PHASE I
ENVIRONMENTAL SITE ASSESSMENT
NEW/REPLACEMENT OF WATER WELL
AND WELL COLLECTION LINE – SIMS BAYOU
WBS NO. S-000100-0024-4
HARRIS COUNTY, HOUSTON, TEXAS

PREPARED FOR:
AEI ENGINEERING
616 FM 1960 WEST, SUITE 205
HOUSTON, TEXAS 77090

PREPARED BY:
HVJ ASSOCIATES, INC.
HOUSTON, TEXAS
JULY 18, 2014

REPORT NO. HE1216860
KEY MAP 471J & N

HVJ ASSOCIATES

Houston
Austin
Dallas
San Antonio

6120 S. Dairy Ashford Rd.
Houston, TX 77072-1010
281.933.7388 Ph
281.933.7293 Fax
www.hvj.com

July 18, 2014

Mr. J.T. (Tom) Matkin, PE
Vice President
AEI Engineering
616 FM 1960 West, Suite 250
Houston, TX 77090

Re: Phase I Environmental Site Assessments
New/Replacement of Water Well and Well Collection – Sims Bayou
WBS No. S-000100-0024-4
Owner: City of Houston
HVJ Report No. HE1216860

Dear Mr. Matkin:

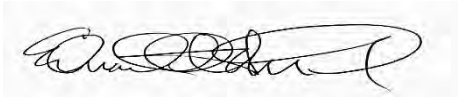
Presented herein is our Phase I Environmental Site Assessment (ESA) revised final report for the above captioned project. The study was performed in general accordance with ASTM E 1527-13 Standard Practice as modified by the City of Houston, Department of Public Works & Engineering Infrastructure Design Manual Chapter 11 "Geotechnical and Environmental Requirements" and our proposal number HE1216860 dated October 23, 2012 (Revised April 17, 2014).

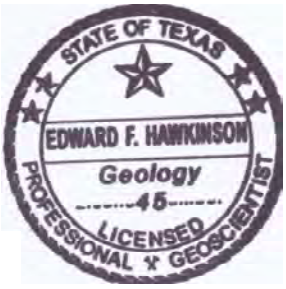
This report presents HVJ Associates' understanding of the project's scope, the methodology we employed in executing the work, and the conclusions we reached subject to the limitations discussed in Section 10 of this report.

It has been a pleasure to work with you on this project, and we appreciate the opportunity to be of service. Please read the entire report and notify us if there are questions or comments or if we may be of further assistance.

Sincerely,

HVJ ASSOCIATES, INC.
Texas Firm Registration No. F-000646





Edward Hawkinson, PG, MS, MBA
Project Manager

MM/EH/NL

Copies submitted: 4 final, 1 electronic

The following lists the pages which complete this report:

- Main Text – 18 pages
- Plates – 7 pages
- Appendix A – 109 pages
- Appendix B – 6 pages
- Appendix C – 26 pages
- Appendix D – 6 pages

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EXECUTIVE SUMMARY

HVJ Associates, Inc. (HVJ Associates) was contracted by the AEI Engineering to perform a Phase I Environmental Site Assessment (ESA). The project involves site evaluation, site selection and design of new water well for the City of Houston in the Sims Bayou Alignment. HVJ Associates conducted this ESA of the Subject Project Alignment in accordance with the guidelines contained in the American Society for Testing and Materials Designation E 1527-13, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process (ASTM E 1527-13) as modified by City of Houston, Department of Public Works & Engineering Infrastructure Design Manual Chapter 11 "Geotechnical and Environmental Requirements." The purpose of this Phase I ESA was to identify recognized environmental conditions in connection with the Subject Project Alignment. As defined in ASTM E 1527-13, "The term recognized environmental conditions means the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater or surface water of the property."
This Phase I ESA report includes the following:

- A database search of environmental records for the Subject Project Alignment and surrounding area.
- A review of various historical records to assess past uses of Subject Project Alignment and adjoining properties.
- An on-site reconnaissance of Subject Project Alignment during which Subject Project Alignment was visually inspected for the presence and management of hazardous substances and petroleum products and any signs of environmental releases or impacts.
- Interviews to obtain information relevant to Subject Project Alignment and adjoining properties.
- Identification of the current uses and status of properties adjoining the Subject Project Alignment in order to evaluate their potential as sources of contamination.

The project is located in a remote residential Alignment in southwest of Houston. Available information for this project is summarized below:

1. A review of historical aerial photographs, topographic maps and other data show that the Subject Project Alignment has never been developed.
2. According to the ASTM Standard E 1527-13; regulatory data indicate no locatable mapped environmental database entries were found within the Subject Project Alignment area.
3. After a site reconnaissance and our review of historical data, maps and the Texas Commission on Environmental Quality (TCEQ) online records, we found no sites on or adjoining the Subject Project Alignment with recognized environmental conditions (RECs) that could pose a concern to project construction along the Subject Project Alignment.

This assessment has revealed no evidence of recognized environmental conditions in connection with the Subject Project Alignment and we recommend no further investigation of the Subject Project Alignment. No wetland development was found on or adjacent to the Subject Project Alignment.

Please note that this executive summary does not fully relate our findings and opinions. Those findings and opinions are only related through our full report.

1.0 INTRODUCTION

1.1 Project Objective and Purpose

HVJ Associates, Inc. was contracted by the AEI Engineering to perform a Phase I ESA for the Subject Project Alignment shown on Plates 1 through 4 (in the Plates Section) and on GeoSearch maps contained in Appendix A. The project involves site evaluation, site selection and design of new water well for the City of Houston in the Sims Bayou Alignment area.

The objective of this study was to determine whether recognized environmental conditions may be located on or near the Subject Project Alignment construction area or on adjacent parcels that may lead to an environmental concern. This Phase I ESA was performed as part of the due diligence for the construction along the Subject Project Alignment. This Phase I ESA was performed to qualify for the following landowner liability protection under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA): innocent landowner limitation; the contiguous property owner limitation; or the bona fide prospective purchaser limitation. The purpose of this Phase I ESA was to conduct a "due diligence" investigation to identify recognized environmental conditions along/near and within the Subject Project Alignment. As defined in ASTM E 1527-13, "The term recognized environmental conditions means the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into the structures on the property or into the ground, groundwater or surface water of the property."

1.2 Project Scope

The scope of services we provided for this Phase I ESA was performed in general accordance with ASTM Standard Practice E 1527-13 as modified by City of Houston, Department of Public Works & Engineering Infrastructure Design Manual Chapter 11 "Geotechnical and Environmental Requirements." The following tasks were performed:

1. Environmental regulatory agency summary records were obtained for regulated environmental sites near the Subject Project Alignment. Following initial review, additional information was obtained through file reviews, field observations and interviews.
2. Available historical topographic maps, aerial photographs, well and pipeline data and city directories were obtained and reviewed to determine if current or prior land owners/occupants may have engaged in activities on adjacent properties that may have been an environmental concern. Sanborn fire insurance maps were not available for the Subject Project Alignment and adjoining properties.
3. Available geologic literature was reviewed to characterize the geologic, physiographic, and hydrogeologic setting to determine potential release pathways.
4. An on-site reconnaissance of Subject Project Alignment and the adjoining properties was performed to conduct interviews, verify environmental and historical records, identify hazardous substance and petroleum product storage areas and any obvious signs of environmental releases, identify current land-use activities and discover potential areas of environmental concern based on current conditions and development.
5. Interviews were conducted to obtain information relevant to the Subject Project Alignment and adjoining properties.

This report was prepared to document the Phase I ESA investigation and summarizes our findings/results, conclusions and recommendations.

1.3 Authorization

AEI Engineering authorized this ESA subsequent to City of Houston project authorization on May 5, 2014.

1.4 Significant Assumptions and Exceptions

This Phase I ESA was performed in general accordance with ASTM E 1527-13 as modified by City of Houston, Department of Public Works & Engineering Infrastructure Design Manual Chapter 11 "Geotechnical and Environmental Requirements." The Phase I ESA was limited to information that is "reasonably ascertainable" and "practically reviewable" in accordance with ASTM E 1527-13, considering the time and cost associated with the assessment. HVJ Associates cannot guarantee the completeness or accuracy of the regulatory agency database records and cannot guarantee that not finding indications of hazardous substances or petroleum products means that these materials do not exist on the Subject Project Alignment. There is a possibility that sources of contamination have escaped detection due to the limitations of this study, the inaccuracy of available governmental records, or the presence of undetected and unreported environmental releases. HVJ Associates cannot be responsible for failure to disclose recognized environmental conditions that may exist on or near the Subject Project Alignment, but were not identified due to the limited nature of this assessment.

HVJ Associates reserves the right to alter our conclusions and recommendations based on our review of any information obtained after the date of this report. Our professional services have been performed using that degree of care and skill ordinarily exercised, under similar conditions, by environmental consultants practicing in this or similar localities. No warranty, express or implied, is made as to the professional information included in this report.

1.5 Qualifications of Environmental Professionals

The primary investigator for this Phase I ESA is Mr. Edward Hawkinson. Mr. Hawkinson holds BS and MS degrees in geology from The Ohio State University and the University of Cincinnati respectively and an MBA from the University of Cincinnati. Mr. Hawkinson is a registered professional geologist in Arkansas, Tennessee and Texas. His career encompasses a period exceeding 27 years involving environmental site assessments, hydrogeology, water resource evaluations, NEPA environmental investigations and energy exploration.

2.0 SITE DESCRIPTION

2.1 Location and Project Description

The location of the Subject Project Alignment is shown on Plates 1 through 4 (in the Plates Section) and on GeoSearch maps contained in Appendix A. The work involves site evaluation, site selection and design of new water well for the City of Houston in the Sims Bayou area. The project is located in Harris County within the city limits of Houston.

2.2 Current Use of and Improvements on the Subject Project Alignment

The Subject Project Alignment is developed south of Sims Bayou with a roadway, pipeline easement and fenced agricultural areas near subdivision development. Current land uses in the vicinity are depicted on Plates 2A and 2B.

2.3 Current Uses of Properties Adjoining the Subject Project Alignment

The following properties adjoin the Subject Project Alignment (refer to location map in Plate 2B and photographs in Appendix B).

- An active well location (Well No. 3), Sims Bayou and wooded areas adjoin the Subject Project Alignment to the north beyond which is West Orem and some subdivision development.

- Blue Ridge Drive adjoins the Subject Project Alignment to the west beyond which is a wooded area, Hillcroft Avenue, commercial development and a residential subdivision.

- A pipeline easement adjoins the Subject Project Alignment to the south beyond which is an open area, commercial development and Fort Bend Parkway.

- An open mowed possibly agricultural area listed as Harris County Flood Control with some farm structures and pipeline construction adjoins the Subject Project Alignment to the east.

3.0 USER PROVIDED INFORMATION

AEI Engineering provided a project description, several project maps and drawings. The ASTM standard User Questionnaire was not submitted to the user since is not appropriate for this type of investigation.

4.0 RECORDS REVIEW

4.1 Environmental Records Sources

On May 14, 2014 GeoSearch conducted a search of environmental database records (standard environmental record sources) for the Subject Project Alignment and surrounding areas. The GeoSearch Radius Report is provided in Appendix A. The search radii from the Subject Project Alignment were in accordance with the ASTM E1527-13 approximate minimum search distances for standard environmental record sources (where available). A Site Map showing the radius search area and registered facilities in the database records is included in the GeoSearch Radius Report in Appendix A. Table 1 lists the number of sites identified in the environmental databases that are located within the ASTM E1527-13 minimum search distance as modified by the City of Houston Department of Public Works Infrastructure Design Manual Chapter 11 Section 11.25 A for the Subject Project Alignment.

Table 1 – Sites Identified During Environmental Database Search

Data Records	Locatable Sites	Unlocatable Sites
FEDERAL		
AIRSAFS – Aerometric Information Retrieval System/Air Facility Subsystem	0	0
BRS – Biennial Report System	0	0
CDL – Clandestine Drug Laboratory Locations	0	0
DOCKETS – EPA DOCKET Data	0	0
EC – Federal Institutional /Engineering Controls	0	0
ERNSTX - Emergency Response Notification System	0	0
FRSTX – Facility Registry System	0	0
HMIRSR06 – Hazardous Materials Incident Reporting System	0	0
ICIS – Integrated Compliance Information System	0	0
ICISNPDES – Integrated Compliance information System	0	0
MLTS – Material Licensing Tracking System	0	0
NPDESR06 – National Poll. Discharge Sys.	0	0
PADS – PCB Activity Database System	0	0
PCSR06 – Permit Compliance System	0	0
RCRASC – RCRA Sites with Controls	0	0
SFLIENS – CERCLIS Liens	0	0
SSTS – Section Seven Tracking System	0	0
TRI – Toxic Release Inventory	0	0
TSCA – Toxic Substances Control Act	0	0
NLRRCRAG – No Longer Regulated RCRA – Generator	0	0
RCRAGR06 (non-TSD operating sites that generate and handle hazardous wastes) Resource Conservation and Recovery Act – Generator/Handler	0	0
HISTPST – Historical Gas Stations	0	0

Table 1 – Sites Identified During Environmental Database Search		
Data Records	**Locatable Sites**	**Unlocatable Sites**
BF – Brownfields Management System	0	0
CERCLIS (federal hazardous waste sites) Comprehensive Environmental Response, Compensation and Liability Information System	0	0
LUCIS – Land Use Control Information System	0	0
NFRAP – No Further Remedial Action Planned	0	0
NLRRCRAT – No Longer Regulated RCRA – TSD	0	0
ODI – Open Dump Inventory	0	0
RCRAT Facilities (hazardous waste treatment, storage and disposal facilities) Resource Conservation and Recovery Act – Treatment, Storage and Disposal	0	0
DNPL – Delisted National Priority List (federal superfund sites)	0	0
DOD – Department of Defense Sites	0	0
FUDS – Formerly Used Defense Sites	0	0
NLRRCRAC – No Longer Regulated RCRA – Corrective Action	0	0
NPL - National Priority List (federal superfund sites)	0	0
PNPL – Proposed National Priority List (federal superfund sites)	0	0
RCRAC – Resource Conservation and Recovery Act – Corrective Action	0	0
RODS – Records of Decision	0	0
STATE		
GWCC – Groundwater Contamination Cases	0	0
HISTGWCC – Historic Groundwater Contamination Cases	0	0
LIENS – TCEQ Liens	0	0
MSD – Municipal Settings Designation Report	0	0
NOV – Notices of Violation	0	0
SIEC01 – State Institutional/Engineering Controls	0	0
SPILLS – Spills Listing	0	0
TIER II – Chemical Reporting Program	0	0
DCR – Dry Cleaner Registration	0	0
IHW - Industrial and Hazardous Waste Sites	0	0
PIHW – Permitted Ind. and Hazardous Waste Sites	0	0
PST – Petroleum Storage Tanks	1	0
APAR – Affected Property Assessment Reports	0	0
BSA – Brownfields Site Assessment	0	0
CALF – Closed and Abandoned Landfill Inventory	0	0
IOP - Innocent Owner/Operator Program	0	0
LPST - Leaking Petroleum Storage Tanks	1	0
MSWLF – Municipal Solid Waste Landfill Sites	0	0
RRCVCP – Railroad Commission VCP Sites	0	0
RWS - Radioactive Waste Sites	0	0
VCP – Voluntary Cleanup Program	0	0
WMRF – Waste Management Recycling Facilities	0	0
IHWCA – Industrial and Hazardous Waste Corrective Action Sites	1	0
SF - State Superfund	0	0
TRIBAL		
USTR06 – Underground Storage Tanks on Tribal Land – Region 06	0	0
LUSTR06 – Leaking Underground Storage Tanks on Tribal Land – Region 06	0	0
ODINDIAN - Open Dump Inventory on Tribal Lands	0	0

Table 1 – Sites Identified During Environmental Database Search		
Data Records	**Locatable Sites**	**Unlocatable Sites**
INDIANRES – Indian Reservation Country	0	0
TOTAL	3	0

4.2 State and Federal Records Summary

HVJ Associates reviewed federal and state regulatory agency summaries for nearby regulated sites to determine their status and to identify specific addresses and site names that would aid in conducting our field reconnaissance. Three environmental records were found in the environmental databases reviewed for this study (see Plates 3A and 3B). The number and types of sites identified in the database records are consistent with the various land uses in the surrounding area. Due to the relatively flat topography there is very minor surface gradient in the area toward Sims Bayou north of the Subject Project Alignment. None of the sites identified in the database search are likely to have a significant negative impact on the Subject Project Alignment.

HVJ Associates reviewed federal and state regulatory agency summaries for nearby regulated sites to determine their status and to identify specific addresses and site names that would aid in conducting our field reconnaissance. The environmental sites and specific environmental sites with recognized environmental conditions (RECs) are shown on Plates 3A and 3B. For sites found within the search radius, the records include the following type of sites (most but not all sites are discussed in the following narrative):

SPILLS – Spills Listing. This TCEQ report (last updated during December 2012) lists releases of hazardous or potentially hazardous materials into the environment. SPILL issues are discussed in Section 4.4 under Local Hazmat Incidents.

PST – TCEQ Petroleum Storage Tank database. This list identifies parties who own or operate aboveground and underground storage tanks (ASTs and USTs respectively) containing petroleum products or hazardous materials. One site with storage tanks was reported to exist within the designated search radii. This tank is located approximately 0.19 mi. northwest of the Subject Project Alignment (Plate 3A – Map ID #1) and should not be a concern to the proposed project due to the PST status information contained in this database and its location.

LPST - TCEQ Leaking Petroleum Storage Tank Report. This report lists sites known to have leaks/spills associated with underground or aboveground tanks. It contains summary information about leaking tanks reported to the commission such as identification numbers, location information, responsible party information and priority/status codes.

One LPST site was reported within the database search radii. This site it the Butler Stadium facility at 6690 Carved Rock (Plate 3A – Map ID #2) approximately 0.49 mi. northeast of the Subject Project Alignment and is listed as priority code "no groundwater impact, no apparent threats or impacts to receptors" and status code "final concurrence issued, case closed." One used oil tank was installed at this location in 1981 and removed during 1996. This site should not be a concern to project construction due to its location and current status.

IHWCA - Industrial and Hazardous Waste Corrective Action Sites. This database is provided by the TCEQ. The mission of the industrial and hazardous waste corrective action program is to oversee the cleanup of sites contaminated from industrial and municipal hazardous and industrial nonhazardous wastes. The goals of this program are to: ensure that sites are assessed and remediated to levels that protect human health and the environment; verify that waste management units or facilities are taken out of service and closed properly; and to facilitate revitalization of contaminated properties. The M-I Drilling Fluids Plant at 11808 Canemont Street (Plate 3A – Map ID #3)

approximately 0.85 mi. northwest of the Subject Project Alignment should not be a concern to project construction due to its location and current status.

A complete list of all government records reviewed is included as an attachment to the GeoSearch report provided in Appendix A. In addition, a list of records reviewed is provided in Section 4.1 – Environmental Records Sources.

4.3 TCEQ File Review

Based on our review of the data, no request was made to the LPST Records Section of the Houston TCEQ to review files.

4.4 Local Hazmat Incidents

The State of Texas SPILL listing lists releases of hazardous or potentially hazardous materials into the environment. No SPILL events were reported on or within 500 ft. of the Subject Project Alignment.

4.5 FEMA Floodplain and Wetlands Map Review

According to Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRM) for Harris County, Texas and Incorporated areas, Panel 48201C1005 (revised date June 18, 2007) the Subject Project Alignment is in Zone X described as an area that is outside the 100 year floodplain.

The United States Department of Agriculture (USDA) NWI map shows no wetland areas on or adjoining the Subject Project Alignment. Copies of this map and the FEMA map are provided in Appendix C.

4.6 Physical Setting

Site Topography. From a review of the 1995 Bellaire and Almeda, Texas 7.5-minute United States Geological Survey (USGS) topographic quadrangle maps (Plate 4), the Subject Project Alignment lies at an elevation of approximately 70 feet above mean sea level. The regional slope is to the north toward Sims Bayou north of the Subject Project Alignment.

Municipal water districts, subdivisions, industrial sites, and local residents in the Subject Project Alignment draw groundwater for domestic, municipal, commercial and industrial usage. Large withdrawal of water in the greater Houston area has resulted in regional and localized land-surface subsidence. This has resulted in the lowering of elevations in the area by approximately 6 feet since 1906 when subsidence data began being recorded. The primary effects of this have been the alteration of natural drainage patterns in the area and revisions to floodplain and floodway designations.

Geology and Soil Characteristics. A review of the Bureau of Economic Geology 1992 Geologic Atlas of Texas, Beaumont Sheet indicates that the uppermost geologic formation underlying the Subject Project Alignment is the Pleistocene Beaumont Formation (map symbol Qbs). These sediments consist primarily of clays, silts and sands; and include mainly stream channel, point-bar, natural levee, backswamp, coastal marsh and mud-flat deposits in fluvial and deltaic environments during the Pleistocene Epoch. The Beaumont Formation is locally calcareous, has concretions of calcium carbonate, iron oxide and iron manganese oxides commonly in zones of weathering and is characterized by a fairly flat, featureless surface with meander patterns and pimple mounds on meander belt ridges.

A review of the 1976 Soil Survey of Harris County, Texas, indicates the soils within the Subject Project Alignment are classified as Bernard clay loam (map symbols Bd). Bernard clay loam soil consists of deep, poorly drained, moderately permeable soils that formed in thick loamy sediments on coastal prairies of Pleistocene Age with slopes ranging from 0 to1 percent. The upper layer consists of a very dark gray dry black loam with a weak fine subangular blocky structure.

Groundwater Characteristics. Groundwater occurs in two main aquifers in the Houston area. The Chicot Aquifer is the shallowest aquifer that produces sufficient quantities of water for domestic, commercial and light industrial purposes. In this area, the Chicot is estimated to extend to approximately 500 feet below the ground surface. Below the Chicot is the Evangeline Aquifer. The Evangeline is the main source of groundwater in the Houston area. Its depth in the area ranges from 400 to 1200 feet below ground surface. Both aquifers dip gently toward the coast.

Shallower groundwater is also encountered in this Alignment of Harris County. Generally, this groundwater is of lesser quality than that found in the Chicot or Evangeline Aquifers. Typically, the shallow water-bearing zones are first encountered at a depth of 10 to 20 feet below ground surface. Groundwater movement direction is variable from location to location and may not follow the surface flow direction. The rate of groundwater movement in these shallow water-bearing zones is extremely slow and the production rates rarely exceed two gallons per minute.

Geologic Faulting. A review of surface faults was made from geologic literature and available in-house records. Based on our review, the Subject Project Alignment is not located near any documented geologic fault. We believe that faulting may not affect the project; however, it should be noted that unmapped faults that could impact the project may exist within the Subject Project Alignment. A detailed fault assessment is not within the scope of this study.

4.7 Oil/Gas Well, Pipeline and Water Well Review

GeoSearch found no oil/gas well dry hole or producing wells locations within the database search radius. GeoSearch found a deep Greenridge MUD water well adjacent to (north) and a deep City Houston water adjacent to (northwest) of the Subject Project Alignment. Copies of the GeoSearch Oil/Gas and Water Well Reports and all other historical records are provided in the Historical Records section of this report (see Appendix A).

4.8 Historical Review

Historical review of data, maps and aerial photographs revealed that the Subject Project Alignment is heavily wooded and has never been developed.

4.8.1 Historical Topographic Map. Topographic maps of the Alignment that included the Subject Project Alignment published in 1915, 1929, 1947, 1955, 1967, 1982 and 1995 were reviewed to assess historical use of the Subject Project Alignment. The topographic maps show no significant information on land use and environmental conditions on the Subject Project Alignment. The oldest available topographic map in the area is the 1915 Bellaire, Texas Quadrangles. This map shows the Subject Project Alignment to be undeveloped in a rural setting. The most current topographic map for 1995 is provided as Plate 4. Copies of all other reviewed historical topographic maps are provided in Appendix C.

4.8.2 Sanborn Fire Insurance Maps. We requested copies of all available Sanborn fire insurance maps from GeoSearch in Austin, Texas. GeoSearch reviewed Sanborn maps in the collection of the Center for American History at the University of Texas at Austin and from other data providers. No Sanborn maps were available for the Subject Project Alignment.

4.8.3 Historical Directories. City directories by Cole Directory and others have been published in Houston and surround areas since the early 1900's. GeoSearch reviewed listings within the Subject Project Alignment and in the immediate vicinity for the years 1996-97 through 2008 for West Orem. Historically, most of the Subject Project Alignment was undeveloped prior to 2004. No possible or suspected sites with recognized environmental conditions identified through other sources were confirmed based on this information. No additional information was added from a review of the city directory database. Copies of the city directory information obtained from GeoSearch are provided in Appendix C.

4.8.4 Historical Aerial Photographs. Historical aerial photographs (Appendix C) were obtained from GeoSearch for the years 1944, 1953, 1969, 1979, 1989, 1996, 2004 and 2012. The photographs were reviewed for land use, development, the presence of uncontrolled dumping, service stations and other industrial facilities.

1944/1953. These photographs show the Subject Project Alignment to be undeveloped and cleared. A small residential subdivision has been developed west side of the Subject Project Alignment.

1969/1979. The Subject Project Alignment is cleared and undeveloped. A school complex has been constructed north of the Subject Project Alignment and additional residential subdivisions have been constructed north, northwest and west of the Subject Project Alignment.

1989/1996. These photographs show development around the Subject Project Alignment in roughly its present day configuration. The area west of the Subject Project Alignment is partially wooded with some commercial development.

2004/2012. The area appears much as it does today with residential development predominating to the north, northwest and west of the Subject Project Alignment and some commercial development along Fort Bend Parkway and to the west along/near Hirsch Road. No indications of recognized environmental conditions were observed on these photographs.

No additional historical recognized environmental conditions associated with the Subject Project Alignment and the adjoining properties were identified during the review of the historical aerial photographs.

5.0 SITE RECONNAISSANCE AND INTERVIEWS

A site reconnaissance by automobile and on foot of the Subject Project Alignment and adjoining properties was conducted by an HVJ Associates Environmental Professional during May 2014. Interviews were conducted in the adjoining subdivision areas. Several local residents indicated that they were unaware of any environmental impairment in the Subject Project Alignment.

The purpose of the site reconnaissance was to observe the streets, easements and any adjacent environmental sites for site characteristics, spills, corrective actions and other potential environmental concerns and to document present land uses. Power line poles were observed on and adjoining the Subject Project Alignment with electrical transformers that potentially contain PCBs. The City of Houston provides water, sanitary sewer and storm sewer service to the adjoining areas.

Table 2 – Site Reconnaissance Observations

Summary of Research and Findings:		**Brief Description of Findings and Supporting Evidence Identifying:**	
Observations or Investigative Methods Used:	**Type**	**Type R - Recognized Environmental Conditions** **Type H - Historical Recognized Environmental Conditions, and/or** **Type D - De Minimis Conditions:**	**Probability of Condition***
Date of site visit and major exterior observations on Subject Project Alignment	**May 2014**		
Date of visit and exterior observations on adjoining properties	**May 2014**		

Table 2 – Site Reconnaissance Observations			
Summary of Research and Findings:	**Type**	**Brief Description of Findings and Supporting Evidence Identifying:**	**Probability of Condition***
Observations or Investigative Methods Used:		**Type R - Recognized Environmental Conditions Type H - Historical Recognized Environmental Conditions, and/or Type D - De Minimis Conditions:**	
Any storage of hazardous substances/petroleum items?	N		
Any pits, ponds, lagoons? On parcel or Adjoining?	N		
Any odors, stained soil/pavement, stressed vegetation?	N		
Any above or underground storage tanks?	N		
Any leaking tanks or drums? On parcel or Adjoining?	N		
Any solid waste disposal sites, trash container leaks?	N		
Any wastewater discharges into ditch or streams?	N		
Any dry wells, irrigation wells, injection wells, etc.?	N		
Any septic systems? On parcel or Adjoining?	N		
Any dry cleaners or hazardous item containers? (O or A)	N		
Any electrical or hydraulic equipment w possible PCBs?	N?	D – none observed	
Any RCRA Large Quantity Generators? (O or A)	N		
Any RCRA Treatment Storage Disposal System? (O or A)	N		
Date of visit and interior building observations on Subject Project Alignment.	N/A		
Any interior stains or corrosion (except from water)?	N/A		
Any floor drains and sumps?	N/A		

* K – Known (with certainty), H – High, M – Moderate, L – Low, or N - None

No active service station locations were observed on or adjoining the Subject Project Alignment. No dry cleaner locations were observed adjoining or near the Subject Project Alignment. No significant dumping and/or trash disposal was observed on or near the Subject Project Alignment. No stained soils and/or soil piles were observed near the Subject Project Alignment. No solid waste disposal facilities were observed in the Subject Project Alignment. No septic systems were observed.

Our field observations were in accordance with the database information. A detailed summation of our field observations in provided in Table 2 above. No possible wetland areas were observed on or near the Subject Project Alignment.

6.0 FINDINGS

No sites likely to have a negative impact on the Subject Project Alignment were identified while performing this Phase I ESA. We found no known, suspect and/or historical recognized environmental conditions (refer to ASTM E1527-13 §12.5).

7.0 OPINION

The ASTM 1527-13 document requires the Environment Professional's opinion regarding the impact of the conditions identified in the findings section and the rationale for concluding that the condition is or is not an REC. No RECs were identified on or near the Subject Project Alignment.

8.0 DATA GAPS

Section 8.3 of ASTM E 1527-13 states that all obvious uses of the property shall be identified from the present back to the property's first developed use, or back to 1940, which ever is earlier. The term developed use includes agricultural uses. A data failure occurs when all of the standard historical sources that are reasonably ascertainable and likely to be useful have been reviewed and yet the objectives have not been met. Data failure is not uncommon in trying to identify the use of the property at five-year intervals back to first use or 1940. Not withstanding a data failure, standard historical sources may be excluded if the sources are not reasonably ascertainable or if past experience indicates that the sources are not likely to be sufficiently useful, accurate or complete in terms of satisfying the objectives.

Based on aerial photograph and topographic map information, the Subject Project Alignment area has been developed with a roadway and agricultural facilities with fencing. Based on this information, in our opinion there is no data gap(s) resulting in a data failure. There are no significant data gaps and all obvious uses of the Subject Project Alignment have been identified from the present back to the property's first developed use.

9.0 CONCLUSIONS AND RECOMMENDATIONS

We have performed a Phase I Environmental Site Assessment of City of Houston designated Subject Project Alignment near Sims Bayou. This assessment has revealed no evidence of recognized environmental conditions in connection with the Subject Project Alignment. No wetland areas were found on or adjacent to the Subject Project Alignment.

10.0 DEVIATIONS AND LIMITATIONS

This report is an instrument of service of HVJ Associates, Inc. The report was prepared for and is intended for the exclusive use of the City of Houston. The report's contents may not be relied upon by any other party without the express written permission of HVJ Associates. The information and conclusions provided in this report are based on a general knowledge of Subject Project Alignment and the region; regulatory agency database information; historical information; site reconnaissance findings; interviews; etc. The site reconnaissance observations in this report summarize conditions as found on the date the HVJ Associates environmental professional was at and observed Subject Project Alignment. The report's findings are based on conditions that existed on the dates of HVJ Associates' site visits and available records and should not be relied upon to precisely represent conditions at any other time. This study has attempted to identify recognized environmental conditions in connection with Subject Project Alignment; however, there is a possibility that sources of information have gone undetected because of the limitations of this study, inaccuracy of database records, or the presence of undetected and unreported environmental releases. Certain indicators of the presence of environmental conditions, historical sites, or hazardous materials may have been latent at the time of our site reconnaissance and may subsequently have become unobservable. All discovered information has been disclosed and a good faith effort has been made to consult pertinent sources and appropriately evaluate the information.

This investigation was performed using the standard level of care and diligence normally practiced by recognized professional environmental and engineering firms in this Alignment presently performing similar services under similar circumstances. This report is intended to be used in its entirety. It has been prepared exclusively for Subject Project Alignment. If the location or Alignment of the Subject Project Alignment changes or otherwise differs from the descriptions contained herein, HVJ Associates should be immediately notified and retained to evaluate the effect of the changes on the conclusions and recommendations presented in this report, and to revise them if necessary. The conclusions presented in this report should not be relied upon for other properties or sites without additional evaluation and/or investigation. This document is not intended to constitute or substitute

for legal counsel or guidance in connection with decisions regarding property acquisition or regulatory actions.

HVJ Associates has based the conclusions included in this report on its observation of existing Subject Project Alignment conditions, its interpretation of Subject Project Alignment history, and its interpretation of the Subject Project Alignment usage information it was able to access. It is possible that HVJ Associates, Inc. research while fully appropriate for an Environmental Site Assessment failed to indicate the existence of important information sources. Assuming such sources actually exist, their information could not have been considered in the formulation of HVJ Associates' findings and opinions. All conclusions are qualified by the fact that no borings were made and no soil, sediment, or groundwater sampling or chemical testing was conducted. Conclusions about Subject Project Alignment conditions under no circumstances comprise a warranty that conditions in all Alignments within the Subject Project Alignment (and below existing grade) are of the same quality that HVJ Associates has inferred from observable Subject Project Alignment conditions and readily available site history. HVJ Associates' findings and opinions must be considered probabilities based on professional judgment applied to the limited data HVJ Associates was able to gather during the course of the Subject Project Alignment assessment.

11.0 ADDITIONAL SERVICES

Wetland information was added to this assessment from the NWI map and field observations. No other additional services were provided for this assessment. No title and judicial research was conducted to identify environmental liens and activity and use limitations currently recorded against the Subject Project Alignment.

12.0 REFERENCES

The following referenced resources were relied upon in preparing this Phase I ESA report:

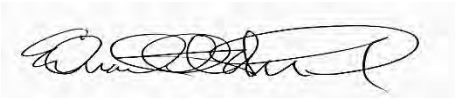
- Bureau of Economic Geology, 1992. Geologic Atlas of Texas, Houston Sheet, University of Texas at Austin;
- United States Department of Agriculture, Soil Conservation Service, Soil Survey of Harris County, 1976;
- Harris-Galveston Coastal Subsidence District, 1995. Subsidence Map, 1906 to 1995;
- U.S. Geological Survey 1915 Bellaire, Texas Topographic Quadrangle Map (1:62500);
- U.S. Geological Survey Bellaire and Almeda Texas 7.5 Minute Topographic Quadrangle Maps (1:24000);
- FEMA Flood Insurance Rate Map;
- City of Houston Public Library, "Historical City Directories;"
- Current National Wetland Inventory (NWI) map; and
- American Society of Testing and Material, 2005, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process, Designation E 1527-13.
- City of Houston, Department of Public Works & Engineering Infrastructure Design Manual Chapter 11 "Geotechnical and Environmental Requirements."

The following individuals, vendors, and agencies were contacted during the course of this study.

- GeoSearch, Austin, Texas;
- Local residents at adjoining residences;
- Texas Commission on Environmental Quality Data Files, Houston and Austin, Texas.

13.0 SIGNATURE OF ENVIRONMENTAL PROFESSIONAL

I declare to the best of my professional knowledge and belief I meet the definition of Environmental Professional as defined in §312.10 of 40 CFR 312 and I have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the City of Sims Bayou Well Project. I have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.



7/18/2014

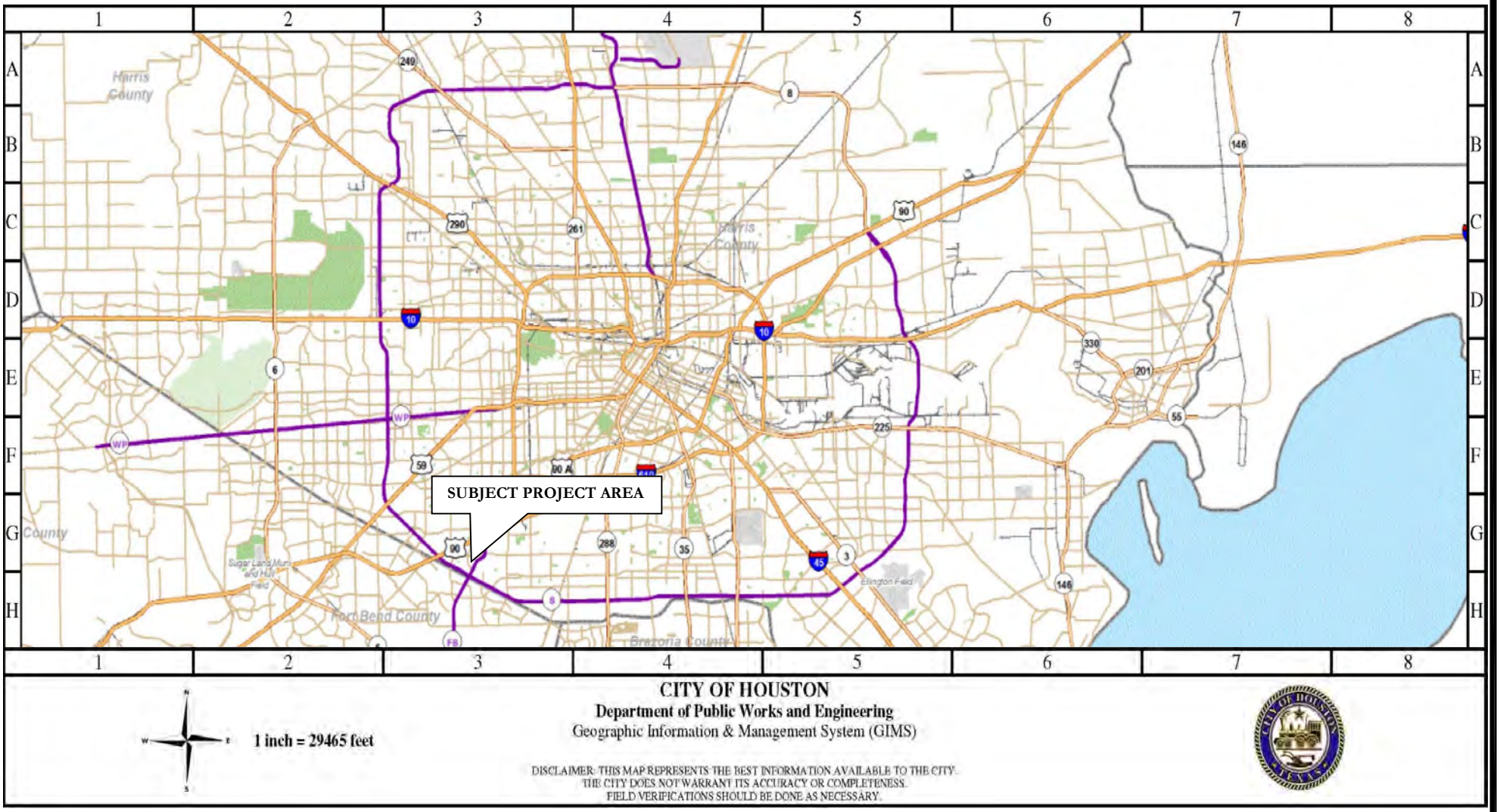
Edward F. Hawkinson, PG
Project Environmental Scientist
HVJ Associates, Inc.

Date:

14.0 QUALIFICATIONS OF ENVIRONMENTAL PROFESSIONAL

HVJ Associates environmental scientist Edward F. Hawkinson, PG conducted the Phase I ESA and prepared this report. Mr. Hawkinson has over 20 years of environmental project management experience. He has been responsible for ESA preparation, NEPA site assessments, environmental impact statement preparation, remediation, aquifer characterization, groundwater modeling and Phase II ESA sampling/analysis and reporting. Over the last 15 years, Mr. Hawkinson has been personally involved in the production of over 500 ESA documents in a multi-state Alignment and Puerto Rico. Mr. Hawkinson is a registered professional geologist in Texas, Arkansas and Tennessee and is a member of the Geological Society of America, Houston Geological Society and the Texas Association of Environmental Professionals. Mr. Hawkinson's resume is provided in Appendix D.

PLATES



CITY OF HOUSTON
Department of Public Works and Engineering
Geographic Information & Management System (GIMS)

DISCLAIMER: THIS MAP REPRESENTS THE BEST INFORMATION AVAILABLE TO THE CITY. THE CITY DOES NOT WARRANT ITS ACCURACY OR COMPLETENESS. FIELD VERIFICATIONS SHOULD BE DONE AS NECESSARY.

HVJ ASSOCIATES
6120 S. Dairy Ashford Road
Houston, Texas 77072-1010
281.933.7388 Ph
281.933.7293 Fax

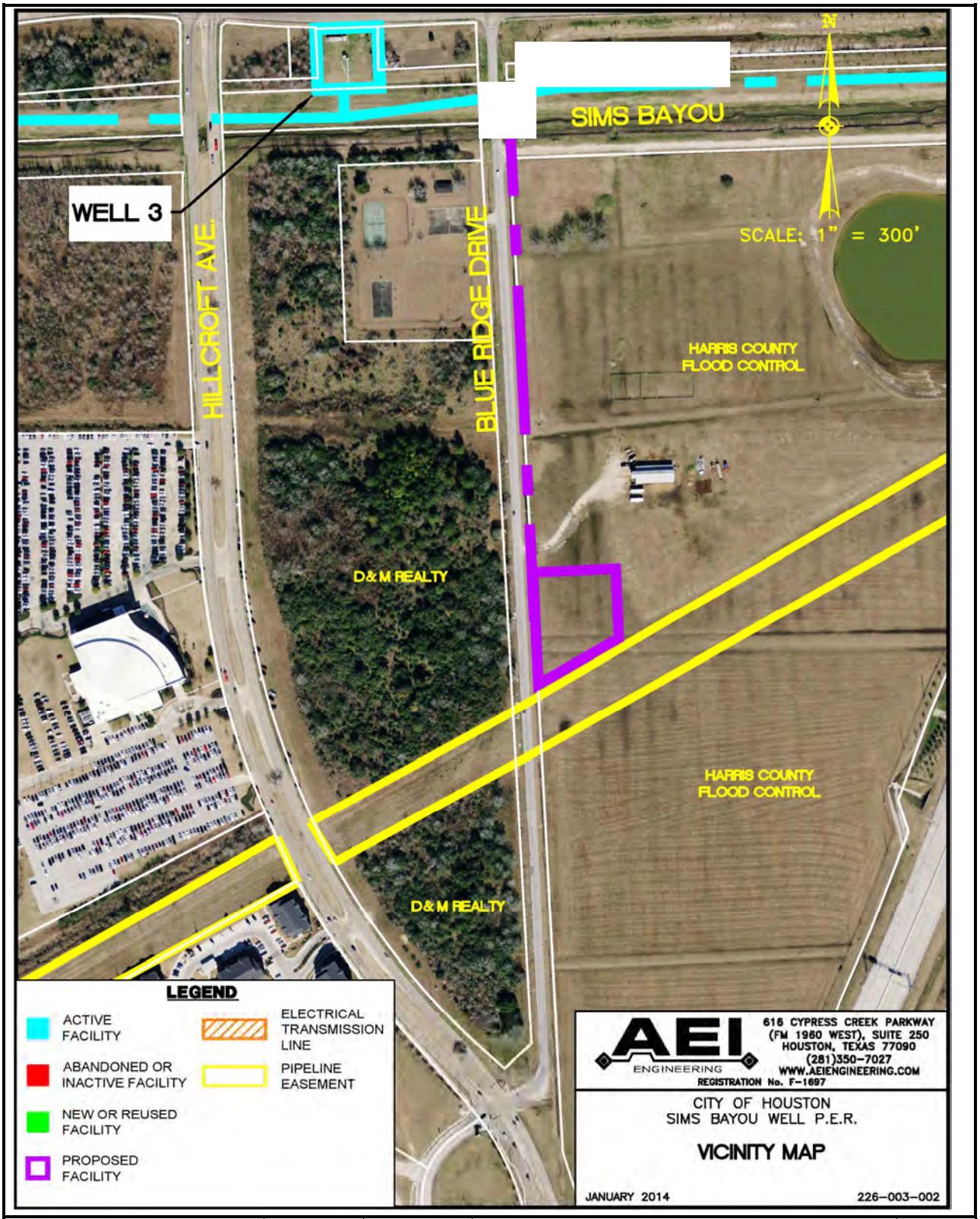
DATE: 5/27/2014	APPROVED BY: EH	PREPARED BY: NL

SITE VICINITY MAP
Phase I ESA
New/Replacement of Water Well and Well Collection Line - Sims Bayou
WBS No.: S-000100-0024-4

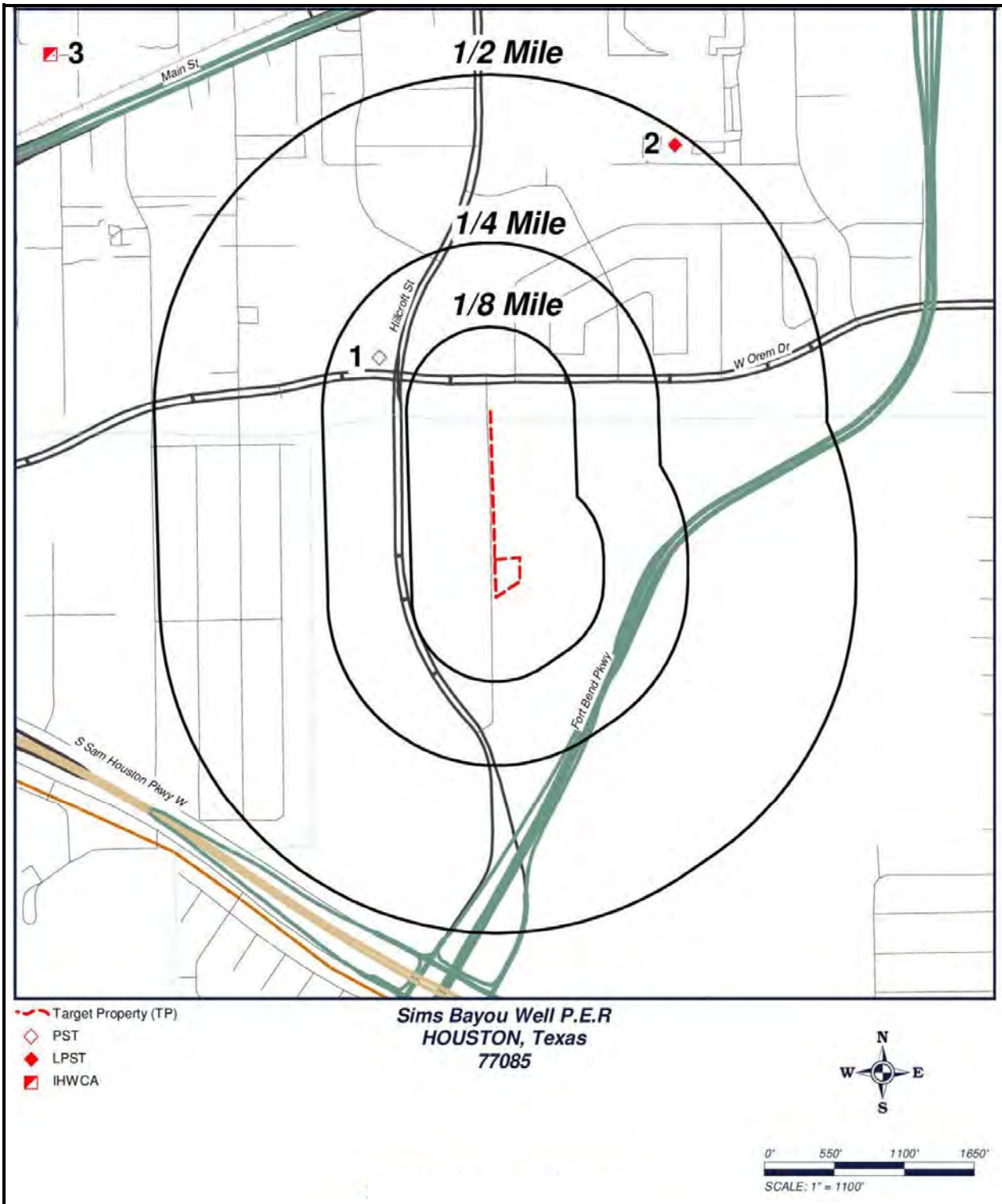
PROJECT NO.:	DRAWING NO.:
HE1216860	PLATE 1

Radius Map 2

HVJ ASSOCIATES	Drawn:	NL	**Plate 2A** **Land Use Map** **Phase I ESA - New/Replacement of Water Well and Well Collection Line – Sims Bayou** **WBS S-000100-0024-4** **Houston, Harris County, Texas**
	Checked:	EH	
	Date:	May 2014	
Project No. HE1216860	Scale	NTS	



HVJ ASSOCIATES	Drawn:	NL	**Plate 2B** **Subject Project Area Map** **Phase I ESA - New/Replacement of Water Well and Well Collection Line – Sims Bayou** **WBS S-000100-0024-4** **Houston, Harris County, Texas**
	Checked:	EH	
	Date:	May 2014	
Project No. HE1216860	Scale	NTS	



HVJ ASSOCIATES		Drawn:	NL	**Plate 3A** **Environmental Sites Map** **Phase I ESA - New/Replacement of Water Well and Well Collection Line – Sims Bayou** **WBS S-000100-0024-4** **Houston, Harris County, Texas**	N
		Checked:	EH		
		Date:	May 2014		
Project No.	HE1216860	Scale	NTS		

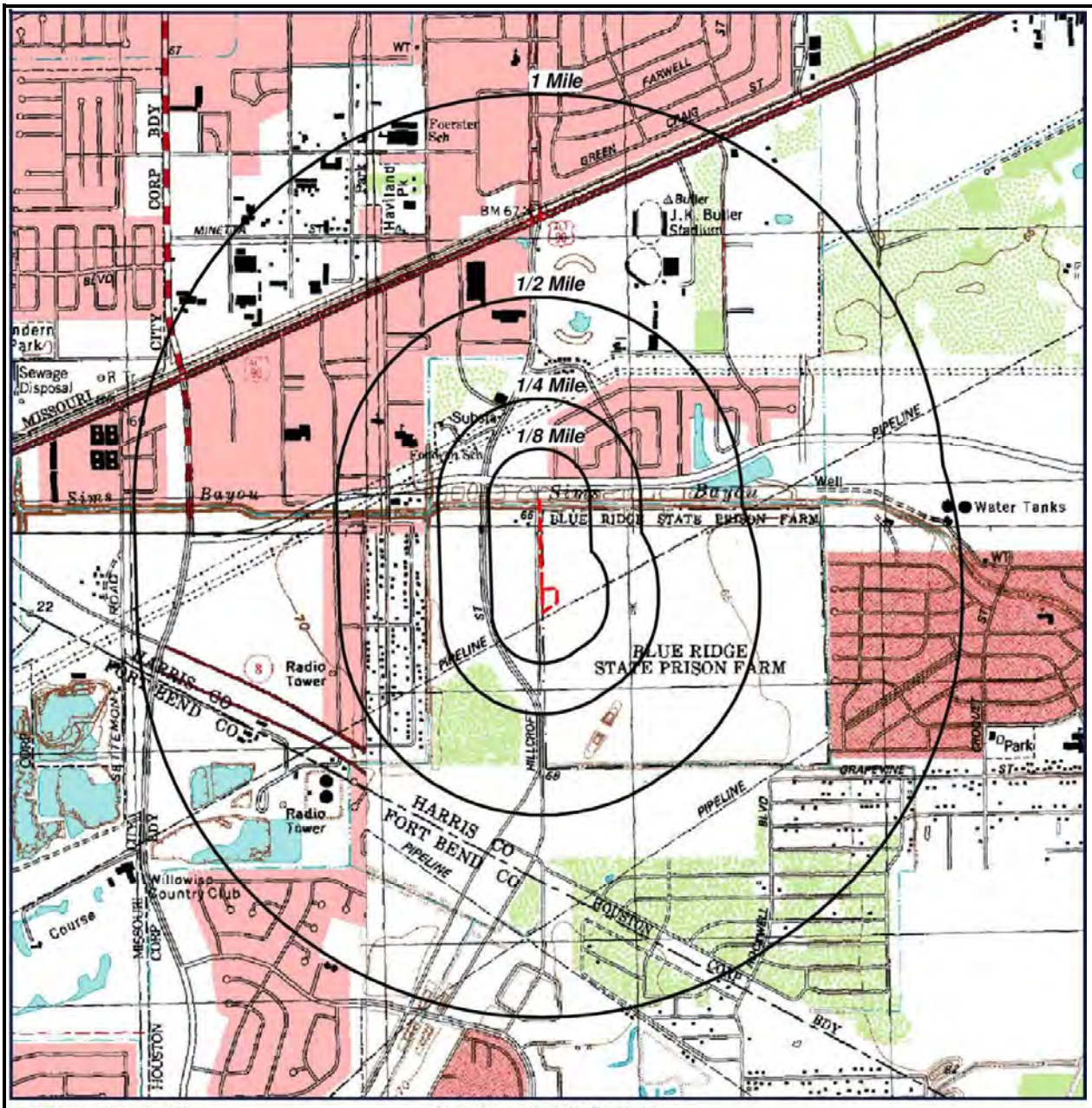
Target Property (TP)
PST
LPST
IHWCA

Quadrangle(s): Bellaire, Almeda
Sims Bayou Well P.E.R
HOUSTON, Texas
77085

N
W E
S

0' 550' 1100' 1650'
SCALE: 1" = 1100'

HVJ ASSOCIATES		Drawn:	NL	**Plate 3B** **Environmental Sites Map ORTHO** **Phase I ESA - New/Replacement of Water Well and Well Collection Line – Sims Bayou** **WBS S-000100-0024-4** **Houston, Harris County, Texas**	N
		Checked:	EH		
		Date:	May 2014		
Project No.	HE1216860	Scale	NTS		



Quadrangle(s): Bellaire, Almeda
Sims Bayou Well P.E.R
HOUSTON, Texas
77085

N
W E
S

0' 1000' 2000' 3000'
SCALE: 1" = 2000'

HVJ ASSOCIATES		Drawn:	NL	**Plate 4** **Site Topographic Map** **Phase I ESA - New/Replacement of Water Well and Well Collection Line – Sims Bayou** **WBS S-000100-0024-4** **Houston, Harris County, Texas**	N
		Checked:	EH		
		Date:	May 2014		
Project No.	HE1216860	Scale	NTS		

APPENDIX A

REGULATORY AGENCY INFORMATION

GeoSearch

On time. On target. In touch.™

Radius Report

Satellite view

Target Property:

Sims Bayou Well P.E.R

HOUSTON, Harris County, Texas 77085

Prepared For:

HVJ Associates-Houston

Order #: 35889

Job #: 79543

Project #: HE1216860

Date: 05/14/2014

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Target Property Summary

Sims Bayou Well P.E.R
HOUSTON, Harris County, Texas 77085

USGS Quadrangle: ***Bellaire, TX***
Target Property Geometry: ***Corridor***

Target Property Longitude(s)/Latitude(s):
(-95.492882, 29.626179), (-95.492882, 29.626179), (-95.492749, 29.622145), (-95.492159, 29.622494), (-95.492159, 29.623000), (-95.492773, 29.622964)

County/Parish Covered:
Harris (TX) , Fort Bend (TX)

Zipcode(s) Covered:
Houston TX: 77035, 77071, 77085
Missouri City TX: 77489

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 (picocuries per liter).

This report was designed by GeoSearch to meet or exceed the records search requirements of the All Appropriate Inquires Rule (40 CFR §312.26) and the current version of the ASTM International E1527, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process or, if applicable, the custom requirements requested by the entity that ordered this report. The records and databases of records used to compile this report were collected from various federal,state and local governmental entities. It is the goal of GeoSearch to meet or exceed the 40 CFR §312.26 and E1527 requirements for updating records by using the best available technology. GeoSearch contacts the appropriate governmental entities on a recurring basis. Depending on the frequency with which a record source or database of records is updated by the governmental entity, the data used to prepare this report may be updated monthly, quarterly, semi-annually, or annually.

Database Findings Summary

FEDERAL LISTING

Database	Acronym	Locatable	Unlocatable	Search Radius (miles)
AEROMETRIC INFORMATION RETRIEVAL SYSTEM / AIR FACILITY SUBSYSTEM	AIRSAFS	0	0	TP/AP
BIENNIAL REPORTING SYSTEM	BRS	0	0	TP/AP
CLANDESTINE DRUG LABORATORY LOCATIONS	CDL	0	0	TP/AP
EPA DOCKET DATA	DOCKETS	0	0	TP/AP
FEDERAL ENGINEERING INSTITUTIONAL CONTROL SITES	EC	0	0	TP/AP
EMERGENCY RESPONSE NOTIFICATION SYSTEM	ERNSTX	0	0	TP/AP
FACILITY REGISTRY SYSTEM	FRSTX	0	0	TP/AP
HAZARDOUS MATERIALS INCIDENT REPORTING SYSTEM	HMIRSR06	0	0	TP/AP
INTEGRATED COMPLIANCE INFORMATION SYSTEM (FORMERLY DOCKETS)	ICIS	0	0	TP/AP
INTEGRATED COMPLIANCE INFORMATION SYSTEM NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM	ICISNPDES	0	0	TP/AP
LAND USE CONTROL INFORMATION SYSTEM	LUCIS	0	0	TP/AP
MATERIAL LICENSING TRACKING SYSTEM	MLTS	0	0	TP/AP
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM	NPDESR06	0	0	TP/AP
PCB ACTIVITY DATABASE SYSTEM	PADS	0	0	TP/AP
PERMIT COMPLIANCE SYSTEM	PCSR06	0	0	TP/AP
RCRA SITES WITH CONTROLS	RCRASC	0	0	TP/AP
CERCLIS LIENS	SFLIENS	0	0	TP/AP
SECTION SEVEN TRACKING SYSTEM	SSTS	0	0	TP/AP
TOXICS RELEASE INVENTORY	TRI	0	0	TP/AP
TOXIC SUBSTANCE CONTROL ACT INVENTORY	TSCA	0	0	TP/AP
NO LONGER REGULATED RCRA GENERATOR FACILITIES	NLRRCRAG	0	0	0.1250
RESOURCE CONSERVATION & RECOVERY ACT - GENERATOR FACILITIES	RCRAGR06	0	0	0.1250
HISTORICAL GAS STATIONS	HISTPST	0	0	0.2500
BROWNFIELDS MANAGEMENT SYSTEM	BF	0	0	0.5000
COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION & LIABILITY INFORMATION SYSTEM	CERCLIS	0	0	0.5000
DELISTED NATIONAL PRIORITIES LIST	DNPL	0	0	0.5000
NO FURTHER REMEDIAL ACTION PLANNED SITES	NFRAP	0	0	0.5000
NO LONGER REGULATED RCRA NON-CORRACTS TSD FACILITIES	NLRRCRAT	0	0	0.5000
OPEN DUMP INVENTORY	ODI	0	0	0.5000
RESOURCE CONSERVATION & RECOVERY ACT - TREATMENT, STORAGE & DISPOSAL FACILITIES	RCRAT	0	0	0.5000
DEPARTMENT OF DEFENSE SITES	DOD	0	0	1.0000
FORMERLY USED DEFENSE SITES	FUDS	0	0	1.0000

Database Findings Summary

Database	Acronym	Locatable	Unlocatable	Search Radius (miles)
NO LONGER REGULATED RCRA CORRECTIVE ACTION FACILITIES	NLRRCRAC	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
RECORD OF DECISION SYSTEM	RODS	0	0	1.0000
SUB-TOTAL		0	0	

Database Findings Summary

STATE (TX) LISTING

Database	Acronym	Locatable	Unlocatable	Search Radius (miles)
GROUNDWATER CONTAMINATION CASES	GWCC	0	0	TP/AP
HISTORIC GROUNDWATER CONTAMINATION CASES	HISTGWCC	0	0	TP/AP
TCEQ LIENS	LIENS	0	0	TP/AP
MUNICIPAL SETTING DESIGNATIONS	MSD	0	0	TP/AP
NOTICE OF VIOLATIONS	NOV	0	0	TP/AP
STATE INSTITUTIONAL/ENGINEERING CONTROL SITES	SIEC01	0	0	TP/AP
SPILLS LISTING	SPILLS	0	0	TP/AP
TIER I I CHEMICAL REPORTING PROGRAM FACILITIES	TIERII	0	0	TP/AP
DRY CLEANER REGISTRATION DATABASE	DCR	0	0	0.2500
INDUSTRIAL AND HAZARDOUS WASTE SITES	IHW	0	0	0.2500
PERMITTED INDUSTRIAL HAZARDOUS WASTE SITES	PIHW	0	0	0.2500
PETROLEUM STORAGE TANKS	PST	1	0	0.2500
AFFECTED PROPERTY ASSESSMENT REPORTS	APAR	0	0	0.5000
BROWNFIELDS SITE ASSESSMENTS	BSA	0	0	0.5000
CLOSED & ABANDONED LANDFILL INVENTORY	CALF	0	0	0.5000
DRY CLEANER REMEDIATION PROGRAM SITES	DCRPS	0	0	0.5000
INNOCENT OWNER / OPERATOR DATABASE	IOP	0	0	0.5000
LEAKING PETROLEUM STORAGE TANKS	LPST	1	0	0.5000
MUNICIPAL SOLID WASTE LANDFILL SITES	MSWLF	0	0	0.5000
RAILROAD COMMISSION VCP AND BROWNFIELD SITES	RRCVCP	0	0	0.5000
RADIOACTIVE WASTE SITES	RWS	0	0	0.5000
VOLUNTARY CLEANUP PROGRAM SITES	VCP	0	0	0.5000
RECYCLING FACILITIES	WMRF	0	0	0.5000
INDUSTRIAL AND HAZARDOUS WASTE CORRECTIVE ACTION SITES	IHWCA	1	0	1.0000
STATE SUPERFUND SITES	SF	0	0	1.0000
SUB-TOTAL		3	0	

Database Findings Summary

TRIBAL LISTING

Database	Acronym	Locatable	Unlocatable	Search Radius (miles)
UNDERGROUND STORAGE TANKS ON TRIBAL LANDS	USTR06	0	0	0.2500
LEAKING UNDERGROUND STORAGE TANKS ON TRIBAL LANDS	LUSTR06	0	0	0.5000
OPEN DUMP INVENTORY ON TRIBAL LANDS	ODINDIAN	0	0	0.5000
INDIAN RESERVATIONS	INDIANRES	0	0	1.0000
SUB-TOTAL		0	0	
TOTAL		3	0	

Locatable Database Findings

FEDERAL LISTING

Acronym	Search Radius (miles)	TP/AP (0 - 0.02)	1/8 Mile (> TP/AP)	1/4 Mile (> 1/8)	1/2 Mile (> 1/4)	1 Mile (> 1/2)	> 1 Mile	Total
AIRSAFS	0.0200		NS	NS	NS	NS	NS	0
BRS	0.0200		NS	NS	NS	NS	NS	0
CDL	0.0200		NS	NS	NS	NS	NS	0
DOCKETS	0.0200		NS	NS	NS	NS	NS	0
EC	0.0200		NS	NS	NS	NS	NS	0
ERNSTX	0.0200		NS	NS	NS	NS	NS	0
FRSTX	0.0200		NS	NS	NS	NS	NS	0
HMIRSR06	0.0200		NS	NS	NS	NS	NS	0
ICIS	0.0200		NS	NS	NS	NS	NS	0
ICISNPDES	0.0200		NS	NS	NS	NS	NS	0
LUCIS	0.0200		NS	NS	NS	NS	NS	0
MLTS	0.0200		NS	NS	NS	NS	NS	0
NPDESR06	0.0200		NS	NS	NS	NS	NS	0
PADS	0.0200		NS	NS	NS	NS	NS	0
PCSR06	0.0200		NS	NS	NS	NS	NS	0
RCRASC	0.0200		NS	NS	NS	NS	NS	0
SFLIENS	0.0200		NS	NS	NS	NS	NS	0
SSTS	0.0200		NS	NS	NS	NS	NS	0
TRI	0.0200		NS	NS	NS	NS	NS	0
TSCA	0.0200		NS	NS	NS	NS	NS	0
NLRRCRAG	0.1250		0	NS	NS	NS	NS	0
RCRAGR06	0.1250		0	NS	NS	NS	NS	0
HISTPST	0.2500		0	0	NS	NS	NS	0
BF	0.5000		0	0	0	NS	NS	0
CERCLIS	0.5000		0	0	0	NS	NS	0
DNPL	0.5000		0	0	0	NS	NS	0
NFRAP	0.5000		0	0	0	NS	NS	0
NLRRCRAT	0.5000		0	0	0	NS	NS	0
ODI	0.5000		0	0	0	NS	NS	0
RCRAT	0.5000		0	0	0	NS	NS	0
DOD	1.0000		0	0	0	0	NS	0
FUDS	1.0000		0	0	0	0	NS	0
NLRRCRAC	1.0000		0	0	0	0	NS	0
NPL	1.0000		0	0	0	0	NS	0
PNPL	1.0000		0	0	0	0	NS	0
RCRAC	1.0000		0	0	0	0	NS	0

Locatable Database Findings

Acronym	Search Radius (miles)	TP/AP (0 - 0.02)	1/8 Mile (> TP/AP)	1/4 Mile (> 1/8)	1/2 Mile (> 1/4)	1 Mile (> 1/2)	> 1 Mile	Total
RODS	1.0000		0	0	0	0	NS	0
SUB-TOTAL			0	0	0	0	0	0

Locatable Database Findings

STATE (TX) LISTING

Acronym	Search Radius (miles)	TP/AP (0 - 0.02)	1/8 Mile (> TP/AP)	1/4 Mile (> 1/8)	1/2 Mile (> 1/4)	1 Mile (> 1/2)	> 1 Mile	Total
GWCC	0.0200		NS	NS	NS	NS	NS	0
HISTGWCC	0.0200		NS	NS	NS	NS	NS	0
LIENS	0.0200		NS	NS	NS	NS	NS	0
MSD	0.0200		NS	NS	NS	NS	NS	0
NOV	0.0200		NS	NS	NS	NS	NS	0
SIEC01	0.0200		NS	NS	NS	NS	NS	0
SPILLS	0.0200		NS	NS	NS	NS	NS	0
TIERII	0.0200		NS	NS	NS	NS	NS	0
DCR	0.2500		0	0	NS	NS	NS	0
IHW	0.2500		0	0	NS	NS	NS	0
PIHW	0.2500		0	0	NS	NS	NS	0
PST	0.2500		0	1	NS	NS	NS	1
APAR	0.5000		0	0	0	NS	NS	0
BSA	0.5000		0	0	0	NS	NS	0
CALF	0.5000		0	0	0	NS	NS	0
DCRPS	0.5000		0	0	0	NS	NS	0
IOP	0.5000		0	0	0	NS	NS	0
LPST	0.5000		0	0	1	NS	NS	1
MSWLF	0.5000		0	0	0	NS	NS	0
RRCVCP	0.5000		0	0	0	NS	NS	0
RWS	0.5000		0	0	0	NS	NS	0
VCP	0.5000		0	0	0	NS	NS	0
WMRF	0.5000		0	0	0	NS	NS	0
IHWCA	1.0000		0	0	0	1	NS	1
SF	1.0000		0	0	0	0	NS	0
SUB-TOTAL			0	1	1	1	0	3

Locatable Database Findings

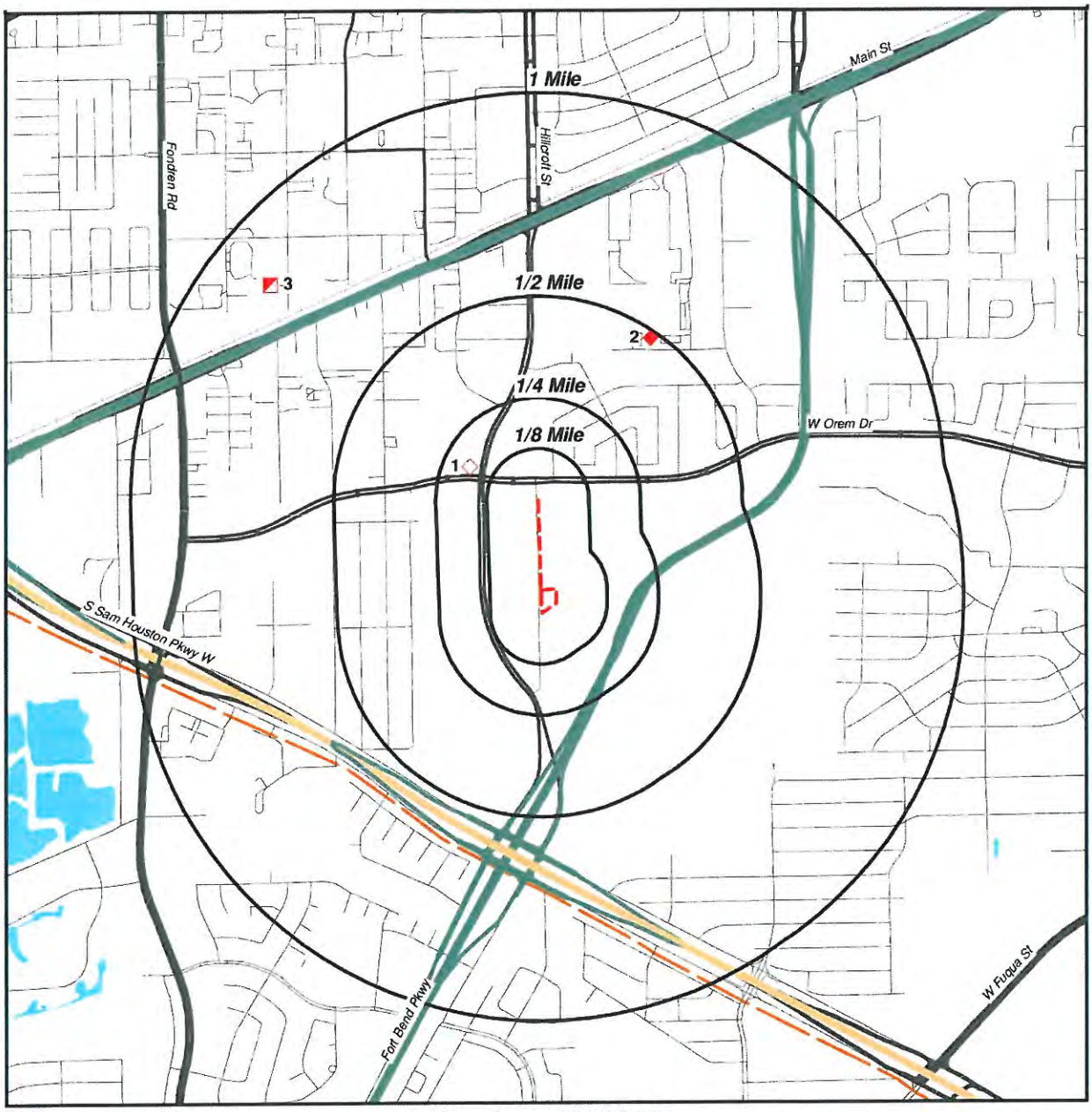
TRIBAL LISTING

Acronym	Search Radius (miles)	TP/AP (0 - 0.02)	1/8 Mile (> TP/AP)	1/4 Mile (> 1/8)	1/2 Mile (> 1/4)	1 Mile (> 1/2)	> 1 Mile	Total
USTR06	0.2500		0	0	NS	NS	NS	0
LUSTR06	0.5000		0	0	0	NS	NS	0
ODINDIAN	0.5000		0	0	0	NS	NS	0
INDIANRES	1.0000		0	0	0	0	NS	0
SUB-TOTAL			0	0	0	0	0	0

TOTAL			0	1	1	1	0	3

NOTES:
NS = NOT SEARCHED
TP/AP = TARGET PROPERTY/ADJACENT PROPERTY

Radius Map 1



Target Property (TP)
PST
LPST
IHWCA

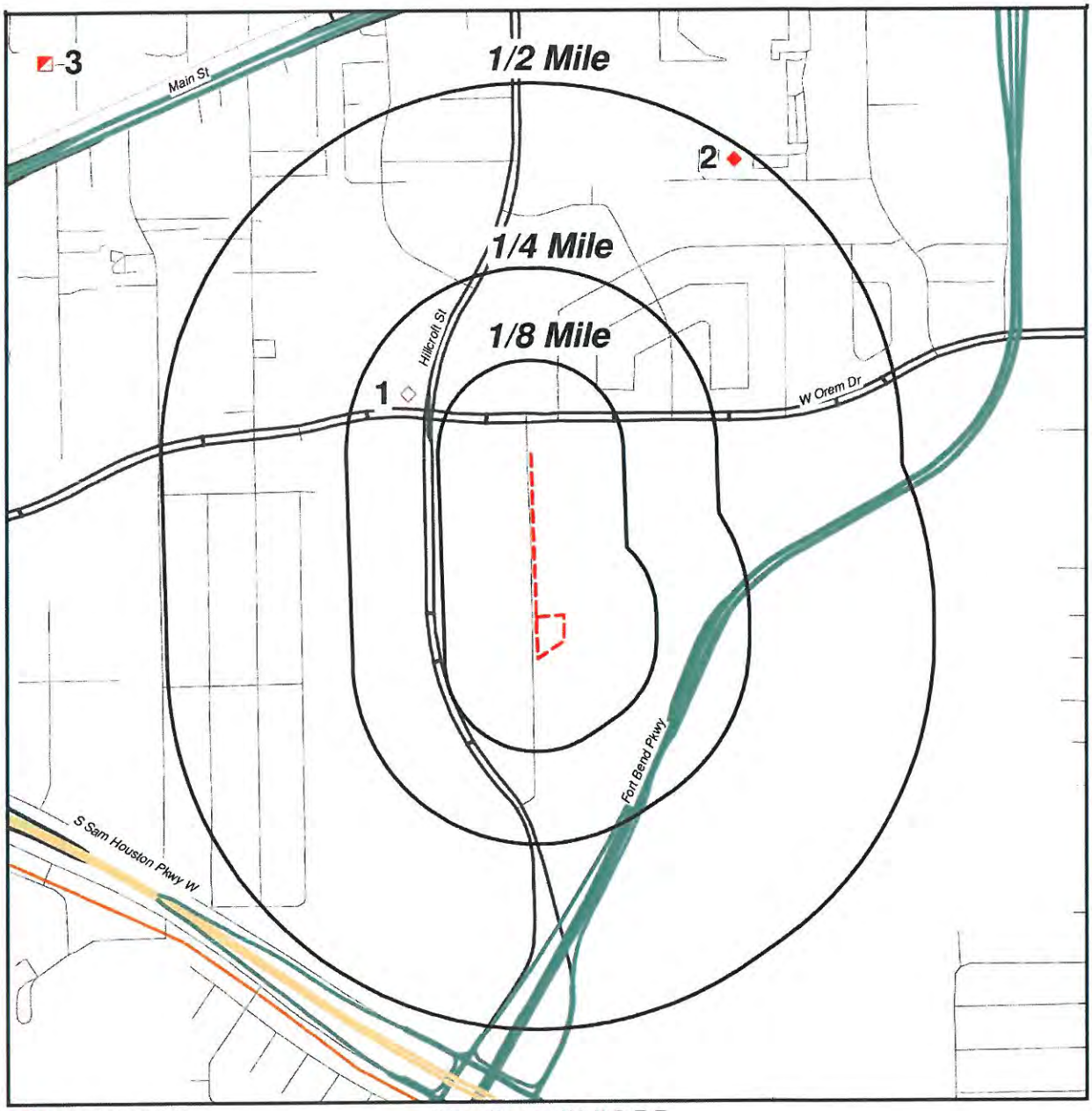
Sims Bayou Well P.E.R
HOUSTON, Texas
77085

N
W E
S

0' 1000' 2000' 3000'
SCALE: 1" = 2000'

Click here to access Satelite view

Radius Map 2



Target Property (TP)
PST
LPST
IHWCA

Sims Bayou Well P.E.R
HOUSTON, Texas
77085

N
W E
S

0' 550' 1100' 1650'
SCALE: 1" = 1100'

Click here to access Satelite view

Ortho Map

Target Property (TP)
PST
LPST
IHWCA

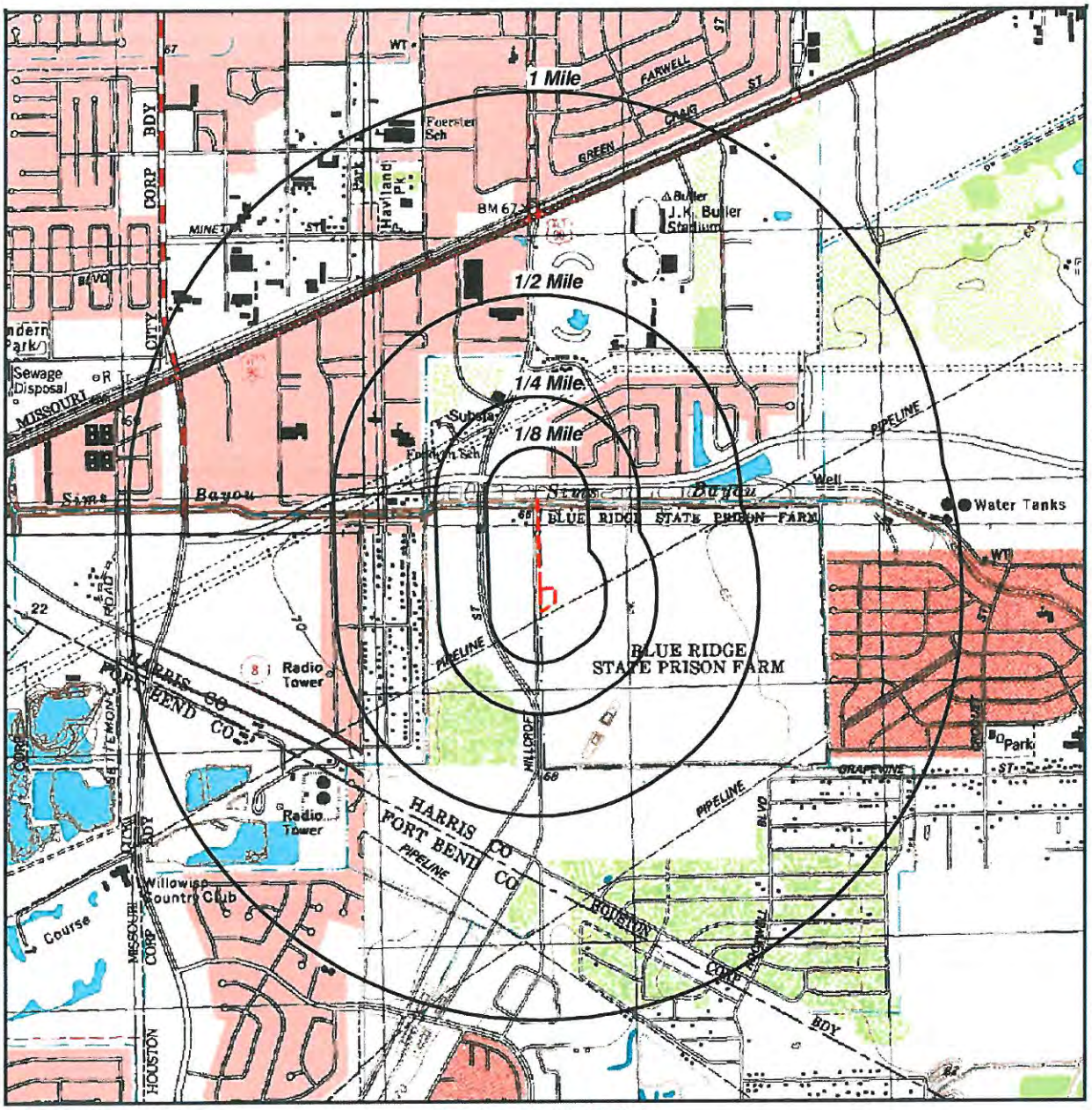
Quadrangle(s): Bellaire, Almeda
Sims Bayou Well P.E.R
HOUSTON, Texas
77085

N
W E
S

0' 550' 1100' 1650'
SCALE: 1" = 1100'

[Click here to access Satelite view]

Topographic Map



Target Property (TP)

Quadrangle(s): Bellaire, Almeda
Sims Bayou Well P.E.R
HOUSTON, Texas
77085

N
W E
S

0' 1000' 2000' 3000'
SCALE: 1" = 2000'

Click here to access Satelite view

Report Summary of Locatable Sites

Map ID#	Database Name	Site ID#	Distance From Site	Site Name	Address	City, Zip Code
1	PST	79656	0.19 NW	WEST OREM VALERO	7104 W OREM DR	HOUSTON, 77085
2	LPST	111091	0.49 NE	BUTLER STADIUM	6690 CARVED ROCK	HOUSTON, 77085
3	IHWCA	32494	0.85 NW	M-I DRILLING FLUIDS ERL PLANT	11808 CANEMONT ST	HOUSTON, 77035

Petroleum Storage Tanks (PST)

MAP ID# 1 **Distance from Property: 0.19 mi. NW**

FACILITY INFORMATION

ID#: **79656**
NAME: **WEST OREM VALERO**
ADDRESS: **7104 W OREM DR**
HOUSTON, TX 77085
COUNTY: **HARRIS**
REGION: **12**
TYPE: **RETAIL**
BEGIN DATE: **10/24/2008**
STATUS: **ACTIVE**
EXEMPT STATUS: **NO**
RECORDS OFF-SITE: **NO**
NUMBER OF ACTIVE UNDERGROUND TANKS: **2**
NUMBER OF ACTIVE ABOVEGROUND TANKS: **0**

APPLICATION INFORMATION:

RECEIVED DATE ON EARLIEST REGISTRATION FORM: **09/23/2013**
SIGNATURE DATE ON EARLIEST REGISTRATION FORM: **09/23/2013**
SIGNATURE NAME & TITLE: **ANIL MOMIN, NOT REPORTED**
ENFORCEMENT ACTION DATE: **NOT REPORTED**

OWNER

OWNER NUMBER: **CN603445164**
NAME: **OCA ASSET HOLDINGS LP**
CONTACT ADDRESS: **OWNER ADDRESS NOT REPORTED**
CITY NOT REPORTED
TYPE: **ORGANIZATION**
BEGIN DATE: **10/24/2008**
CONTACT ROLE: **NOT REPORTED**
CONTACT NAME: **NOT REPORTED**
CONTACT TITLE: **NOT REPORTED**
ORGANIZATION: **NOT REPORTED**
PHONE: **NOT REPORTED**
FAX: **NOT REPORTED**
EMAIL: **NOT REPORTED**

OPERATOR

OPERATOR NUMBER: **CN603557984**
NAME: **UNITED FA & S ENTERPRISES INC**
CONTACT ADDRESS: **OPERATOR ADDRESS NOT REPORTED**
CITY NOT REPORTED
TYPE: **CORPORATION/COMPANY**
BEGIN DATE: **02/05/2009**
CONTACT ROLE: **NOT REPORTED**
CONTACT NAME: **NOT REPORTED**
CONTACT TITLE: **NOT REPORTED**

CONTACT INFORMATION

NAME: **JAVED ALI**
TITLE: **MGR**
ORGANIZATION: **WEST OREM VALERO**
MAIL ADDRESS: **MAILING ADDRESS NOT REPORTED**
CITY NOT REPORTED
PHONE: **713-729-7143**

ORGANIZATION: **NOT REPORTED**
PHONE: **NOT REPORTED**
FAX: **NOT REPORTED**
EMAIL: **NOT REPORTED**

SELF-CERTIFICATION

SELF-CERTIFICATION ID: **227019**
SIGNATURE DATE: **09/23/2013**
SIGNATURE NAME & TITLE: **ANIL MOMIN, REP**
FILING STATUS: **RENEWAL**
REGISTRATION FLAG: **YES**
SELF-CERTIFICATION ID: **215111**
SIGNATURE DATE: **08/02/2012**
SIGNATURE NAME & TITLE: **AKBARALI MOMIN, REP**
FILING STATUS: **RENEWAL**
REGISTRATION FLAG: **YES**
SELF-CERTIFICATION ID: **215110**
SIGNATURE DATE: **09/01/2011**
SIGNATURE NAME & TITLE: **AKBARALI MOMIN, REP**
FILING STATUS: **RENEWAL**
REGISTRATION FLAG: **YES**
SELF-CERTIFICATION ID: **215109**
SIGNATURE DATE: **09/27/2010**
SIGNATURE NAME & TITLE: **ANIL MOMIN, REP**
FILING STATUS: **RENEWAL**
REGISTRATION FLAG: **YES**
SELF-CERTIFICATION ID: **215108**
SIGNATURE DATE: **11/18/2009**
SIGNATURE NAME & TITLE: **JOSIAH OSEI, PRES**
FILING STATUS: **RENEWAL**
REGISTRATION FLAG: **YES**
SELF-CERTIFICATION ID: **215107**
SIGNATURE DATE: **12/01/2008**
SIGNATURE NAME & TITLE: **R AVERY, VP**
FILING STATUS: **INITIAL**
REGISTRATION FLAG: **YES**

CONSTRUCTION NOTIFICATION

NOTIFICATION CONSTRUCTION ID: **21625**
APPLICATION RECEIVED DATE: **01/15/2008**
SCHEDULE CONSTRUCTION DATE: **02/25/2008**
GENERAL DESCRIPTION OF PROPOSED CONSTRUCTION:
NOT REPORTED
NOTIFICATION CONSTRUCTION ID: **21624**
APPLICATION RECEIVED DATE: **12/08/2008**
SCHEDULE CONSTRUCTION DATE: **03/06/2009**
GENERAL DESCRIPTION OF PROPOSED CONSTRUCTION:
NOT REPORTED

UNDERGROUND STORAGE TANK

TANK ID: **1**
INSTALLATION DATE: **04/01/2008**
TANK CAPACITY (GAL): **35000**
STATUS: **IN USE**
INTERNAL PROTECTION DATE: **NOT REPORTED**
TANK DESIGN SINGLE WALL: **NO**
PIPE DESIGN SINGLE WALL: **NO**
NUMBER OF COMPARTMENTS: **3**
REGISTRATION DATE: **12/16/2008**
EMPTY TANK: **NOT EMPTY**
STATUS BEGIN DATE: **04/01/2008**
REGULATORY STATUS: **FULLY REGULATED**
TANK DESIGN DOUBLE WALL: **YES**
PIPE DESIGN DOUBLE WALL: **YES**

TANK DETAILS

MATERIAL:
NOT REPORTED
CORROSION PROTECTION:
COMPOSITE TANK (STEEL W/FRP EXTERNAL LAMINATE)
EXTERNAL CONTAINMENT:
NOT REPORTED
TANK COMPLIANCE FLAG
CORROSION PROTECTION COMPLIANCE FLAG: **YES**
CORROSION PROTECTION VARIANCE: **NO VARIANCE**

COMPARTMENT DETAILS

UST COMPARTMENT ID: **183932**
TANK ID: **1**
COMPARTMENT LETTER: **A**
SUBSTANCES: **GASOLINE**
OTHER SUBSTANCES: **NOT REPORTED**
CAPACITY (GAL): **20000**
COMPARTMENT RELEASE DETECTION: **GROUNDWATER MONITORING**
SPILL CONTAINMENT AND OVERFILL PREVENTION: **NOT REPORTED**

PIPING SYSTEMS

MATERIAL: **NONMETALLIC FLEXIBLE PIPING,NONMETALLIC FLEXIBLE PIPING**
CORROSION PROTECTION: **NONMETALLIC FLEXIBLE PIPING (NONCORRODIBLE),ISOLATED IN OPEN AREA/2ND CONTAINMENT**
EXTERNAL CONTAINMENT: **NOT REPORTED**
CONNECTORS & VALVES:
NOT REPORTED
CORROSION PROTECTION: **NONMETALLIC FLEXIBLE PIPING (NONCORRODIBLE),ISOLATED IN OPEN AREA/2ND CONTAINMENT**
PIPE COMPLIANCE FLAG
CORROSION PROTECTION COMPLIANCE FLAG: **YES**
CORROSION PROTECTION VARIANCE: **NO VARIANCE**

TANK ID: **1**
INSTALLATION DATE: **04/01/2008**
TANK CAPACITY (GAL): **35000**
STATUS: **IN USE**
INTERNAL PROTECTION DATE: **NOT REPORTED**
TANK DESIGN SINGLE WALL: **NO**
PIPE DESIGN SINGLE WALL: **NO**
NUMBER OF COMPARTMENTS: **3**
REGISTRATION DATE: **12/16/2008**
EMPTY TANK: **NOT EMPTY**
STATUS BEGIN DATE: **04/01/2008**
REGULATORY STATUS: **FULLY REGULATED**
TANK DESIGN DOUBLE WALL: **YES**
PIPE DESIGN DOUBLE WALL: **YES**

TANK DETAILS

MATERIAL:

NOT REPORTED

CORROSION PROTECTION:

COMPOSITE TANK (STEEL W/FRP EXTERNAL LAMINATE)

EXTERNAL CONTAINMENT:

NOT REPORTED

TANK COMPLIANCE FLAG

CORROSION PROTECTION COMPLIANCE FLAG: **YES**

CORROSION PROTECTION VARIANCE: **NO VARIANCE**

COMPARTMENT DETAILS

UST COMPARTMENT ID: **183933**

TANK ID: **1**

COMPARTMENT LETTER: **B**

SUBSTANCES: **GASOLINE**

OTHER SUBSTANCES: **NOT REPORTED**

CAPACITY (GAL): **20000**

COMPARTMENT RELEASE DETECTION: **GROUNDWATER MONITORING**

SPILL CONTAINMENT AND OVERFILL PREVENTION: **NOT REPORTED**

PIPING SYSTEMS

MATERIAL: **NONMETALLIC FLEXIBLE PIPING,NONMETALLIC FLEXIBLE PIPING**

CORROSION PROTECTION: **NONMETALLIC FLEXIBLE PIPING (NONCORRODIBLE),ISOLATED IN OPEN AREA/2ND CONTAINMENT**

EXTERNAL CONTAINMENT: **NOT REPORTED**

CONNECTORS & VALVES:

NOT REPORTED

CORROSION PROTECTION: **NONMETALLIC FLEXIBLE PIPING (NONCORRODIBLE),ISOLATED IN OPEN AREA/2ND CONTAINMENT**

PIPE COMPLIANCE FLAG

CORROSION PROTECTION COMPLIANCE FLAG: **YES**

CORROSION PROTECTION VARIANCE: **NO VARIANCE**

TANK ID: **1**

INSTALLATION DATE: **04/01/2008**

TANK CAPACITY (GAL): **35000**

STATUS: **IN USE**

INTERNAL PROTECTION DATE: **NOT REPORTED**

TANK DESIGN SINGLE WALL: **NO**

PIPE DESIGN SINGLE WALL: **NO**

NUMBER OF COMPARTMENTS: **3**

REGISTRATION DATE: **12/16/2008**

EMPTY TANK: **NOT EMPTY**

STATUS BEGIN DATE: **04/01/2008**

REGULATORY STATUS: **FULLY REGULATED**

TANK DESIGN DOUBLE WALL: **YES**

PIPE DESIGN DOUBLE WALL: **YES**

TANK DETAILS

MATERIAL:

NOT REPORTED

CORROSION PROTECTION:

COMPOSITE TANK (STEEL W/FRP EXTERNAL LAMINATE)

EXTERNAL CONTAINMENT:

NOT REPORTED

TANK COMPLIANCE FLAG

CORROSION PROTECTION COMPLIANCE FLAG: **YES**
CORROSION PROTECTION VARIANCE: **NO VARIANCE**

COMPARTMENT DETAILS

UST COMPARTMENT ID: **183934**
TANK ID: **1**
COMPARTMENT LETTER: **C**
SUBSTANCES: **DIESEL**
OTHER SUBSTANCES: **NOT REPORTED**
CAPACITY (GAL): **20000**
COMPARTMENT RELEASE DETECTION: **GROUNDWATER MONITORING**
SPILL CONTAINMENT AND OVERFILL PREVENTION: **NOT REPORTED**

PIPING SYSTEMS

MATERIAL: **NONMETALLIC FLEXIBLE PIPING,NONMETALLIC FLEXIBLE PIPING**
CORROSION PROTECTION: **NONMETALLIC FLEXIBLE PIPING (NONCORRODIBLE),ISOLATED IN OPEN AREA/2ND CONTAINMENT**
EXTERNAL CONTAINMENT: **NOT REPORTED**
CONNECTORS & VALVES:
NOT REPORTED
CORROSION PROTECTION: **NONMETALLIC FLEXIBLE PIPING (NONCORRODIBLE),ISOLATED IN OPEN AREA/2ND CONTAINMENT**
PIPE COMPLIANCE FLAG
CORROSION PROTECTION COMPLIANCE FLAG: **YES**
CORROSION PROTECTION VARIANCE: **NO VARIANCE**

TANK ID: **2**
NUMBER OF COMPARTMENTS: **2**
INSTALLATION DATE: **04/01/2008**
REGISTRATION DATE: **12/16/2008**
TANK CAPACITY (GAL): **15000**
EMPTY TANK: **NOT EMPTY**
STATUS: **IN USE**
STATUS BEGIN DATE: **04/01/2008**
INTERNAL PROTECTION DATE: **NOT REPORTED**
REGULATORY STATUS: **FULLY REGULATED**
TANK DESIGN SINGLE WALL: **NO**
TANK DESIGN DOUBLE WALL: **YES**
PIPE DESIGN SINGLE WALL: **NO**
PIPE DESIGN DOUBLE WALL: **YES**

TANK DETAILS

MATERIAL:
NOT REPORTED
CORROSION PROTECTION:
COMPOSITE TANK (STEEL W/FRP EXTERNAL LAMINATE)
EXTERNAL CONTAINMENT:
NOT REPORTED
TANK COMPLIANCE FLAG
CORROSION PROTECTION COMPLIANCE FLAG: **YES**
CORROSION PROTECTION VARIANCE: **NO VARIANCE**

COMPARTMENT DETAILS

UST COMPARTMENT ID: **183935**
TANK ID: **2**
COMPARTMENT LETTER: **A**
SUBSTANCES: **GASOLINE**
OTHER SUBSTANCES: **NOT REPORTED**

CAPACITY (GAL): **9000**
COMPARTMENT RELEASE DETECTION: **GROUNDWATER MONITORING**
SPILL CONTAINMENT AND OVERFILL PREVENTION: **NOT REPORTED**

PIPING SYSTEMS

MATERIAL: **NONMETALLIC FLEXIBLE PIPING,NONMETALLIC FLEXIBLE PIPING**
CORROSION PROTECTION: **NONMETALLIC FLEXIBLE PIPING (NONCORRODIBLE),ISOLATED IN OPEN AREA/2ND CONTAINMENT**
EXTERNAL CONTAINMENT: **NOT REPORTED**
CONNECTORS & VALVES:
NOT REPORTED
CORROSION PROTECTION: **NONMETALLIC FLEXIBLE PIPING (NONCORRODIBLE),ISOLATED IN OPEN AREA/2ND CONTAINMENT**
PIPE COMPLIANCE FLAG
CORROSION PROTECTION COMPLIANCE FLAG: **YES**
CORROSION PROTECTION VARIANCE: **NO VARIANCE**

TANK ID: **2**
NUMBER OF COMPARTMENTS: **2**
INSTALLATION DATE: **04/01/2008**
REGISTRATION DATE: **12/16/2008**
TANK CAPACITY (GAL): **15000**
EMPTY TANK: **NOT EMPTY**
STATUS: **IN USE**
STATUS BEGIN DATE: **04/01/2008**
INTERNAL PROTECTION DATE: **NOT REPORTED**
REGULATORY STATUS: **FULLY REGULATED**
TANK DESIGN SINGLE WALL: **NO**
TANK DESIGN DOUBLE WALL: **YES**
PIPE DESIGN SINGLE WALL: **NO**
PIPE DESIGN DOUBLE WALL: **YES**

TANK DETAILS

MATERIAL:
NOT REPORTED
CORROSION PROTECTION:
COMPOSITE TANK (STEEL W/FRP EXTERNAL LAMINATE)
EXTERNAL CONTAINMENT:
NOT REPORTED
TANK COMPLIANCE FLAG
CORROSION PROTECTION COMPLIANCE FLAG: **YES**
CORROSION PROTECTION VARIANCE: **NO VARIANCE**

COMPARTMENT DETAILS

UST COMPARTMENT ID: **183936**
TANK ID: **2**
COMPARTMENT LETTER: **B**
SUBSTANCES: **DIESEL**
OTHER SUBSTANCES: **NOT REPORTED**
CAPACITY (GAL): **9000**
COMPARTMENT RELEASE DETECTION: **GROUNDWATER MONITORING**
SPILL CONTAINMENT AND OVERFILL PREVENTION: **NOT REPORTED**

PIPING SYSTEMS

MATERIAL: **NONMETALLIC FLEXIBLE PIPING,NONMETALLIC FLEXIBLE PIPING**
CORROSION PROTECTION: **NONMETALLIC FLEXIBLE PIPING (NONCORRODIBLE),ISOLATED IN OPEN AREA/2ND CONTAINMENT**
EXTERNAL CONTAINMENT: **NOT REPORTED**

CONNECTORS & VALVES:

NOT REPORTED

CORROSION PROTECTION: **NONMETALLIC FLEXIBLE PIPING (NONCORRODIBLE),ISOLATED IN OPEN AREA/2ND CONTAINMENT**

PIPE COMPLIANCE FLAG

CORROSION PROTECTION COMPLIANCE FLAG: **YES**

CORROSION PROTECTION VARIANCE: **NO VARIANCE**

ABOVEGROUND STORAGE TANK INFORMATION

NO ABOVEGROUND STORAGE TANK DATA REPORTED FOR THIS FACILITY

Back to Report Summary

Leaking Petroleum Storage Tanks (LPST)

MAP ID# 2 **Distance from Property: 0.49 mi. NE**

FACILITY INFORMATION

LPST ID#: **111091** FACILITY ID#: **0030355**
REPORTED DATE: **3/5/1996**
NAME: **BUTLER STADIUM**
ADDRESS: **6690 CARVED ROCK**
HOUSTON, TX 77085

PRP INFORMATION

NAME: **HOUSTON ISD**
ADDRESS: **228 MCCARTY**
HOUSTON, TX 77029
CONTACT: **JAMES P VOELKLE**
PHONE: **713/676-9256**

FACILITY LOCATION: **6690 CARVED ROCK**
PRIORITY CODE: **(4.2) NO GROUNDWATER IMPACT, NO APPARENT THREATS OR IMPACTS TO RECEPTORS**
STATUS CODE: **(6A) FINAL CONCURRENCE ISSUED, CASE CLOSED**

TANK INFORMATION

TANKID#/TYPE: **4/UST** INSTALLED: **01/01/1981** STATUS(DATE): **REMOVED FROM GROUND (03/27/1996)**
CAPACITY(gal.): **500** CONTENTS: **USED OIL**
TANK MATERIAL/CONTAINMENT: **STEEL / NOT REPORTED**
PIPE MATERIAL/CONTAINMENT: **NOT REPORTED / NOT REPORTED**
TANK/PIPE RELEASE DETECTION:
NOT REPORTED / NOT REPORTED
TANK/PIPE CORROSION PROTECTION:
NOT REPORTED / NOT REPORTED
SPILL/OVERFILL PROTECTION: **NOT REPORTED**

Back to Report Summary

Industrial and Hazardous Waste Corrective Action Sites (IHWCA)

MAP ID# 3 **Distance from Property: 0.85 mi. NW**

PROGRAM ID: **32494**
RN NUMBER: **RN103773768**
NAME: **M-I DRILLING FLUIDS ERL PLANT**
ADDRESS: **11808 CANEMONT ST**
HOUSTON, TX 77035
STATUS: **INACTIVE**
STATUS DATE: **5/3/12**
LOCATION DESCRIPTION:
11808 CANEMONT, HOUSTON, TX

Back to Report Summary

Environmental Records Definitions - FEDERAL

AIRSAFS Aerometric Information Retrieval System / Air Facility Subsystem

VERSION DATE: 08/01/12

The United States Environmental Protection Agency (EPA) modified the Aerometric Information Retrieval System (AIRS) to a database that exclusively tracks the compliance of stationary sources of air pollution with EPA regulations: the Air Facility Subsystem (AFS). Since this change in 2001, the management of the AIRS/AFS database was assigned to EPA's Office of Enforcement and Compliance Assurance.

BRS Biennial Reporting System

VERSION DATE: 12/31/11

The United States Environmental Protection Agency (EPA), in cooperation with the States, biennially collects information regarding the generation, management, and final disposition of hazardous wastes regulated under the Resource Conservation and Recovery Act of 1976 (RCRA), as amended. The Biennial Report captures detailed data on the generation of hazardous waste from large quantity generators and data on waste management practices from treatment, storage and disposal facilities. Currently, the EPA states that data collected between 1991 and 1997 was originally a part of the defunct Biennial Reporting System and is now incorporated into the RCRAInfo data system.

CDL Clandestine Drug Laboratory Locations

VERSION DATE: 09/06/13

The U.S. Department of Justice ("the Department") provides this information as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments. The Department does not establish, implement, enforce, or certify compliance with clean-up or remediation standards for contaminated sites; the public should contact a state or local health department or environmental protection agency for that information.

DOCKETS EPA Docket Data

VERSION DATE: 12/22/05

The United States Environmental Protection Agency Docket data lists Civil Case Defendants, filing dates as far back as 1971, laws broken including section, violations that occurred, pollutants involved, penalties assessed and superfund awards by facility and location. Please refer to ICIS database as source of current data.

EC Federal Engineering Institutional Control Sites

VERSION DATE: 01/14/14

This database includes site locations where Engineering and/or Institutional Controls have been identified as part

of a selected remedy for the site as defined by United States Environmental Protection Agency official remedy decision documents. A site listing does not indicate that the institutional and engineering controls are currently in place nor will be in place once the remedy is complete; it only indicates that the decision to include either of them in the remedy is documented as of the completed date of the document. Institutional controls are actions, such as legal controls, that help minimize the potential for human exposure to contamination by ensuring appropriate land or resource use. Engineering controls include caps, barriers, or other device engineering to prevent access, exposure, or continued migration of contamination.

ERNSTX Emergency Response Notification System

VERSION DATE: 12/31/12

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.

FRSTX Facility Registry System

VERSION DATE: 08/04/13

The United States Environmental Protection Agency's Office of Environmental Information (OEI) developed the Facility Registry System (FRS) as the centrally managed database that identifies facilities, sites or places subject to environmental regulations or of environmental interest. The Facility Registry System replaced the Facility Index System or FINDS database.

HMIRSR06 Hazardous Materials Incident Reporting System

VERSION DATE: 01/10/14

The HMIRS database contains unintentional hazardous materials release information reported to the U.S. Department of Transportation located in EPA Region 6. This region includes the following states: Arkansas, Louisiana, New Mexico, Oklahoma, and Texas.

ICIS Integrated Compliance Information System (formerly DOCKETS)

VERSION DATE: 08/01/12

ICIS is a case activity tracking and management system for civil, judicial, and administrative federal Environmental Protection Agency enforcement cases. ICIS contains information on federal administrative and federal judicial cases under the following environmental statutes: the Clean Air Act, the Clean Water Act, the Resource Conservation and Recovery Act, the Emergency Planning and Community Right-to-Know Act - Section 313, the Toxic Substances Control Act, the Federal Insecticide, Fungicide, and Rodenticide Act, the Comprehensive Environmental Response, Compensation, and Liability Act, the Safe Drinking Water Act, and the Marine Protection, Research, and Sanctuaries Act.

Environmental Records Definitions - FEDERAL

ICISNPDES Integrated Compliance Information System National Pollutant Discharge Elimination System

VERSION DATE: 08/01/12

In 2006, the Integrated Compliance Information System (ICIS) - National Pollutant Discharge Elimination System (NPDES) became the NPDES national system of record for select states, tribes and territories. ICIS-NPDES is an information management system maintained by the United States Environmental Protection Agency's Office of Compliance to track permit compliance and enforcement status of facilities regulated by the NPDES under the Clean Water Act. ICIS-NPDES is designed to support the NPDES program at the state, regional, and national levels.

LUCIS Land Use Control Information System

VERSION DATE: 09/01/06

The LUCIS database is maintained by the U.S. Navy and contains information for former Base Realignment and Closure (BRAC) properties across the United States.

MLTS Material Licensing Tracking System

VERSION DATE: 01/30/13

MLTS is a list of approximately 8,100 sites which have or use radioactive materials subject to the United States Nuclear Regulatory Commission (NRC) licensing requirements.

NPDESR06 National Pollutant Discharge Elimination System

VERSION DATE: 04/01/07

Information in this database is extracted from the Water Permit Compliance System (PCS) database which is used by United States Environmental Protection Agency to track surface water permits issued under the Clean Water Act. This database includes permitted facilities located in EPA Region 6. This region includes the following states: Arkansas, Louisiana, New Mexico, Oklahoma, and Texas. The NPDES database was collected from December 2002 until April 2007. Refer to the PCS and/or ICIS-NPDES database as source of current data.

PADS PCB Activity Database System

VERSION DATE: 06/01/13

The PCB Activity Database System (PADS) is used by the United States Environmental Protection Agency to monitor the activities of polychlorinated biphenyls (PCB) handlers.

PCSR06 Permit Compliance System

VERSION DATE: 08/01/12

The Permit Compliance System is used in tracking enforcement status and permit compliance of facilities

controlled by the National Pollutant Discharge Elimination System (NPDES) under the Clean Water Act and is maintained by the United States Environmental Protection Agency's Office of Compliance. PCS is designed to support the NPDES program at the state, regional, and national levels. This database includes permitted facilities located in EPA Region 6. This region includes the following states: Arkansas, Louisiana, New Mexico, Oklahoma, and Texas.

RCRASC RCRA Sites with Controls

VERSION DATE: 01/14/14

This list of Resource Conservation and Recovery Act sites with institutional controls in place is provided by the U.S. Environmental Protection Agency.

SFLIENS CERCLIS Liens

VERSION DATE: 06/08/12

A Federal CERCLA ("Superfund") lien can exist by operation of law at any site or property at which United States Environmental Protection Agency has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties. This database contains those CERCLIS sites where the Lien on Property action is complete.

SSTS Section Seven Tracking System

VERSION DATE: 12/31/09

The United States Environmental Protection Agency tracks information on pesticide establishments through the Section Seven Tracking System (SSTS). SSTS records the registration of new establishments and records pesticide production at each establishment. The Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) requires that production of pesticides or devices be conducted in a registered pesticide-producing or device-producing establishment. ("Production" includes formulation, packaging, repackaging, and relabeling.)

TRI Toxics Release Inventory

VERSION DATE: 12/31/12

The Toxics Release Inventory, provided by the United States Environmental Protection Agency, includes data on toxic chemical releases and waste management activities from certain industries as well as federal facilities. This inventory contains information about the types and amounts of toxic chemicals that are released each year to the air, water, and land as well as information on the quantities of toxic chemicals sent to other facilities for further waste management.

TSCA Toxic Substance Control Act Inventory

VERSION DATE: 12/31/06

The Toxic Substances Control Act (TSCA) was enacted in 1976 to ensure that chemicals manufactured, imported, processed, or distributed in commerce, or used or disposed of in the United States do not pose any unreasonable risks to human health or the environment. TSCA section 8(b) provides the United States Environmental Protection Agency authority to "compile, keep current, and publish a list of each chemical substance that is manufactured or processed in the United States." This TSCA Chemical Substance Inventory contains non-confidential information on the production amount of toxic chemicals from each manufacturer and importer site.

NLRRCRAG No Longer Regulated RCRA Generator Facilities

VERSION DATE: 04/10/14

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.
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.

RCRAGR06 Resource Conservation & Recovery Act - Generator Facilities

VERSION DATE: 04/10/14

This database includes sites listed as generators of hazardous waste (large, small, and exempt) 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). This database includes sites located in EPA Region 6. This region includes the following states: Arkansas, Louisiana, New Mexico, Oklahoma, and Texas.
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.

HISTPST Historical Gas Stations

VERSION DATE: 07/01/30

This historic directory of service stations is provided by the Cities Service Company. The directory includes Cities Service filling stations that were located throughout the United States in 1930.

BF Brownfields Management System

VERSION DATE: 04/15/14

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 this database to track activities in the various brown field grant programs including grantee assessment, site cleanup and site redevelopment.

CERCLIS Comprehensive Environmental Response, Compensation & Liability Information System

VERSION DATE: 10/25/13

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: 10/25/13

This database includes sites from the United States Environmental Protection Agency's Final National Priorties 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.

NFRAP No Further Remedial Action Planned Sites

VERSION DATE: 10/25/13

This database includes sites which have been determined by the United States Environmental Protection Agency, following preliminary assessment, to no longer pose a significant risk or require further activity under CERCLA. After initial investigation, no contamination was found, contamination was quickly removed or contamination was not serious enough to require Federal Superfund action or NPL consideration.

NLRRCRAT No Longer Regulated RCRA Non-CORRACTS TSD Facilities

VERSION DATE: 04/10/14

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.

ODI Open Dump Inventory

VERSION DATE: 06/01/85

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.

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

VERSION DATE: 04/10/14

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).

DOD Department of Defense Sites

VERSION DATE: 12/01/05

This information originates from the National Atlas of the United States Federal Lands data, which includes lands owned or administered by the Federal government. Army DOD, Army Corps of Engineers DOD, Air Force DOD, Navy DOD and Marine DOD areas of 640 acres or more are included.

FUDS Formerly Used Defense Sites

VERSION DATE: 02/01/13

The 2011 Formerly Used Defense Sites (FUDS) inventory includes properties previously owned by or leased to the United States and under Secretary of Defense Jurisdiction, as well as Munitions Response Areas (MRAs). The remediation of these properties is the responsibility of the Department of Defense. This data is provided by the U.S. Army Corps of Engineers (USACE), the boundaries/polygon data are based on preliminary findings and not all properties currently have polygon data available. DISCLAIMER: This data represents the results of data collection/processing for a specific USACE activity and is in no way to be considered comprehensive or to be used in any legal or official capacity as presented on this site. While the USACE has made a reasonable effort to insure the accuracy of the maps and associated data, it should be explicitly noted that USACE makes no warranty, representation or guaranty, either expressed or implied, as to the content, sequence, accuracy, timeliness or completeness of any of the data provided herein. For additional information on Formerly Used Defense Sites please contact the USACE Public Affairs Office at (202) 528-4285.

NLRRCRAC No Longer Regulated RCRA Corrective Action Facilities

VERSION DATE: 04/10/14

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.

NPL National Priorities List

VERSION DATE: 10/25/13

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.

PNPL Proposed National Priorities List

VERSION DATE: 10/25/13

This database contains sites proposed to be included on the National Priorities List (NPL) in the Federal Register.

Environmental Records Definitions - FEDERAL

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: 04/10/14

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 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).

RODS Record of Decision System

VERSION DATE: 07/01/13

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.

Environmental Records Definitions - STATE (TX)

GWCC Groundwater Contamination Cases

VERSION DATE: 12/31/12

This report contains a listing of groundwater contamination cases which were documented for the 2012 calendar year. Texas Water Code, Section 26.406 requires the annual report to describe the current status of groundwater monitoring activities conducted or required by each agency at regulated facilities or associated with regulated activities. The agencies reporting these contamination cases include the Texas Commission on Environmental Quality, Railroad Commission of Texas, Texas Alliance of Groundwater Districts, and Department of State Health Services.

HISTGWCC Historic Groundwater Contamination Cases

VERSION DATE: NR

This historic report contains all agency groundwater contamination cases documented from 1994 to 2011. The agencies that reported these contamination cases included the Texas Commission on Environmental Quality, Railroad Commission of Texas, Texas Alliance of Groundwater Districts, and Department of State Health Services.

LIENS TCEQ Liens

VERSION DATE: 01/16/14

Liens filed upon State and/or Federal Superfund Sites by the Texas Commission on Environmental Quality.

MSD Municipal Setting Designations

VERSION DATE: 04/01/13

The Texas Commission on Environmental Quality defines an MSD as an official state designation given to property within a municipality or its extraterritorial jurisdiction that certifies that designated groundwater at the property is not used as potable water, and is prohibited from future use as potable water because that groundwater is contaminated in excess of the applicable potable-water protective concentration level. The prohibition must be in the form of a city ordinance, or a restrictive covenant that is enforceable by the city and filed in the property records. The MSD property can be a single property, multi-property, or a portion of property.

NOV Notice of Violations

VERSION DATE: 11/08/13

This database containing Notice of Violations (NOV) is maintained by the Texas Commission on Environmental Quality. An NOV is a written notification that documents and communicates violations observed during an inspection to the business or individual inspected.

Environmental Records Definitions - STATE (TX)

SIEC01 State Institutional/Engineering Control Sites

VERSION DATE: 02/19/14

The Texas Risk Reduction Program (TRRP) requires the placement of institutional controls (e.g., deed notices or restrictive covenants) on affected property in different circumstances as part of completing a response action. In its simplest form, an institutional control (IC) is a legal document that is recorded in the county deed records. In certain circumstances, local zoning or ordinances can serve as an IC. This listing may also include locations where Engineering Controls are in effect, such as a cap, barrier, or other engineering device to prevent access, exposure, or continued migration of contamination. The sites included on this list are regulated by various programs of the Texas Commission on Environmental Quality (TCEQ).

SPILLS Spills Listing

VERSION DATE: 11/08/13

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

TIERII Tier I I Chemical Reporting Program Facilities

VERSION DATE: 12/31/12

The Texas Tier II Chemical Reporting Program in the Department of State Health Services (DSHS) is the state repository for EPCRA-required Emergency Planning Letters (EPLs), which are one-time notifications to the state from facilities that have certain extremely hazardous chemicals in specified amounts. The Program is also the state repository for EPCRA/state-required hazardous chemical inventory reports called Texas Tier Two Reports. This data contains those facility reports for the 2005 through the 2012 calendar years.

DCR Dry Cleaner Registration Database

VERSION DATE: 04/01/14

The database includes dry cleaning drop stations and facilities registered with the Texas Commission on Environmental Quality.

IHW Industrial and Hazardous Waste Sites

VERSION DATE: 04/01/14

Owner and facility information is included in this database of permitted and non-permitted industrial and hazardous waste sites. Industrial waste is waste that results from or is incidental to operations of industry, manufacturing, mining, or agriculture. Hazardous waste is defined as any solid waste listed as hazardous or possesses one or more hazardous characteristics as defined in federal waste regulations. The IHW database is maintained by the Texas Commission on Environmental Quality.

Environmental Records Definitions - STATE (TX)

PIHW Permitted Industrial Hazardous Waste Sites

VERSION DATE: 04/01/14

Owner and facility information is included in this database of all permitted industrial and hazardous waste sites. Industrial waste is waste that results from or is incidental to operations of industry, manufacturing, mining, or agriculture. Hazardous waste is defined as any solid waste listed as hazardous or possesses one or more hazardous characteristics as defined in federal waste regulations. Permitted IHW facilities are regulated under 30 Texas Administrative Code Chapter 335 in addition to federal regulations. The IHW database is maintained by the Texas Commission on Environmental Quality.

PST Petroleum Storage Tanks

VERSION DATE: 11/04/13

The Petroleum Storage Tank database is administered by the Texas Commission on Environmental Quality (TCEQ). 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.

APAR Affected Property Assessment Reports

VERSION DATE: 01/29/14

As regulated by the Texas Commission on Environmental Quality, an Affected Property Assessment Report is required when a person is addressing a release of chemical of concern (COC) under 30 TAC Chapter 350, the Texas Risk Reduction Program (TRRP). The purpose of the APAR is to document all relevant affected property information to identify all release sources and COCs, determine the extent of all COCs, identify all transport/exposure pathways, and to determine if any response actions are necessary. The Texas Administrative Code Title 30 §350.4(a)(1) defines affected property as the entire area (i.e. on-site and off-site; including all environmental media) which contains releases of chemicals of concern at concentrations equal to or greater than the assessment level applicable for residential land use and groundwater classification.

BSA Brownfields Site Assessments

VERSION DATE: 02/19/14

The Brownfields Site Assessments database is maintained by the Texas Commission on Environmental Quality (TCEQ). The TCEQ, in close partnership with the U.S. Environmental Protection Agency (EPA) and other federal, state, and local redevelopment agencies, and stakeholders, is facilitating cleanup, transferability, and revitalization of brownfields through the development of regulatory, tax, and technical assistance tools.

CALF Closed & Abandoned Landfill Inventory

VERSION DATE: 11/01/05

The Texas Commission on Environmental Quality, under a contract with Texas State University, and in cooperation with the 24 regional Council of Governments (COGs) 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 and this historical information is not updated. Please refer to the specific regional COG for the most current information.

DCRPS Dry Cleaner Remediation Program Sites

VERSION DATE: 09/01/13

This list of DCRP sites is provided by the Texas Commission on Environmental Quality (TCEQ). According to the TCEQ, the Dry Cleaner Remediation Program (DCRP) establishes a prioritization list of dry cleaner sites and administers the Dry Cleaning Remediation fund to assist with remediation of contamination caused by dry cleaning solvents.

IOP Innocent Owner / Operator Database

VERSION DATE: 02/19/14

Texas Innocent Owner / Operator (IOP), created by House Bill 2776 of the 75th Legislature, provides a certificate to an innocent owner or operator if their property is contaminated as a result of a release or migration of contaminants from a source or sources not located on the property, and they did not cause or contribute to the source or sources of contamination. The IOP database is maintained by the Texas Commission on Environmental Quality.

LPST Leaking Petroleum Storage Tanks

VERSION DATE: 11/01/13

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. This listing includes aboveground and underground storage tank facilities with reported leaks.

MSWLF Municipal Solid Waste Landfill Sites

VERSION DATE: 01/10/14

The municipal solid waste landfill database is provided by the Texas Commission on Environmental Quality. This database includes active landfills and inactive landfills, where solid waste is treated or stored.

RRCVCP Railroad Commission VCP and Brownfield Sites

VERSION DATE: 10/15/13

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.

Environmental Records Definitions - STATE (TX)

RWS Radioactive Waste Sites

VERSION DATE: 07/11/06

This Texas Commission on Environmental Quality database contains all sites in the State of Texas that have been designated as Radioactive Waste sites.

VCP Voluntary Cleanup Program Sites

VERSION DATE: 02/19/14

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. The VCP database is maintained by the Texas Commission on Environmental Quality.

WMRF Recycling Facilities

VERSION DATE: 11/01/12

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. This database is no longer maintained and includes the last compilation of the program participants before the Recycle Texas Online program was closed.

IHWCA Industrial and Hazardous Waste Corrective Action Sites

VERSION DATE: 11/25/13

This database is provided by the Texas Commission on Environmental Quality (TCEQ). According to the TCEQ, the mission of the industrial and hazardous waste corrective action program is to oversee the cleanup of sites contaminated from industrial and municipal hazardous and industrial nonhazardous wastes. The goals of this program are to: Ensure that sites are assessed and remediated to levels that protect human health and the environment; Verify that waste management units or facilities are taken out of service and closed properly; and to Facilitate revitalization of contaminated properties.

SF State Superfund Sites

VERSION DATE: 12/01/13

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). As required by the Texas Solid Waste Disposal Act, Texas Health and Safety Code, Chapter 361, the Texas Commission on Environmental Quality identifies and

evaluates these facilities for inclusion on the state Superfund registry. This registry includes any recent developments and the anticipated action for these sites.

Environmental Records Definitions - TRIBAL

USTR06 Underground Storage Tanks On Tribal Lands

VERSION DATE: 10/30/13

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.

LUSTR06 Leaking Underground Storage Tanks On Tribal Lands

VERSION DATE: 10/30/13

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: 11/08/06

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).

INDIANRES Indian Reservations

VERSION DATE: 01/01/00

The Department of Interior and Bureau of Indian Affairs maintains this database that includes American Indian Reservations, off-reservation trust lands, public domain allotments, Alaska Native Regional Corporations and Recognized State Reservations.

GeoSearch

On time. On target. In touch.™

GeoPlus Oil & Gas Report

Satellite view

Target Property:

Sims Bayou Well P.E.R

HOUSTON, Harris County, Texas 77085

Prepared For:

HVJ Associates-Houston

Order #: 35889

Job #: 79548

Project #: HE1216860

Date: 05/14/2014

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Target Property Summary

Sims Bayou Well P.E.R
HOUSTON, Harris County, Texas 77085

USGS Quadrangle: ***Bellaire, TX***
Target Property Geometry: ***Corridor***

Target Property Longitude(s)/Latitude(s):
(-95.492882, 29.626179), (-95.492882, 29.626179), (-95.492749, 29.622145), (-95.492159, 29.622494), (-95.492159, 29.623000), (-95.492773, 29.622964)

County/Parish Covered:
Harris (TX)

Zipcode(s) Covered:
Houston TX: 77085

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 (picocuries per liter).

Database Findings Summary

STATE (TX) LISTING

Database	Acronym	Locatable	Unlocatable	Search Radius (miles)
OIL AND GAS WELLS	OGWELLS	0	0	0.5000
SUB-TOTAL		0	0	
TOTAL		0	0	

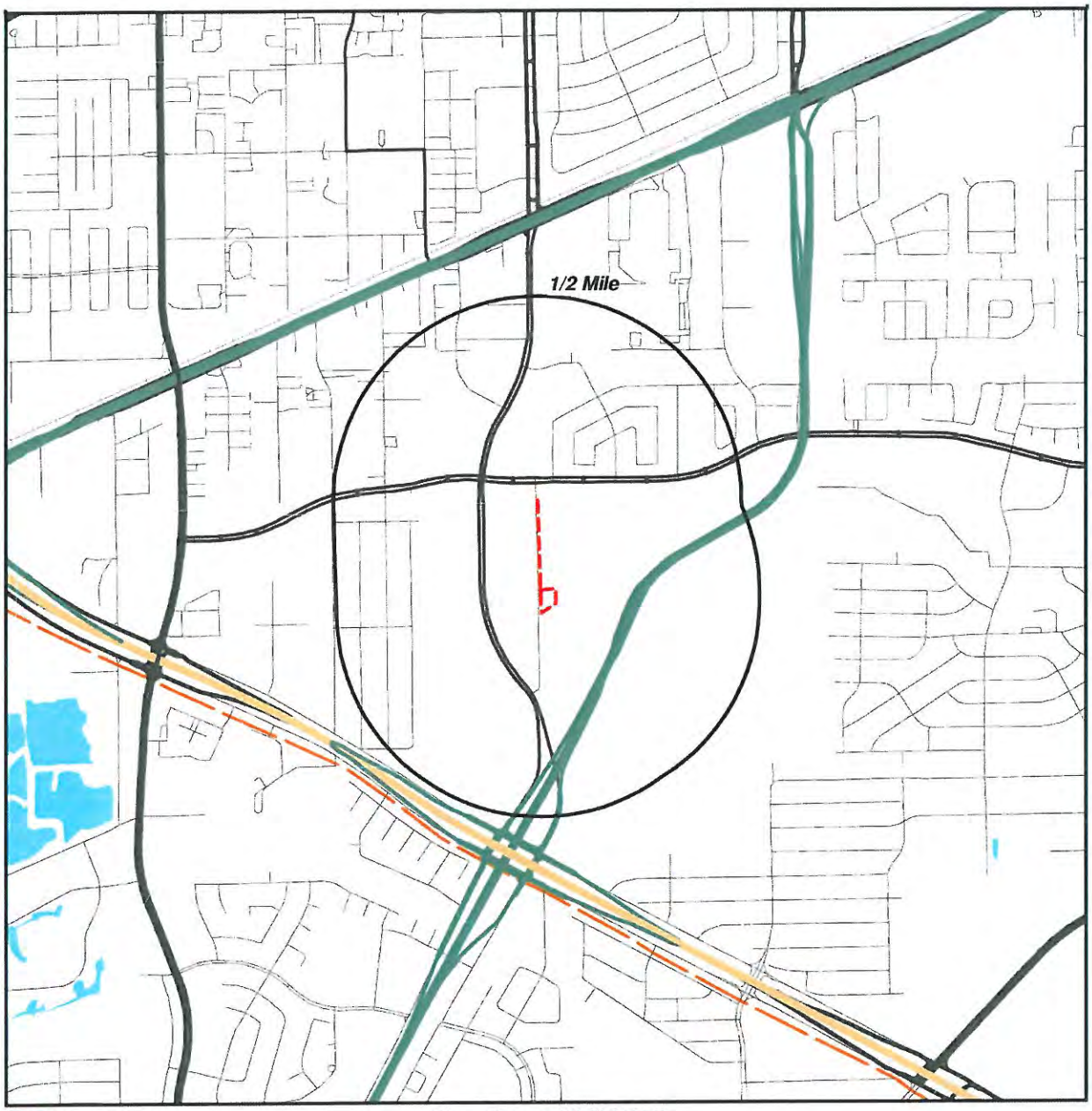
Locatable Database Findings

STATE (TX) LISTING

Acronym	Search Radius (miles)	TP/AP (0 - 0.02)	1/8 Mile (> TP/AP)	1/4 Mile (> 1/8)	1/2 Mile (> 1/4)	1 Mile (> 1/2)	> 1 Mile	Total
OGWELLS	0.5000		0	0	0	NS	NS	0
SUB-TOTAL			0	0	0	0	0	0
TOTAL			0	0	0	0	0	0

NOTES:
NS = NOT SEARCHED
TP/AP = TARGET PROPERTY/ADJACENT PROPERTY

OIL & GAS MAP



Target Property (TP)

Surface Location

Sims Bayou Well P.E.R
HOUSTON, Texas
77085

N
W E
S

0' 1000' 2000' 3000'

SCALE: 1" = 2000'

Click here to access Satelite view

Environmental Records Definitions - STATE (TX)

OGWELLS Oil and Gas Wells

VERSION DATE: 04/09/13

This oil and gas well data set is provided by the Geographic Information System of the Railroad Commission of Texas (the Commission). The data set includes oil and gas well records dating back to the early 1960's, some wells prior to the 1960's are also included with with no API and/or a historical API number in place. The Commission shall not be held liable for use of this data, which is provided as a public service for informational purposes only. Users are responsible for checking the accuracy, completeness, currency, and/or suitability of this data set themselves.

GeoSearch

On time. On target. In touch.™

GeoPlus Water Well Report

Satellite view

Target Property:

Sims Bayou Well P.E.R
HOUSTON, Harris County, Texas 77085

Prepared For:

HVJ Associates-Houston

Order #: 35889
Job #: 79546
Project #: HE1216860
Date: 05/14/2014

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Target Property Summary

Sims Bayou Well P.E.R
HOUSTON, Harris County, Texas 77085

USGS Quadrangle: ***Bellaire, TX***
Target Property Geometry: ***Corridor***

Target Property Longitude(s)/Latitude(s):
(-95.492882, 29.626179), (-95.492882, 29.626179), (-95.492749, 29.622145), (-95.492159, 29.622494), (-95.492159, 29.623000), (-95.492773, 29.622964)

County/Parish Covered:
Harris (TX)

Zipcode(s) Covered:
Houston TX: 77085

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 (picocuries per liter).

Database Findings Summary

FEDERAL LISTING

Database	Acronym	Locatable	Unlocatable	Search Radius (miles)
UNITED STATES GEOLOGICAL SURVEY NATIONAL WATER INFORMATION SYSTEM	NWIS	2	0	0.5000
SUB-TOTAL		2	0	

Database Findings Summary

STATE (TX) LISTING

Database	Acronym	Locatable	Unlocatable	Search Radius (miles)
SUBMITTED DRILLERS REPORT DATABASE	SDRD	0	0	0.5000
TEXAS COMMISSION ON ENVIRONMENTAL QUALITY WATER WELLS	TCEQ	2	0	0.5000
TEXAS WATER DEVELOPMENT BOARD GROUNDWATER DATABASE	TWDB	3	0	0.5000
WATER UTILITY DATABASE	WUD	1	0	0.5000
SUB-TOTAL		6	0	

Database Findings Summary

LOCAL LISTING

Database	Acronym	Locatable	Unlocatable	Search Radius (miles)
FORT BEND SUBSIDENCE DISTRICT WATER WELLS	FBSD	0	0	0.5000
HARRIS GALVESTON SUBSIDENCE DISTRICT WATER WELLS	HGSD	4	0	0.5000
SUB-TOTAL		4	0	
TOTAL		12	0	

Locatable Database Findings

FEDERAL LISTING

Acronym	Search Radius (miles)	TP/AP (0 - 0.02)	1/8 Mile (> TP/AP)	1/4 Mile (> 1/8)	1/2 Mile (> 1/4)	1 Mile (> 1/2)	> 1 Mile	Total
NWIS	0.5000		2	0	0	NS	NS	2
SUB-TOTAL			2	0	0	0	0	2

Locatable Database Findings

STATE (TX) LISTING

Acronym	Search Radius (miles)	TP/AP (0 - 0.02)	1/8 Mile (> TP/AP)	1/4 Mile (> 1/8)	1/2 Mile (> 1/4)	1 Mile (> 1/2)	> 1 Mile	Total
SDRD	0.5000		0	0	0	NS	NS	0
TCEQ	0.5000		1	0	1	NS	NS	2
TWDB	0.5000		2	0	1	NS	NS	3
WUD	0.5000		1	0	0	NS	NS	1
SUB-TOTAL			4	0	2	0	0	6

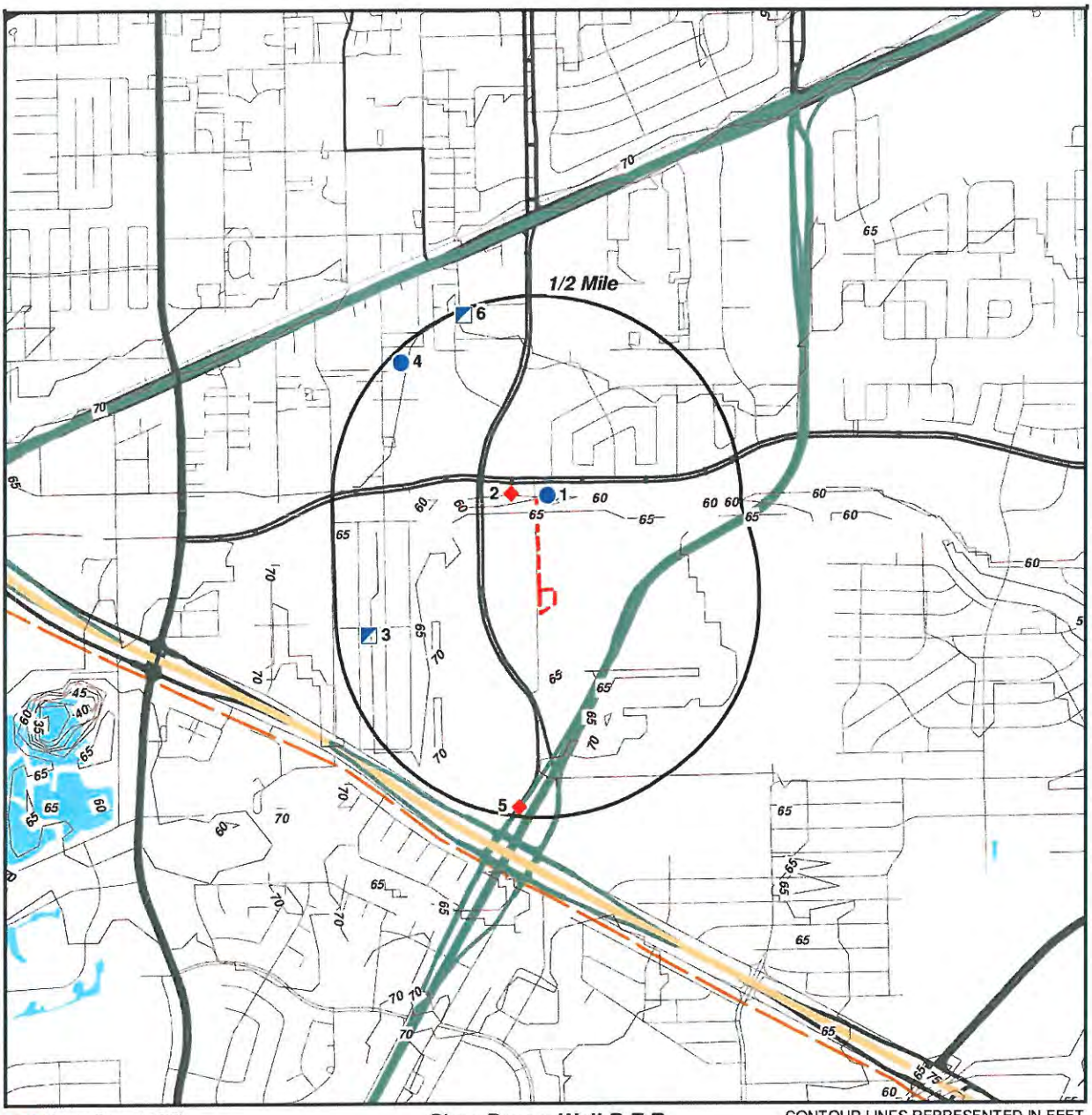
Locatable Database Findings

LOCAL LISTING

Acronym	Search Radius (miles)	TP/AP (0 - 0.02)	1/8 Mile (> TP/AP)	1/4 Mile (> 1/8)	1/2 Mile (> 1/4)	1 Mile (> 1/2)	> 1 Mile	Total
FBSD	0.5000		0	0	0	NS	NS	0
HGSD	0.5000		1	0	3	NS	NS	4
SUB-TOTAL			1	0	3	0	0	4
TOTAL			7	0	5	0	0	12

NOTES:
NS = NOT SEARCHED
TP/AP = TARGET PROPERTY/ADJACENT PROPERTY

Waterwell Map



Target Property (TP)
TCEQ
TWDB
HGSD

Sims Bayou Well P.E.R
HOUSTON, Texas
77085

CONTOUR LINES REPRESENTED IN FEET

N
W E
S

0' 1000' 2000' 3000'
SCALE: 1" = 2000'

Click here to access Satelite view

Report Summary of Locatable Sites

Map ID#	Database Name	Site ID#	Distance From Site	Site Name	Address	City, Zip Code
1	TCEQ	TX206230	0.04 NE	GREENRIDGE MUD	0 BLUE RIDGE RD	HOUSTON, 77085
1	NWIS	00712301	0.03 NE	LJ-65-21-711		
1	TWDB	65-21-711	0.03 NE	GREENRIDGE MUD	0 BLUE RIDGE RD	HOUSTON, 77085
2	TWDB	65-21-708	0.07 NW	CITY OF HOUSTON	0 BLUE RIDGE RD	HOUSTON, 77057
2	WUD	G1010013AT	0.08 NW	CITY OF HOUSTON		
2	NWIS	00712302	0.06 W	LJ-65-21-708		
2	HGSD	1105	0.08 NW	CITY OF HOUSTON	0 BLUE RIDGE RD	HOUSTON, 77057
3	HGSD	11742	0.43 W		12703 TERRANCE ST	HOUSTON, 77085
4	TCEQ	TX205579	0.48 NW	MR. SAM A. CANGELOSI	12201 CARLSBAD ST	HOUSTON, 77085
5	TWDB	65-29-108	0.49 S	CITY OF HOUSTON	0 S SAM HOUSTON PKY W	HOUSTON, 77085
5	HGSD	3675	0.48 X	CHASEWOOD #3	0 S SAM HOUSTON PKY W	HOUSTON, 77085
6	HGSD	3876	0.5 N	HOUSTON, CITY OF	12865 DUNLAP	HOUSTON, 77035

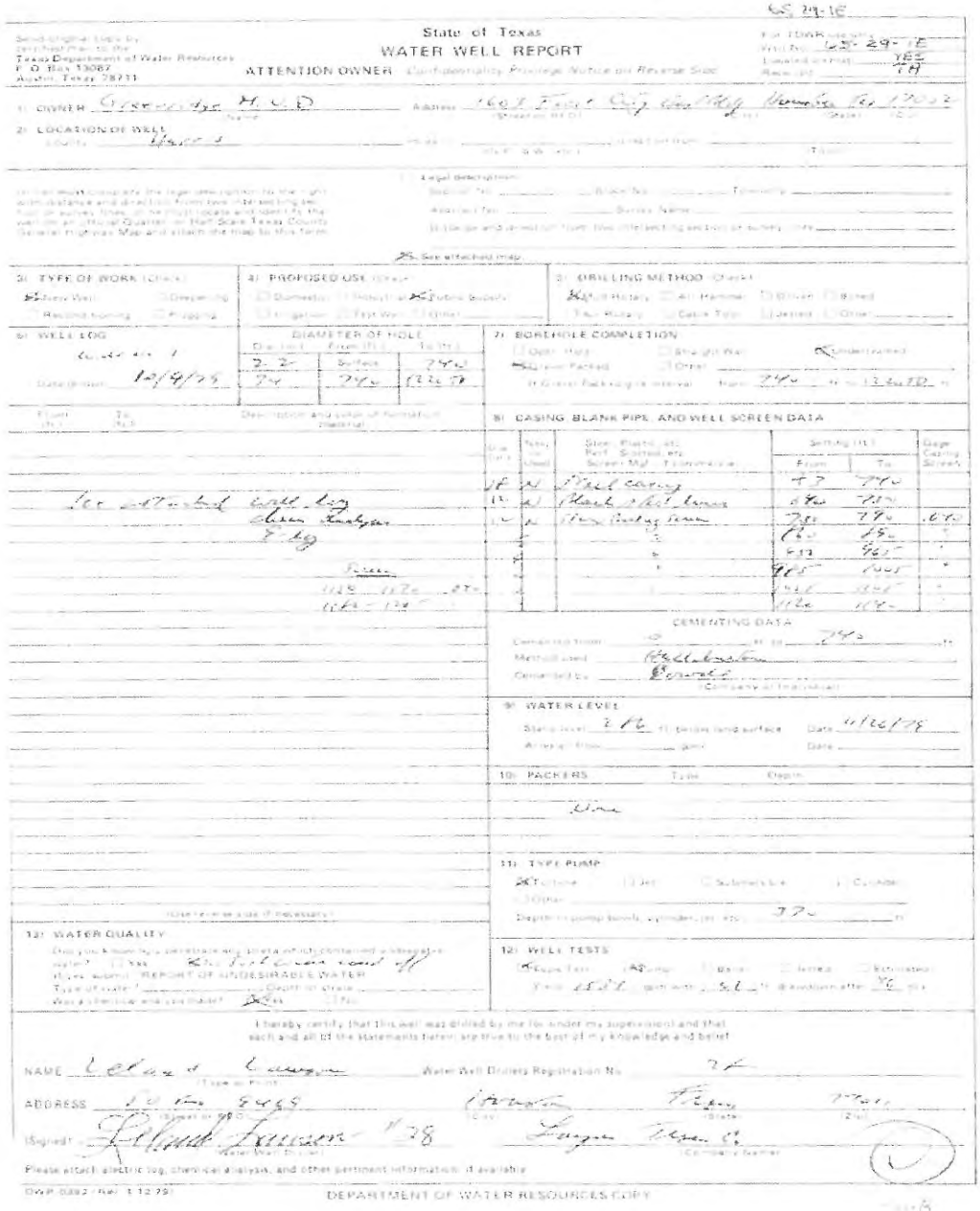
Texas Commission on Environmental Quality Water Wells (TCEQ)

MAP ID# 1 **Distance from Property: 0.04 mi. NE**

ID NUMBER: **TX206230**
STATE ID : **65-29-1E**
OWNER NAME: **GREENRIDGE MUD**
DATE DRILLED: **10/09/1979**
DEPTH DRILLED: **1220'**
STATIC LEVEL: **286'**
WATER USAGE: **PUBLIC SUPPLY**
LONGITUDE: **-95.492430000**
LATITUDE: **29.626392000**

2 PAGE(S) OF DRILLERS' LOGS

Texas Commission on Environmental Quality Water Wells (TCEQ)



State of Texas
WATER WELL REPORT

Texas Department of Water Resources
P.O. Box 13087
Austin, Texas 78711

ATTENTION OWNER

1) OWNER

2) LOCATION OF WELL

3) TYPE OF WORK

4) PROPOSED USE

5) DRILLING METHOD

6) WELL LOG

7) BOREHOLE COMPLETION

8) CASING, BLANK PIPE, AND WELL SCREEN DATA

9) WATER LEVEL

10) PACKERS

11) TYPE PUMP

12) WATER QUALITY

12) WELL TESTS

I hereby certify that this well was drilled by me (or under my supervision) and that each and all of the statements herein are true to the best of my knowledge and belief.

NAME

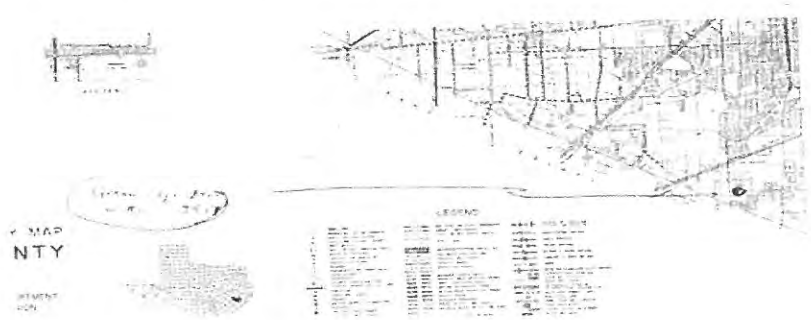
ADDRESS

(Signed)

Please attach electric log, chemical analysis, and other pertinent information, if available.

DEPARTMENT OF WATER RESOURCES COPY

IMPORTANT NOTICE FOR PERSONS
HAVING WELLS DRILLED CONCERNING
PRIVILEGE OF CONFIDENTIALITY



United States Geological Survey National Water Information System (NWIS)

MAP ID# 1 **Distance from Property: 0.03 mi. NE**

REPORTING AGENCY: **US GEOLOGICAL SURVEY**
SITE NUMBER: **29373409**
STATION NAME: **LJ-65-21-711**
SITE TYPE: **WELL**
LATITUDE: **29.626344080** LONGITUDE: **-95.492442400**
DATE DRILLED: **1982-11-04**
WELL DEPTH: **1190'**
HOLE DEPTH: **1505'**
LOCAL AQUIFER: **EVANGELINE AQUIFER**

Back to Report Summary

Texas Water Development Board Groundwater Database (TWDB)

MAP ID# 1 **Distance from Property: 0.03 mi. NE**

STATE ID: **65-21-711**
OWNER'S NAME: **GREENRIDGE MUD**
DATE DRILLED: **00/00/1982**
DEPTH DRILLED: **1190'**
WATER USAGE: **PUBLIC SUPPLY**
LONGITUDE: **-95.49250**
LATITUDE: **29.62639**
SOURCE: **TWDB**

Back to Report Summary

Texas Water Development Board Groundwater Database (TWDB)

MAP ID# 2 **Distance from Property: 0.07 mi. NW**

STATE ID: **65-21-708**
OWNER'S NAME: **CITY OF HOUSTON**
DATE DRILLED: **00/00/1972**
DEPTH DRILLED: **1204'**
WATER USAGE: **PUBLIC SUPPLY**
LONGITUDE: **-95.49389**
LATITUDE: **29.62639**
SOURCE: **TWDB**

WRD Exp. (GW)
April 1966

Well No. J-65-21-708

WELL SCHEDULE

U. S. DEPT. OF THE INTERIOR — GEOLOGICAL SURVEY — WATER RESOURCES DIVISION

MASTER CARD

1:24000

Record by W. L. Moffet — Source of data Ofc. & Drillr — Date Sept. 14 — Map Bellaire 1967

State Texas (48) — County (or town) Harris — (J)

Latitude: 29 37 34 N — Longitude: 095 29 37 — Sequential number: 1

Lat-long accuracy: 1 — T. ____ S, R. ____ W, Sec. ____, ____ k, ____ k, ____ k — B & M

Local well number: 4J-65-21-708 — Other number: well No. 3

Local use: — Owner or name: City of Houston

Owner or name: CITY OF HOUSTON — Address: Sims Bayou Plant

Ownership: (C) County, (F) Fed Gov't, (M) City, (N) Corp or Co, (P) Private, (S) State Agency, (W) Dist — M

Use of water: (A) Air cond, (B) Bottling, (C) Comm, (D) Dewater, (E) Power, (F) Fire, (G) Dom, (I) Irr, (N) Ind, (P) P.S., (R) Rec, (S) Stock, (T) Instit, (U) Unused, (V) Repressure, (W) Recharge, (Z) Dual-P S, (O) Dual-other, (O) Other — P

Use of well: (A) Anode, (D) Drain, (G) Seismic, (H) Heat Rec, (O) Obs, (O) Oil-gas, (R) Recharge, (T) Test, (U) Unused, (W) Withdrawal, (X) Waste, (D) Destroyed. — W

DATA AVAILABLE: Well data — Freq. W/L meas.: mos. — A — Field aquifer chem.

Hyd. lab. data: new MIS 9-73

Qual. water data; type:

Freq. sampling: Sept. 8 1972 — Pumpage inventory: yes no, period:

Aperture cards: yes

Log data: D-LOG — D

WELL-DESCRIPTION CARD

SAME AS ON MASTER CARD — Depth well: 1204 ft — 1204 — Meas. (MP) — accuracy — 3

Depth cased (first perf.): 632 ft — 1632 — Casing type: S — Diam. 24X14 in — 24 14

Finish: (C) porous concrete, (F) gravel w. (perf.), (G) gravel w. screen, (H) horiz. gallery, (O) open end, (P) perf., screen, sd. pt., (S) shored, (V) open hole, (X) other — G

Method Drilled: (A) air rot, (B) bored, (C) cable, (D) dug, (H) hyd, (J) jetted, (P) air percussion, (R) reverse rotary, (T) trenching, (V) drive wash, (W) other — H

Date Drilled: Sept. 1972 — 9 7 2 — Pump intake setting: 370 ft — 370

Driller: Layne-Texas Co. — Houston (name / address)

Lift (type): (A) air, (B) bucket, (C) cent, (J) jet, (L) multiple, multiple (cent.), (M) multiple (turb.), (N) cons, piston, rot, submerg, turb, other (T) — T — Deep Shallow — D

Power (type): diesel elec, nat gas, gasoline, hand, LP gas, wind; H.P. 350 — Trans. or water no.

Descrip. MP 1/4" meas. pipe — +0.5 ft above LSD — Alt. MP

Alt. LSD: 65 — 65 — Accuracy (source): 5' topo. map (USGS) — 3

Water Level 236.47 ft above (below) MP; ft above (below) Tape — 236 — Accuracy: M-Scope — A

Date meas: 9-8-72 — 9 7 2 — Yield: 2513 gpm — 2513 — Method determined — 4

Drawdown: 76.74 ft — 77 — Accuracy: M-Scope (USGS) — 0 — Pumping period 28 hrs — 28

QUALITY OF WATER DATA: Iron ppm — Sulfate ppm — Chloride ppm — Hard. ppm

Sp. Conduct x 10^5 — Temp. 26 C — Date sampled 9-8-72

Taste, color, etc.

* 100 min static

Q1751

P2 313.21 / 236.47 / 76.74

Well No. J-65-21-708

Well No. LJ-65-21-708

Latitude-longitude 29, 37, 34 095, 29, 37

HYDROGEOLOGIC CARD

SAME AS ON MASTER CARD | Physiographic Province: Coastal Plain 03 | Section: West Gulf

Coast Plain F | Drainage Basin: 51 R 51 R | Subbasin:

Type of well site: (D) depression, (C) stream channel, (E) dunes, (F) flat, (H) hilltop, (S) sink, (L) swamp, (O) offshore, (P) pediment, (B) hillside, (T) terrace, (U) undulating, (V) valley flat — F

MAJOR AQUIFER: Tertiary system | Pliocene-Mio. series | TF | Evangeline aquifer, formation, group | E

Lithology: Sand | S | Origin: Deltaic | 3 | Aquifer Thickness: ft

Length of well open to: 450 ft | 450 | Depth to top of: ft

MINOR AQUIFER: system | series | aquifer, formation, group

Lithology: | Origin: | Aquifer Thickness: ft

Length of well open to: ft | Depth to top of: ft

* Intervals screened: SS, W, W

Depth to consolidated rock: ft | Source of data:

Depth to basement: ft | Source of data:

Surficial material: | Infiltration characteristics:

Coefficient Trans: 184,286 gpd/ft | Coefficient Storage:

Coefficient Perm: 414 gpd/ft²; Spec cap: 31 65 min gpm/ft; Number of geologic cards:

24" to 625 ft. 34" UR
Top of 14" 545 ft.

PL 332' @ 3000gpm
Static level before test 231'

* 632 – 651	19	1082 – 1096	14
653 – 688	35	1106 – 1118	12
698 – 733	35	1120 – 1158	38
735 – 767	32	1160 – 1182	22
770 – 803	33		86
828 – 868	40		
878 – 920	42		
931 – 958	27		
961 – 995	34		
1010 – 1039	29		
1042 – 1080	38		
	364		
	86		
	450		

GPO 857-709

LJ-65-21-708

Send original copy by certified mail to the Texas Water Development Board P. O. Box 13206 Austin, Texas 78711

State of Texas

WATER WELL REPORT

For TWDB use only
Well No. 65-21-708
Located on Map
Received: 7-31-70

1) OWNER:
Person having well drilled [illegible] (Name) Address [illegible] (Street or RFD) [illegible] (City) Texas (State)

Landowner (Name) Address (Street or RFD) (City) (State)

2) LOCATION OF WELL:
County HARRIS, miles in (N.E., S.W., etc.) direction from (Town)

Locate by sketch map showing landmarks, roads, creeks, hiway number, etc.*

See attached map

North

(Use reverse side if necessary)

or Give legal location with distances and directions from adjacent sections or survey lines.

Labor League

Block Survey

Abstract No.

(NW¼ NE¼ SW¼ SE¼) of Section

3) TYPE OF WORK (Check): New Well, Deepening, Reconditioning, Plugging

4) PROPOSED USE (Check): Domestic, Industrial, Municipal, Irrigation, Test Well, Other

5) TYPE OF WELL (Check): Rotary, Driven, Dug, Cable, Jetted, Bored

6) WELL LOG:
Diameter of hole in. Depth drilled ft. Depth of completed well ft. Date drilled

All measurements made from ft. above ground level.

From (ft.)	To (ft.)	Description and color of formation material
		See attached
		Completion Report

9) Casing:
Type: Old, New, Steel, Plastic, Other
Cemented from ft. to ft.

Diameter (inches)	Setting From (ft.)	Setting To (ft.)	Gage

10) SCREEN:
Type
Perforated, Slotted

Diameter (inches)	Setting From (ft.)	Setting To (ft.)	Slot Size

(Use reverse side if necessary)

7) COMPLETION (Check): Straight wall, Gravel packed, Other, Under reamed, Open Hole

8) WATER LEVEL:
Static level ft. below land surface Date
Artesian pressure lbs. per square inch Date
Depth to pump bowls, cylinder, jet, etc., ft. below land surface.

11) WELL TESTS:
Was a pump test made? Yes No If yes, by whom?
Yield: gpm with ft. drawdown after hrs.
Bailer test gpm with ft. drawdown after hrs.
Artesian flow gpm
Temperature of water

12) WATER QUALITY:
Was a chemical analysis made? Yes No
Did any strata contain undesirable water? Yes No
Type of water? depth of strata

I hereby certify that this well was drilled by me (or under my supervision) and that each and all of the statements herein are true to the best of my knowledge and belief.

NAME [illegible] (Type or Print) Water Well Drillers Registration No. 1401

ADDRESS P.O. Box. 8485 (Street or RFD) [illegible] (City) 77041 (State)

(Signed) GASTON GASS ALCIATORE (Water Well Driller) (Company Name)

Please attach electric log, chemical analysis, and other pertinent information, if available.

*Additional instructions on reverse side.

Q-1751

65-21-708

TWDB-GW-53

(11-74) Water Resources Division Austin, Texas

020999

Latitude	Longitude	Seq. No.
29 37 34	095 29 37	01

mnty code 201 County HARRIS
Well # LJ-65-21-708
Project number 7-4648-01000
Date 2-4-77 Time — Temp°C 26.5
Owner City of Houston
Address Sims Bayou #3
Date drld — WBF code 121 Evgl
Sample interval: (top) 632 (bottom) 1182
Water level — Appr CLEAR Use PS
Collector PETERS Yield — GPM
Smpld aftr pmpg on arrival Depth —
Pt of coll tap on Discharge
Field: Cond — pH — HCO_3 — DO —

Indicate types of analyses
Coliform Phenols Minors
Nutrients MBAS BOD TOC DOC
i chem schedule I
Other
Herbicide Insecticide
Remarks:

Type 2 (1) Station identification number 29373409529370 1 (2–16)

Y M D (17–22) Begin

Time of measurement (29–32)

	Parameter code	Value	Exp.	Rmk
Depth	72008			
Yield (GPM)	00059			
Sample interval TOP	72015	6320	03	
nple interval BOTTOM	72016	1182	04	
Water level	72019			

	Parameter code	Value	Exp.	Rmk	
Sampled after pumping	72004				
DO (mg/l)	00300				
DO % Sat.	00301				
Temp °C	00010	2650	02		26.5
pH	00400	7800	01		7.8
Specific conductance	00095	5440	03		544
HCO_3	00440	2600	03		260
CO_3	00445	0000	01		0
Chloride (Cl)	00940	3900	02		39
Sulfate (SO_4)	00945	1400	02		14
Color	00080				
Coliform, membrane filter	31501				
Coliform, fecal	31616				
Strep-tococci	31679				
BOD	00310				

65-21-708

Austin, Texas

Latitude ° ' " Longitude ° ' " Seq. No.
2937 34 N 095 29 37 19

County code 201 County HARRIS
Well # LJ- 65-21-708
Project number 4648-01000
Date 2-5-76 Time — Temp°C 26.5
Owner City of Houston Sims Bayou #3
Address —
Date drld — WBF code 121 EVGL
Sample interval: (top) 632 (bottom) 1182
Water level — Appr CLEAR Use PS
Collector PETERS Yield — GPM
Smpld aftr pmpg — Depth —
Pt of coll Tap on Discharge
Field: Cond pH HCO_3 DO

Indicate types of analyses
Coliform Phenols Minors
Nutrients MBAS BOD TOC DOC
Std chem schedule I
Other
Herbicide Insecticide
Remarks: —

Type 2 Station identification number 293734095293719

Y M D	Time of measurement
76 02 05 (Begin)	

	Parameter code	Value	Exp.	Rmk
Depth	72008			
Yield (GPM)	00059			
Sample interval TOP	72015	6320	03	
Sample interval BOTTOM	72016	1182	04	

	Parameter code	Value	Exp.	Rmk	
Sampled after pumping	72004				
DO (mg/1)	00300				
DO % Sat.	00301				
Temp °C	00010	2650	02		26.5
pH	00400	7900	01		7.9
Specific conductance	00095	5440	03		544
HCO_3	00440	2580	03		258
CO_3	00445	0000	01		0.
Chloride (Cl)	00940	3800	02 (down 5)		38
Sulfate (SO_4)	00945	1600	02		16
Color	00080				
Coliform, membrane filter	31501				
Coliform, fecal	31616				
Strep-tococci	31679				
BOD	00310				

65-21-708

(11-74)

UNITED STATES DEPARTMENT OF THE INTERIOR
Water Resources Division
Austin, Texas

015484

Latitude 29°37'34" Longitude 095°29'37" Seq. No. 1

County code 201 County HARRIS
Well # LJ-65-21-708
Project number 564801000
Date 4-15-75 Time ____ Temp°C 26.5
Owner City of Houston
Address Sims Bayou No. 3
Date drld 9-72 WBF code 112 Eugl
Sample interval: (top) 632 (bottom) 1162
Water level ____ Appr ____ Use P.S.
Collector Vaught Yield ____ GPM
Smpld aftr pmpg ____ Depth ____
Pt of coll Faucet on side of pipe
Field: Cond ____ pH ____ HCO_3 ____ DO ____

Indicate types of analyses

Coliform rients | Phenols MBAS | BOD | Minors TOC | DOC

Std chem schedule I+S04
Other
Herbicide ____ Insecticide ____
Remarks:

Type 2 (1-1)
Station identification number: 29373409529370 1 (2-16)
Y M D: 75 04 15 (17-22) Begin
Time of measurement: ____ (29-32)

	Parameter code	Value	Exp.	Rmk
Depth	72008			
Yield (GPM)	00059			
Sample interval TOP	72015	6320	03	
Sample interval BOTTOM	72016	1182	04	

	Parameter code	Value	Exp.	Rmk	
Sampled after pumping	72004				
DO (mg/l)	00300				
DO % Sat.	00301				
Temp °C	00010	2650	02		26.5
pH	00400	7400	01		7.4
Specific conductance	00095	5540	03		554
HCO_3	00440	2560	03		256
CO_3	00445	0000	01		0
Chloride (Cl)	00940	4300	02		43
Sulfate (SO_4)	00945	1600	02		16
Color	00080				
Coliform, membrane filter	31501				
Coliform, fecal	31616				
Strep-tococci	31679				
BOD	00310				

65-21-708

FORM NO. 28
State

BLAYNE TEXAS COMPANY,
HOUSTON -:- DALLAS

WELL LOG

65-21-7D

REPORT NO. 8889
S. O. 1103-1343
PAGE 1 of 1
FILE NO. 3578
DATE 8/2/72

CUSTOMER LOCATION

FOR City of Houston
LOCATION WELL Sims Bayou
SURVEY FIELD
COUNTY Harris STATE Texas
OTHER LAND MARKS

WELL DATA

NAME WELL WELL NO. 3
ELEVATION DATUM
RT C GR
TEST HOLE SIZE 9-7/8" TD 1805'
DATE STARTED DRILLING 6-13-72
DATE FINISHED DRILLING 6-16-72
DRILLER McFarland RIG NO. 4
TYPE MUD Gel NO. SACKS
ELECTRIC LOG Yes TYPE Schlumberger
SURVEY Eastman TYPE Single-shot
OTHER J. R. Moore

DEPTH STRATA	EACH STRATUM	DESCRIPTION FORMATION	SAMPLES DEPTH	SAMPLES TYPE	SAMPLES NUMBER
0		Surface			
82	82	Clay			
119	37	Sandy clay & gravel			
207	88	Clay			
260	53	Red clay			
342	82	Washed gravel & sand			
362	20	Shale			
508	146	Sandy shale & sand			
549	41	Shale			
611	62	Shale & sandy shale			
695	84	Sand			
861	166	Shale			
871	10	Sand			
923	52	Shale			
954	31	Sand			
1009	55	Shale			
1075	66	Sandy shale			
1085	10	Sand			
1109	24	Sandy shale			
1155	46	Shale			
1197	42	Sand			
1235	38	Shale			
1281	46	Sandy shale			
1421	140	Sand & shale streaks			
1523	102	Shale & sand streaks			
1617	94	Sand			
1649	32	Sand & shale breaks			
1805	256	Shale			

Total depth 1805 ft.

65-21-708

FORM NO. 1505 -JH - 6-61 - 50M

THE LAYNE TEXAS COMPANY, LTD.

HOUSTON -:- DALLAS

REPORT NO. 8890
S. O. 1104-1343
PAGE 1 OF 2
FILE NO. 3578
DATE 8/22/72

MATERIAL SETTING

CUSTOMER LOCATION

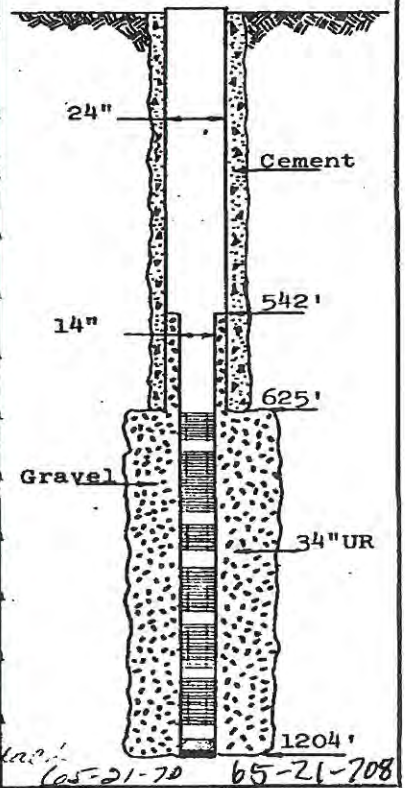
FOR City of Houston
LOCATION WELL Sims Bayou
SURVEY FIELD
COUNTY Harris STATE Texas
OTHER LAND MARKS

WELL DATA

NAME WELL Sims Bayou WELL NO. 3
ELEVATION DATUM
TYPE WELL Gravel-wall
SURFACE CASING CEMENTED Yes NO. SACKS 690+8% Gel
SIZE HOLE UNDERREAMED 34" DEPTH 625-1204'
GRAVEL TYPE 112-113- NO. CU. YDS. 210
TYPE SCREEN 165-131 S.S. W.W. Bar- lug GAGE .045"
DRILLER McFarland RIG NO. 4
OTHER driller: Watson & Moore

DEPTH	LENGTH	SIZE. KIND. WEIGHT MATERIAL
+2'		24" O.D. surface casing 94.63#
+2'		1¼" measuring line
0		Surface
500'	502'	1¼" measuring line
541.81'		Top of 14" O.D. liner
625'	627'	24" O.D. surface casing 94.63#
632.50'	90.69'	14" O.D. blank liner 54.57#
650.91'	18.41'	14" O.D. S.S. W.W. barlug screen .045" ga.
653.09'	2.18'	14" O.D. blank liner 54.57#
687.75'	34.66'	14" O.D. S.S. W.W. barlug screen .045" ga.
697.69'	9.94'	14" O.D. blank liner 54.57#
732.93'	35.24'	14" O.D. S.S. W.W. barlug screen .045" ga.
735.15'	2.22'	14" O.D. blank liner 54.57#
767.42'	32.27'	14" O.D. S.S. W.W. barlug screen .045" ga.
769.59'	2.17'	14" O.D. blank liner 54.57#
802.96'	33.37'	14" O.D. S.S. W.W. barlug screen .045" ga.
827.92'	24.96'	14" O.D. blank liner 54.57#
868.09'	40.17'	14" O.D. S.S. W.W. barlug screen .045" ga.
877.98'	9.89'	14" O.D. blank liner 54.57#
920.19'	42.21'	14" O.D. S.S. W.W. barlug screen .045" ga.
931.28'	11.09'	14" O.D. blank liner 54.57#
958.31'	27.03'	14" O.D. S.S. W.W. barlug screen .045" ga.
960.81'	2.50'	14" O.D. blank liner 54.57#
995.09'	34.28'	14" O.D. S.S. W.W. barlug screen .045" ga.
1010.46'	15.37'	14" O.D. blank liner 54.57#
1039.47'	29.01'	14" O.D. S.S. W.W. barlug screen .045" ga.
1041.89'	2.42'	14" O.D. blank liner 54.57#
1080.05'	38.16'	14" O.D. S.S. W.W. barlug screen .045" ga.
1082.51'	2.46'	14" O.D. blank liner 54.57# Cellar

SKETCH



65-21-70 65-21-708

FORM NO. 1202 - 1M - 8-61 - B&L

THE LAYNE TEXAS COMPANY, LTD.

HOUSTON -:- DALLAS

MATERIAL SETTING

REPORT NO. 8890
S. O. 1104-1343
PAGE 2 OF 2
FILE NO. 3578
DATE 8/22/72

CUSTOMER LOCATION

FOR City of Houston

LOCATION WELL Sims Bayou

SURVEY FIELD

COUNTY Harris STATE Texas

OTHER LAND MARKS

WELL DATA

NAME WELL Sims Bayou WELL NO. 3

ELEVATION DATUM

TYPE WELL Gravel-wall

SURFACE CASING CEMENTED Yes NO. SACKS 690+8% Gel

SIZE HOLE UNDERREAMED 34" DEPTH 625-1204'

GRAVEL TYPE 112-113- NO. CU. YDS. 210
105-131

TYPE SCREEN S.S. W.W. Bar-lug GAGE .045"

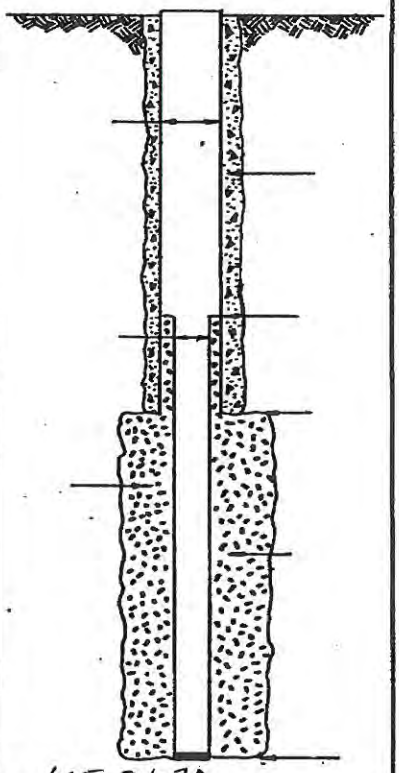
DRILLER McFarland RIG NO. 4

OTHER

DEPTH	LENGTH	SIZE, KIND, WEIGHT MATERIAL
1082-51'		
1095.87'	13.36'	14" O.D. S.S. W.W. Barlug screen .045" ga.
1106.24'	10.37'	14" O.D. blank liner 54.57#
1117.79'	11.55'	14" O.D. S.S. W.W. Barlug screen .045" ga.
1120.35'	2.56'	14" O.D. blank liner 54.57#
1157.82'	37.47'	14" O.D. S.S. W.W. barlug screen .045" ga.
1160.20'	2.38'	14" O.D. blank liner 54.57#
1181.70'	21.50'	14" O.D. S.S. W.W. Barlug screen .045" ga.
1201.70'	20.00'	14" O.D. blank liner 54.57#
1204.00'	2.30'	14" O.D. set nipple & back pressure valve
	NOTE:	1201' to 1192' filled with broken cast iron bowl.

65-21-708

SKETCH



65-21-7D

LAYNE TEXAS COMPANY
HOUSTON -:- DALLAS
WATER WELL TEST

REPORT NO. 8891
S. O. 1104-1343
PAGE 1 of 3
FILE NO. 3578
DATE 9/11/72

CUSTOMER LOCATION

TEST FOR City of Houston
LOCATION OF WELL Sims Bayou
SURVEY FIELD
COUNTY Harris STATE Texas
DESCRIPTION OF LAND MARKS

WELL DATA

NAME WELL Sims Bayou WELL NO. 3
ELEVATION DATUM
WELL SIZE 24" x 14" x 34"UR
TOTAL DEPTH 1204' TOP SCREEN 632-650'
GRAVEL WELL Yes STRAIGHT WELL
TYPE SCREEN S.S. W.W Barlug GAGE .045"
TEMPERATURE OF WATER
WATER CONDITION Clear

WATER MEASURING DEVICE

ORIFICE SIZE 12"x10" LENGTH 4'
OTHER

TEST PUMP DATA

DEPTH SETTING TOP OF BOWL 370'
LENGTH AIR LINE 370' SIZE 1/4"
TYPE BOWL DROHC 17" NO. STAGES 4
LENGTH BOWL SUCTION LT.

SAND CONTENT 0 OZ. PER 100 GAL.
WATER SAMPLE TAKEN Yes NO. SAMPLES 1
BACTERIOLOGICAL SAMPLE TAKEN
DRAWDOWN SPECIFIC CAPACITY

ACTIVE STATIC HEAD AFTER PUMP STOPPED

5 MIN.	FT.	20 MIN.	FT.
10 MIN.	FT.	25 MIN.	FT.
15 MIN.	FT.	30 MIN.	FT.

S.L. before start 231.45 ft.

DATE HOUR	AIR LINE GAGE	PUMPING LEVEL	DISCH. PRESS.	HEAD ON ORIFICE INCHES	GPM	Sand	OPERATOR	REMARKS
7/24/72	- Started 48-Hour Test at 9:00 A.M.							
9:30AM		287.80		17	2030	Trace		
10:00		288.45		17	2030	"		
10:30		289.90		17	2030	0		
11:00		289.60		17	2030	0		
11:30		290		17	2030	0		
12:00 N		290		17	2030	0		
12:30PM		290		17	2030	0		
1:00		290		17	2030	0		
1:30		290		17	2030	0		
2:00		290		17	2030	0		
2:30		290		17	2030	0		
3:00		290.16		17	2030	0	Step up	pump motor
3:30		301.30		26	2513	0		
4:00		301.54		26	2513	0		
4:30		301.70		26	2513	0		
5:00		301.83		26	2513	0		
5:30		302.10		26	2513	0		
6:00		302		26	2513	0		
6:30		302		26	2513	0		
7:00		302.10		26	2513	Trace		
7:30		302		26	2513	"		
8:00		301.94		26	2513	"		
8:30		302.25		26	2513	"		
9:00		302.25		26	2513	"	Step up	to 3024 GPM
9:30		318		37.5	3024	"		
10:00		318.50		37.5	3024	"		

OBSERVERS

FOR OWNER

L. S. Luthringer
FOR LAYNE TEXAS CO.

65-21-708 65-21-70

FORM NO. 36

Test of Sims Bay [illegible] Water Well No. 3 for
City of Houston
Houston, Texas

Report No. 8891
S.O. 1104-1343
Page 2 of 3
File 3578
Date 9/11/72

Date Hour	Pumping Level	Head on Orifice Inches	GPM	Sand	Remarks
7/24/72					
10:30 PM	318.55	37.5	3024		
11:00	318.64	37.5	3024	Trace	
11:30	318.50	37.5	3024	"	
7/25/72					
12:00 M	318.05	37.5	3024	"	
12:30 AM	318.51	37.5	3024	"	
1:00	318.55	37.5	3024	"	
7/26/72					
2:00 PM	Pump on				
2:30	286.15	17	2030	"	
3:00	287	17	2030	"	
3:30	287.75	17	2030	"	
4:00	287.35	17	2030	"	
4:30	287.55	17	2030	"	
5:00	287.80	17	2030	"	Step up pump
5:30	299.80	26	2513	"	
6:00	300.25	26	2513	"	
6:30	300.60	26	2513	"	
7:00	300.50	26	2513	0	
7:30	300.55	26	2513	Trace	
8:00	300.60	26	2513	"	Step up to 3024
8:30	316.05	37.5	3024	"	
9:00	316.94	37.5	3024	"	
9:30	317.00	37.5	3024	"	
10:00	317.05	37.5	3024	"	
10:30	317	37.5	3024	"	
11:00	317.45	37.5	3024	"	
11:30	318.00	37.5	3024	"	
7/27/72					
12:00 M	317.31	37.5	3024	"	
12:30 AM	318.20	37.5	3024	"	
1:00	318.65	37.5	3024	"	
1:30	318.60	37.5	3024	"	
2:00	318.65	37.5	3024	"	
2:30	318.40	37.5	3024	"	
3:00	318.56	37.5	3024	"	
3:30	318.20	37.5	3024	"	
4:00	318.40	37.5	3024	"	
4:30	318.45	37.5	3024	"	
5:00	318.40	37.5	3024	"	
5:30	318.55	37.5	3024	"	
6:00	318.45	37.5	3024	"	
6:30	318.50	37.5	3024	"	
7:00	319.05	37.5	3024	"	
7:30	319.03	37.5	3024	"	
8:00	319.15	37.5	3024	"	Step up to 3316
8:30	329.25	45.5	3316	"	
9:00	329.50	45.5	3316	"	
9:30	329.55	45.5	3316	"	
10:00	329.55	45.5	3316	"	
10:30	329.75	45.5	3316	"	
11:00	329.90	45.5	3316	"	
11:30	329.75	45.5	3316	"	65-21-708
12:00 N	329.85	45.5	3316	"	6-31-70

Report No. 8891
Page 3 of 3
S.O. 1104-1343
File 3578
Date 9/11/72

Test of Sims Bayou water Well No. 3 for
City of Houston
Houston, Texas

Date Hour	Pumping Level	Head on Orifice Inches	GPM	Sand	Remarks
7/27/72					
12:30 PM	329.85	45.5	3316	Trace	
1:00	329.90	45.5	3316	"	
1:30	329.90	45.5	3316	"	
2:00	329.90	45.5	3316	"	Step down to 3024
2:30	321.70	37.5	3024	"	
3:00	321.64	37.5	3024	"	
3:30	321.40	37.5	3024	"	
4:00	321.30	37.5	3024	"	
4:30	321.40	37.5	3024	"	
5:00	321.40	37.5	3024	"	
5:30	321.40	37.5	3024	"	
6:00	321.35	37.5	3024	"	
6:30	321.45	37.5	3024	"	
7:00	321.45	37.5	3024	"	
7:30	321.40	37.5	3024	"	
8:00	321.45	37.5	3024	"	
8:30	298.65	20	2204	"	
9:00	298.60	20	2204	"	
9:30	298.60	20	2204	"	
10:00	298.70	20	2204	"	
10:30	298.65	20	2204	"	
11:00	298.60	20	2204	"	
11:30	298.65	20	2204	"	
7/28/72					
12:00 M	298.75	20	2204	"	
12:30 AM	298.75	20	2204	"	
1:00	298.70	20	2204	"	
1:30	298.75	20	2204	"	
2:00	298.70	20	2204	"	
2:30	298.70	20	2204	"	
3:00	298.65	20	2204	"	
3:30	298.75	20	2204	"	
4:00	298.70	20	2204	"	

Test pump broke down. Test completed 9/7/72 on following pages.

65-21-708
65-21-70

Report No. 6691
S.O. 1104-1343
Page 2 of 2
File 3578
Date 9/11/72

Test of Sims Bayou Water Well No. 3 for
City of Houston
Houston, Texas

Date Hour	Air Line Gage	Pumping Level	Head on Orifice Inches	GPM	Sand	Remarks
9:30PM	39	331	37	3002		
10:00	38½	332½	37	3002	None	
10:30	38½	332½	37	3002		
11:00	38½	332½	37-	3002		
11:30	38	332	37	3002		
12:00M	38	332	37	3002		Decreased rate
9/8/72						
12:30AM	53	317	26	2513	None	
1:00	53	317	26	2513		
1:30	53	317	26	2513		
2:00	53	317	26	2513		
2:30	53	317	26	2513		
3:00	53	317	26	2513		
3:30	53	317	26	2513		
4:00	53	317	26	2513		
4:30	53	317	26	2513		
5:00	53	317	26	2513		
5:30	53	317	26	2513		
6:00	53	317	26	2513		
6:30	53	317	26	2513		
7:00	53	317	26	2513	None	
7:30	53	317	26	2513		
8:00	53	317	26	2513		
8:30	53½	316½	26	2513		
9:00	53½	316½	26	2513	None	
9:30	53	317	26	2513		
10:00	53	317	26	2513		
10:30	53	317	26	2513		
11:00	53	317	26	2513		
11:30	53	317	26	2513		
12:00 N	53	317	26	2513		Pump off

Recovery - Electric tape measurements

Time	W.L.	Time	W.L.
12:02PM	242.64	1:01	237.29
12:03	242.44	1:10	236.98
12:04	241.92	1:20	236.83
12:05	241.52	1:30	236.64
12:06	241.15	1:40	236.83
12:07	240.89	2:15	236.40
12:08	240.67	2:30	236.37
12:09	240.48	2:45	236.20
12:10	240.30	3:00	236.08
12:12	239.95	3:15	235.92
12:15	239.59	3:30	235.78
12:18	239.27	3:35	235.68
12:20	239.12	4:00	235.53
12:25	238.74		
12:30	238.47		
12:35	238.20		
12:40	237.97		
12:45	237.78		
12:50	237.62		
12:55	237.45		

E. A. Dykes

65-21-708
6-21-72

LAYNE TEXAS COMPANY
HOUSTON -:- DALLAS
WATER WELL TEST

REPORT NO. 8891
S. O. 1104-1343
PAGE 1 of 2
FILE NO. 3578
DATE 9/11/72

CUSTOMER LOCATION

TEST FOR City of Houston
LOCATION OF WELL Sims Bayou
SURVEY FIELD
COUNTY Harris STATE Texas
DESCRIPTION OF LAND MARKS

WELL DATA

NAME WELL Sims Bayou WELL NO. 3
ELEVATION DATUM
WELL SIZE 24" x 14" x 34"UR
TOTAL DEPTH 1204' TOP SCREEN 632-650'
GRAVEL WELL Yes STRAIGHT WELL
TYPE SCREEN SS WW Bar-lug GAGE .045"
TEMPERATURE OF WATER
WATER CONDITION Clear

WATER MEASURING DEVICE

ORIFICE SIZE 12"x10" LENGTH 4'
OTHER

TEST PUMP DATA

DEPTH SETTING TOP OF BOWL 370'
LENGTH AIR LINE 370' SIZE 1/4"
TYPE BOWL DROHC 17" NO. STAGES 4
LENGTH BOWL SUCTION LT.

SAND CONTENT 0 OZ. PER 100 GAL.
WATER SAMPLE TAKEN Yes NO. SAMPLES 1
BACTERIOLOGICAL SAMPLE TAKEN

ACTIVE STATIC HEAD AFTER PUMP STOPPED

5 MIN. 241 FT. 20 MIN. 239 FT.
10 MIN. 240 FT. 25 MIN. 238 FT.
15 MIN. 239 FT. 30 MIN. 238 FT.

S.L. before start 231 ft.

DRAWDOWN SPECIFIC CAPACITY

DATE HOUR	AIR LINE GAGE	PUMPING LEVEL	DISCH. PRESS.	HEAD ON ORIFICE INCHES	GPM	SAND CONTENT	OPERATOR	REMARKS
9/7/72 -	Started test	at 8:00		A.M.		Sand		
8:30 AM	76	294		18.5	2118			
9:00	74	296		18.5	2118			
9:30	74	296		18.5	2118			
10:00	74	296		18.5	2118			
10:30	72	298		19	2146	None		
11:00	72	298		19	2146			
11:30	72½	297½		18½+	2118+			
12:00 N	73	297		18.5	2118			
12:30PM	73	297		18.5	2118			
1:00	72	298		18.5	2118			
1:30	72	298		18.5	2118			
2:00	72	298		18.5	2118			
2:30	72	298		18.5	2118			
3:00	72	298		18.5	2118			
3:30	72	298		18.5	2118		Increased rate	
4:00	72	298		18.5	2118			
4:30	42	328		37	3002			
5:00	41	329		37	3002			
5:30	40½	329½		37	3002			
6:00	40	330		37	3002	None		
6:30	40	330		37	3002			
7:00	40	330		37	2003			
7:30	40	330		37	3002			
8:00	39	331		37-	3002			
8:30	39	331		37-	3002			
9:00	39	331		37	3002			

OBSERVERS

FOR OWNER

E. A. Dykes
FOR LAYNE TEXAS CO.

65-21-708
65-21-70

FORM NO. 25

EDNA WOOD LABORATORIES
WATER TECHNOLOGISTS . . CHEMIST . . MICROBIOLOGISTS

12 September 1972

To: Layne Texas Company
Houston, Texas

SO# 1104-1343E

Sample marked: City of Houston, Harris County - S.B. #3, Texas
Taken 9-8-72 after 28 hrs. pumping at 2500 gpm.
Static Head: 10 min - 240.30' Pumping Level: 317'
Screened: 632' - 1181'. Clear, no sand. E. A. Dykes.
Received: 9-11-72

WATER ANALYSIS
results in parts per million (mg/l) except as noted

Dissolved Residue at 350°C		309	Conductance, micromhos/cm, 25°C		530
Total Dissolved Solids, actual†		441	Color, units		0
Total Dissolved Solids, calc.		438	Turbidity, units		0
Silica	SiO_2	22	As Calcium Carbonate, $CaCO_3$:		
Calcium	Ca	43	Phenolphthalein Alkalinity		0
Magnesium	Mg	7	Total Alkalinity		212
Sodium (diff.) Na + K as	Na	62	Total Hardness		136
Carbonate	CO_3	0	Free Carbon Dioxide	CO_2	9
Bicarbonate	HCO_3	259	pH . . . 7.63		
Sulfate	SO_4	11	**HYPOTHETICAL COMBINATIONS**		
Chloride	Cl	33	Calcium Bicarbonate		174
Total Iron	Fe	0.07	Sodium Bicarbonate		128
Total Fluoride	F	0.4	Sodium Sulfate		16
Total Nitrate	NO_3	0.6	Magnesium Bicarbonate		42
Total Manganese	Mn	< 0.02	Sodium Chloride		54
			Sodium Fluoride		1
			Sodium Nitrate		1
			Silica		22
			Total Dissolved Solids, Calc.		438

†Total Dissolved Solids, actual = Dissolved Residue + 50.8% of bicarbonate (HCO_3) ion

EDNA WOOD LABORATORIES

1298
lr

65-21-708 By: Edna Wood

Tel: (713) 747-7271 • P. O. BOX 14171 • 4820 OLD SPANISH TRAIL • HOUSTON, TEXAS 77021

Back to Report Summary

Water Utility Database (WUD)

MAP ID# 2 **Distance from Property: 0.08 mi. NW**

PWSID: **1010013**
SOURCEID: **G1010013AT**
UTILITY NAME: **CITY OF HOUSTON**
DATE DRILLED: **08/22/1972**
SCREEN BOTTOM: **1182.0'**
SCREEN TOP: **633.00'**
GALLONS
PER MINUTE: **1946**
CCN: **99144**
LONGITUDE: **-95.494057000**
LATITUDE: **29.626490000**
OWNER'S NAME: **CITY OF HOUSTON**
ADDRESS: **PO BOX 1562**
CITY: **HOUSTON** STATE: **TX** ZIP CODE: **772511562**

Back to Report Summary

United States Geological Survey National Water Information System (NWIS)

MAP ID# 2 **Distance from Property: 0.06 mi. W**

REPORTING AGENCY: **US GEOLOGICAL SURVEY**
SITE NUMBER: **29373409**
STATION NAME: **LJ-65-21-708**
SITE TYPE: **WELL**
LATITUDE: **29.626344080** LONGITUDE: **-95.493831400**
DATE DRILLED: **1972-09-08**
WELL DEPTH: **1204'**
HOLE DEPTH: **1204'**
LOCAL AQUIFER: **CHICOT AND EVANGELINE AQUIFERS**

Back to Report Summary

Harris Galveston Subsidence District Water Wells (HGSD)

MAP ID# 2 **Distance from Property: 0.08 mi. NW**

WELL ID: **1105**
OWNER'S NAME: **CITY OF HOUSTON**
YEAR DRILLED: **1972**
DEPTH DRILLED: **1204'**
STATIC LEVEL: **625'**
WATER USAGE: **PUBLIC SUPPLY**
WELL STATUS: **ACTIVE**
LONGITUDE: **-95.493888889**
LATITUDE: **29.626666667**
SOURCE: **HGSD**

Back to Report Summary

Harris Galveston Subsidence District Water Wells (HGSD)

MAP ID# 3 **Distance from Property: 0.43 mi. W**

WELL ID: **11742**
OWNER'S NAME: **NOT REPORTED**
YEAR DRILLED: **NOT REPORTED**
DEPTH DRILLED: **50'**
STATIC LEVEL: **40'**
WATER USAGE: **NOT REPORTED**
WELL STATUS: **PLUGGED**
LONGITUDE: **-95.499722222**
LATITUDE: **29.621388889**
SOURCE: **HGSD**

Back to Report Summary

Texas Commission on Environmental Quality Water Wells (TCEQ)

MAP ID# 4 **Distance from Property: 0.48 mi. NW**

ID NUMBER: **TX205579**
STATE ID : **65-20-9E**
OWNER NAME: **MR. SAM A. CANGELOSI**
DATE DRILLED: **02/10/1970**
DEPTH DRILLED: **288'**
STATIC LEVEL: **137'**
WATER USAGE: **DOMESTIC**
LONGITUDE: **-95.498400000**
LATITUDE: **29.631082000**

1 PAGE(S) OF DRILLERS' LOGS

Texas Commission on Environmental Quality Water Wells (TCEQ)

Page # 1 out of 1
Water Well ID: 205579

9E

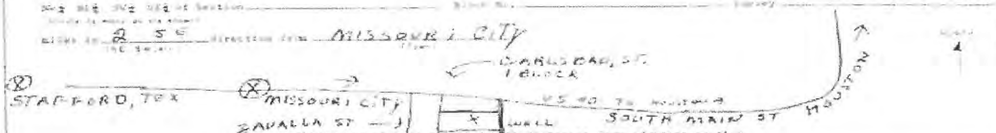
Send original copy by certified mail to the Texas Water Development Board, P. O. Box 13087, Austin, Texas 78711

State of Texas
WATER WELL REPORT

For TWDB use only — Well No. [illegible] — Located on map [illegible] — Received [illegible] — Form GW-1 — Form GW-2

1) OWNER: Person having well drilled MR SAM A. CANGELOSI Address 12214 ZAVALLA ST.
Landowner SAME Address HOUSTON, TEXAS

2) LOCATION OF WELL: County HARRIS
miles in 2 SE direction from MISSOURI CITY



Sketch map of well location with distances from adjacent section or survey lines, and to landmarks, roads, and creeks.

3) TYPE OF WORK (Check): New Well ☒ Deepening ☐ Reconditioning ☐ Plugging ☐

4) PROPOSED USE (Check): Domestic ☒ Industrial ☐ Municipal ☐ Irrigation ☐ Test Well ☐ Other ☐

5) TYPE OF WELL (Check): Rotary ☒ Driven ☐ Dug ☐ Cable ☐ Jetted ☐ Bored ☐

6) WELL LOG: Diameter of hole 4 in. Depth drilled 288 ft. Depth of completed well 288 ft. Date drilled 2-10-70
All measurements made from 0 ft. above ground level.

From (ft.)	To (ft.)	Description and color of formation material	From (ft.)	To (ft.)	Description and color of formation material
0	3	BLACK TOP SOIL	195	220	FAIR SAND - TO COURSE SAND
3	19	GRAY CLAY TURNING RED	220	253	RED CLAY
19	33	RED-BROWN BANK SAND	253	288	COURSE SAND AND GRAVEL
33	60	RED CLAY			BOTTOM OF WELL
60	85	FINE RED SAND,			
85	140	RED CLAY - STICKY			
140	150	FINE SAND - WHITE			
150	195	RED CLAY TURNING GRAY			(Use reverse side if necessary)

7) COMPLETION (Check): Straight wall ☒ Gravel packed ☐ Other ☐ Under reamed ☐ Open hole ☐

8) WATER LEVEL: Static level 157 ft. below land surface Date 2-10-70
Artesian pressure — lbs. per square inch Date —

9) CASING: Type: Old ☐ New ☒ Steel ☒ Plastic ☐ Other ☐
Cemented from 0 ft. to 12 ft.

Diameter (inches)	Setting From (ft.)	Setting To (ft.)	Gage

10) SCREEN: Type BRONZE WRAP ON GALV. PIPE
Perforated ☐ Slotted ☐

Diameter (inches)	Setting From (ft.)	Setting To (ft.)	Slot size
4" OD	276	288	EQUAL TO 14 GAGE

11) WELL TESTS:
Was a pump test made? ☒ Yes ☐ No If yes, by whom? BY THE WELL DRILLER (SAME PUMP)
Yield: 38 gpm with ___ ft. drawdown after ___ hrs.
Bailer test ___ gpm with ___ ft. drawdown after ___ hrs.
Artesian flow ___ gpm Date 2-10-70
Temperature of water ___
Was a chemical analysis made? ☐ Yes ☒ No
Did any strata contain undesirable water? ☐ Yes ☒ No
Type of water? VERY GOOD depth of strata 288

12) PUMP DATA:
Manufacturer's Name RED JACKET
Type SUBMERSIBLE H.P. 5
Designed pumping rate 38-TO-45 gpm ☒ gph ☐
Type power unit 220 SINGLE PHASE
Depth to bowls, cylinder, jet, etc., 252 ft. below land surface.

I hereby certify that this well was drilled by me (or under my supervision) and that each and all of the statements herein are true to the best of my knowledge and belief.

NAME CECIL L. ELLIS (Type or Print) Water Well Drillers Registration No. 815
Address 13719 STAFFORD, RD. STAFFORD, TEXAS 77477
(Signed) Cecil L. Ellis (Water Well Driller) ELLIS WATER WELL DRILLING (Company Name)

Please attach electric log, chemical analysis, and other pertinent information, if available.

Back to Report Summary

Texas Water Development Board Groundwater Database (TWDB)

MAP ID# 5 **Distance from Property: 0.49 mi. S**

STATE ID: **65-29-108**
OWNER'S NAME: **CITY OF HOUSTON**
DATE DRILLED: **00/00/1982**
DEPTH DRILLED: **1190'**
WATER USAGE: **PUBLIC SUPPLY**
LONGITUDE: **-95.49361**
LATITUDE: **29.61528**
SOURCE: **TWDB**

Texas Water Development Board
Well Schedule

State Well No. 65 29 108 Previous Well No. _____ County Harris 201
River Basin San Jacinto 10 Zone 1 Region 03 Lat. 29 36 52 Long. 095 29 36 Source of Coord. 1
Owner's Well No. _____ Location _____ 1/4, _____ 1/4, Section _____, Block _____, Survey _____

Owner City of Houston Chasewood #3 Driller _____

Address _____ Tenant/Oper. _____
Date Drilled _____ 1982 Depth 1190 Source of Depth Datum A Altitude _____ 70 Source of Alt. Datum M
Aquifer Evangeline 122 EVBL Well Type W User 396200
Well Construction Const. Method Rotary R Casing Material Steel S
Completion Gravel Packed B Screen Material Steel S
Lift Data Pump Mfr. _____ Type _____ No. Stages _____
Bowls Diam. _____ in. Setting _____ ft. Column Diam. _____ in.
Motor Mfr. _____ Fuel or Power _____ Horsepower _____
Yield Flow _____ GPM Pump _____ GPM Meas., Rept., Est. _____ Date _____
Performance Test Date _____ Length of Test _____ Production _____ GPM
Static Level _____ ft. Pumping Level _____ ft. Drawdown _____ ft. Sp.Cap. _____ GPM/ft.
Quality (Remarks _____
Water Use Primary Public P Secondary _____ Tertiary _____
Other Data Available Water Level _____ Water Quality Y Logs _____ Other Data _____
Water Levels Date _____ Meas. _____ _____
Water Levels Date _____ Meas. _____ _____
Water Levels Date _____ Meas. _____ _____

Casing or Blank Pipe (C)
Well Screen or Slotted Zone (S)
Open Hole (O)
Cemented from ___ to ___

	Diam. (in.)	Setting (feet) From	To
1	C 18	0	740
2	C 13	637	750
3	S 13	750	765
4	C 13	765	780
5	S 13	780	820
6	C 13	820	850
7	S 13	850	890
8	C 13	890	892
9	S 13	892	930
10	C 13	930	940
11	S 13	940	964
12	C 13	964	965
13	S 13	965	1000
14	C 13	1000	1024
15	S 13	1024	1069
16	C 13	1069	1089

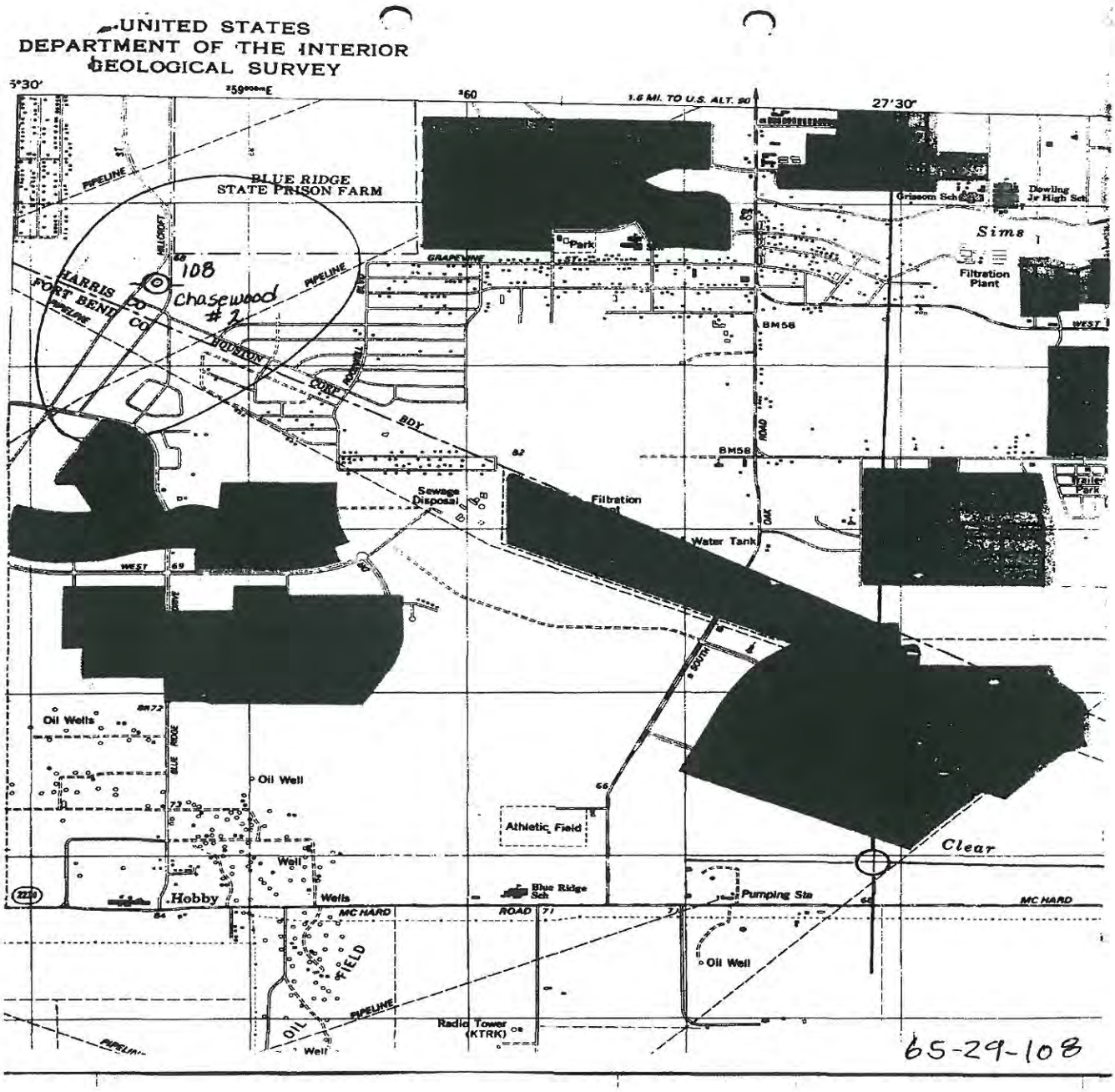
(20 max) (Lower) Reporting Agency 01

Recorded By E. Tejada Date Record Collected or Updated 09 13 1990

Remarks
1
2
3
4
5
6

Aquifer Evangeline
Well No. 65-29-108

900052
11/21/89


UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
1.6 MI. TO U.S. ALT. 90
BLUE RIDGE
STATE PRISON FARM
108
Chasewood
#2
HARRIS CO
FORT BEND CO
HOUSTON
PIPELINE
Park
Grissom Sch
Dowling Jr High Sch
Sims
Filtration Plant
Sewage Disposal
Filtration
Water Tank
Oil Wells
Oil Well
Athletic Field
Clear
Hobby
Wells
Blue Ridge Sch
Pumping Sta
MC HARD
ROAD
OIL FIELD
Radio Tower (KTRK)
65-29-108

(12) 571N/FBC~~R~~ 3/5 571N/3613
ADDR. ~~14400 HUCKERT~~ * 14400 HUCKERT 14400 HILL CROFT
571N/3615

Water Quality Sampling Run

SWN: 65-29-108
County: Harris
Aquifer(s):

Sample No. 655
Date: 6/7/90 9:19
By: D.R. Jones

	Bottle 1	Bottle 2	Bottle 3	Bottle 4	Bottle 5	Bottle 6	Bottle 7	Total
	✓1 liter Anions	✓1 liter Cations/HM	✓1 gallon Radioactivity	✓~~Nitrate~~/ 500 ml Phosphate	✓1 Qt.(glass) 2 (TOC) Organics	~~500 ml~~ Cyanide	2-VI	Sub-Samples 5
Preserve with:	ICE	2ml ↓ HNO_3 (Nitric)	5ml ↓ HNO_3 (Nitric)	1ml ↓ H_2SO_4 (Sulfuric)	unfiltered –	NaOH (Sodium Hydroxide) KEY PUNCHED		All filtered unless otherwise stipulated. All on ice.

Water Level _____ LSD
Temperature (00010) 26.6 °C
Specific Conductance (00094) 550 µmhos/cm
pH (00400) 7.57 @ 26.6 °C
Eh (00090) -71.6 mv @ 26.6 °C
Phenol ALK (82244) 0 mg/l
Total ALK (00431) 212 mg/l
Carbonate (00452) 0 meq/l 0 mg/l
Bicarbonate (00453) _____ meq/l 258.6 mg/l

Total Cations (+) _____
Total Anions (-) _____
Total Hardness (46570) 140
Dissolved Solids (70301) 340 calc. [368 meter]

Notes & Calculations

10.6 ml 0.02 normal to 5 ml sample: pH 4.50

Texas Water Development Board

Chemical Water Analysis Report

HM-DRJ 1990. 655
HM = Heavy Trace and Alkaline-Earth Metals

TWDB Use Only
Work No. 310 - 3202
IAC No.

Send Reply To:
Ground Water Unit
Texas Water Development Board
P.O. Box 13231
Austin, Texas 78711

Chasewood #3

Attention: P. Nordstrom
County: Harris
Owner: City of Houston % Terry Baker X
Address: P.O. Box 1562 Houston, Tx. 77251
Date Drilled: _____ Depth: _____
Collection Point: FAW pH 7.57
By: D.R. Jones

State Well Number: 6529108
Date & Time: 6/7/90 9:15
Send Copy To Owner
Sampled After Pumping: POA Hours
Yield: _____ GPM ☐ Measured ☐ Estimated
Use: P.S. Temperature: 26.6 °C
Specific Conductance: 550

Requested Ch[redacted]
Laboratory No.: _____ Date Received: JUN 08 1990 Date Reported: PUNCHED JUL 16 1990

		me/l	mg/l			me/l	mg/l
Calcium	(00915)		43	Sodium	(00930)		73
Magnesium	(00925)		8.0	Potassium	(00935)		2.6

		µg/l				µg/l
Aluminum	(01106)	<50		Manganese	(01056)	35
Arsenic	(01000)	<10		Mercury	(71890)	<0.2
Barium	(01005)	214	✓	Molybdenum*	(01062)	<20
Cadmium	(01025)	<10		Selenium	(01145)	<2
Chromium	(01030)	<20		Silver	(01075)	<10
Copper	(01040)	<20	✓	Strontium*	(01080)	480
Iron	(01046)	133	✓	Vanadium*	(01085)	<20
Lead	(01049)	<50		Zinc	(01090)	<20

* Do not analyze unless it is checked.
Note: Crossout those elements not to be analyzed.

890091-E

Texas Water Development Board

Chemical Water Analysis Report

GWN DRJ 1990 - 655
(Nitrogen Cycle)

Chasewood #3

TWDB Use Only
Work No. 910-1202
IAC No.

Send Reply To:
Ground Water Unit
Texas Water Development Board
P.O. Box 13231
Austin, Texas 78711

Attention: P. Hendstrom
County: Harris
Owner: City of Houston % Tony Ratter
Address: P.O. Box 1562 Houston, Tx 77251
Date Drilled: ____ Depth: ____
Collection Point: FRW pH 7.57
By: D.R. Jones

State Well Number: 6529108
Date & Time: 6/7/90 9:15
X Send Copy To Owner
Sampled After Pumping: POA Hours
Yield: ____ GPM ☐ Measured ☐ Estimated
Use: P.S. Temperature: 26.6 °C
Specific Conductance: 550

Requested Chemical Analysis

Laboratory No.: [redacted] Date Received: JUN 08 1990 Date Reported: JUN 14 1990

THD-Sample No. EB0 1434 Date Received 06/08/90 Date Reported 06/13/90

		MG/L
Nitrate as N	(00618)	< 0.01
KJE as N	(00623)	< 0.1

		MG/L
Ammonia as N	(00608)	0.03
Nitrite as N	(00613)	< 0.01
Orthophosphate as P	(00671)	0.01

*Note: To convert NO_3-N to NO_3, multiply by 4.427.

860091-D

* Do not analyze unless it is checked yes.

860091-P

Texas Water Development Board

Chemical Water Analysis Report

MISC- DRT-1990-655

Chasewood #3

TWDB Use Only
Work No. 320-320a
IAC No.

Send Reply To:
Ground Water Unit
Texas Water Development Board
P.O. Box 13231
Austin, Texas 78711

Attention: P. Nordstrom
State Well Number: 65-29-108
County: Harris
Date & Time: 6/7/90 9:15
Owner: City of Houston % Tony Baker
X Send Copy To Owner
Address: P.O. Box 1562 Houston, Tx. 77251
Sampled After Pumping: POA Hours
Date Drilled: Depth:
Yield: GPM ☐ Measured ☐ Estimated
Collection Point: FAW pH 7.97
Use: P.S. Temperature: 26.6 °C
By: D.R. Jones
Specific Conductance: 350

Requested Chem: [redacted]
Laboratory No.:
Date Received: JUN 08 1990
Date Reported: JUL 13 1990

T.O.C. MS

Gc/ms

TEXAS DEPARTMENT OF HEALTH
GC/MS ANALYSIS REPORT
EPA PRIORITY POLLUTANTS

ANALYST: T. Campbell DATE: 12 Jan 90 TDH SAMPLE NUMBER: EB-1493
TWC SAMPLE NUMBER:
SAMPLE TYPE: water
SAMPLE CONDITION: Intact.

*DETECTION LIMITS ARE APPROXIMATE

ACID EXTRACTABLES IN (CHECK ONE) ( ) MICROGRAMS/LITER ( ) MILLIGRAMS/KILOGRAM:

NAME	ANT	NAME	ANT	NAME	ANT
PHENOL	<10	4-CHLORO-3-CRESOL	<10	4-NITROPHENOL	<20
CALOROPHENOL		2,4,6-TRICHLOROPHENOL		2,4-DINITRO-4-CRESOL	
2-NITROPHENOL		2,4-DIMETHYLPHENOL		PENTACHLOROPHENOL	
2,4-DICHLOROPHENOL		2,4-DINITROPHENOL			

BASE NEUTRAL EXTRACTABLES IN (CHECK ONE) ( ) MICROGRAMS/LITER ( ) MILLIGRAMS/KILOGRAM:

NAME	ANT	NAME	ANT	NAME	ANT
N-NITROSO-N-METHYLAMINE	<5	ACENAPHTHYLENE	<5	FLUORANTHENE	<2
bis-(2-CHLOROETHYL) ETHER		DIMETHYL PHTHALATE		PYRENE	
1,3-DICHLOROBENZENE		2,6-DINITROTOLUENE		BENZIDINE	
1,4-DICHLOROBENZENE		ACENAPHTHENE		BUTYLBENZYL PHTHALATE	
1,2-DICHLOROBENZENE		2,4-DINITROTOLUENE		BENZO(a)ANTHRACENE	
bis-(2-CHLOROISOPROPYL)ETHER		FLUORENE		CHRYSENE	
HEXACHLOROETHANE		4-CHLOROPHENYL PHENYL ETHER		3,3'-DICHLOROBENZIDINE	
N-NITROSO-Di-n-PROPYLAMINE		DIETHYL PHTHALATE		bis-(2-ETHYLHEXYL)PHTHALATE	
NITROBENZENE		DIPHENYLAMINE		DI-n-OCTYL PHTHALATE	
ISOPHORONE		N-NITROSODIPHENYLAMINE		BENZO(b)FLUORANTHENE	
bis-(2-CHLOROETHOXY)METHANE		1,2-DIPHENYLHYDRAZINE		BENZO(k)FLUORANTHENE	
1,2,4-TRICHLOROBENZENE		4-BROMOPHENYL PHENYL ETHER		BENZO(a)PYRENE	
NAPHTHALENE		HEXACHLOROBENZENE		INDENO(1,2,3-cd)PYRENE	
HEXACHLOROBUTADIENE		PHENANTHRENE		DIBENZ(a,h)ANTHRACENE	
HEXACHLOROCYCLOPENTADIENE		ANTHRACENE		BENZO(g,h,i)PERYLENE	
2-CHLORONAPHTHALENE		DI-n-BUTYL PHTHALATE			

PESTICIDES IN (CHECK ONE) ( ) MICROGRAMS/LITER ( ) MILLIGRAMS/KILOGRAM:

NAME	ANT	NAME	ANT	NAME	ANT
Alpha-BHC	<10	ALDRIN	<10	Beta-ENDOSULFAN	<20
gamma-BHC		4,4'-DDE		ENDOSULFAN SULFATE	
beta-BHC		DIELDRIN		ENDRIN	
delta-BHC		4,4'-DDD		alpha-ENDOSULFAN	
HEPTACHLOR		4,4'-DDT		METHOXYCLOR EPOXIDE	
ENDRIN ALDEHYDE					

VOLATILE ORGANICS IN (CHECK ONE) ( ) MILLIGRAMS/LITER ( ) MILLIGRAMS/KILOGRAM:

NAME	ANT	NAME	ANT	NAME	ANT
CHLOROMETHANE	---	1,2-DICHLOROETHANE	---	1,1,2-TRICHLOROETHANE	---
BROMOMETHANE	---	CARBON TETRACHLORIDE	---	2-CHLOROETHYLVINYL ETHER	---
VINYL CHLORIDE	---	BROMODICHLOROMETHANE	---	TRICHLOROETHYLENE	---
CHLOROETHANE	---	BENZENE	---	DIBROMOCHLOROMETHANE	---
TRICHLOROFLUOROMETHANE	---	1,3-DICHLOROPROPENE	---	TOLUENE	---
CHLOROFORM	---	1,1,1-TRICHLOROETHANE	---	ETHYLBENZENE	---
DICHLOROMETHANE	---	1,1-DICHLOROPROPANE	---	1,1,2,2-TETRACHLOROETHANE	---
1,1-DICHLOROETHYLENE	---	trans-1,3-DICHLOROPROPYLENE	---	TETRACHLOROETHYLENE	---
1,1-DICHLOROETHANE	---	cis-1,3-DICHLOROPROPYLENE	---	CHLOROBENZENE	---
trans-1,2-DICHLOROETHYLENE	---			TOTAL XYLENES	---

TENTATIVE IDENTIFICATION OF THE TEN LARGEST NON-PRIORITY POLLUTANT PEAKS BY COMPARISON WITH EPA/NIH MASS SPECTRAL LIBRARY. QUANTITATION AS INTERNAL STANDARD IS PROVIDED, AND THE VALUES SHOULD BE REGARDED AS APPROXIMATE.

TENTATIVE COMPOUND IDENTIFICATION	APPROXIMATE CONCENTRATIONS ( ) MICROGRAMS/LITER ( ) MILLIGRAMS/KILOGRAM
SEMI-VOLATILES	AS BIS-BATHOXYBENE
VOLATILES	
	AS BIS-CHLOROBENZENE

KEY PUNCHED

* COMMON LAB CONTAMINANTS
** REPORTED AT LESS THAN QUANTITATION LIMITS

COMMENTS AND OTHER REQUESTED ANALYSIS:

SIGNATURE

Steve Campbell

DATE

1

Rev. 5/87

Water Quality Field Data

SWN: 65-29-108
County: HARRIS
Aquifer(s): ALEVEL

Sample No. 1282
Date: 6-12-97
By: BLR

Name: CITY OF HOUSTON
Address: 105 SABINE
HOUSTON 77007
owner's well # CHASEWOOD #3
14400 HILLCROFT RD

Bottle1	Bottle 2	Bottle 3	Bottle 4	Bottle 5	Bottle 6	Bottle 7	Total SUB-Samples
500 ml Anions	1 liter Cations	250 ml Nitrate	1 liter Radioactivity				
	2 ml HNO (Nitric)	0.5 ml H SO (Sulfuric)	2 ml HNO (Nitric)				All filtered unless otherwise stipulated

Water Level P01 LSD Remark ____
Temperature (00010) 27.7 c
Specific Conductance (00084) 314 umhos/cm
pH (00400) 7.48
Eh (00090) -117.9 mv.
Phenol ALK (82244) 0 mg/l
Total ALK (39086) 210 mg/l
Carbonate (00452) 0 meq/l 0 mg/l
Bicarbonate (00453) 4.2 meq/l 256 mg/l
Total Cations(+) 0
Total Anions (-) ____
Total Hardness (00800) 115
Dissolved Solids 315

Time In 1300
Time out 1340 Sample time 1330
Weather DRY well use PUBLIC
Outside Temp 90°
Sampling point @ WELLHEAD

Time:	1313	1318	1325				ml.	pH	ml.	pH	ml.	pH
pH:	7.47	7.48	7.48				0	7.48	10.00	5.14		
Temp:	27.7	27.9	27.9				1.00	7.11	10.50	4.50		
Eh:			-117.9				2.00	6.88				
Cond.	302	312	314				3.00	6.70				
other notes: 29° 36' 56" 59° 29' 35"							4.00	6.53				
							5.00	6.39				
							6.00	6.23				
							7.00	6.07				
							8.00	5.88				
							9.00	5.62				

FINAL ANALYSIS REPORT

LAB ID: 9705026 SAMPLE DESCRIPTION: Groundwater
FACILITY: TWDB SAMPLE DATE: 06/12/97
ACCT NO: SAMPLE TIME: 1330
TX WATER DEV. BOARD
DATE RECEIVED: 06/13/97
REPORT DATE: 08/19/97

LOCATION ID: 65-29-108

PARAMETER	RESULTS	UNITS	STORET #	PQL in WATER	DATE ANALYZED
Alkalinity, Phenol.	<1	mg/L	00415	1	06/16/97
Alkalinity, Total	195	mg/L	00410	1	06/16/97
Bromide	0.22	mg/L	71870	0.05	06/17/97
Chloride	41.9	mg/L	00941	0.1	06/17/97
Fluoride	0.36	mg/L	00950	0.02	06/17/97
Iodide, Laboratory	<0.15	mg/L	71965	0.05	07/03/97
Nit.,Nitrate/Nitrite	<0.040	mg/L	00630	0.020	06/18/97
Nitrogen, Kjeldahl	<0.200	mg/L	00623	0.010	06/23/97
Nitrogen, ammonia	<0.100	mg/L	00608	0.010	06/19/97
Silica	23.90	mg/L	00955	0.01	06/24/97
Sulfate	13.00	mg/L	00946	0.10	06/17/97
Aluminum, Dis. ICPMS	<1.5	ug/L	01106	1.0	07/16/97
Antimony, Dis. ICPMS	<1.0	ug/L	01095	1.0	07/16/97
Arsenic, Diss. ICPMS	<1.5	ug/L	01000	1.0	07/16/97
Barium, Diss. ICPMS	188.0	ug/L	01005	1.0	07/16/97
Beryllium, Dis ICPMS	<1.0	ug/L	01010	1.0	07/16/97
Boron, Diss. ICPMS	88.3	ug/L	01020	1.0	07/16/97
Calcium, Dissolved	36.30	mg/L	00915	0.50	06/18/97
Cobalt, Diss. ICPMS	<1.0	ug/L	01035	1.0	07/16/97
Copper, Diss. ICPMS	<1.0	ug/L	01040	1.0	07/16/97
Iron-AA, Dissolved	28.90	ug/L	01046	15.00	06/23/97
Lead, Diss. ICPMS	<1.0	ug/L	01049	1.0	07/16/97
Lithium, Diss. ICPMS	14.4	ug/L	01130	1.0	07/16/97
Magnesium, Dissolved	5.85	mg/L	00925	0.05	06/18/97
Manganese, Dis ICPMS	22.7	ug/L	01056	1.0	07/16/97
Molybdenum Dis ICPMS	2.3	ug/L	01060	1.0	07/16/97
Nickel, Diss. ICPMS	<1.0	ug/L	01065	1.0	07/16/97
Potassium, Dissolved	1.54	mg/L	00935	1.00	06/18/97
Selenium, Dis. ICPMS	<6.0	ug/L	01145	4.0	07/16/97

PAGE 1 of 2

FINAL ANALYSIS REPORT

LAB ID: 9705026 SAMPLE DESCRIPTION: Groundwater
FACILITY: TWDB SAMPLE DATE: 06/12/97
ACCT NO: SAMPLE TIME: 1330
TX WATER DEV. BOARD
DATE RECEIVED: 06/13/97
REPORT DATE: 08/19/97

LOCATION ID: 65-29-108

PARAMETER	RESULTS	UNITS	STORET #	PQL in WATER	DATE ANALYZED
Sodium, Dissolved	74.20	mg/L	00930	0.10	06/18/97
Strontium, Dis ICPMS	362.0	ug/L	01080	1.0	07/16/97
Thallium, Diss ICPMS	<1.0	ug/L	01057	1.0	07/16/97
Vanadium, Diss ICPMS	4.5	ug/L	01085	1.0	07/16/97
Zinc, Diss. ICPMS	3.9	ug/L	01090	1.0	07/16/97

COMMENTS: Silica, NH3, TKN, NO3/NO2 subcontracted.

PAGE 2 of 2

TEXAS WATER DEVELOPMENT BOARD
WELL SCHEDULE

State Well Number - 65 29 108 Previous Well Number - County - Harris 201
River Basin - San Jacinto River - 10 Zone - 1 Latitude - 29 36 54 Longitude - 95 29 36 Source of Coords - 1

Owners Well No. _____ Location _____ 1/4, _____ 1/4, Section _____, Block _____, Survey _____

Owner - City of Houston
Chasewood #3

Driller -

Address _____ Tenant/Oper. _____

Date Drilled - / /1982 Depth - 1,190 ft. Source of Depth - A Altitude - 70 ft. Source of Alt. - M
Aquifer - 121EVGL EVANGELINE AQUIFER Well Type - W User - 396200

WELL CONSTRUCTION
Const. Method - HYDRAULIC ROTARY
Completion - GRAVEL PACK W/SCREEN
Casing Material - STEEL
Screen Material - STEEL

LIFT DATA - Pump Mfr. _____ Type - TURBINE PUMP No. Stages ____

Bowls Diam. - _____ in. Setting - _____ ft. Column Diam. - _____ in.

Motor Mfr. - _____ Fuel or Power - ELECTRIC MOTOR Horsepower -

YIELD Flow- _____ GPM Pump- _____ GPM Meas.,Rept.,Est- _____ Date- _____

PERFORMANCE TEST Date- _____ Length of Test- _____ Production- _____GPM

Static Level- _____ft. Pumping Level- _____ft. Drawdown- _____ft. Sp.Cap.- _____GPM/ft

QUALITY (Remarks- _____

WATER USE Primary- PUBLIC SUPPLY Secondary- _____ Tertiary- _____

OTHER DATA AVAILAIBLE Water Levels- C Quality- Y Logs- Other Data-

WATER LEVELS Date- 01/09/1990 Measurement- -325.04
Date- 04/03/2001 Measurement- -273.00

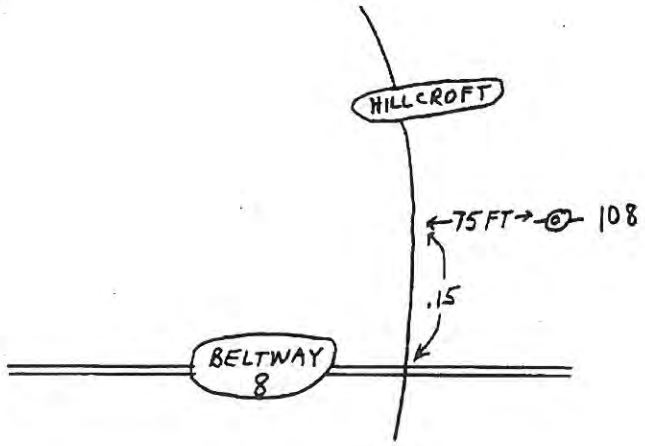
Recorded By MB Date Record Collected or Updated- 04/03/2001

Reporting Agency - TEXAS WATER DEVELOPMENT BOARD
REMARKS -
Owner's well, Chasewood #3.

| Casing or Blank Pipe (C)
| Well Screen or Slotted Zone (
| Open Hole (O)
| Cemented from_____to_____

		Diam. (in.)	Setting(feet) From	To
1	C	18	0	740
2	C	13	637	750
3	S	13	750	765
4	C	13	765	780
5	S	13	780	820
6	C	13	820	850
7	S	13	850	890
8	C	13	890	892
9	S	13	892	930
10	C	13	930	940
11	S	13	940	964
12	C	13	964	965
13	S	13	965	1000
14	C	13	1000	1024
15	S	13	1024	1069
16	C	13	1069	1089
17	S	13	1089	1109
18	C	13	1109	1129
19	S	13	1129	1170

Aquifer - 121EVGL
Well No. - 65 29 108



65-29-108

TWDB Water Quality Field Data Sheet

New Well: yes / (no)
State Well Number: 65-29-108
County: HARRIS
County Code: 201
Aquifer Code: 121EGL
Aquifer Id: 15

Send Results To: Owner / Lessee
Owner's Name: CITY OF HOUSTON
Lessee's Name:
Attention:
Mailing Address:
Well Number: CHASEWOOD #3

Type of Sample: LCRA / HACH
Sample Number: 975
Date: 4-3-01
Sampler(s): MB

CIRCLE BOTTLES TAKEN:

1 (on ice)	2	3 (on ice)	4 (on ice)	5
500ml (filtered) Anions / Total Alkalinity no preservative	500ml (filtered) Cations 1ml Nitric (HNO3)	250ml (filtered) Nitrate/Nitrite 0.5 ml Sulfuric (H2SO4)	40 ml (not filtered) Alkalinity no preservative	1 gallon (filtered) Radioactivity 10 ml Nitric (HNO3)

Add enough of the proper acid to each bottle that is preserved to drop the pH to 2.

Time In: 1015
Time Out: 1100

W.L. remark:
W.L. depth (from LSD (ft.):
Pumping Since: POA
Sampling Point: FAW
Well Use: PUBLIC
Lift: T
Power: E
Latitude: 29 36 56
Longitude: 95 29 36
Elevation: 71
Sample Time: 1040
Filter pressure: hard pump line

Daily Meter Calibration:

pH	7	7.0	
	4 or 10	4.0	
Conductivity	500	501	
	1000	1000	
	2000		
	5000		

Field Alkalinity Titration:
7.14 Start pH 4.47 End pH
50 ml. Sample Size
11.40 ml. Acid added for Total
ml. Acid added for Phenol
Items below calculated from ml. acid added data:
Field Total Alkalinity: 0.0 mg/L 228
Field Phenol Alkalinity: 0.0 mg/L

Notes: 1200 GPM
1-16-01
273 USGS

Water Quality Stabilization Parameters Table

					Final Readings:
Time:	1030	1035	1040		
pH:	7.09	7.13	7.14		
Temperature (Celsius):	25.6	25.7	25.7		
Conductivity (uS/cm):	688	688	688		
Conductivity Temperature (Celsius)	25.6	25.7	25.7		

Items Below Calculated Later From Results:
Total Hardness: 186
Calculated TDS (mg/L): 385
Sulfate: 83

Data Entered By Sampler Into Database: yes / no

LCRA Environmental Laboratory Services

Date: *30-Apr-01*

CLIENT: Texas Water Development Board
Lab Order: 0104059 **COC ID:** 15789
Project: TWDB 00-01
Lab ID: 0104059-03

Client Sample ID: 65-29-108
Collection Date: 04/03/2001 10:40:00 AM
Matrix: GROUNDWATER

Analyses	Storet	Result	PQL	Qual	Units	DF	QC Batch	Date Analyzed
ICP METALS, DISSOLVED			**E200.7**					Analyst: SW
Calcium	00915	56.9	0.204		mg/L	1.02	R8261	04/11/2001
Magnesium	00925	10.7	0.204		mg/L	1.02	R8261	04/11/2001
Potassium	00935	2.01	0.204		mg/L	1.02	R8261	04/11/2001
Sodium	00930	68.1	0.714		mg/L	1.02	R8261	04/11/2001
ICP METALS, DISSOLVED			**E200.7**					Analyst: SW
Boron	01020	119	51.0		µg/L	1.02	R8262	04/11/2001
Iron	01046	214	51.0		µg/L	1.02	R8262	04/11/2001
Strontium	01080	490	20.4		µg/L	1.02	R8262	04/11/2001
ICPMS METALS, DISSOLVED			**E200.8**					Analyst: PJM
Aluminum	01106	ND	4.00		µg/L	1	R8305	04/16/2001
Antimony	01095	ND	1.00		µg/L	1	R8305	04/16/2001
Arsenic	01000	ND	2.00		µg/L	1	R8305	04/16/2001
Barium	01005	246	1.00		µg/L	1	R8305	04/16/2001
Beryllium	01010	ND	1.00		µg/L	1	R8305	04/16/2001
Cadmium	01025	ND	1.00		µg/L	1	R8305	04/16/2001
Chromium	01030	ND	1.00		µg/L	1	R8305	04/16/2001
Cobalt	01035	ND	1.00		µg/L	1	R8305	04/16/2001
Copper	01040	ND	2.00		µg/L	1	R8305	04/16/2001
Lead	01049	ND	1.00		µg/L	1	R8305	04/16/2001
Lithium	01130	13.4	2.00		µg/L	1	R8305	04/16/2001
Manganese	01056	56.8	1.00		µg/L	1	R8305	04/16/2001
Molybdenum	01060	8.12	1.00		µg/L	1	R8305	04/16/2001
Nickel	01065	2.03	1.00		µg/L	1	R8305	04/16/2001
Selenium	01145	ND	4.00		µg/L	1	R8305	04/16/2001
Thallium	01057	ND	1.00		µg/L	1	R8305	04/16/2001
Vanadium	01085	ND	1.00		µg/L	1	R8305	04/16/2001
Zinc	01090	ND	4.00		µg/L	1	R8305	04/16/2001
DISSOLVED ANIONS BY ION CHROMATOGRAPH E300								Analyst: AMJ
Bromide Dissolved	71870	0.158	0.0200		mg/L	1	R8347	04/19/2001
Chloride Dissolved	00941	74.7	1.00		mg/L	1	R8347	04/19/2001
Fluoride Dissolved	00950	0.292	0.0100		mg/L	1	R8347	04/19/2001
Sulfate Dissolved	00946	15.1	1.00		mg/L	1	R8347	04/19/2001
ALKALINITY			**M2320 B**					Analyst: WM

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

5

LCRA Environmental Laboratory Services **Date:** *30-Apr-01*

CLIENT: Texas Water Development Board **Client Sample ID:** 65-29-108
Lab Order: 0104059 **COC ID:** 15789
Project: TWDB 00-01 **Collection Date:** 04/03/2001 10:40:00 AM
Lab ID: 0104059-03 **Matrix:** GROUNDWATER

Analyses	Storet	Result	PQL	Qual	Units	DF	QC Batch	Date Analyzed
Alkalinity, Phenolphthalein	00415	ND	0		mg/L CaCO3	1	R8246	04/11/2001
Alkalinity, Total (As CaCO3)	00410	219	2.00		mg/L CaCO3	1	R8246	04/11/2001
CATION/ANION BALANCE			**CALCULATION**					Analyst: AMJ
Cation/Anion Balance	00000	Balanced	0		Date	1	R8373	04/24/2001
NITRATE AND NITRITE			**E353.2**					Analyst: CL
Nitrogen, Nitrate & Nitrite	00631	ND	0.0200		mg/L	1	R8344C	04/19/2001
GROSS ALPHA, GROSS BETA			**RADIOCHEM**					Analyst: SB
ALPHA, Gross	01503	9.6	0		pCi/L	1	R8381	04/12/2001
BETA, Gross	03503	6.2	0		pCi/L	1	R8381	04/12/2001
SILICA			**E370.1**					Analyst: CL
Silica, Dissolved (as SiO2)	00955	25.8	0.500		mg/L	1	R8290C	04/16/2001

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

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Back to Report Summary

Harris Galveston Subsidence District Water Wells (HGSD)

MAP ID# 5 **Distance from Property: 0.48 mi. X**

WELL ID: **3675**
OWNER'S NAME: **CHASEWOOD #3**
YEAR DRILLED: **1982**
DEPTH DRILLED: **1225'**
STATIC LEVEL: **975'**
WATER USAGE: **PUBLIC SUPPLY**
WELL STATUS: **PLUGGED**
LONGITUDE: **-95.493333333**
LATITUDE: **29.615277778**
SOURCE: **HGSD**

Back to Report Summary

Harris Galveston Subsidence District Water Wells (HGSD)

MAP ID# 6 **Distance from Property: 0.50 mi. N**

WELL ID: **3876**
OWNER'S NAME: **HOUSTON, CITY OF**
YEAR DRILLED: **1987**
DEPTH DRILLED: **1200'**
STATIC LEVEL: **800'**
WATER USAGE: **PUBLIC SUPPLY**
WELL STATUS: **PLUGGED**
LONGITUDE: **-95.495833333**
LATITUDE: **29.632777778**
SOURCE: **HGSD**

Back to Report Summary

Environmental Records Definitions - FEDERAL

NWIS United States Geological Survey National Water Information System

VERSION DATE: 11/22/13

This USGS National Water Information System database only includes groundwater wells. The USGS defines this well type as: A hole or shaft constructed in the earth intended to be used to locate, sample, or develop groundwater, oil, gas, or some other subsurface material. The diameter of a well is typically much smaller than the depth. Wells are also used to artificially recharge groundwater or to pressurize oil and gas production zones. Additional information about specific kinds of wells should be recorded under the secondary site types or the Use of Site field. Underground waste-disposal wells should be classified as waste-injection wells.

Environmental Records Definitions - STATE (TX)

SDRD Submitted Drillers Report Database

VERSION DATE: 11/01/13

This Texas Water Development Board database was created from the online Texas Well Report Submission and Retrieval System (A cooperative TDLR, TWDB system) that registered water-well drillers use to submit their required reports. The system was started in February 2001 and is optional for the drillers to use.

TCEQ Texas Commission on Environmental Quality Water Wells

VERSION DATE: NR

The Texas Commission on Environmental Quality (TCEQ) maintains a filing system of plotted and unnumbered water wells. Plotted water wells are filed according to the County indicated by the driller and the state well number assigned by State of Texas personnel. Given the available location information provided by the driller, personnel identify where the approximate well location should be. After well placement a state well number is assigned indicating that the well lies within a specific 2.5' section of a 7.5' quadrangle. This method allows for quicker, more refined, reference when researching a specific area. Unnumbered water wells have not been assigned a state well number. This can occur for a variety of reasons; however it does not mean the well cannot be accurately spotted. Unnumbered water well records are filed according to County and are often broken up by year or by a span of years.

TWDB Texas Water Development Board Groundwater Database

VERSION DATE: 02/04/14

The Texas Water Development Board Groundwater Database contains information for more than 123,500 sites in Texas including data on water wells, springs, oil/gas tests, water levels, and water quality. The purpose of the Board's data collection effort over the years has been to gain representative information about aquifers in the state in order to do water planning. It is very important, however, to realize that the wells in the database represent only a small percentage of the wells that actually exist in Texas. A registered water well driller is required by law to send in a report to the State for every well that is drilled. This requirement began in 1965, and we estimate that approximately 500,000 wells have been drilled in Texas since then. Of the 1,000,000 plus water wells drilled in Texas over the past 100 years, more than 130,000 have been inventoried and placed into the TWDB groundwater database. State well numbers have been assigned to these based on their location within numbered 7 1/2 minute quadrangles formed by lines of latitude and longitude. This database contains well information including location, depth, well type, owner, driller, construction and completion data.

WUD Water Utility Database

VERSION DATE: 02/15/11

The Water Utility Database is defined as a collection of data from Texas Water Districts, Public Drinking Water Systems and Water and Sewer Utilities who submit information to the TCEQ. This database is an integrated database designed and developed to replace over 160 stand alone legacy systems representing over 5 million records of the former Texas Water Commission and the Texas Department of Health.

Environmental Records Definitions - STATE (TX)

Environmental Records Definitions - LOCAL

FBSD Fort Bend Subsidence District Water Wells

VERSION DATE: 05/07/13

The Fort Bend Subsidence District was created by the Texas Legislature in 1989 as a conservation and reclamation district to control land subsidence and manage groundwater resources through regulation, conservation, and coordination with suppliers of alternative water sources to assure an adequate quantity and quality of water for the future. The District s purpose is to provide for the regulation of the withdrawal of groundwater within the District to prevent subsidence that contributes to flooding, inundation or overflow of areas within the District, including rising waters resulting from storms or hurricanes. The District s boundaries are defined as all the territory within Fort Bend County.

HGSD Harris Galveston Subsidence District Water Wells

VERSION DATE: 05/07/13

The Harris-Galveston Coastal Subsidence District was created by the 64th Texas Legislature as an underground water conservation district in 1975 to provide regulation of groundwater withdrawal to control subsidence.

APPENDIX B

SITE PHOTOGRAPHS

Photo 1. View from Blue Ridge Road and Sims Bayou looking north.

Photo 2. View from Blue Ridge Road and Sims Bayou looking south.

Photo 3. View from Blue Ridge Road and Sims Bayou looking east.

Photo 4. View of SBA Communication Tower along Blue Ridge Road, west of the Subject Project Alignment.

Photo 5. View from the south end of the proposed new Sims Well Station looking north.

Photo 6. View of the proposed new Sims Well Station looking east.

Photo 7. View of current pipeline construction along the proposed Subject Project Alignment looking east.

Photo 8. View of existing ditch along Blue Ridge Road looking south.

Photo 9. View of existing Sims Bayou #3 Well locates at 13825 Blue Ridge.

Photo 10. View of current Exxon construction site locates northeast of the intersection of Hillcroft Street & W. Orem Drive.

APPENDIX C

HISTORICAL DOCUMENTS

CITY DIRECTORIES

GeoSearch
On time. On target. In touch.

City Directory Standard Report

Target Property:

W Orem Dr,
Houston, TX 77085

Prepared For:

HVJ Associates-Houston

Order# : 35889

HE1216860

Date : 5/14/2014

Cole Directory			
Greater Houston	2008	**W Orem Dr**	
		5429	Wise Choice Barber Shop
		5501	Walgreens
		5510	CVS Pharmacy
		7431	Virginia Nino
		7435	Belinda Bonilla
		7439	Clara Sanchez
		7443	Joel Quiroz
		7447	Jose L Martinez
			x [End of Listings]
Cole Directory			
Greater Houston	2003	**W Orem Dr**	
		5431	B & W Specialties
		5510	CVS Pharmacy
			x [Carlsbad St Ints]
		7431	Virginia Nino
		7435	Vicente A Bonilla
		7439	No Current Listing
		7443	Joel Quiroz
		7447	Ana M Ortix
			x [End of Listings]
Cole Directory			
Greater Houston	1996-97	**W Orem Dr**	
			Range Not Listed- listings end with 5431

Comments: **Blue Ridge Dr was also researched and the address range was not listed in any directories (listings ended with 7221).**

GeoSearch
On time. On target. In touch.

City Directory Target Property Address

Target Property:

W Orem Dr,

Houston, TX 77085

Prepared For:

HVJ Associates-Houston

Order# : 35889

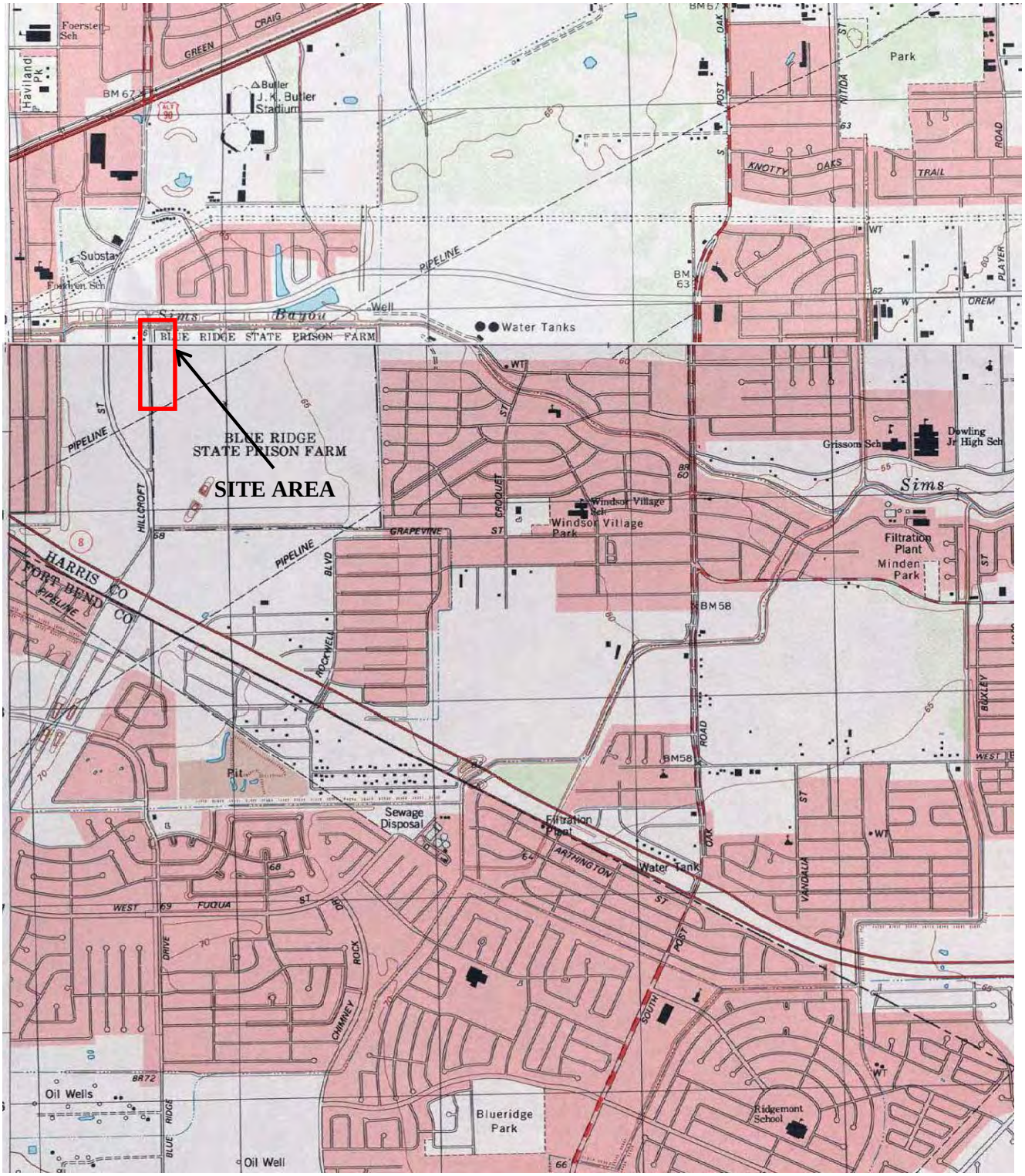
HE1216860

Date : 5/14/2014

1996-97	Range Not Listed- listings end with 5431	Cole Directory	Greater Houston
5429 W Orem Dr			
2008	Wise Choice Barber Shop	Cole Directory	Greater Houston
5431 W Orem Dr			
2003	B & W Specialties	Cole Directory	Greater Houston
5501 W Orem Dr			
2008	Walgreens	Cole Directory	Greater Houston
5510 W Orem Dr			
2008	CVS Pharmacy	Cole Directory	Greater Houston
2003	CVS Pharmacy	Cole Directory	Greater Houston
	x [Carlsbad St Ints]	Cole Directory	Greater Houston
7431 W Orem Dr			
2008	Virginia Nino	Cole Directory	Greater Houston
2003	Virginia Nino	Cole Directory	Greater Houston
7435 W Orem Dr			
2008	Belinda Bonilla	Cole Directory	Greater Houston
2003	Vicente A Bonilla	Cole Directory	Greater Houston
7439 W Orem Dr			
2008	Clara Sanchez	Cole Directory	Greater Houston
2003	No Current Listing	Cole Directory	Greater Houston
7443 W Orem Dr			
2008	Joel Quiroz	Cole Directory	Greater Houston
2003	Joel Quiroz	Cole Directory	Greater Houston
7447 W Orem Dr			
2008	Jose L Martinez	Cole Directory	Greater Houston
	x [End of Listings]	Cole Directory	Greater Houston
2003	Ana M Ortix	Cole Directory	Greater Houston
	x [End of Listings]	Cole Directory	Greater Houston

Comments: **Blue Ridge Dr was also researched and the address range was not listed in any directories (listings ended with 7221).**

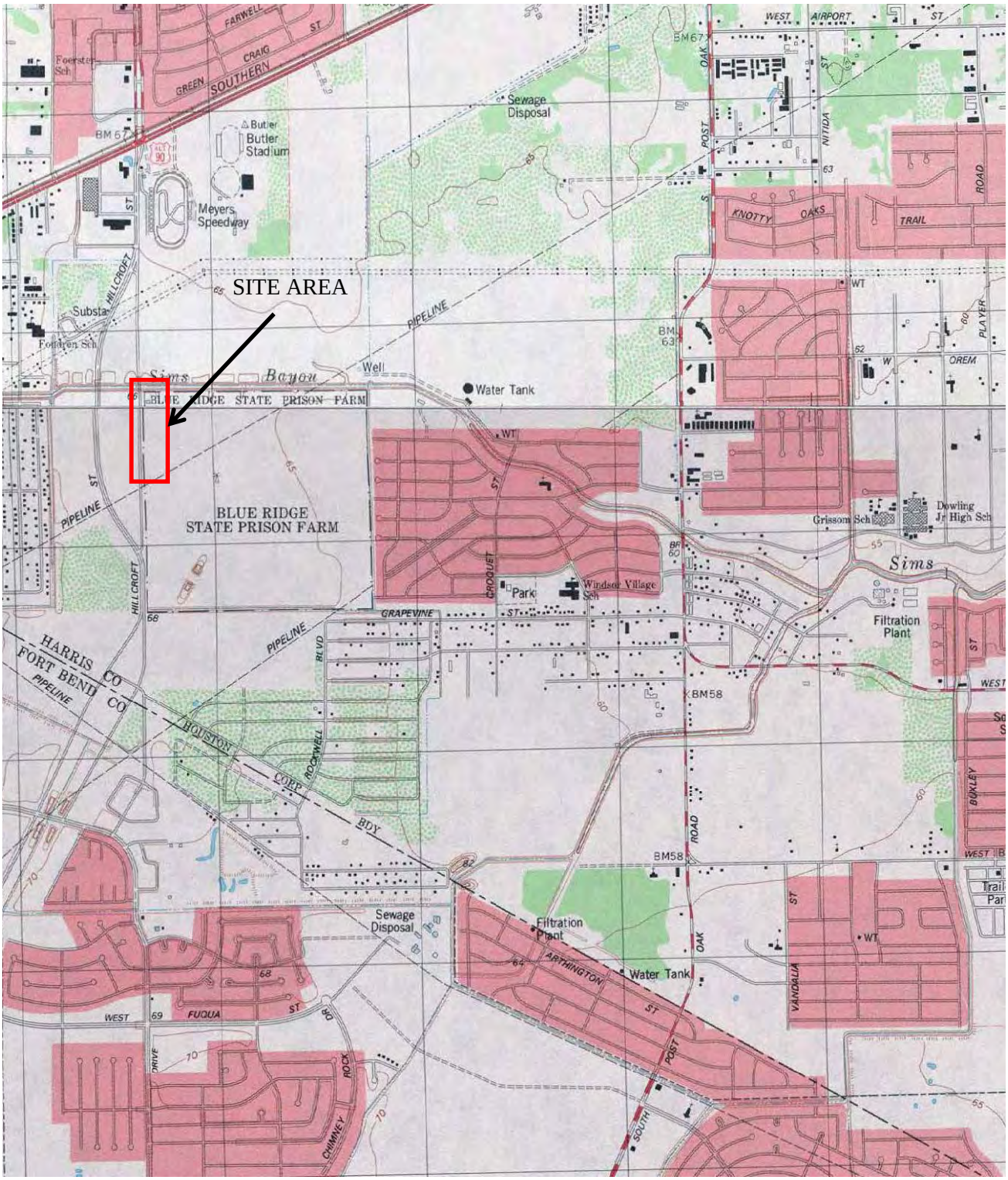
TOPOGRAPHIC, NWI AND FEMA MAPS



Source: U.S. Geological Survey (1995 Almeda & Bellaire Quadrangles)

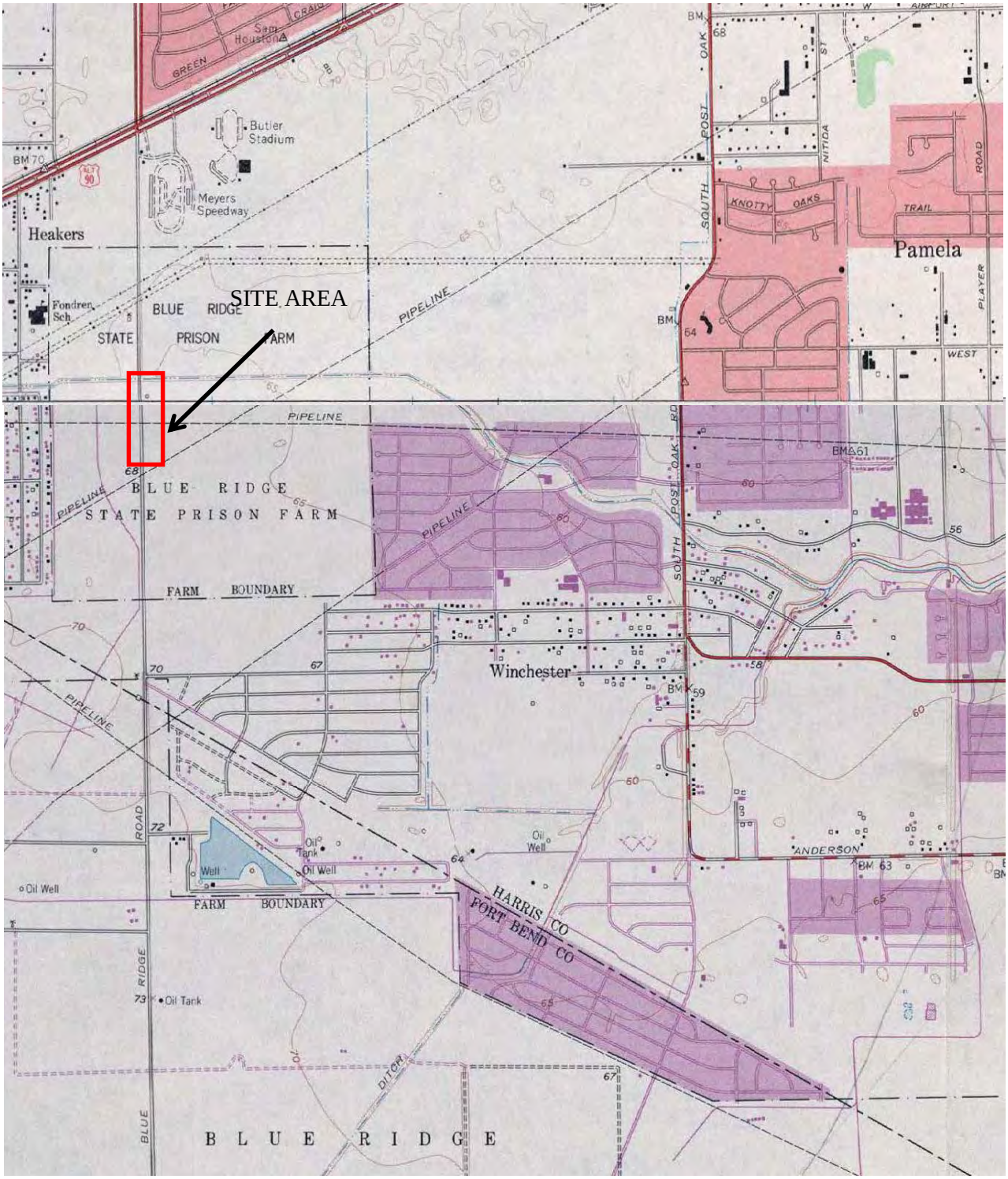
HVJ ASSOCIATES	Drawn:	NL	**TOPOGRAPHIC MAP (1995)** **Phase I ESA - New/Replacement of Water Well and Well Collection Line – Sims Bayou** **WBS S-000100-0024-4** **Houston, Harris County, Texas**
	Checked:	EH	
	Date:	May 2014	
Report No. HE1216860	Scale:	NTS	

N



Source: U.S. Geological Survey (1982 Almeda & Bellaire Quadrangles)

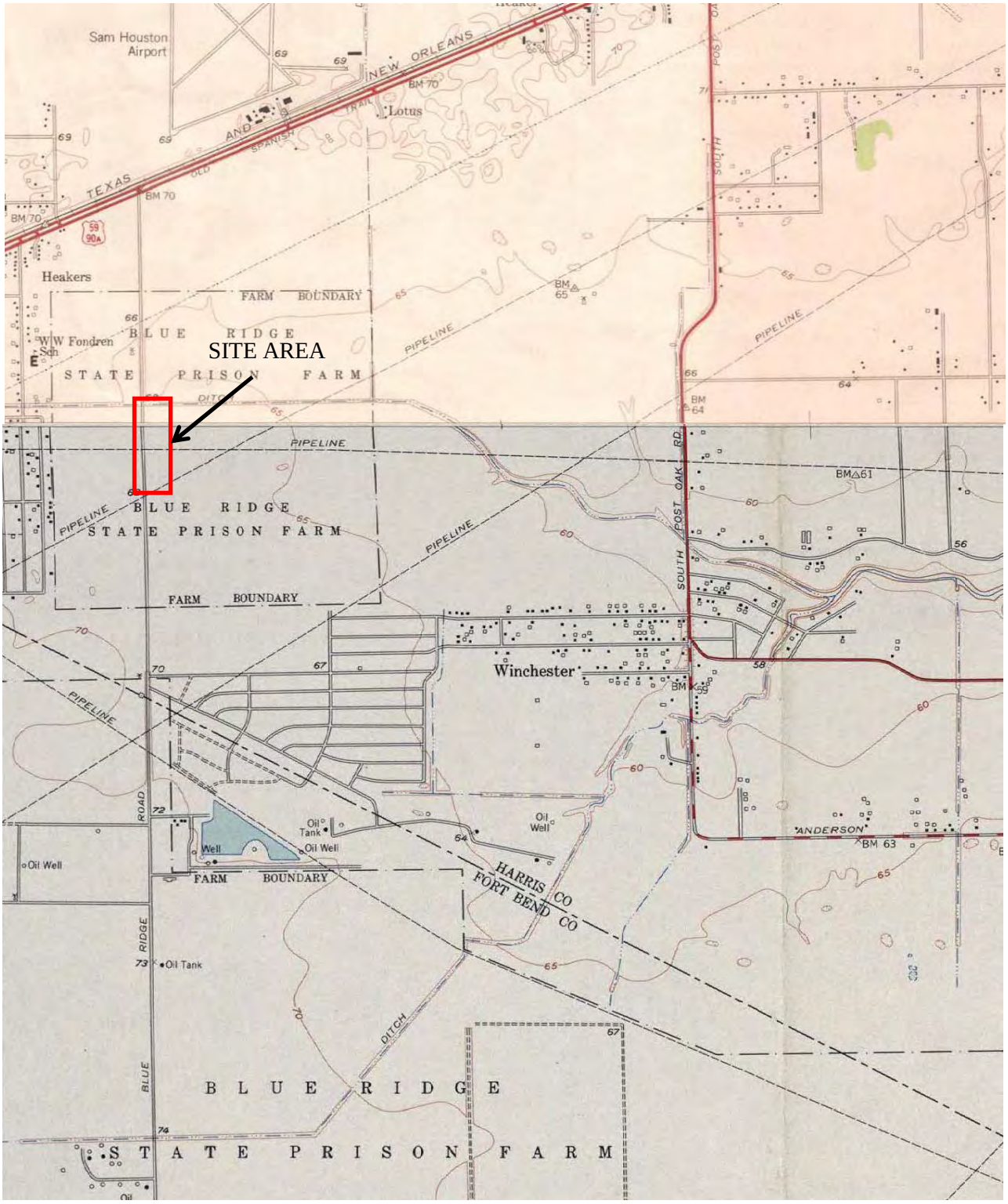
HVJ ASSOCIATES	Drawn:	NL	**TOPOGRAPHIC MAP (1982)** **Phase I ESA - New/Replacement of Water Well and Well Collection Line – Sims Bayou** **WBS S-000100-0024-4** **Houston, Harris County, Texas**
	Checked:	EH	
	Date:	May 2014	
Report No. HE1216860	Scale:	NTS	



Source: U.S. Geological Survey (1967 Almeda & Bellaire Quadrangles)

HVJ ASSOCIATES	Drawn:	NL	**TOPOGRAPHIC MAP (1967)** **Phase I ESA - New/Replacement of Water Well and Well Collection Line – Sims Bayou** **WBS S-000100-0024-4** **Houston, Harris County, Texas**
	Checked:	EH	
	Date:	May 2014	
Report No. HE1216860	Scale:	NTS	

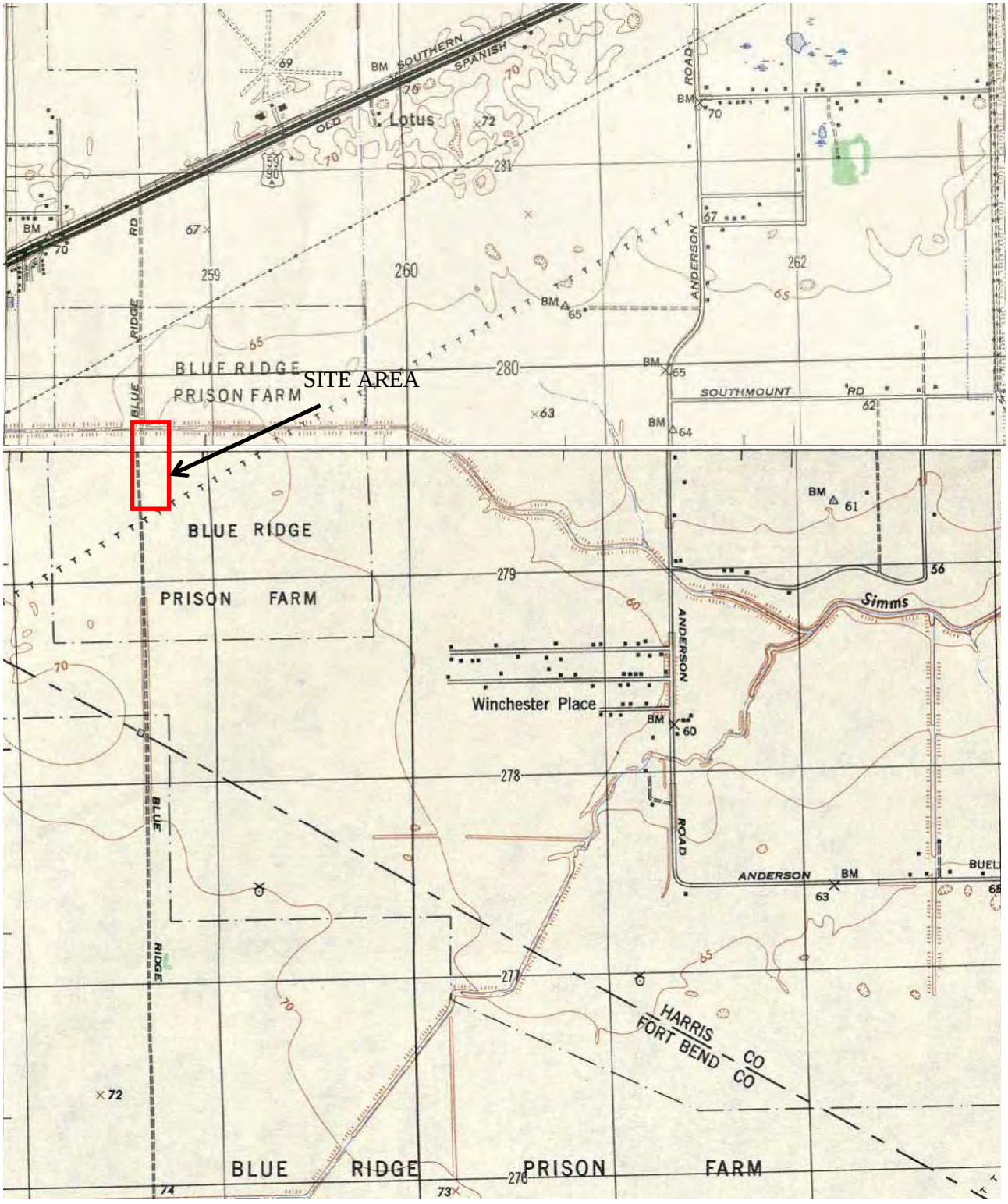
N



Source: U.S. Geological Survey (1955 Almeda & Bellaire Quadrangles)

HVJ ASSOCIATES	Drawn:	NL	**TOPOGRAPHIC MAP (1955)** **Phase I ESA - New/Replacement of Water Well and Well Collection Line – Sims Bayou** **WBS S-000100-0024-4** **Houston, Harris County, Texas**
	Checked:	EH	
	Date:	May 2014	
Report No. HE1216860	Scale:	NTS	

N



Source: U.S. Geological Survey (1947 Almeda & Bellaire Quadrangles)

HVJ ASSOCIATES	Drawn:	NL	**TOPOGRAPHIC MAP (1947)** **Phase I ESA - New/Replacement of Water Well and Well Collection Line – Sims Bayou** **WBS S-000100-0024-4** **Houston, Harris County, Texas**
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Report No. HE1216860	Scale:	NTS	

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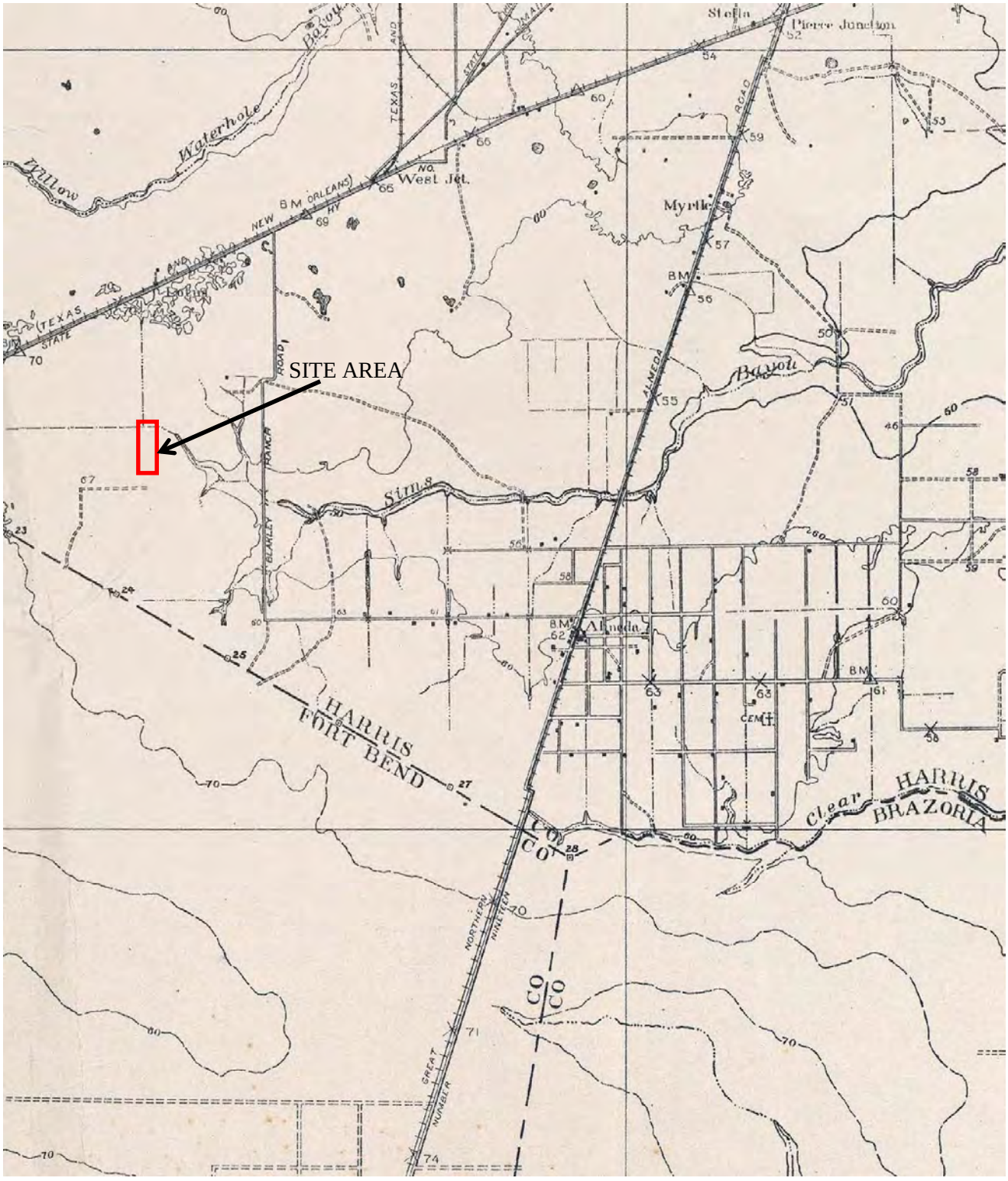
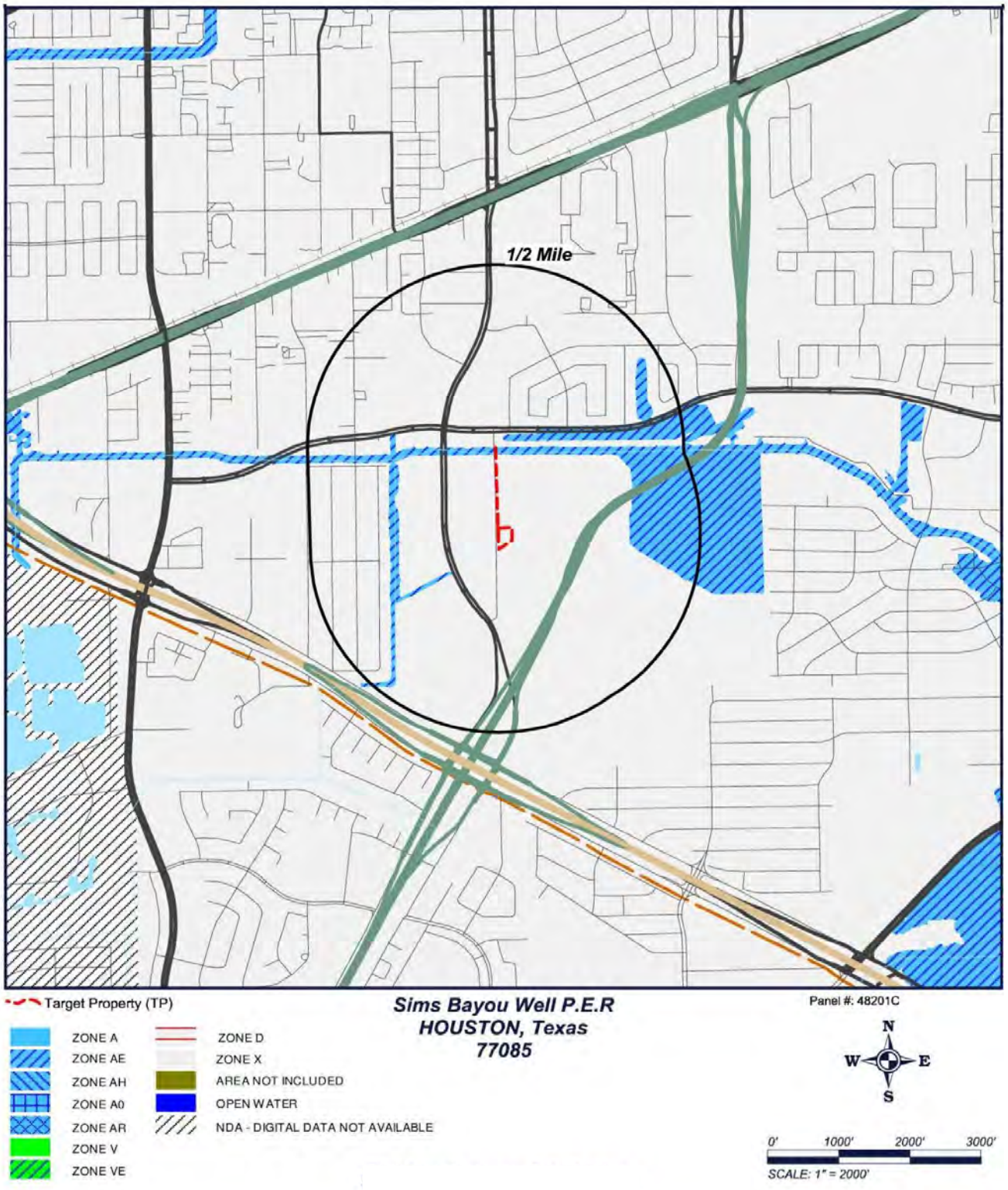


Source: U.S. Geological Survey (1929 Pearland Quadrangle)

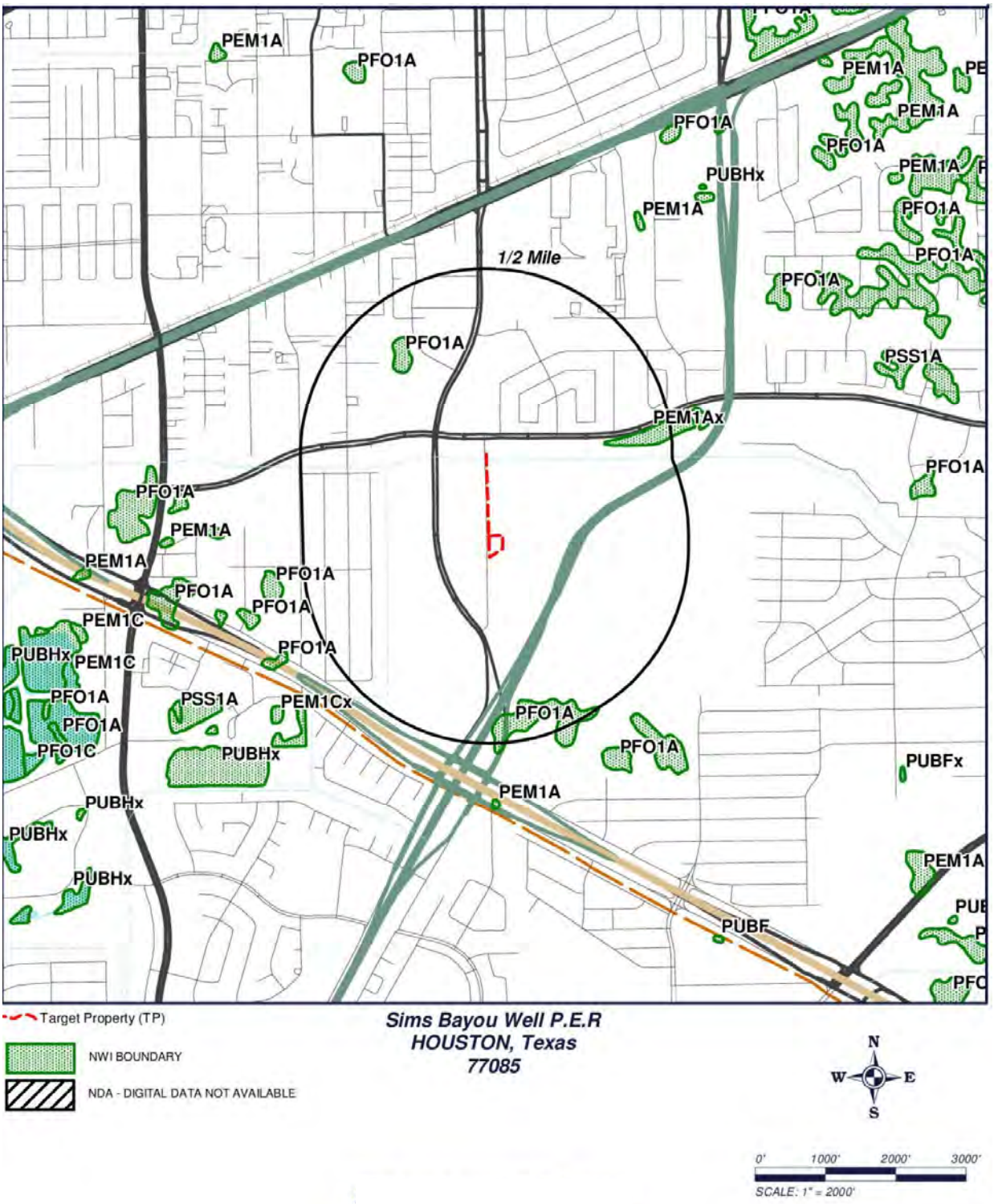
HVJ ASSOCIATES	Drawn:	NL	**TOPOGRAPHIC MAP (1929)** **Phase I ESA - New/Replacement of Water Well and Well Collection Line – Sims Bayou** **WBS S-000100-0024-4** **Houston, Harris County, Texas**
	Checked:	EH	
	Date:	May 2014	
Report No. HE1216860	Scale:	NTS	

N



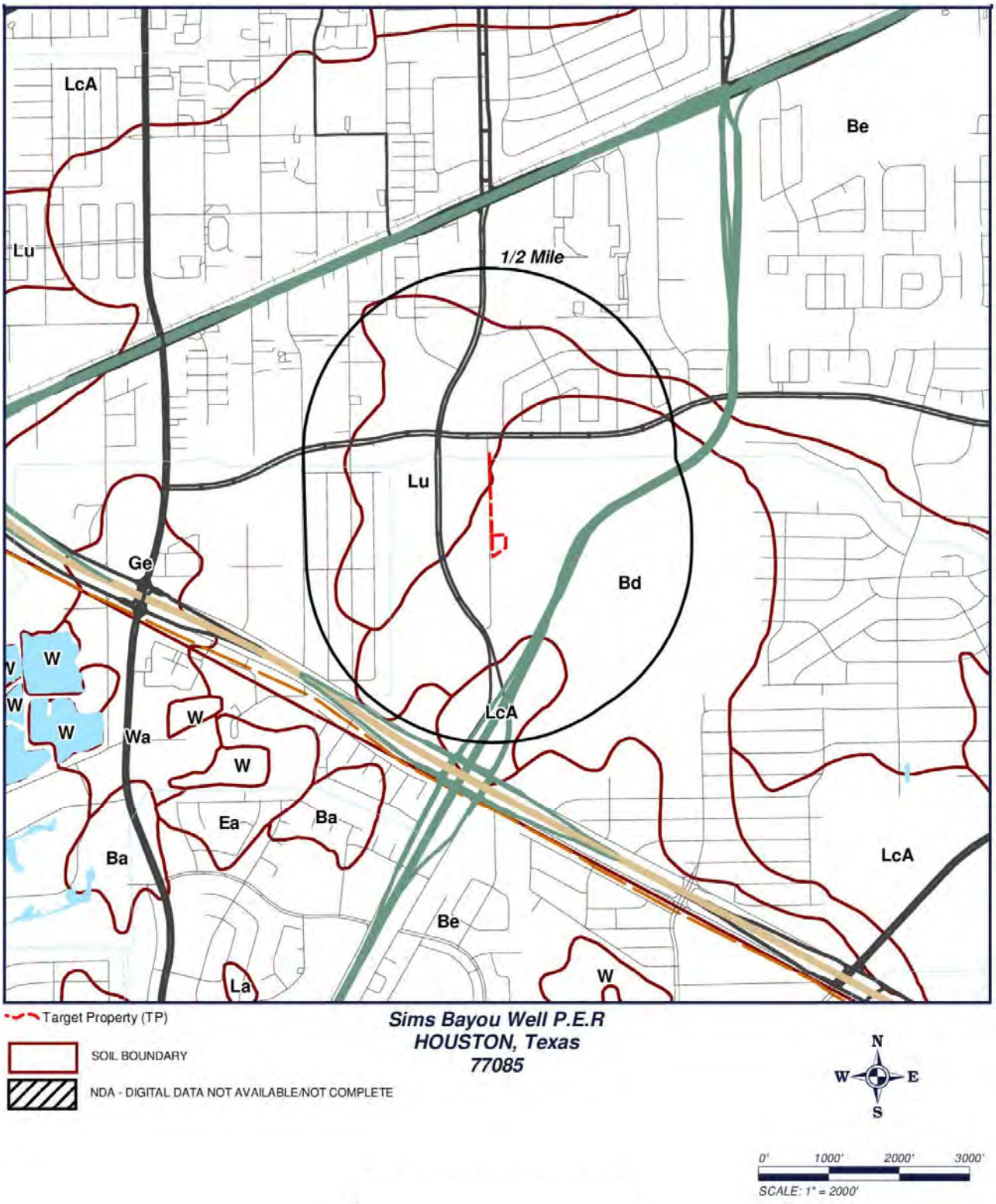
Source: FEMA Panel 48201C

HVJ ASSOCIATES		Drawn:	EH	**FEMA MAP** **Phase I ESA - New/Replacement of Water Well and Well Collection Line – Sims Bayou** **WBS S-000100-0024-4** **Houston, Harris County, Texas**	N
		Checked:	EH		
		Date:	May 2014		
Report No.	HE1216860	Scale:	NTS		



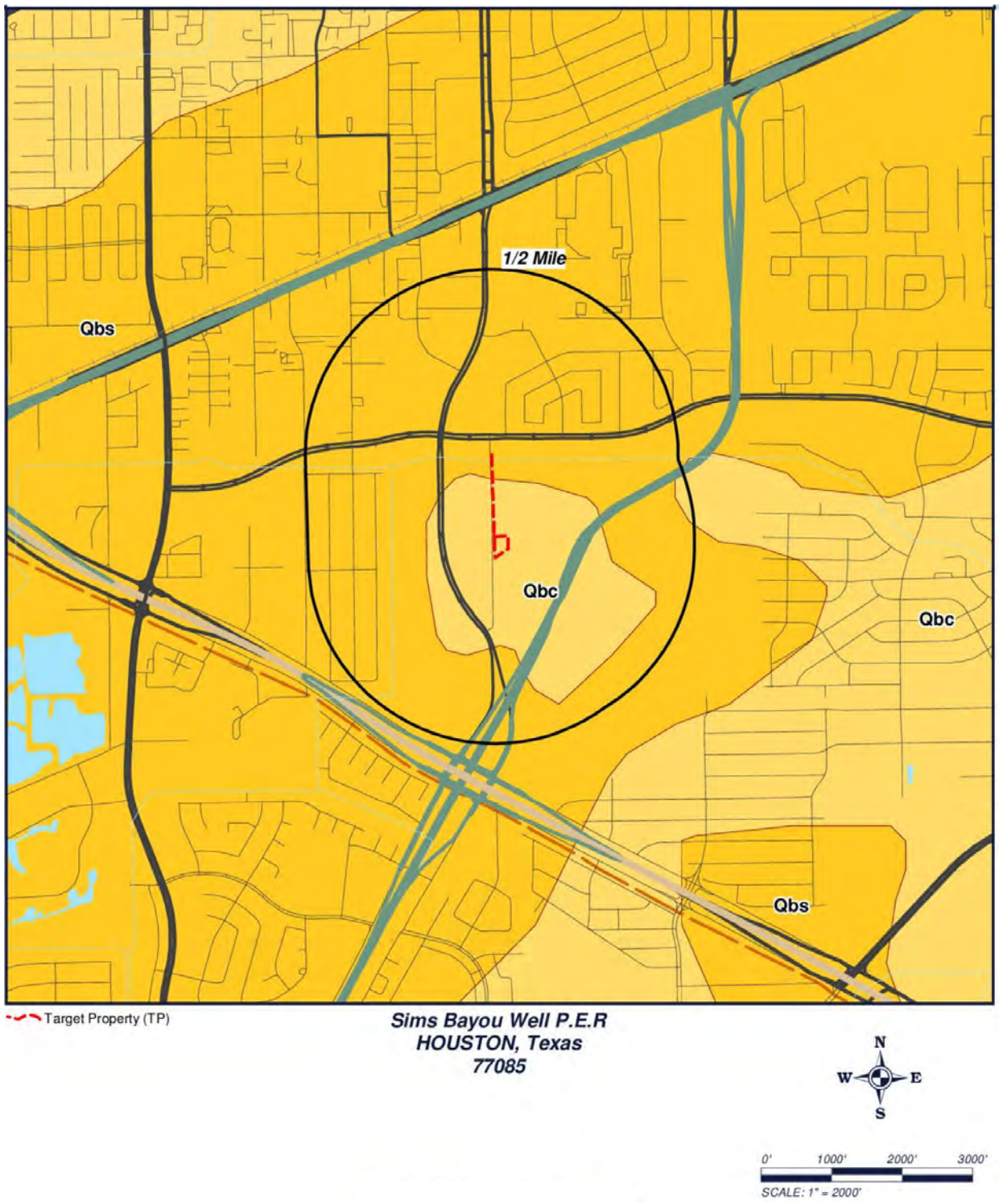
Source: USDA NWI Map

HVJ ASSOCIATES		Drawn:	NL	**NWI MAP** **Phase I ESA - New/Replacement of Water Well and Well Collection Line – Sims Bayou** **WBS S-000100-0024-4** **Houston, Harris County, Texas**	N
		Checked:	EH		
		Date:	May 2014		
Report No.	HE1216860	Scale:	NTS		



Source: United States Department of Agriculture, Soil Conservation Service, Soil Survey of Harris County, 1976

HVJ ASSOCIATES		Drawn:	NL	**SOIL MAP** **Phase I ESA - New/Replacement of Water Well and Well Collection Line – Sims Bayou** **WBS S-000100-0024-4** **Houston, Harris County, Texas**	N
		Checked:	EH		
		Date:	May 2014		
Report No.	HE1216860	Scale:	NTS		



Source: Bureau of Economic Geology, 1992. Geologic Atlas of Texas, Houston Sheet, University of Texas at Austin

HVJ ASSOCIATES		Drawn:	NL	**GEOLOGY MAP** **Phase I ESA - New/Replacement of Water Well and Well Collection Line – Sims Bayou** **WBS S-000100-0024-4** **Houston, Harris County, Texas**
		Checked:	EH	
		Date:	May 2014	
Report No.	HE1216860	Scale:	NTS	

AERIAL PHOTOGRAPHS

Phase I ESA – New/Replacement of Water Well and Well Collection Line – Sims Bayou
WBS No. S-000100-0024-3
1944 AERIAL PHOTO
SCALE: 1" = 700'

Phase I ESA – New/Replacement of Water Well and Well Collection Line – Sims Bayou
WBS No. S-000100-0024-3
1944 AERIAL PHOTO
SCALE: 1" = 700'

Phase I ESA – New/Replacement of Water Well and Well Collection Line – Sims Bayou
WBS No. S-000100-0024-3
1944 AERIAL PHOTO
SCALE: 1" = 700'

Phase I ESA – New/Replacement of Water Well and Well Collection Line – Sims Bayou
WBS No. S-000100-0024-3
1969-2 AERIAL PHOTO
SCALE: 1" = 700'

Phase I ESA – New/Replacement of Water Well and Well Collection Line – Sims Bayou
WBS No. S-000100-0024-3
1979 AERIAL PHOTO
SCALE: 1" = 700'

Phase I ESA – New/Replacement of Water Well and Well Collection Line – Sims Bayou
WBS No. S-000100-0024-3
1989 AERIAL PHOTO
SCALE: 1" = 700'

Phase I ESA – New/Replacement of Water Well and Well Collection Line – Sims Bayou
WBS No. S-000100-0024-3
1996 AERIAL PHOTO
SCALE: 1" = 700'

Phase I ESA – New/Replacement of Water Well and Well Collection Line – Sims Bayou
WBS No. S-000100-0024-3
2004 AERIAL PHOTO
SCALE: 1" = 700'

Phase I ESA – New/Replacement of Water Well and Well Collection Line – Sims Bayou
WBS No. S-000100-0024-3
2012 AERIAL PHOTO
SCALE: 1" = 700'

APPENDIX D

RESUME OF ENVIRONMENTAL PROFESSIONAL

HVJ ASSOCIATES

EDWARD HAWKINSON, PG, CAPM
PROJECT GEOLOGIST

EDUCATION	MBA, University of Cincinnati, 1977 MS, Geology, University of Cincinnati, 1975 BS, Geology, The Ohio State University, 1968
LICENSE	Professional Geologist, TX (45), 2003 Professional Geologist, AR, 1989 Professional Geologist, TN, 1990

EXPERIENCE SUMMARY

Mr. Hawkinson has over 25 years of experience providing a wide range of environmental services including Phase I and Phase II Environmental Site Assessments; NEPA documents including Categorical Exclusion and Environmental Assessment studies; wetland studies and permitting; threatened and endangered species studies, cultural resources studies; underground and leaking petroleum storage tank assessment and remediation; invasive and non-invasive geologic fault studies; hazardous waste assessment and management; RCRA/CERCLA investigations; aquifer characterization and interpretations and remedial system design and construction oversight. Environmental work is conducted is conducted in accordance with ASTM standards and applicable city, county, state and federal regulations and guidelines which include EPA, US Fish and Wildlife, Texas Parks & Wildlife, and USACE. Mr. Hawkinson is familiar with the protocols in conducting environmental studies, such as ASTM, ASFE, and TNRCC RBCA procedures.

SIGNIFICANT PROJECT EXPERIENCE

Lake Houston and Lynchburg Reservoir, Harris County, Texas. Project Manager for environmental analysis of recent soil discoloration (possibly due to petroleum hydrocarbons) near the southwest corner of the Lynchburg Reservoir area site, where a large quantity of debris was deposited on and near these sites from Hurricane Ike. The purpose of this study was to provide sampling and testing services to determine if hydrocarbon (or other) contamination is present, and if present, whether impacted soils will require special disposal measures.

Metro Intermodal Transit Facility, Houston, Texas. Project Manager for an environmental assessment for the proposed Transit Facility north of downtown Houston, which will provide commuters easy transfer between many different transit modes and providers. The project is to include the construction of a great circle (terminal area), a train hall, a bus hall, a market facility and development sites.

IH 10 General Engineering Consultant Fault Studies, Houston, Texas. Mr. Hawkinson served on a team that conducted comprehensive geologic fault studies for three sections involving two major interchanges and one overpass. The IH 10 and Loop 610 and I-10 and Beltway 8 interchanges were located on the surface trace of the Eureka Heights and the Long Point Faults, respectively. Investigations included field delineation of fault scarps and marking for detailed

surveying. A Phase I fault study was conducted for the section between SH 8 and Barker-Cypress Road to determine if a potential fault was located in that area. Published records from the USGS and academia indicated the potential for an active fault to cross the roadway in this section.

FM 2234 Roadway Widening: FM 521 to SH 288, Houston, Texas. Project Manager for a hazardous materials initial site assessment for the widening of FM 2234, from FM 521 to SH 288. The project involved widening the alignment from two lanes to four lanes and rights-of-way were acquired.

Kirby Drive Storm Sewer, Houston, Texas. Project Manager for a Phase I and Phase II environmental site assessment for the proposed storm sewer project. The project involved two 10-by 10-foot box culverts; storm sewers including storm sewer leads, inlets and manholes; 24-inch waterline; 8-inch sanitary sewer; six lanes of concrete paving; asphalt transitions, and traffic signal foundations. The Phase I ESA identified the potential for groundwater and soil contamination to impact the project so recommended a Phase II ESA adjacent to the listed sites to determine the nature of any contamination located within the project alignment and to develop recommendations for design and construction of proposed facilities.

Texas A&M Institute for Pre-Clinical Study, College Station, Texas. Project Manager for a Phase I environmental site assessment, threatened and endangered species study, cultural resources study, and wetlands identification for a 10.55-acre tract in College Station. The proposed project involved the construction of a two- to three-story building with a total area of 59,000 square feet and two additional one-to two-story buildings with planned areas of 28,000 square feet each.

Westside Mitigation, Houston, Texas. Project Manager for a geotechnical and hydrogeologic assessment of the Houston Airport System site for a proposed wetland construction project.

Gulf Meadows Wastewater Treatment Plant, Houston, Texas. Project Manager for a background Phase I Environmental Site Assessment (ESA) and a Phase II ESA proposed general demolition of the existing sewage treatment plant and assignment of the former plant for non-industrial use as a park since the property is adjacent to an existing park and school area.

West White Oak Bayou Trail Extension Categorical Exclusion, Houston, Texas. Performed environmental assessment for the proposed hike and bike trail extension along White Oak Bayou under TxDOT environmental guidelines for NEPA projects. Specific tasks included preparing environmental documents, conducting wetlands delineations, and coordination with archeological vendor.

New Luke Road, San Antonio, Texas. Performed an environmental assessment for a portion of the former industrial complex associated with Kelly Air Force Base. Evaluated the threat of hazardous waste plumes (soil and groundwater) to impact the design, construction, and operation of the new facility. Work was conducted as part of an environmental assessment for the TxDOT San Antonio.

West White Oak Bayou Trail Extension, Houston, Texas. Performed an environmental assessment with a finding of a categorical exclusion for a 3-mile segment of a proposed bikeway. Critical issues addressed included wetlands, floodplains, and historical/archeological sites.

Goose Creek Categorical Exclusion, Baytown, Texas. Identified four areas of possible jurisdictional wetland development along Goose Creek, east of Houston near Baytown, using standard USACE wetland delineation methodology. Identified wetland hydrology, wetland and non-wetland soil regimes, and wetland vegetation in these areas of possible jurisdictional wetland development and conveyed these results in a report to the USACE for a determination.

Southeast University Hobby Corridor, Houston, Texas. Performed an environmental study relating to water resources, including data collection and analysis of existing conditions. The study included documentation of surface waters, grounwater, floodplains and drainage, and wetlands and riverine systems for Affected Environment of the Southeast Corridor Draft Environmental Impact Statement. The work was in compliance with all local, state, and federal regulations including the National Environmental Policy Act.

Dairy Ashford No. 2 Lift Station, Houston, Texas. Completed a Phase I ESA for the proposed construction of the Dairy Ashford No. 2 sanitary sewer lift station on a vacant lot once occupied by a wastewater treatment plant to include environmental regulatory agency summary records review, field observations, and interviews; review of available, historical maps, aerial photographs; a review of available geologic literature to characterize the geologic, physiographic, and hydrogeologic setting to determine potential release pathways; and a site reconnaissance to conduct interviews, verify environmental and historical records, identify current land-use activities, and identify potential areas of environmental concern based on current conditions. Developed a report summarizing his findings with conclusions and recommendations.

Environmental Site Assessment, Adjoining Properties, Almeda Sims Sludge Drying Facitily, Houston, Texas. Completed a Phase I ESA for the adjoining properties of the proposed new construction of a sludge drying facility at the Almeda-Sims WWTP. The objective of this study was to identify current or previous land use activities that may have created an environmental concern to the project on two properties that adjoin the Almeda-Sims WWTP.

Westway, Homestead, and Chocolate Bayou Wastewater Treatment Plants, Houston, Texas. Project Manager for Phase I environmental site assessments for modifications and improvements at the plants.

Galveston Sewer Replacements, Galveston, Texas. Completed a Phase I ESA for sanitary sewer projects in Galveston, Texas. The objectives of this study were to identify current or previous land use activities that may have created an environmental concern to the project. The projects are located in a mixed area of residential, commercial, and industrial land uses. Based on available information, found that potential impact may include contaminated soils, groundwater, vapors, and impacts associated with waste handling and worker protection. Recommended additional investigations at all three of the project areas to determine the nature and extent, if any, of contamination along the project alignment. Soil borings were recommended as well as groundwater sampling due to the high level of the water table in this area.

Clay Road Improvements Phase I, Houston, Texas. Performed a Phase I environmental site assessment and wetland determination for improvements to Clay Road, from Elrod to Peek Road.

A.D. Dyess Park, Cypress, NW Harris County, Texas. Project Geologist for a multi-phase environmental investigation for A.D. Dyess Park in northwest Harris County. Services included a Phase I ESA, wetlands determination, wetlands delineation, study on the presence or absence of threatened and endangered species, an evaluation of cultural resources, and permit support for Harris County in connection with the wetlands. The wetland delineation study was conducted using those specific procedures for tracts of more than 5 acres, as promulgated in the USACE Wetland Manual.

Collingsworth Bridge Phase II Environmental Site Assessment, Houston, Texas. Completed Phase I and II environmental site assessments for the construction of a grade separation across the railroad tracks along Collingsworth along an alignment adjoining the South Cavalcade Superfund Site. Conducted extensive review of regulatory agency documents relating to environmental sites in the alignment area, conducted subsurface investigations, and provided recommendations for worker health and safety, materials handling and materials disposal during construction.

Texas Medical Center Transit Center, Subsurface Investigation, Houston, Texas. Supervised the geoprobe boring installation, soil sampling and analysis/reporting for the project. Soil samples were collected in a grid pattern in the vicinity of a former service station location and at locations east and north of this potentially contaminated property. All soil samples were screened with an organic vapor meter and selected samples were submitted for the analysis of "chemicals of concern" typically associated with a leaking petroleum storage tank installation.

Jacintoport and Pennsinula Boulevards Reconstruction, Phase I ESA, Harris County, Texas. Project Manager for conducting a Phase I ESA, which included in the scope an evaluation of Threatened and Endangered Species, Wetlands, and Cultural Resources. The Phase I ESA was conducted per ASTM and ESA Section 404 guidelines Coordination was conducted with the US Fish and Wildlife Service and the Texas Historical Commission. The project involved the realignment of Jacinto Port Road and Peninsula Boulevard in southeast Harris County.

Elementary School # 36 - FM 1464 on 12.12 Acres, Fort Bend County, Texas. Project Manager for a Phase I Environmental Site Assessment for the location of a proposed elementary school on approximately 12.12 acres. The objectives of this study were to identify current or previous land use activities that may have created an environmental concern to the project. The project was located in an area of vacant land which abutted the West Oaks Village Subdivision. The Phase I ESA did not reveal evidence of recognized environmental conditions in connection with the 12.12-acre parcel. HVJ had no recommendations for further environmental studies involving hazardous materials and/or contamination on the 12.12-acre parcel. Services provided included a review of ASTM E-1527 records and an evaluation of the project to be impact wetlands, cultural resources, or be impacted by active geologic faulting.

Elementary School #38, Fort Bend County ESA, Fort Bend County, Texas. Project Manager for a Phase I ESA for an approximate 8.8-acre tract immediately east of Lexington Boulevard. The objectives of this study were to determine whether recognized environmental conditions may be located on or near the project site or on adjacent parcels that may lead to an environmental concern. In addition to the standard ESA presentation, we provided threatened and endangered species and cultural resources information.

WHCRWA Waterline, Harris County, Texas. Project Manager for a Phase IA environmental site assessment, wetlands reconnaissance study, cultural resources study, and threatened and endangered species study for a proposed 12- to 16-inch water line.

Grant Road Detention Pond, Cypress, Texas. Project Manager for environmental services for construction of a detention basin approximately 5-acres, measuring about 1300 by 160 feet and located on a 10-acre parcel. The parcel is located about 450 feet east of Perry Road, along the south side of Grant Road. HVJ previously conducted a Phase I ESA, wetlands determination, and a review of Threatened and Endangered Species for the Grant Road alignment. The scope of this project included these items as well as a review of cultural resources. The Phase I Environmental Site Assessment will be based on Harris County standard practice document entitled "Minimum Requirements and Guidelines for performing Preliminary Environmental Site Assessments" and ASTM Standards (E-1527).

WHCRWA Waterline, Harris County, Texas. Project Manager for a Phase IA environmental site assessment, wetlands reconnaissance study, cultural resources study, and threatened and endangered species study for a proposed 12- to 16-inch water line.

Karst Invertebrate Survey, San Antonio, Texas. Project Manager for a geologic assessment and Endangered Karst Invertebrate Survey for a 300-foot section of roadway right-of-way at the intersection of Babcock Road and Hausman Road. The property is located within the Edwards Aquifer Recharge Zone and also an area documented as Threatened and Endangered Species in the form of Karst invertebrates.

SAWS ESA - Kelly AFB, San Antonio, Texas. SAWS is proposing to make improvements to the existing stand-alone water distribution system at Kelly USA and Kelly AFB to tie the system into Pressure Zone 4 and provide a reliable water supply for the business park being developed. Project Manager for Phase I ESA.

PROFESSIONAL AFFILIATIONS

Houston Geological Society
Texas Association of Environmental Professionals
Geological Society of America