1,2-Dichloropropane	0.02	0.022	110	0.02	0.022	110	0	35	80-125	

Amended report.

Refer to the Definition page for terms.

QUALITY CONTROL CERTIFICATE



Job ID : 10100064

Date : 10/12/2010

Analysis : Volatile Organic Compounds

Method : SW-846 8260B

Reporting Units : mg/Kg

QC Batch ID : Qb10100520 Created Date : 10/04/10

Created By : Whuimei

Samples in This QC Batch : 10100064.02,04,08

QC Type: LCS and LCSD

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
1,3,5-Trimethylbenzene	0.02	0.017	85	0.02	0.02	100	16.2	35	82-120	
1,3-Dichlorobenzene	0.02	0.017	85	0.02	0.02	100	16.2	35	77-128	
1,3-Dichloropropane	0.02	0.021	105	0.02	0.022	110	4.6	35	66-115	
1,4-Dichlorobenzene	0.02	0.017	85	0.02	0.019	95	11.1	35	77-127	
2,2-Dichloropropane	0.02	0.019	95	0.02	0.022	110	14.6	35	74-129	
2-Chlorotoluene	0.02	0.019	95	0.02	0.022	110	14.6	35	80-121	
4-Chlorotoluene	0.02	0.018	90	0.02	0.021	105	15.4	35	83-119	
4-Isopropyltoluene	0.02	0.016	80	0.02	0.02	100	22.2	35	80-121	
Benzene	0.02	0.02	100	0.02	0.022	110	9.5	35	80-123	
Bromobenzene	0.02	0.018	90	0.02	0.019	95	5.4	35	80-125	
Bromochloromethane	0.02	0.023	115	0.02	0.023	115	0	35	76-134	
Bromodichloromethane	0.02	0.021	105	0.02	0.022	110	4.6	35	85-119	
Bromoform	0.02	0.02	100	0.02	0.02	100	0	35	70-135	
Bromomethane	0.02	0.018	90	0.02	0.02	100	10.5	35	80-141	
Carbon tetrachloride	0.02	0.019	95	0.02	0.021	105	10	35	82-123	
Chlorobenzene	0.02	0.019	95	0.02	0.02	100	5.1	35	77-121	
Chloroethane	0.02	0.018	90	0.02	0.021	105	15.4	35	78-131	
Chloroform	0.02	0.021	105	0.02	0.022	110	4.6	35	79-129	
Chloromethane	0.02	0.02	100	0.02	0.022	110	9.5	35	74-130	
cis-1,2-Dichloroethylene	0.02	0.022	110	0.02	0.023	115	4.4	35	68-131	
cis-1,3-Dichloropropene	0.02	0.021	105	0.02	0.022	110	4.6	35	76-124	
Dibromochloromethane	0.02	0.02	100	0.02	0.02	100	0	35	62-119	
Dibromomethane	0.02	0.021	105	0.02	0.022	110	4.6	35	79-134	
Dichlorodifluoromethane	0.02	0.019	95	0.02	0.023	115	19	35	62-137	
Ethylbenzene	0.02	0.018	90	0.02	0.021	105	15.4	35	84-117	
Isopropylbenzene	0.02	0.018	90	0.02	0.021	105	15.4	35	79-122	
m- & p-Xylenes	0.04	0.037	92.5	0.04	0.042	105	12.7	35	77-124	
MEK	0.02	0.019	95	0.02	0.021	105	10	35	50-168	
Methylene chloride	0.02	0.023	115	0.02	0.022	110	4.4	35	69-133	
Naphthalene	0.02	0.018	90	0.02	0.019	95	5.4	35	71-131	
n-Butylbenzene	0.02	0.018	90	0.02	0.02	100	10.5	35	76-132	
n-Propylbenzene	0.02	0.017	85	0.02	0.021	105	21.1	35	81-123	
o-Xylene	0.02	0.019	95	0.02	0.021	105	10	35	84-116	
sec-Butylbenzene	0.02	0.017	85	0.02	0.02	100	16.2	35	79-126	
Styrene	0.02	0.019	95	0.02	0.021	105	10	35	78-126	
t-butylbenzene	0.02	0.019	95	0.02	0.021	105	10	35	78-126	
Tetrachloroethylene	0.02	0.014	70	0.02	0.018	90	25	35	70-140	
Toluene	0.02	0.019	95	0.02	0.021	105	10	35	78-121	
trans-1,2-Dichloroethylene	0.02	0.021	105	0.02	0.022	110	4.6	35	78-129	
trans-1,3-Dichloropropene	0.02	0.018	90	0.02	0.021	105	15.4	35	69-115	
Trichloroethylene	0.02	0.018	90	0.02	0.02	100	10.5	35	75-128	
Trichlorofluoromethane	0.02	0.021	105	0.02	0.023	115	9.1	35	70-139	

Amended report.

Refer to the Definition page for terms.

QUALITY CONTROL CERTIFICATE



Job ID : 10100064

Date : 10/12/2010

Analysis : Volatile Organic Compounds Method : SW-846 8260B Reporting Units : mg/Kg

QC Batch ID : Qb10100520 Created Date : 10/04/10 Created By : Whulmei

Samples in This QC Batch : 10100064.02,04,08

QC Type: LCS and LCSD										
Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrLimit	%Recovery CtrLimit	Qual
Vinyl Chloride	0.02	0.02	100	0.02	0.02	100	0	35	72-130	

QC Type: MS and MSD											
QC Sample ID: 10100064.08											
Parameter	Sample Result	MS Spk Added	MS Result	MS % Rec	MSD Spk Added	MSD Result	MSD % Rec	RPD	RPD CtrLimit	%Rec CtrLimit	Qual
1,1,1,2-Tetrachloroethane	BRL	0.02	0.019	95						72-139	
1,1,1-Trichloroethane	BRL	0.02	0.021	105						82-137	
1,1,2,2-Tetrachloroethane	BRL	0.02	0.022	110						55-149	
1,1,2-Trichloroethane	BRL	0.02	0.02	100						68-139	
1,1-Dichloroethane	BRL	0.02	0.021	105						78-134	
1,1-Dichloroethylene	BRL	0.02	0.021	105						65-141	
1,1-Dichloropropene	BRL	0.02	0.021	105						79-136	
1,2,3-trichlorobenzene	BRL	0.02	0.016	80						54-144	
1,2,3-Trichloropropane	BRL	0.02	0.018	90						58-156	
1,2,4-Trichlorobenzene	BRL	0.02	0.016	80						69-127	
1,2,4-Trimethylbenzene	BRL	0.02	0.019	95						80-131	
1,2-Dibromo-3-chloropropa	BRL	0.02	0.018	90						61-145	
1,2-Dibromoethane	BRL	0.02	0.019	95						68-140	
1,2-Dichlorobenzene	BRL	0.02	0.018	90						70-138	
1,2-Dichloroethane	BRL	0.02	0.02	100						67-152	
1,2-Dichloropropane	BRL	0.02	0.019	95						79-135	
1,3,5-Trimethylbenzene	BRL	0.02	0.019	95						79-133	
1,3-Dichlorobenzene	BRL	0.02	0.018	90						79-128	
1,3-Dichloropropane	BRL	0.02	0.02	100						70-147	
1,4-Dichlorobenzene	BRL	0.02	0.018	90						76-127	
2,2-Dichloropropane	BRL	0.02	0.019	95						60-129	
2-Chlorotoluene	BRL	0.02	0.02	100						83-130	
4-Chlorotoluene	BRL	0.02	0.019	95						82-129	
4-Isopropyltoluene	BRL	0.02	0.019	95						78-129	
Benzene	BRL	0.02	0.02	100						73-129	
Bromobenzene	BRL	0.02	0.018	90						76-132	
Bromochloromethane	BRL	0.02	0.02	100						76-135	
Bromodichloromethane	BRL	0.02	0.02	100						80-136	
Bromoform	BRL	0.02	0.018	90						65-139	
Bromomethane	BRL	0.02	0.018	90						65-150	
Carbon tetrachloride	BRL	0.02	0.02	100						86-137	
Chlorobenzene	BRL	0.02	0.019	95						69-123	
Chloroethane	BRL	0.02	0.019	95						74-145	
Chloroform	BRL	0.02	0.021	105						78-132	

Amended report.

Refer to the Definition page for terms.

QUALITY CONTROL CERTIFICATE



Job ID : 10100064

Date : 10/12/2010

Analysis : Volatile Organic Compounds

Method : SW-846 8260B

Reporting Units : mg/Kg

QC Batch ID : Qb10100520

Created Date : 10/04/10

Created By : Whulmei

Samples in This QC Batch : 10100064.02,04,08

QC Type: MS and MSD

QC Sample ID: 10100064.08

Parameter	Sample Result	MS Spk Added	MS Result	MS % Rec	MSD Spk Added	MSD Result	MSD % Rec	RPD	RPD CtrLimit	%Rec CtrLimit	Qual
Chloromethane	BRL	0.02	0.02	100						69-139	
cis-1,2-Dichloroethylene	BRL	0.02	0.02	100						71-134	
cis-1,3-Dichloropropene	BRL	0.02	0.019	95						74-128	
Dibromochloromethane	BRL	0.02	0.018	90						67-141	
Dibromomethane	BRL	0.02	0.021	105						75-135	
Dichlorodifluoromethane	BRL	0.02	0.022	110						62-146	
Ethylbenzene	BRL	0.02	0.02	100						80-132	
Isopropylbenzene	BRL	0.02	0.02	100						78-137	
m- & p-Xylenes	BRL	0.04	0.038	95						73-127	
MEK	BRL	0.02	0.02	100						52-148	
Methylene chloride	BRL	0.02	0.02	100						68-131	
Naphthalene	BRL	0.02	0.015	75						61-116	
n-Butylbenzene	BRL	0.02	0.017	85						73-140	
n-Propylbenzene	BRL	0.02	0.019	95						75-127	
o-Xylene	BRL	0.02	0.02	100						74-126	
sec-Butylbenzene	BRL	0.02	0.02	100						75-129	
Styrene	BRL	0.02	0.019	95						77-123	
t-butylbenzene	BRL	0.02	0.019	95						75-126	
Tetrachloroethylene	BRL	0.02	0.016	80						71-122	
Toluene	BRL	0.02	0.019	95						72-121	
trans-1,2-Dichloroethylene	BRL	0.02	0.021	105						73-138	
trans-1,3-Dichloropropene	BRL	0.02	0.017	85						70-133	
Trichloroethylene	BRL	0.02	0.019	95						71-140	
Trichlorofluoromethane	BRL	0.02	0.021	105						67-148	
Vinyl Chloride	BRL	0.02	0.019	95						80-122	

QUALITY CONTROL CERTIFICATE



Job ID : 10100064

Date : 10/12/2010

Analysis : Purgeable Aromatics Method : SW-846 8021B Reporting Units : mg/Kg

QC Batch ID : Qb10100531 Created Date : 10/05/10 Created By : Xan

Samples in This QC Batch : 10100064.01,03,05,06,07,09,10,11,12,13,14

Sample Preparation : PB10100531 Prep Method : SW-846 5035A Prep Date : 10/04/10 12:30 Prep By : Xan

QC Type: Method Blank

Parameter	CAS #	Result	Units	D.F.	RptLimit	Qual
MTBE	1634-04-4	BRL	mg/Kg	1	0.005	
Benzene	71-43-2	BRL	mg/Kg	1	0.005	
Toluene	108-88-3	BRL	mg/Kg	1	0.005	
Ethylbenzene	100-41-4	BRL	mg/Kg	1	0.005	
m- & p-Xylenes	108-38-3&106-42-3	BRL	mg/Kg	1	0.01	
o-Xylene	95-47-6	BRL	mg/Kg	1	0.005	
Xylenes		BRL	mg/Kg	1	0.005	

QC Type: LCS and LCSD

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
MTBE	0.05	0.047	94	0.05	0.045	90	4.3	20	75-120	
Benzene	0.05	0.052	104	0.05	0.052	104	0	20	80-120	
Toluene	0.05	0.053	106	0.05	0.052	104	1.9	20	80-120	
Ethylbenzene	0.05	0.052	104	0.05	0.052	104	0	20	80-120	
m- & p-Xylenes	0.1	0.104	104	0.1	0.104	104	0	20	80-120	
o-Xylene	0.05	0.053	106	0.05	0.052	104	1.9	20	80-120	
Xylenes	0.15	0.157	105	0.15	0.156	104	0.6	20	80-120	

QC Type: MS and MSD

QC Sample ID: 10100064.01

Parameter	Sample Result	MS Spk Added	MS Result	MS % Rec	MSD Spk Added	MSD Result	MSD % Rec	RPD	RPD CtrlLimit	%Rec CtrlLimit	Qual
MTBE	BRL	0.05	0.049	96.9						76-134	
Benzene	BRL	0.05	0.052	104						68-138	
Toluene	BRL	0.05	0.052	104						67-135	
Ethylbenzene	BRL	0.05	0.052	104						71-127	
m- & p-Xylenes	BRL	0.1	0.103	103						56-135	
o-Xylene	BRL	0.05	0.052	104						56-134	
Xylenes	BRL	0.15	0.155	103						59-134	

Amended report.

Refer to the Definition page for terms.

QUALITY CONTROL CERTIFICATE



Job ID : 10100064

Date : 10/12/2010

Analysis : Volatile Organic Compounds Method : SW-846 8260B Reporting Units : mg/L

QC Batch ID : Qb10100536 Created Date : 10/04/10 Created By : Whuimei

Samples in This QC Batch : 10100064.15,16,17,18,19,20

Sample Preparation : PB10100527 Prep Method : SW-846 5030C Prep Date : 10/04/10 15:00 Prep By : Whuimei

QC Type: Method Blank						
Parameter	CAS #	Result	Units	D.F.	RptLimit	Qual
1,1,1,2-Tetrachloroethane	630-20-6	BRL	mg/L	1	0.005	
1,1,1-Trichloroethane	71-55-6	BRL	mg/L	1	0.005	
1,1,2,2-Tetrachloroethane	79-34-5	BRL	mg/L	1	0.005	
1,1,2-Trichloroethane	79-00-5	BRL	mg/L	1	0.005	
1,1-Dichloroethane	75-34-3	BRL	mg/L	1	0.005	
1,1-Dichloroethylene	75-35-4	BRL	mg/L	1	0.005	
1,1-Dichloropropene	563-58-6	BRL	mg/L	1	0.005	
1,2,3-trichlorobenzene	87-61-6	BRL	mg/L	1	0.005	
1,2,3-Trichloropropane	96-18-4	BRL	mg/L	1	0.005	
1,2,4-Trichlorobenzene	120-82-1	BRL	mg/L	1	0.005	
1,2,4-Trimethylbenzene	95-63-6	BRL	mg/L	1	0.005	
1,2-Dibromo-3-chloropropa	96-12-8	BRL	mg/L	1	0.005	
1,2-Dibromoethane	106-93-4	BRL	mg/L	1	0.006	
1,2-Dichlorobenzene	95-50-1	BRL	mg/L	1	0.005	
1,2-Dichloroethane	107-06-2	BRL	mg/L	1	0.005	
1,2-Dichloropropane	78-87-5	BRL	mg/L	1	0.006	
1,3,5-Trimethylbenzene	108-67-8	BRL	mg/L	1	0.005	
1,3-Dichlorobenzene	541-73-1	BRL	mg/L	1	0.005	
1,3-Dichloropropane	142-28-9	BRL	mg/L	1	0.005	
1,4-Dichlorobenzene	106-46-7	BRL	mg/L	1	0.005	
2,2-Dichloropropane	594-20-7	BRL	mg/L	1	0.005	
2-Chlorotoluene	95-49-8	BRL	mg/L	1	0.005	
4-Chlorotoluene	106-43-4	BRL	mg/L	1	0.005	
4-Isopropyltoluene	99-87-6	BRL	mg/L	1	0.005	
Benzene	71-43-2	BRL	mg/L	1	0.005	
Bromobenzene	108-86-1	BRL	mg/L	1	0.005	
Bromochloromethane	74-97-5	BRL	mg/L	1	0.006	
Bromodichloromethane	75-27-4	BRL	mg/L	1	0.006	
Bromoform	75-25-2	BRL	mg/L	1	0.005	
Bromomethane	74-83-9	BRL	mg/L	1	0.005	
Carbon tetrachloride	56-23-5	BRL	mg/L	1	0.006	
Chlorobenzene	108-90-7	BRL	mg/L	1	0.005	
Chloroethane	75-00-3	BRL	mg/L	1	0.006	
Chloroform	67-66-3	BRL	mg/L	1	0.006	
Chloromethane	74-87-3	BRL	mg/L	1	0.005	
cis-1,2-Dichloroethylene	156-59-2	BRL	mg/L	1	0.005	
cis-1,3-Dichloropropene	10061-01-5	BRL	mg/L	1	0.006	
Dibromochloromethane	124-48-1	BRL	mg/L	1	0.005	
Dibromomethane	74-95-3	BRL	mg/L	1	0.005	
Dichlorodifluoromethane	75-71-8	BRL	mg/L	1	0.006	

Amended report.

Refer to the Definition page for terms.

QUALITY CONTROL CERTIFICATE



Job ID : 10100064

Date : 10/12/2010

Analysis : Volatile Organic Compounds Method : SW-846 8260B Reporting Units : mg/L

QC Batch ID : Qb10100536 Created Date : 10/04/10 Created By : Whuimei

Samples in This QC Batch : 10100064,15,16,17,18,19,20

QC Type: Method Blank

Parameter	CAS #	Result	Units	D.F.	RptLimit	Qual
Ethylbenzene	100-41-4	BRL	mg/L	1	0.005	
Isopropylbenzene	98-82-8	BRL	mg/L	1	0.005	
m- & p-Xylenes	108-38-3&106-42-3	BRL	mg/L	1	0.01	
MEK	78-93-3	BRL	mg/L	1	0.005	
Methylene chloride	75-09-2	BRL	mg/L	1	0.005	
Naphthalene	91-20-3	BRL	mg/L	1	0.005	
n-Butylbenzene	104-51-8	BRL	mg/L	1	0.005	
n-Propylbenzene	103-65-1	BRL	mg/L	1	0.005	
o-Xylene	95-47-6	BRL	mg/L	1	0.005	
sec-Butylbenzene	135-98-8	BRL	mg/L	1	0.005	
Styrene	100-42-5	BRL	mg/L	1	0.005	
t-butylbenzene	98-06-6	BRL	mg/L	1	0.005	
Tetrachloroethylene	127-18-4	BRL	mg/L	1	0.006	
Toluene	108-88-3	BRL	mg/L	1	0.005	
trans-1,2-Dichloroethylene	156-60-5	BRL	mg/L	1	0.005	
trans-1,3-Dichloropropene	10061-02-6	BRL	mg/L	1	0.005	
Trichloroethylene	79-01-6	BRL	mg/L	1	0.005	
Trichlorofluoromethane	75-69-4	BRL	mg/L	1	0.005	
Vinyl Chloride	75-01-4	BRL	mg/L	1	0.005	
Xylenes		BRL	mg/L	1	0.005	

QC Type: LCS and LCSD

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrLimit	%Recovery CtrLimit	Qual
1,1,1,2-Tetrachloroethane	0.02	0.019	95	0.02	0.02	100	5.1	35	80-120	
1,1,1-Trichloroethane	0.02	0.019	95	0.02	0.019	95	0	35	80-120	
1,1,2,2-Tetrachloroethane	0.02	0.02	100	0.02	0.021	105	4.9	35	80-120	
1,1,2-Trichloroethane	0.02	0.019	95	0.02	0.02	100	5.1	35	80-120	
1,1-Dichloroethane	0.02	0.019	95	0.02	0.02	100	5.1	35	77.6-124	
1,1-Dichloroethylene	0.02	0.019	95	0.02	0.019	95	0	35	75.5-124	
1,1-Dichloropropene	0.02	0.019	95	0.02	0.02	100	5.1	35	77-125	
1,2,3-trichlorobenzene	0.02	0.021	105	0.02	0.021	105	0	35	76-124	
1,2,3-Trichloropropane	0.02	0.022	110	0.02	0.022	110	0	35	62.3-140	
1,2,4-Trichlorobenzene	0.02	0.02	100	0.02	0.02	100	0	35	80.4-124	
1,2,4-Trimethylbenzene	0.02	0.02	100	0.02	0.02	100	0	35	81.6-118	
1,2-Dibromo-3-chloropropa	0.02	0.023	115	0.02	0.022	110	4.4	35	63.5-139	
1,2-Dibromoethane	0.02	0.018	90	0.02	0.02	100	10.5	35	80-120	
1,2-Dichlorobenzene	0.02	0.02	100	0.02	0.02	100	0	35	83.2-121	
1,2-Dichloroethane	0.02	0.02	100	0.02	0.021	105	4.9	35	74.5-129	

Amended report.

Refer to the Definition page for terms.

QUALITY CONTROL CERTIFICATE



Job ID : 10100064

Date : 10/12/2010

Analysis : Volatile Organic Compounds Method : SW-846 8260B Reporting Units : mg/L

QC Batch ID : Qb10100536 Created Date : 10/04/10 Created By : Whuimei

Samples in This QC Batch : 10100064.15,16,17,18,19,20

QC Type: LCS and LCSD										
Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
1,2-Dichloropropane	0.02	0.019	95	0.02	0.019	95	0	35	80-120	
1,3,5-Trimethylbenzene	0.02	0.021	105	0.02	0.02	100	4.9	35	80-120	
1,3-Dichlorobenzene	0.02	0.02	100	0.02	0.019	95	5.1	35	80-120	
1,3-Dichloropropane	0.02	0.02	100	0.02	0.021	105	4.9	35	74.7-122	
1,4-Dichlorobenzene	0.02	0.02	100	0.02	0.019	95	5.1	35	80-120	
2,2-Dichloropropane	0.02	0.019	95	0.02	0.02	100	5.1	35	75.9-126	
2-Chlorotoluene	0.02	0.021	105	0.02	0.02	100	4.9	35	80-120	
4-Chlorotoluene	0.02	0.02	100	0.02	0.02	100	0	35	80-120	
4-Isopropyltoluene	0.02	0.021	105	0.02	0.021	105	0	35	80-120	
Benzene	0.02	0.019	95	0.02	0.019	95	0	35	80-120	
Bromobenzene	0.02	0.02	100	0.02	0.02	100	0	35	80-120	
Bromochloromethane	0.02	0.02	100	0.02	0.021	105	4.9	35	70.8-133	
Bromodichloromethane	0.02	0.02	100	0.02	0.02	100	0	35	80-119	
Bromoform	0.02	0.018	90	0.02	0.021	105	15.4	35	78.8-127	
Bromomethane	0.02	0.022	110	0.02	0.018	90	20	35	53-138	
Carbon tetrachloride	0.02	0.019	95	0.02	0.02	100	5.1	35	70-136	
Chlorobenzene	0.02	0.018	90	0.02	0.02	100	10.5	35	80-120	
Chloroethane	0.02	0.018	90	0.02	0.018	90	0	35	75.6-128	
Chloroform	0.02	0.019	95	0.02	0.02	100	5.1	35	79-123	
Chloromethane	0.02	0.016	80	0.02	0.017	85	6.1	35	69.6-125	
cis-1,2-Dichloroethylene	0.02	0.019	95	0.02	0.02	100	5.1	35	74.5-132	
cis-1,3-Dichloropropene	0.02	0.019	95	0.02	0.019	95	0	35	80-120	
Dibromochloromethane	0.02	0.019	95	0.02	0.021	105	10	35	82.8-117	
Dibromomethane	0.02	0.019	95	0.02	0.021	105	10	35	78.8-125	
Dichlorodifluoromethane	0.02	0.016	80	0.02	0.017	85	6.1	35	71.9-119	
Ethylbenzene	0.02	0.018	90	0.02	0.02	100	10.5	35	80-120	
Isopropylbenzene	0.02	0.018	90	0.02	0.019	95	5.4	35	80-120	
m- & p-Xylenes	0.04	0.037	92.5	0.04	0.04	100	7.8	35	80-120	
MEK	0.02	0.019	95	0.02	0.021	105	10	35	47.5-159	
Methylene chloride	0.02	0.018	90	0.02	0.018	90	0	35	69.4-131	
Naphthalene	0.02	0.022	110	0.02	0.023	115	4.4	35	70.8-128	
n-Butylbenzene	0.02	0.02	100	0.02	0.021	105	4.9	35	78.5-118	
n-Propylbenzene	0.02	0.02	100	0.02	0.02	100	0	35	81.5-117	
o-Xylene	0.02	0.019	95	0.02	0.02	100	5.1	35	80-120	
sec-Butylbenzene	0.02	0.02	100	0.02	0.02	100	0	35	82.6-117	
Styrene	0.02	0.018	90	0.02	0.019	95	5.4	35	80-120	
t-butylbenzene	0.02	0.021	105	0.02	0.02	100	4.9	35	80-120	
Tetrachloroethylene	0.02	0.018	90	0.02	0.02	100	10.5	35	40-168	
Toluene	0.02	0.018	90	0.02	0.02	100	10.5	35	77.1-121	
trans-1,2-Dichloroethylene	0.02	0.019	95	0.02	0.02	100	5.1	35	77.5-122	
trans-1,3-Dichloropropene	0.02	0.019	95	0.02	0.019	95	0	35	81.5-113	
Trichloroethylene	0.02	0.018	90	0.02	0.019	95	5.4	35	80-120	

Amended report.

Refer to the Definition page for terms.

QUALITY CONTROL CERTIFICATE



Job ID : 10100064

Date : 10/12/2010

Analysis : Volatile Organic Compounds Method : SW-846 8260B Reporting Units : mg/L

QC Batch ID : Qb10100536 Created Date : 10/04/10 Created By : Whuimei

Samples in This QC Batch : 10100064.15,16,17,18,19,20

QC Type: LCS and LCSD										
Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
Trichlorofluoromethane	0.02	0.019	95	0.02	0.019	95	0	35	80-132	
Vinyl Chloride	0.02	0.017	85	0.02	0.018	90	5.7	35	71.1-127	
Xylenes	0.06	0.056	93.3	0.06	0.06	100	6.9	35	80-120	

QC Type: MS and MSD											
QC Sample ID: 10100064.20											
Parameter	Sample Result	MS Spk Added	MS Result	MS % Rec	MSD Spk Added	MSD Result	MSD % Rec	RPD	RPD CtrlLimit	%Rec CtrlLimit	Qual
1,1,1,2-Tetrachloroethane	BRL	0.02	0.02	100						72-139	
1,1,1-Trichloroethane	BRL	0.02	0.019	95						82-137	
1,1,2,2-Tetrachloroethane	BRL	0.02	0.022	110						55-149	
1,1,2-Trichloroethane	BRL	0.02	0.02	100						68-139	
1,1-Dichloroethane	BRL	0.02	0.019	95						78-134	
1,1-Dichloroethylene	BRL	0.02	0.019	95						65-141	
1,1-Dichloropropene	BRL	0.02	0.019	95						79-136	
1,2,3-trichlorobenzene	BRL	0.02	0.024	120						54-144	
1,2,3-Trichloropropane	BRL	0.02	0.023	115						58-156	
1,2,4-Trichlorobenzene	BRL	0.02	0.022	110						69-127	
1,2,4-Trimethylbenzene	BRL	0.02	0.02	100						80-131	
1,2-Dibromo-3-chloropropa	BRL	0.02	0.024	120						61-145	
1,2-Dibromoethane	BRL	0.02	0.022	110						68-140	
1,2-Dichlorobenzene	BRL	0.02	0.02	100						70-138	
1,2-Dichloroethane	BRL	0.02	0.021	105						67-152	
1,2-Dichloropropane	BRL	0.02	0.019	95						79-135	
1,3,5-Trimethylbenzene	BRL	0.02	0.02	100						79-133	
1,3-Dichlorobenzene	BRL	0.02	0.02	100						79-128	
1,3-Dichloropropane	BRL	0.02	0.022	110						70-147	
1,4-Dichlorobenzene	BRL	0.02	0.02	100						76-127	
2,2-Dichloropropane	BRL	0.02	0.018	90						60-129	
2-Chlorotoluene	BRL	0.02	0.02	100						83-130	
4-Chlorotoluene	BRL	0.02	0.02	100						82-129	
4-Isopropyltoluene	BRL	0.02	0.02	100						78-129	
Benzene	BRL	0.02	0.019	95						73-129	
Bromobenzene	BRL	0.02	0.021	105						76-132	
Bromochloromethane	BRL	0.02	0.02	100						76-135	
Bromodichloromethane	BRL	0.02	0.02	100						80-136	
Bromoform	BRL	0.02	0.022	110						65-139	
Bromomethane	BRL	0.02	0.023	115						65-150	
Carbon tetrachloride	BRL	0.02	0.02	100						70-136	
Chlorobenzene	BRL	0.02	0.019	95						69-123	

Amended report.

Refer to the Definition page for terms.

QUALITY CONTROL CERTIFICATE



Job ID : 10100064

Date : 10/12/2010

Analysis : Volatile Organic Compounds Method : SW-846 8260B Reporting Units : mg/L

QC Batch ID : Qb10100536 Created Date : 10/04/10 Created By : Whuimei

Samples in This QC Batch : 10100064.15,16,17,18,19,20

QC Type: MS and MSD											
QC Sample ID: 10100064.20											
Parameter	Sample Result	MS Spk Added	MS Result	MS % Rec	MSD Spk Added	MSD Result	MSD % Rec	RPD	RPD CtrlLimit	%Rec CtrlLimit	Qual
Chloroethane	BRL	0.02	0.019	95						74-145	
Chloroform	BRL	0.02	0.018	90						78-132	
Chloromethane	BRL	0.02	0.017	85						69-139	
cis-1,2-Dichloroethylene	BRL	0.02	0.019	95						71-134	
cis-1,3-Dichloropropene	BRL	0.02	0.02	100						74-128	
Dibromochloromethane	BRL	0.02	0.021	105						67-141	
Dibromomethane	BRL	0.02	0.021	105						75-135	
Dichlorodifluoromethane	BRL	0.02	0.019	95						62-146	
Ethylbenzene	BRL	0.02	0.02	100						80-132	
Isopropylbenzene	BRL	0.02	0.019	95						78-137	
m- & p-Xylenes	BRL	0.04	0.039	97.5						73-127	
MEK	BRL	0.02	0.022	110						52-148	
Methylene chloride	BRL	0.02	0.018	90						68-131	
Naphthalene	BRL	0.02	0.023	115						61-116	
n-Butylbenzene	BRL	0.02	0.02	100						73-140	
n-Propylbenzene	BRL	0.02	0.02	100						75-127	
o-Xylene	BRL	0.02	0.019	95						74-126	
sec-Butylbenzene	BRL	0.02	0.019	95						75-129	
Styrene	BRL	0.02	0.019	95						77-123	
t-butylbenzene	BRL	0.02	0.02	100						75-126	
Tetrachloroethylene	BRL	0.02	0.019	95						71-122	
Toluene	BRL	0.02	0.019	95						72-121	
trans-1,2-Dichloroethylene	BRL	0.02	0.019	95						73-138	
trans-1,3-Dichloropropene	BRL	0.02	0.02	100						70-133	
Trichloroethylene	BRL	0.02	0.019	95						6-138	
Trichlorofluoromethane	BRL	0.02	0.019	95						67-148	
Vinyl Chloride	BRL	0.02	0.018	90						80-122	
Xylenes	BRL	0.06	0.058	96.7						73-127	

QUALITY CONTROL CERTIFICATE



Job ID : 10100064

Date : 10/12/2010

Analysis : Total Petroleum Hydrocarbons **Method :** TX 1005 **Reporting Units :** mg/Kg

QC Batch ID : Qb10100606 **Created Date :** 10/05/10 **Created By :** Ksudha

Samples in This QC Batch : 10100064.01,03,05,06,07,09,10,11,12,13,14

Sample Preparation : PB10100602 **Prep Method :** TX 1005 **Prep Date :** 10/04/10 15:50 **Prep By :** Ksudha

QC Type: Method Blank

Parameter	CAS #	Result	Units	D.F.	RptLimit	Qual
C6-C12		BRL	mg/Kg	1	14.7	
>C12-C28		BRL	mg/Kg	1	18.4	
>C28-C35		BRL	mg/Kg	1	19.1	
Total C6-C35		BRL	mg/Kg	1		

QC Type: LCS and LCSD

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrLimit	%Recovery CtrLimit	Qual
C6-C12	500	470	94	500	487	97.4	3.6	20	75-125	
>C12-C28	500	511	102	500	519	104	1.6	20	75-125	
>C28-C35	500	543	109	500	527	105	3	20	75-125	

QC Type: MS and MSD

QC Sample ID: 10100064.01

Parameter	Sample Result	MS Spk Added	MS Result	MS % Rec	MSD Spk Added	MSD Result	MSD % Rec	RPD	RPD CtrLimit	%Rec CtrLimit	Qual
C6-C12	BRL	500	465	90.8						75-125	
>C12-C28	BRL	500	493	96.7						75-125	
>C28-C35	BRL	500	484	93.3						75-125	

Amended report.

Refer to the Definition page for terms.

QUALITY CONTROL CERTIFICATE



Job ID : 10100064

Date : 10/12/2010

Analysis : Total Petroleum Hydrocarbons **Method :** TX 1005 **Reporting Units :** mg/L

QC Batch ID : Qb10100610 **Created Date :** 10/05/10 **Created By :** Ksudha

Samples in This QC Batch : 10100064.15,16,17,18,19,20

Sample Preparation : PB10100607 **Prep Method :** TX 1005 **Prep Date :** 10/04/10 15:50 **Prep By :** Ksudha

QC Type: Method Blank						
Parameter	CAS #	Result	Units	D.F.	RptLimit	Qual
C6-C12		BRL	mg/L	1	1.25	
>C12-C28		BRL	mg/L	1	1.72	
>C28-C35		BRL	mg/L	1	1.83	
Total C6-C35		BRL	mg/L	1		

QC Type: LCS and LCSD										
Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrLimit	%Recovery CtrLimit	Qual
C6-C12	43	45.1	105	43	44.4	103	1.6	20	75-125	
>C12-C28	43	48.3	112	43	46.5	108	3.8	20	75-125	
>C28-C35	43	47.3	110	43	47.8	111	1	20	75-125	

QC Type: MS and MSD											
QC Sample ID: 10100048.01											
Parameter	Sample Result	MS Spk Added	MS Result	MS % Rec	MSD Spk Added	MSD Result	MSD % Rec	RPD	RPD CtrLimit	%Rec CtrLimit	Qual
C6-C12	BRL	43	43.8	99.7						75-125	
>C12-C28	BRL	43	47.3	106						75-125	
>C28-C35	BRL	43	43.1	96.7						75-125	

1. REPORT TO: COMPANY: ASSOCIATED TESTING LABS
 ADDRESS: 3143 YELLOWSTONE BLVD HOUSTON, TX-77054
 CONTACT: (713) 748-3717
 PHONE: (713) 748-3748
 FAX: E-mail: 10100064
 PROJECT # E10-115

2. INVOICE TO: COMPANY: SAME AS REPORT
 ADDRESS: Address
 CONTACT: PHONE: FAX: E-mail: 10100064
 PROJECT # E10-115

3. PO #
 4. Turnaround Time (Business Days)
 1 Day* Other
 2 Days* Surcharge applies
 3 Days* Surcharge applies
 7 Days - Standard

6. Project Name/Location: COH PROJECTS, CONTRACT 74A-1 & CONTRACT 74A-2

7. Reporting Requirement:
 TRRP Lines only TRRP Rpt. Package Sec Attached Standard Level II

8. Sampler's Name & Company (PLEASE PRINT): PANKAJ PARIKH ASSOCIATED TESTING LABS. *Pankaj Parikh*
 Sampler's Signature & Date: *Pankaj Parikh 10/11/2010*

LAB USE ONLY	9. Sample ID and Description	10. Sampling			11. 12. Matrix						18. REMARKS			
		Date	Time	Comp.	Grab	Water	Soil	Sudge	Oil	Air		Other		
514 DIA	EB-1 Sample P1202 dk. (20'-21')	10/11/2010												
512 O2A	EB-1 " " " " (1'-2')	" "												
513 O3A	EB-2 " " " " (1'-2')	" "												
514 O4A	EB-2 " " " " (5'-6')	" "												
5102 O5A	EB-3 Mixture dk. (3'-4')	10/12/2010												
5103 O6A	EB-4 " " " " (3'-4')	" "												
5104 O7A	EB-5 DUNLAP ST. (21'-22')	10/11/2010												
5106 O8A	EB-5 " " " " (10'-11')	" "												
105 O9A	EB-6 " " " " (2'-3') between	10/21/2010												
5106 O1A	EB-7 STA 65+00 TO 66+17.7 between	10/31/2010												

13. 14. Containers*
 15. Preservatives**
 16. PH-Lab Only
 17. Analyses/Methods: TPH, VOA + METALS

19. RELINQUISHED BY: *Pankaj Parikh* DATE: 10/11/2010 TIME: 11:41
 20. RECEIVED BY: *R. Pargave* DATE: 10/10/2010 TIME: 11:41

21. RECEIVED BY LABORATORY: *R. Pargave*
 **Preservatives: C - Cool H - HCl N - HNO₃ S - H₂SO₄
 OH - NaOH T - Na₂S₂O₈ X - Other

22. KNOWN HAZARDS/COMMENTS: Temperature: 5.6 °C
 Intact: Y or N Initials: *Y P N*
 A&B cannot accept verbal changes
 Please FAX written changes to 713-453-6091
 Samples will be disposed of after 30 days
 A&B reserves the right to return samples

1. REPORT TO: COMPANY: ASSOCIATED TESTING LABS
 10100 East Fwy (I-10) Ste. 100 Houston, TX 77029
 713-453-6060 1-877-478-6060 Toll Free
 713-453-6091 Fax ablabs.com

2. INVOICE TO: COMPANY: SAME AS REPORT
 ADDRESS: ADDRESS
 HOUSTON TX 77054

3. PO #

4. Turnaround Time (Business Days)
 1 Day* Other
 2 Days* 3 Days* *Surcharge applies
 7 Days - Standard

5. Project # E-10-115

6. Project Name/Location COH PROJECTS, CONTRACT 74A-1 & CONTRACT 74A-2

7. Reporting Requirement:
 TRAP Limits only TRAP Rpt. Package See Attached Standard Level II

8. Sampler's Name & Company (PLEASE PRINT) PANKAJ PARIKH ASSOCIATED TESTING LABS
 Sampler's Signature & Date *Pankaj* 10/14/2010

LAB USE ONLY	9. Sample ID and Description	10. Sampling		11. 12. Matrix					13. 14. Containers*	15. Preservatives**	16. PH-Lab Only	17. Analysis/Methods	18. REMARKS
		Date	Time	Comp.	Grab	Water	Soil	Sedg					
3107	E138 between STA 6400 to 6406 20-210	10/13/2010										TPH VOC M/TGE	
3108	E13-9-U-STATION FOR SECTION 210-215	10/13/2010											
3106	E13-10 NEAR STATION 16-17	10/13/2010											
3109	E13-11 CANE MOUNT ST. 16-17	10/13/2010											

19. RELINQUISHED BY: *Pankaj* DATE: 10/14/2010 TIME: 11:41 RECEIVED BY: *R. Prangrave* DATE: 10/14/10 TIME: 11:41

20. RECEIVED BY LABORATORY: *PHU*

21. RECEIVED BY LABORATORY: *PHU*

22. KNOWN HAZARDS/COMMENTS: Temperature: 5.6 °C Initials: *RKH*

*Containers: VOA - 40 ml vial A/G - Amber/Glass 1 Liter
 4 oz/8 oz - glass wide mouth P/O - Plastic/other

METHOD OF SHIPMENT: BILL OF LADING/TRACKING #

LAB USE ONLY SAMPLING RENTAL PHU

A&B cannot accept verbal changes
 Please FAX written changes to 713-453-6091

Samples will be disposed of after 30 days
 A&B reserves the right to return samples

The Chain of Custody is a Legal Document

3. PO #
 4. Turnaround Time (Business Days)
 1 Day* Other
 2 Days*
 3 Days* *Surcharge applies
 7 Days - Standard

INVOICE TO:
 COMPANY: SAME AS REPORT
 ADDRESS: ADDRESS

2. COMPANY: ASSOCIATED TESTING LABS
 ADDRESS: 3143 YELLOWSTONE BLVD.
 HOUSTON TX - 77054
 CONTACT: [Blank]
 PHONE: 713-748-3717
 FAX: 713-748-3748
 E-MAIL: [Blank]

1. REPORT TO:
 COMPANY: ASSOCIATED TESTING LABS
 ADDRESS: 3143 YELLOWSTONE BLVD.
 HOUSTON TX - 77054
 CONTACT: [Blank]
 PHONE: 713-748-3717
 FAX: 713-748-3748
 E-MAIL: [Blank]

10100 East Fwy (I-10) Ste. 100
 Houston, TX 77029
 713-453-6060
 1-877-478-6060 Toll Free
 713-453-6891 Fax
 ablabs.com

13. Containers*
 15. Preservatives**
 16. PH-Lab Only

6. Project Name/Location
 COH PROJECTS, CONTRACT 74A-1 & CONTRACT 74A-2

17. Analytes/Methods
 TPH
 BTEX + VITSE
 VOC

7. Reporting Requirement:
 TRP Limits only TRP Rpt. Package See Attached Standard Level II
 8. Sampler's Name & Company (PLEASE PRINT)
 PANKAJ PARIKH ASSOCIATED TESTING LABS
 Sampler's Signature & Date
Pankaj Parikh 10/11/2010

LAB USE ONLY	9. Sample ID and Description		10. Sampling		11. 12. Matrix		No. of Containers	18. REMARKS
	Date	Time	Comp.	Grab	Water	Soil		
S-2	10/12/2010		V				6	
W-1	10/11/2010		V				9	
W-2	10/13/2010		V				6	
W-3	10/13/2010		V				6	
W-4	10/13/2010		V				4	
W-5	10/13/2010		V				6	

19. RELINQUISHED BY: [Signature] DATE: 10/4/10 TIME: 11:41
 20. RECEIVED BY: R. Donagave DATE: 10/4/10 TIME: 11:41
 21. RECEIVED BY LABORATORY
 **Preservatives: C - Cool H - HCl N - HNO₃ S - H₂SO₄
 OH - NaOH T - Na₂S₂O₃ X - Other

22. KNOWN HAZARDS/COMMENTS
 Temperature: 5.6 °C
 Intact Initials: RKN
 A&B cannot accept verbal changes
 Please FAX written changes to 713-453-6091
 Samples will be disposed of after 30 days
 A&B reserves the right to return samples



Sample Condition Checklist

Date : 10/12/10

A&B JobID : 10100064		Date Received : 10/04/2010				Time Received : 11:41AM						
Client Name : Associated Testing Lab												
Temperature : 5.6°C			Sample pH : N/A									
Check Points												
										Yes	No	N/A
1.	Cooler seal present and signed.										X	
2.	Sample(s) in a cooler.									X		
3.	If yes, ice in cooler.									X		
4.	Sample(s) received with chain-of-custody.									X		
5.	C-O-C signed and dated.									X		
6.	Sample(s) received with signed sample custody seal.										X	
7.	Sample containers arrived intact. (If no comment).									X		
8.	Matrix	Water	Soil	Liquid	Sludge	Solid	Cassette	Tube	Bulk	Badge	Food	Other
		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9.	Sample(s) were received in appropriate container(s).									X		
10.	Sample(s) were received with proper preservative									X		
11.	All samples were logged or labeled.									X		
12.	Sample ID labels match C-O-C ID's									X		
13.	Bottle count on C-O-C matches bottles found.									X		
14.	Sample volume is sufficient for analyses requested.									X		
15.	Samples were received within the hold time.									X		
16.	VOA vials completely filled.									X		
17.	Sample accepted.									X		
Comments : Include actions taken to resolve discrepancies/problem:												

Received by : Rhargrave

Check in by/date : Rhargrave / 10/04/2010

Appendix – E

*Professional
Qualifications*

Niran Reddy, P.E
Environmental Professional/Project Engineer

Education

B.S. Civil Engineering, Mysore University, 1992

Professional Registration and Certification

Registered Professional Engineer in the State of Texas (#99420).
Certificate for Phase I and Phase II Environmental Site Assessments, Texas A&M University
Utilities and Public Works Training Institute, 2004.
Certificate for Corps of Engineers Wetland Delineation & Management Program,
Richard Chinn Environmental Training, Inc, 2006.

Experience

Mr. Reddy has over 10 years of professional experience in the areas of environmental and geotechnical engineering. This experience has been on a wide variety of projects throughout Texas and the surrounding areas.

Mr. Reddy's experience in environmental engineering includes Phase I and Phase II Environmental site assessments (ESA) of commercial as well as undeveloped properties according to regulatory or client specific guidelines.

As a project engineer Mr. Reddy is familiar with the handling of contaminants and has performed and coordinated field sampling, been involved in conducting chemical analysis, and classification of soils.

Mr. Reddy's experience in geotechnical engineering includes geotechnical investigations for the design of various structures from high rise buildings, industrial complexes, roads and bridges, storm and sanitary sewers, to retaining walls, warehouses, tower structures, storage tanks, office buildings and residential homes.

As a project engineer Mr. Reddy has planned and coordinated report generation, field and laboratory activities, as well as analyzing field and laboratory results to be used for design and recommendation.

Professional Society Memberships

American Society of Civil Engineers

Jasbir Singh, P.E.
President/Project Engineer

Education

M.S. Civil Engineering, University of Houston.
M.S. Geological Engineering, University of Minnesota.
B.S. Minerals Engineering, University of Wisconsin.

Professional Registration and Certification

Registered Professional Engineer in the state of Texas (#42505)
Certificate of clay liners and covers for waste disposal facilities, University of Texas
Certificate of environmental drilling technology, University of Wisconsin
Certificate of concepts in ground water hydrology, University of Houston
Certificate of supervision procedures and practices for asbestos abatement projects, Texas A&M University

Experience

Mr. Singh's illustrious career encompasses over 30 years of experience in the areas of environmental, geotechnical, and materials engineering, testing, and inspections on a wide variety of projects.

Mr. Singh's experience in environmental engineering includes performing comprehensive site assessments, analyzing and evaluating risk assessments, and planning and designing remedial systems, as well as managing and coordinating the designing of landfill liners.

Mr. Singh's experience in geotechnical engineering includes structural foundation design of various structures from high rise buildings, roadways and bridges, to petrochemical and manufacturing plants. He has also been a project manager heading the analysis, planning, and design of geotechnical engineering projects.

Mr. Singh has a vast array of experience in construction materials testing and inspection that includes soil stabilization, base materials, asphalt mix proportioning, concrete mix proportioning, and quality control.

Professional Society Memberships

American Society of Professional Engineers
American Society for Testing and materials – serves on Committee D08 Roofing and Waterproofing
Member of the Associated Builders and Contractors – serves on Government Relations Committee.

- K. Motor Removal: Design operator so motor may be removed without disturbing limit-switch adjustment and without affecting emergency manual operation.

2.6 DOOR ASSEMBLY

- A. Door installation, briefly is shown on drawing 41E
- B. Overhead coiling door shall be formed with curtain of interlocking metal slats.
 - 1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
 - a. ACME Rolling Doors.
 - b. Alpine Overhead Doors, Inc.
 - c. AlumaTek, Inc.
 - d. C.H.I. Overhead Doors.
 - e. City-Gates.
 - f. Cookson Company.
 - g. Cornell Iron Works, Inc.
 - h. Dynamic Closures Corp.
 - i. Lawrence Roll-Up Doors, Inc.
 - j. Mahon Door Corporation.
 - k. McKeon Rolling Steel Door Company, Inc.
 - l. Metro Door.
 - m. Overhead Door Corporation.
 - n. QMI Security Solutions.
 - o. Raynor.
 - p. Southwestern Steel Rolling Door Co.
 - q. Wayne-Dalton Corp.
 - r. Windsor Door.
- C. Operation Cycles: Not less than 50,000
- D. STC Rating: 26 .
- E. Curtain R-Value: 5.0 deg F x h x sq. ft./Btu (0.881 K x sq. m/W) Door Curtain Material: Galvanized steel.
- F. Door Curtain Slats: 3-1/4-inch (83-mm) center-to-center height.
 - 1. Insulated-Slat Interior Facing: Metal.
- G. Curtain Jamb Guides: Galvanized steel with finish matching curtain slats. Provide continuous integral wear strips to prevent metal-to-metal contact and to minimize operational noise..
- H. Hood: Match curtain material and finish First option in first subparagraph below is standard. Verify availability of second option with manufacturer.
 - 1. Shape: Square.
 - 2. Mounting: Face of wall.

- I. Locking Devices: Equip door with slide bolt for padlock Retain subparagraph below if retaining "locking device assembly" option in paragraph above.
 - 1. Locking Device Assembly: both jamb sides locking bars, operable from inside with thumb turn. Retain one of first two paragraphs below.
- J. Emergency Manual Door Operator: Chain-hoist operator Retain first subparagraph below for chain or crank operator if located on other side of wall from door curtain.
- K. Electric Door Operator:
- L. Door Finish:
 - 1. Baked-Enamel or Powder-Coated Finish: Color as selected by Architect from manufacturer's full range
 - 2. Interior Curtain-Slat Facing: Match finish of exterior curtain-slat face

2.7 GENERAL FINISH REQUIREMENTS

- A. Comply with NAAMM's "Metal Finishes Manual for Architectural and Metal Products" for recommendations for applying and designating finishes.
- B. Appearance of Finished Work: Noticeable variations in same piece are not acceptable. Variations in appearance of adjoining components are acceptable if they are within the range of approved Samples and are assembled or installed to minimize contrast.

2.8 STEEL AND GALVANIZED-STEEL FINISHES

- A. Baked-Enamel or Powder-Coat Finish: Manufacturer's standard baked-on finish consisting of prime coat and thermosetting topcoat. Comply with coating manufacturer's written instructions for cleaning, pretreatment, application, and minimum dry film thickness.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates areas and conditions, with Installer present, for compliance with requirements for substrate construction and other conditions affecting performance of the Work.
- B. Examine locations of electrical connections.
- C. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION

- A. Install overhead coiling doors and operating equipment complete with necessary hardware, anchors, inserts, hangers, and equipment supports; according to manufacturer's written instructions and as specified.

- B. Install overhead coiling doors, hoods, and operators at the mounting locations indicated for each door.
- C. Accessibility: Install overhead coiling doors, switches, and controls along accessible routes in compliance with regulatory requirements for accessibility.

3.3 STARTUP SERVICE

- A. Engage a factory-authorized service representative to perform startup service.
 - 1. Perform installation and startup checks according to manufacturer's written instructions.
 - 2. Test and adjust controls and safeties. Replace damaged and malfunctioning controls and equipment.
 - 3. Test door closing when activated by detector or alarm-connected fire-release system. Reset door-closing mechanism after successful test.

3.4 ADJUSTING

- A. Adjust hardware and moving parts to function smoothly so that doors operate easily, free of warp, twist, or distortion.
- B. Lubricate bearings and sliding parts as recommended by manufacturer.
- C. Adjust seals to provide weathertight fit around entire perimeter.

3.5 DEMONSTRATION

- A. Engage a factory-authorized service representative to train Owner's maintenance personnel to adjust, operate, and maintain overhead coiling doors.

END OF SECTION