

***Phase I Environmental
Site Assessment Report
for
557 Merrimac Street
Oakland, California***

Prepared For:

Mr. Doug Shin
U. S. Bank
185 Berry Street, #4809
San Francisco, CA 94107

Prepared By:

PIERS Environmental Services, Inc.
1330 S. Bascom Avenue, Suite F
San Jose, CA 95128

February 2003

PIERS Project Number: 03033

February 18, 2003

Mr. Doug Shin
U. S. Bank
185 Berry Street, #4809
San Francisco, CA 94107

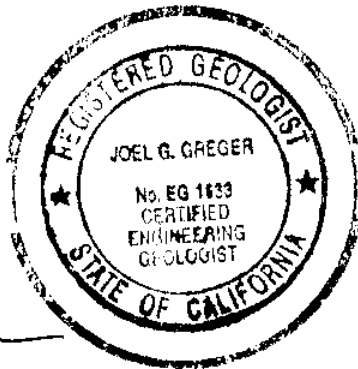
RE: Phase I Environmental Site Assessment
557 Merrimac Street
Oakland, CA

Dear Mr. Shin:

PIERS Environmental Services, Inc. is pleased to provide you with the attached Phase I Environmental Site Assessment for the above referenced property. The work performed for this project included an ASTM site reconnaissance, interviews, and research of: regulatory agency files; aerial photographs; historical maps; and a review of the regulatory environmental database listings for the Property and surrounding area.

If you have any questions regarding this report, please do not hesitate to contact our office. It has been a pleasure working with you on this project and we look forward to working with U. S. Bank again in the near future.

Sincerely,
PIERS Environmental Services, Inc.



Joel Greger

Joel G. Greger
Senior Project Manager
CEG # EG1633, REA # 07079

Kay Pannell
Chief Operations Officer
REP# 05800

INTRODUCTION

PIERS Environmental Services, Inc. (PIERS) has completed a Phase I Environmental Site Assessment (ESA) for the property located at 557 Merrimac Street, in the City of Oakland, Alameda County, California (cited hereafter as the Property). This report follows the guidelines as stated in ASTM Standard Designation E 1527-00; Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process.

EXECUTIVE SUMMARY

On February 12, 2003, PIERS conducted a visual reconnaissance of the Property for indications of past or present hazardous material handling or storage activities, which may pose a threat to the surface or subsurface environment. PIERS inspected all areas of the Property during the site reconnaissance, except for the roof, and the interior of the trash enclosure. Also, the quantity of stored materials within the building prevented a complete inspection of the drains and subsurface features.

The Property is located on the western end of the 500 block of Merrimac Street, in the City of Oakland, Alameda County, California. The Property consists of a rectangular-shaped parcel of approximately 14,162 square feet, which is improved with a former service station building. The Property building is currently used for storage for the owner's property management business, Achievement Enterprises.

The vicinity of the Property is generally comprised of residential development.

Structures at the Property consist of the service station building, and a trash enclosure. The station building is a masonry structure founded on a concrete slab and perimeter foundation. The building has a flat roof. Two service bays with rollup doors were previously located within the building. New doors have been added to the front of building. A small office and restroom are located on the southern portion of the building. A small fire has damaged portions of the interior, which is filled with stored items.

The trash enclosure has been enclosed and boarded up, and was not inspected. According to the owner, there is a refrigerator and a stove stored in it.

The exterior portions of the Property are entirely paved with asphalt or concrete, except for small areas of contained landscaping. An area around the former underground storage tank pit and the former waste oil tank pit are patched with concrete. The concrete foundations for the former pump islands are still visible.

Mechanical systems observed at the Property were alarms, fire sprinkler systems, a forklift, a compressor, a lathe, and the underground hoist within the former station building.

No hazardous materials were observed at the Property. There are two 5-gallon pails of oil which are used for a small forklift, and various small (retail) quantities of paint and cleaners. All of these materials were observed to be stored properly, and there was no evidence of improper storage, usage, or disposal of hazardous materials or other chemicals.

No evidence of water supply, irrigation, oil, injection, or dry wells was observed on the Property. Three monitoring wells at the Property have been properly abandoned, under permit.

Four subsurface features were identified in the floor of the service station building. There is an underground hoist in the southernmost service bay. In the northern service bay, there is what appears to be a catch basin for oil changing. This basin, according to the owner, will hold some water but beyond a certain level the water will drain. Approximately six months ago, rats were entering the building from the drain. The owner has filled the drain with soil, and due to the stored items above it, it was not possible to completely inspect the drain. There is an eight-inch-diameter Christy box set in the floor of the station building that is filled with soil. The fourth subsurface feature is located in the southern portion of the building, and is a metal container below grade that is accessed from a circular eight-inch-diameter Christy box. The purpose of this feature is unknown, and the container was empty.

It is PIERS' understanding that all of the stored items are to be removed from the Property building. **PIERS recommends that after all of the items have been removed from the building, the building floor be re-inspected. The purpose of the re-inspection is to determine whether any other subsurface features exist, and to determine whether any leakage has occurred from the catch basin in the northern service bay. Due to the possibility of leakage from the hoist (hydraulic fluid), the hoist should either be removed, or a boring completed next to it and a soil sample obtained. If not removed, the hydraulic fluid should be replaced with vegetable oil.**

There are no exterior drains at the Property. No storage tanks were observed at the Property. There is no soil exposure at the Property, except for areas of contained landscaping. No stained soil was observed. No significant staining was observed on the exterior paved surfaces. There was some oil and grease beneath a lathe within the station building, but was not of significant environmental concern.

Based on historical research conducted for this investigation, the Property was occupied by four residences from 1912 through 1970, when a Mobil service station was constructed. Based on building department permits, the station was converted to a car rental agency in 1978, which operated until 1986. It is unknown whether the car rental agency used the USTs or the service bays and underground hoist in the building. The later uses of the Property are not of significant environmental concern.

The Property is a closed Leaking Underground Storage Tank (LUST) case. In January 1995, four USTs were removed from the site. The tanks included one 6,000-gallon, one 8,000-gallon and one 10,000-gallon gas UST, and one 500-gallon waste oil UST. The removals were witnessed by the Alameda County Health Care Services Agency (ACHCSA). Holes were encountered in one of the fuel USTs and in the waste oil UST. Also on the day of the tank removals, and as requested and witnessed by the ACHCSA, 17 soil samples were taken from the tank pit excavations and stockpiles, and three samples were collected from beneath the dispenser islands. A groundwater sample was taken from the fuel tank pit.

The six soil samples taken from the fuel tank pit yielded non-detectable results for Total Petroleum Hydrocarbons (TPH) as gasoline, and benzene, toluene, ethylbenzene and xylenes (BTEX). The three samples taken from beneath the dispenser islands yielded largely non-detectable results. The water sample collected from the excavation contained 910 parts per billion (ppb) of TPH as gasoline, and BTEX constituents ranging from 6.9 to 19 ppb.

The soil sample collected from beneath the waste oil tank contained 8.1 parts per million (ppm) of TPH as gasoline, 74 ppm of TPH as diesel, and BTEX constituents ranging up to 92 ppm (xylenes). Oil and grease was detected at 2,500 ppm. The LUFT five metals (cadmium, chromium, lead, nickel, and zinc) were detected at what appeared to be background concentrations, and chlorinated hydrocarbons were non-detectable.

Following this work, the waste oil tank area was over-excavated in February 1995, under the supervision of the ACHCSA. The excavation was enlarged to dimensions of approximately 25 by 25 feet wide, and 9 feet deep, and approximately 250 cubic yards of soil were disposed off-site. The four sidewall samples yielded completely non-detectable concentrations of hydrocarbons. A sample collected from the bottom of the excavation contained elevated concentrations of hydrocarbons. This sample was located just above the water table. Based on these findings, a groundwater investigation was requested by the ACHCSA.

One hundred cubic yards of soil were re-used as backfill. The 100 cubic yards were analyzed and contained 71 ppm of diesel and 35 ppm of Total Oil and Grease (below regulatory limits).

Three groundwater monitoring wells were installed at the site, at the locations shown on Figure 3. In four sampling events between July 1995 and June 1996, the analytical results of the groundwater samples collected from the monitoring wells have been entirely non-detectable for hydrocarbons, with one significant exception. In March 1996, the groundwater sample collected from well, down-gradient of the former tank pit, contained concentrations of TPH as gasoline and TPH as diesel of 2,300 and 1,100 ppb, respectively. Benzene, ethylbenzene, and xylenes were detected at concentrations of 30, 140, and 22 ppb, respectively. This date corresponded to a shift in the direction of groundwater flow to the south-southeast, where MW-3 was more down-gradient of the former tank pit. In the next sampling event (June 1996), all of the wells again yielded non-detectable results.

In a letter dated January 29, 1997, “no further action” status was granted by the ACHCSA. In the Case Closure Summary that accompanied this letter, the remaining residual hydrocarbons in soil are stated as 120 ppm of TPH as gasoline, 420 ppm of TPH as diesel, 6,800 ppm of Total Oil and Grease, and BTEX constituents ranging between 0.032 and 0.140 ppm. The residual concentrations of dissolved hydrocarbons in groundwater are stated as 150 ppb of TPH as gasoline, 58 ppb of diesel, 0.73 ppb of ethylbenzene, and low (below regulatory limits) concentrations of chromium, nickel, and zinc.

In the Case Closure Summary, the reasons given for case closure included that the source had been removed and the site was adequately characterized, that there were no sensitive environmental receptors, and that there was no significant risk to human health using a commercial receptor scenario. It was stated that agency notification is required if there is a proposal for a change in land use or site activity, or if basements to buildings are to be constructed.

Based on the regulatory status and the investigation and remediation performed, PIERS recommends no further investigation of the waste oil tank pit or fuel tank pit, dispensers, and piping.

PIERS recommends that a completed copy of the interview form be obtained from the owner.

Based on research conducted during this study, it appears unlikely that the subsurface conditions of the Property have been significantly impacted by contaminants originating on other nearby, *agency-listed* chemical use or release sites.

PURPOSE, INVOLVED PARTIES

The purpose of performing this Phase I ESA was to determine past, current and potential future environmental liabilities associated with the current and past uses of the Property. Specific types of liabilities addressed in this report are based on statements detailed in ASTM Standard Designation E 1527-00.

PIERS was retained by Mr. Doug Shin of U. S. Bank (cited hereafter as the Client) to conduct this Phase I Environmental Site Assessment for the said Property.

DETAILED SCOPE OF SERVICES

The Scope of Services for the performance of this Phase I ESA included the following tasks:

- ❖ Current visual reconnaissance of the Property to evaluate on-site activities in respect to hazardous materials use, storage and disposal activities.
- ❖ General visual survey of the current uses of the immediately adjacent sites.
- ❖ Review of selected historic documentation for the Property to determine what activities have occurred at the subject site since the Property's first developed use or since 1940 (whichever is earlier).
- ❖ Review of reasonably ascertainable regulatory agency files concerning chemical use, storage and disposal at the Property and at surrounding sites.
- ❖ Acquisition of a current computerized review (PIERS IHMS radius report) of federal, state, and local publications to identify National Priority List (NPL); Resource Conservation and Recovery Act (RCRA); United States Environmental Protection Agency (EPA), Region 9, Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS); RCRA Treatment, Storage and Disposal (TSD); and Emergency Response Notification System (ERNS) sites located within close proximity to the Property as well as landfills, Leaking Underground Storage Tanks (LUST) sites and registered underground storage tank (UST) sites.

- ❖ Review of reports on file at environmental regulatory agencies concerning on-going environmental investigations at nearby agency-listed sites.
- ❖ Preparation of this report in general accordance with the document entitled *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process* (The American Society for Testing and Materials [ASTM], Designation E 1527-00).

SPECIAL TERMS AND CONDITIONS / ADDITIONAL SERVICES

The Client for this project requested no special terms, conditions or extraneous services. Therefore, PIERS implemented no special terms, conditions or extraneous services for this project. Business Environmental Risk concerns have not been addressed for this project.

USER RELIANCE

This Phase I Environmental Site Assessment (ESA) has been prepared for the exclusive use of the Client and/or his agents. PIERS will distribute any information regarding this assessment and report only upon the request of the Client and/or his agents. The Client may rely on the statements and information contained within this report.

PIERS warrants that the services, findings, and/or recommendations provided to the Client and his affiliates and subsidiaries, have been prepared, performed and rendered in accordance with procedures, practices and standards generally accepted and customary in the consultant's profession for use in similar assignments.

CURRENT SITE DESCRIPTION

LOCATION AND LEGAL DESCRIPTION

The Property is located on the western end of the 500 block of Merrimac Street, in the City of Oakland, Alameda County, California. A Site Vicinity Map, Property Parcel Map and Property Site Plan are attached to this report as Figures 1, 2, and 3, respectively.

The Property consists of a rectangular-shaped parcel of approximately 14,162 square feet, which is improved with a former service station building. The Property is legally described as Assessor's Parcel Number 40-1 of Assessor's Map 9, Page 689 (Assessor's Parcel Number 009-0689-040-01), see Figure 2.

SITE AND VICINITY GENERAL CHARACTERISTICS

The vicinity of the Property is generally comprised of residential development. A Property Site Plan (Figure 3) is attached to this report.

CURRENT USE OF THE PROPERTY

The Property building is currently used for storage for the owner's property management business, Achievement Enterprises.

SITE RECONNAISSANCE

On February 12, 2003, PIERS conducted a visual reconnaissance of the Property for indications of past or present hazardous material handling or storage activities, which may pose a threat to the surface or subsurface environment. Property photographs are attached to this report.

METHODOLOGY AND LIMITING CONDITIONS

PIERS inspected all areas of the Property during the site reconnaissance, except the roof, and the interior of the trash enclosure. Also, the quantity of stored materials within the building prevented a complete inspection of the drains and subsurface features. Property photographs (Attachment A), site plans, and notes were taken during the reconnaissance.

GENERAL SITE SETTING

Improvements on the Property include a one-story former service station building. The Property appears to be served by the normal municipal utilities. The following sections provide the results of the Property inspection.

EXTERIOR OBSERVATIONS

The exterior portions of the Property are entirely paved with asphalt or concrete, except for small areas of contained landscaping. An area around the former underground storage tank pit and the former waste oil tank pit are patched with concrete. The tops of three former monitoring wells are also patched with concrete. The concrete foundations for the former pump islands are still visible.

The trash enclosure has been enclosed and boarded up, and was not inspected. According to the owner, there is a refrigerator and a stove stored in it.

INTERIOR OBSERVATIONS

The Property building has had new doors added to the front. There are two former service bays on the northern portion. A small office and restroom are located on the southern portion. A small fire has damaged portions of the interior. The interior is filled with stored items.

DESCRIPTION OF STRUCTURES AND PROPERTY IMPROVEMENTS:

STRUCTURES

Structures at the Property consist of the service station building, and a trash enclosure. The station building is a masonry structure founded on a concrete slab and perimeter foundation. The building has a flat roof. Two service bays with rollup doors were previously located within the building.

ROADS

No roads are located on the Property. The Property is accessed from driveways on 27th Street.

MECHANICAL SYSTEMS

Mechanical systems observed at the Property, were alarms, fire sprinkler systems, a forklift, a compressor, a lathe, and the underground hoist within the former station building.

SOLID WASTE AND SEWAGE DISPOSAL

A dumpster is used for solid waste. Sewage is disposed of via city sewer lines.

HEATING AND COOLING SYSTEMS

The station building has a heating and cooling system, which apparently is located on the roof.

SOURCE OF POTABLE WATER

Water is provided by a municipal water service.

HAZARDOUS MATERIALS STORAGE, USE, DISPOSAL

No hazardous materials were observed at the Property. There are two 5-gallon pails of oil, which are used for a small forklift, and various small (retail) quantities of paint and cleaners. All of these materials were observed to be stored properly, and there was no evidence of improper storage, usage, or disposal of hazardous materials or other chemicals.

WELLS

No evidence of water supply, irrigation, oil, injection, or dry wells was observed on the Property. Three monitoring wells at the Property have been properly abandoned, under permit. The well abandonments are discussed further in this report.

FLOOR DRAINS AND SUMPS

Four subsurface features were identified in the floor of the service station building. There is an underground hoist in the southernmost service bay. In the northern service bay, there is what appears to be a catch basin for oil changing. This basin, according to the owner, will hold some water but beyond a certain level the water will drain. Approximately six months ago, rats were entering the building from the drain. The owner has filled the drain with soil, and due to the stored items above it, it was not possible to completely inspect the drain. There is an eight-inch-diameter Christy box set in the floor of the station building that is filled with soil. The fourth subsurface feature is located in the southern portion of the building, and is a metal container below grade that is accessed from a circular eight-inch-diameter Christy box. The purpose of this feature is unknown, and the container was empty.

It is PIERS' understanding that all of the stored items are to be removed from the Property building. **PIERS recommends that after all of the items have been removed from the building, the building floor be re-inspected. The purpose of the re-inspection is to determine whether any other subsurface features exist, and to determine whether any leakage has occurred from the catch basin in the northern service bay. Due to the possibility of leakage from the hoist (hydraulic fluid), the hoist should either be removed, or a boring completed next to it and a soil sample obtained. If not removed, the hydraulic fluid should be replaced with vegetable oil.**

There are no exterior drains at the Property.

STORAGE TANKS

No storage tanks were observed at the Property. The Property is a previous service station and a closed Leaking Underground Storage Tank (LUST) case. Three fuel underground storage tanks (USTs) and a waste oil UST were previously removed from the Property, and are discussed further in this report.

STAINED SOIL OR PAVEMENT

There is no soil exposure at the Property, except for areas of contained landscaping. No stained soil was observed. No significant staining was observed on the exterior paved surfaces. There was some oil and grease beneath a lathe within the station building, but was not of significant environmental concern.

CURRENT USES OF ADJOINING PROPERTIES

The area surrounding the Property is predominantly comprised of residential developments. PIERS conducted a field reconnaissance of the properties adjacent to the Property to evaluate their actual or potential impact on the Property. The parcels immediately surrounding and in the vicinity of the Property are as follows:

- The Property is bound to the north by Merrimac Street. The area across Merrimac Street is entirely residential.
- The Property is bound to the south by 27th Street. The area across 27th Street to the south is occupied by a large parking structure.
- The Property is bound to the east by residences along Merrimac and 27th Streets.
- The Property is bound to the west by a small landscaped area, and then a soundwall and the entrance to the 9580/24 freeway.

No items of obvious environmental concern were observed on the vicinity reconnaissance.

USER PROVIDED INFORMATION

TITLE RECORDS, ENVIRONMENTAL LIENS, USE LIMITATIONS, SPECIALIZED KNOWLEDGE, VALUE REDUCTION FOR ENVIRONMENTAL ISSUES

PIERS was not provided with any information regarding liens, use limitations, specialized knowledge, or value reductions for environmental issues on the Property.

OWNER, PROPERTY MANAGER OR OCCUPANT INFORMATION

Achievement Enterprises is listed as the current owner of record of the Property.

PREVIOUS ENVIRONMENTAL REPORTS

Several recent environmental reports related to the Property as a leaking underground storage tank (LUST) case were provided to PIERS, and are listed in the references to this report. For report continuity, and as additional reports were reviewed at the regulatory agencies, all of the reports are summarized under "Local Health Department Records Review".

INTERVIEWS

On February 12, 2003, PIERS submitted an ASTM Site Reconnaissance and Interview Form to Mr. William Wong, the owner of the Property. A completed interview form had not been obtained as of the date of this report. A copy of the form with PIERS' site observations recorded is attached to this report. PIERS recommends that a completed copy of the interview form be obtained from the owner.

HISTORICAL RECORDS REVIEW FOR THE PROPERTY

Standards developed by ASTM, and agreed upon by most financial institutions, require that the history of a site be established from the present time back to 1940, or to the year that it was developed from agricultural use or open space. Sources of such information are typically interviews, aerial photographs, Sanborn Fire Insurance (Sanborn) Maps, city directories, and local fire, building and health department files. Historical research, therefore, includes a review of as many sources as needed to obtain developmental history of a site.

TOPOGRAPHIC MAP REVIEW

The Property is located at an elevation of approximately 33 feet above mean sea level (U. S. Geological Survey 7.5 Minute Topographic Quadrangle, "Oakland West"). The Property is located within an area that slopes very gently to the southwest, towards San Francisco Bay.

SANBORN FIRE INSURANCE MAPS REVIEW

On February 7, 2003, PIERS reviewed historical Sanborn Fire Insurance Maps at the University of California at Berkeley Earth Sciences Library. Maps from 1902, 1912, 1951, 1952, 1954, 1959, 1962, 1967, and 1970 were reviewed.

On the 1902 map, there are two residences on the Property, and two lots are vacant. On all of the later maps, there are four residential buildings. By 1959, 27th Street had been widened, which included the removal of residential dwellings adjacent to and south of the Property. By 1967, all of the residences on the adjacent area to the west of the Property had been removed in preparation for the construction of the freeway.

No items of significant environmental concern were observed on the Sanborn maps reviewed.

LOCAL FIRE DEPARTMENT RECORDS REVIEW

City of Oakland Fire Department (OFD)

The OFD does not retain records beyond five years, and the file for the Property was therefore not reviewed, as the history and remediation of the Property is well documented from other agency sources.

LOCAL BUILDING DEPARTMENT RECORDS REVIEW

City of Oakland Building Department (OBD)

Review Date - February 11, 2003

On February 11, 2003, PIERS reviewed the file for the Property at the OBD. Documents dated between 1969 and 2002 were contained in the file. The oldest file document from 1969 consisted of plans for a Mobil station with an 8,000-gallon and a 10,000-gallon UST. A 1970 building permit for the station was finalized in April 1970. In 1978, a permit was granted to convert the service station to a car rental agency. Later documents were not of significant environmental concern.

LOCAL HEALTH DEPARTMENT RECORDS REVIEW

City of Oakland Office of Emergency Services (OEM)

Review Date - February 11, 2003.

On February 11, 2003, PIERS reviewed the file for the Property at the OEM. Documents dated between 1989 and 2001 were contained in the file. Reports for the Property were also provided by the owner. All of the documents except for the 2001 document referred to the former service station at 554 – 27th Street. The Property is referred to as the Schoonbrood and Barbagelata Property in the documents for the former service station Leaking Underground Storage Tank Case (LUST).

The oldest document consisted of a Property Valuation prepared for Mr. John J. Barbagelata dated July 18, 1989. In this document, it is noted that although all of the service station facilities including the tanks are still present, the Property is vacant.

The oldest report is entitled “Underground Storage Tank Removal, Final Report, 554 – 27th Street, Oakland, CA”, by All Environmental, Inc., dated February 22, 1995. Based on this report, on January 18, 1995, four USTs were removed from the site. The tanks included one 6,000-gallon, one 8,000-gallon and one 10,000-gallon gas UST, and one 500-gallon waste oil UST. The tanks were located at the locations shown on Figure 3. The removals were witnessed by the Alameda County Health Care Services Agency (ACHCSA). No holes were reportedly found in the gasoline tanks, however, there was a hole about one inch in diameter in the waste oil tank.

In a Site Summary prepared by Ms. Jennifer Eberle of ACHCSA, which sums the site history from 1995 through closure in 1997, she states that she also observed “sizeable holes on end” of the 6,000-gallon UST.

Also on the day of the tank removals, and as requested and witnessed by the ACHCSA, 17 soil samples were taken from the tank pit excavations and stockpiles, and three samples were collected from beneath the dispenser islands. A groundwater sample was taken from the fuel tank pit.

The six soil samples taken from the fuel tank pit yielded non-detectable results for Total Petroleum Hydrocarbons (TPH) as gasoline, and benzene, toluene, ethylbenzene and xylenes (BTEX). The analytical results of the samples taken from the stockpile of excavated soil yielded some concentrations of hydrocarbons in some of the samples.

The soil sample collected from beneath the waste oil tank contained 8.1 parts per million (ppm) of TPH as gasoline, 74 ppm of TPH as diesel, and BTEX constituents ranging up to 92 ppm (xylenes). Oil and grease was detected at 2,500 ppm. The LUFT five metals (cadmium, chromium, lead, nickel, and zinc) were detected at what appeared to be background concentrations, and chlorinated hydrocarbons were non-detectable.

The three samples taken from beneath the dispenser islands yielded largely non-detectable results, except for relatively low concentrations of TPH as gasoline, ethylbenzene, and xylenes, which were detected in one sample at concentrations of 1.2, 9.4, and 11 ppm, respectively.

The water sample collected from the excavation contained 910 parts per billion (ppb) of TPH as gasoline, and BTEX constituents ranging from 6.9 to 19 ppb.

A report entitled “Overexcavation of Contaminated Soil Report” by All Environmental, Inc. and dated May 3, 1995, documents the over-excavation of the area of the waste oil tank. The work was performed on February 8, 1995, under the supervision of the ACHCSA. The excavation was enlarged to dimensions of approximately 25 by 25 feet wide, and 9 feet deep, which removed approximately 250 additional cubic yards of soil. The four sidewall samples yielded completely non-detectable concentrations of hydrocarbons. A sample collected from the bottom of the excavation contained elevated concentrations of hydrocarbons. This sample was located just above the water table. Based on these findings, a groundwater investigation was requested by the ACHCSA.

The significantly hydrocarbon-impacted soils that were excavated were properly disposed of at a landfill facility. The soils were segregated into various stockpiles that were sampled separately. According to the Site Summary by ACHCSA, 250 cubic yards of soil were disposed of at a landfill, and 100 cubic yards were reused as backfill. The 100 cubic yards were analyzed and contained 71 ppm of diesel and 35 ppm of Total Oil and Grease (below regulatory limits).

As summarized in a report by All Environmental entitled "Subsurface Investigation and Groundwater Monitoring and Sampling Report" dated August 15, 1995, in June 1995, three groundwater monitoring wells were installed at the site, at the locations shown on Figure 3. On the July 10, 1995 monitoring event, the depth to groundwater was about 8.5 feet below grade, with a flow direction to the south. One well, MW-3, was located south of the former fuel tank pit. Well MW-1 was located on the western side of the waste oil tank pit. Well MW-2 was located near the northern boundary of the Property. Soil samples collected from the borings, and the groundwater samples, yielded non-detectable concentrations of hydrocarbons.

The historical groundwater monitoring results are summarized in a report by All Environmental, Inc., entitled "Fourth Quarterly Groundwater Monitoring and Sampling Report" dated June 26, 1996. Based on this report, the direction of groundwater flow has historically been to the south-southeast. In four sampling events between July 1995 and June 1996, the analytical results of the groundwater samples collected from the monitoring wells have been entirely non-detectable for hydrocarbons, with one exception. In March 1996, the groundwater sample collected from well MW-3, downgradient of the former tank pit, contained concentrations of TPH as gasoline and TPH as diesel of 2,300 and 1,100 ppb, respectively. Benzene, ethylbenzene, and xylenes were detected at concentrations of 30, 140, and 22 ppb, respectively. This date corresponded to a shift in the direction of groundwater flow to the south-southeast, where MW-3 was more downgradient of the former tank pit. In the next sampling event (June 1996), all of the wells again yielded non-detectable results.

On October 17, 1996, in a letter from the ACHCSA, permission to destroy the monitoring wells was granted. Closure of the monitoring wells is documented in a report by All Environmental entitled "Groundwater Monitoring Well Site Closure" dated January 14, 1997. With the approval of the ACHCSA, and prior to issuance of closure, on December 9, 1996, the three wells were properly abandoned by pressure grouting with neat cement.

In a letter dated January 29, 1997, “no further action” status was granted by the ACHCSA. In the Case Closure Summary that accompanied this letter, the remaining residual hydrocarbons in soil are stated as 120 ppm of TPH as gasoline, 420 ppm of TPH as diesel, 6,800 ppm of Total Oil and Grease, and BTEX constituents ranging between 0.032 and 0.140 ppm. The residual concentrations of dissolved hydrocarbons in groundwater are stated as 150 ppb of TPH as gasoline, 58 ppb of diesel, 0.73 ppb of ethylbenzene, and low (below regulatory limits) concentrations of chromium, nickel, and zinc.

In the Case Closure Summary, the reasons given for case closure included that the source had been removed and the site was adequately characterized, that there were no sensitive environmental receptors, and that there was no significant risk to human health using a commercial receptor scenario. It was stated that agency notification is required if there is a proposal for a change in land use or site activity, or if basements to buildings are to be constructed.

The most recent document contained in the file, and the only document not related to the former service station, was a Hazardous Materials Inspection Report for Achievement Enterprises dated March 1, 2001. In this report, it is noted that there are no storm drains on the Property. Welding gases are noted at the site at a quantity that requires a Hazardous Materials Business Plan. The report also notes “Heavy litter and miscl. paint cans exposed to storm drain”, apparently an off-site storm drain. The business is directed to properly store the paint cans.

Based on PIERS’ reconnaissance, this no longer appears to be of environmental concern. All of the paint was stored within the Property building.

LOCAL CITY DIRECTORY REVIEW

City Directories have been published for major cities and towns across the United States since the 18th century. Originally, these Directories, published in the 20th century, also included a street index. For each street address, the Directory lists the name of the resident or business operating from this address during a given year. City Directories are a valuable source of historical information with regard to site tenancy and use. Directories for rural areas were not often published.

On February 8, 2003, PIERS reviewed historical city directories and telephone directories at the Oakland Public Library. Directories for the period of 1967 through 2003 were reviewed. The specific directories reviewed are included in the references to this report. The following is a summary of the city directory listings for the Property:

551 - 557 Merrimac Street

1967 – 1969 – residential

1973 – 2001 – no listings

2002 – 2003 – E. Achievement (557 Merrimac only)

554 – 27th Street

1972 – 1978 – Mobil Service Station

1979 – no listing

1981 – 1986 – Pacific Car Rental

1987 – 1989 – International Imports

1990 – 2003 – no listing

HISTORICAL AERIAL PHOTOGRAPH REVIEW

On February 9, 2003, aerial photographs from the U. S. Geological Survey of Menlo Park, California were reviewed for evidence of hazardous materials and features that may have impacted the Property. The following is a summary of this review:

DATE	PHOTOS	OBSERVATIONS
10-28-46	GS-CP 6-41 and 6-42	The Property is occupied by four residential buildings. The Property is bound by Merrimac Street to the east. There are residential buildings on all of the adjacent parcels, and across Merrimac Street.
5-18-50	BUT-13G-34 and 35	There are no significant changes to the Property or adjacent parcels.
8-13-58	BUT-4V-77 and 78	There are no significant changes to the Property. 27 th Street has been widened, and now bounds the Property to the south. The residences that formerly were on the northern side of 27 th Street are now replaced by the street widening. There are no significant changes to the other adjacent parcels.
5-18-65	ALA 15-134 and 15-135	There are no significant changes to the Property or immediately adjacent parcels. To the west and northwest (not adjacent), residences have been removed to allow construction of the freeway.
10-14-74	13-39 and 13-40	The Property is occupied by a service station. The freeway and entrance ramp to the west are now present. There are no other significant changes to the immediately adjacent parcels.
10-1-80	GS-VEZR 1-41 and 1-42	The Property is still occupied by a service station. There are no significant changes to the immediately adjacent parcels.
7-10-93	Terraserver (internet)	The Property is still occupied by a service station. There are no significant changes to the immediately adjacent parcels.

ADDITIONAL FILE REVIEWS

Additional file reviews were not performed for this investigation.

REGULATORY AGENCIES DATABASES REVIEW

ENVIRONMENTAL DATABASES SEARCH FOR THE PROPERTY AND SURROUNDING SITES WITHIN ONE-MILE

Attached to this report is a PIERS “Identified Hazardous Materials Sites Radius Report” for the subject Property. The report identifies sites of environmental concern within a one-mile radius of the subject Property. The databases searched to compile the enclosed report are gathered from numerous federal, state and local governing environmental entities. All of the databases required to be searched by ASTM Standard E 1527-00 – Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process – Section 7.2.1.1 “Standard Environmental Records Sources” have been included in this report, and searched to the required distances from the subject Property. Further information about the Radius Report and detailed descriptions of the databases searched are found in the report itself. The following is an analysis of the attached report.

SUMMARY OF DATABASES REVIEWED:

SUBJECT PROPERTY

The Property is listed as a closed LUST site (554 – 27th Street) on one of the regulatory agency databases included in this database report. The file for the Property was reviewed, and is summarized earlier in this report.

SURROUNDING SITES

NPL - NATIONAL PRIORITIES LIST

No sites within a one-mile radius from the Property were listed on the National Priority List (NPL) database.

PROPOSED NPL

No sites within a one-mile radius from the Property were listed on the Proposed National Priority List (NPL) database.

CORRACTS

No facilities within a one-mile radius from the Property were listed on the CORRACTS database.

TSD

No sites within a one-mile radius from the Property were listed on the TSD database.

SMBRP

Five facilities within a one-mile radius of the Property were listed on the Site Mitigation and Brownfield's Reuse (SMBRP) database. As these sites are all located cross-gradient to downgradient from the Property (northwest to southwest), at distances of between approximately 763 and 2,059 feet, none of them appear to be of significant environmental concern to the Property.

SLIC

Twenty sites within a one-mile radius from the Property were listed on the SLIC database (one site is listed twice). One of these sites is a cross-gradient SMBRP site. Except for one upgradient site, the other SLIC sites are all located cross-gradient to downgradient from the Property (west to southeast), at distances of between approximately 1,747 to 5,106 feet. The single upgradient site is the Kaiser Medical Center at 280 MacArthur Boulevard, approximately 4,230 feet to the northeast. Based on the distance of this site from the Property, it does not appear to be of significant environmental concern.

DEED RESTRICTION SITES

No sites within a one-mile radius from the Property were listed on the DEED database.

CERCLIS

Two sites within a one-half mile radius from the Property were listed on the CERCLIS database. Both of these are cross-listings of SMBRP sites that are located cross-gradient relative to the Property.

CERCLIS/NFRAP

No sites within a one-half mile radius from the Property were listed on the CERCLIS/No Further Remedial Action Planned (NFRAP) database.

LUST

One hundred seventeen sites within a one-half mile radius from the Property were listed on the LUST database, including the Property itself. Many of the listings are duplicate listings of the same site, and many of the cases are closed.

In fuel leak cases, research conducted in the State of California by Lawrence Livermore National Laboratory (LLNL) in 1996 indicates that attenuation and degradation of the product in groundwater play major roles in reducing the hydrocarbon contamination to non-detectable levels within several hundred feet of the contaminant source. Moreover, this research indicates that in over 90% of the hydrocarbon contamination cases, groundwater contaminant plumes do not extend more than 250 feet from the source. Solvent/toxic contamination plumes may extend farther from the source.

Based on the discussion above, fuel leak LUST sites that are within 1/8 mile in the upgradient direction, and upgradient solvent or toxic leak sites are considered to have potential risk to the subsurface soils and/or groundwater of the Property. In addition to the Property, a closed LUST case, two other LUST sites were listed within 1/8 mile of the Property (each of the sites is listed several times). The Property is a closed LUST case, which is discussed earlier in this report.

The other two LUST sites are open cases. One of these is the Sears auto center site located approximately 568 feet to the southeast. As this site is located cross-gradient relative to the Property, it does not appear to be of significant environmental concern to the Property.

The other open case is the Shell station at 2800 Telegraph Avenue, approximately 514 feet to the northeast, upgradient relative to the Property. It would be unusual for any hydrocarbons other than MTBE to migrate more than 500 feet downgradient. While it is possible that the groundwater beneath the Property may have been impacted by dissolved concentrations of MTBE, the potential for this site to significantly impact the subsurface soils and/or groundwater beneath the Property appears low.

There do not appear to be any solvent or toxic contamination plumes located farther upgradient.

SWLF (Solid Waste Landfill)

No sites within a one-half mile radius from the Property was listed on the SWLF database.

WELLS

No sites within a one quarter-mile radius from the Property were listed on the WELLS database.

HAZMAT

Three sites within one-eighth mile from the Property were listed on the HAZMAT database. These sites include the two open LUST cases, which are discussed above under that heading. The third HAZMAT site within one-eighth mile is a dry cleaners site that is located approximately 641 feet to the southeast (cross-gradient). This site does not appear to be of significant environmental concern to the Property.

ERNS

Neither the Property nor any adjacent parcel is listed on the ERNS database.

RCRIS GENERATORS

No sites within one-eighth mile from the Property were listed on the RCRIS database, except for the Shell station (LUST) site, which is discussed above under the LUST heading.

UST

No sites within one-eighth mile from the Property were listed on the UST database.

AST

Neither the Property nor any adjacent parcel is listed on the AST database.

CLEANERS

No sites within one-eighth mile from the Property were listed on the CLEANERS database.

HAZNET

No sites within one-eighth mile from the Property were listed on the HAZNET database.

CONCLUSIONS AND RECOMMENDATIONS

Please see the Executive Summary section on page one of this report for full conclusions and recommendations.

LIMITATIONS AND EXCEPTIONS

This Phase I Environmental Site Assessment does not guarantee the condition of a Property. PIERS Environmental Services Inc. (PIERS) shall not be responsible for conditions or consequences arising from facts and information that were withheld or concealed, or not fully disclosed at the time the evaluation is performed. Conclusions and recommendations made in the report for the Property are preliminary in nature and are based wholly upon the data obtained and available information reviewed during the assessment. The site assessment is prepared to assist in decisions regarding this Property, and its possible subsurface environmental hazards. PIERS is not responsible for errors or omissions in agency files or databases or non-disclosure by current Property owners or representatives. To achieve the study objectives stated in this report, we were required to base PIERS' conclusions and recommendations on the best information available during the period the investigation was conducted and within the limits prescribed by PIERS' client in the contract/authorization agreement and standard terms and conditions.

PIERS professional services were performed using that degree of care and skill ordinarily exercised by environmental consultants practicing in this or similar fields. The findings were mainly based upon examination of historic records, maps, aerial photographs, and governmental agencies lists. It should be noted that governmental agencies often do not list all sites with environmental contamination; the lists and data used could be inaccurate and/or incomplete. Recommendations are based on the historic land use of the subject property, as well as features noted during the site walk. The absence of potential gross contamination sources, historic or present, does not necessarily imply that the subject property is free of any contamination. This report only represents a "due diligence" effort as to the integrity of the subject property. No other warranty or guarantee, expressed or implied, is made as to the professional conclusions or recommendations contained in this report. The limitations contained within this report supersede all other contracts or scopes of work, implied or otherwise, except those stated or acknowledged herewith.

This report does not address, in any way: septic systems, leach fields, septic tanks, or related health hazards, lead in drinking water, lead based paint, asbestos containing materials, radon, wetlands, cultural and historic resources, industrial hygiene, health and safety, ecological resources, endangered species, indoor air quality, high voltage power lines, mold, dust, any air quality issues or microorganism concerns were not addressed within the scope of this project. This report does not address: permitting, environmental compliance, or business environmental risks. This project does not include sampling of materials (for example: soil, water, air, mold, building materials).

No warranties, therefore, are expressed or implied. PIERS total liability to the Client for any and all injuries, claims, losses, expenses or damages whatsoever arising out of or in any way related to this agreement from any cause or causes, including but not limited to PIERS negligence, errors, omissions, strict liability, or breach of contract shall not exceed the total amount of the contract for this project.

An environmental compliance audit may be necessary for the Property. The scope of services is based on ASTM standards and not on any other local, state or federal standards, codes, regulations or laws.

The information and opinions rendered in this report are exclusively for use by the Client. Qualifications of professionals completing this project are available upon request. PIERS will not distribute or publish this report without the Client's consent except as required by law or court order. The information and opinions included in this report were given in response to a limited scope of work and should be considered and implemented only in light of that particular scope of work. The services provided by PIERS in completing this project have been provided in a manner consistent with the normal standards of the profession. No other warranty, expressed or implied, is made.

REFERENCES

- All Environmental, Inc., 1995. Underground Storage Tank Removal, Final Report, 554 – 27th Street, Oakland, CA, dated February 22, 1995.
- All Environmental, Inc., 1995. Overexcavation of Contaminated Soil Report, 554 – 27th Street, Oakland, CA, dated May 3, 1995.
- All Environmental, Inc., 1995. Soil and Groundwater Investigation Proposal, 554 – 27th Street, Oakland, CA, dated May 2, 1995.
- All Environmental, Inc., 1995. Subsurface Investigation and Quarterly Groundwater Monitoring and Sampling Report, 554 – 27th Street, Oakland, CA, dated August 15, 1995.
- All Environmental, Inc., 1996. Fourth Quarterly Groundwater Monitoring and Sampling Report, 554 – 27th Street, Oakland, CA, dated June 26, 1996.
- All Environmental, Inc., 1996. Groundwater Monitoring Well Site Closure, 554 – 27th Street, Oakland, CA, dated January 14, 1997.
- Haine's City Directories, Oakland: 1973 through 2003.
- Pacific Telephone Directory, Oakland: 1970, 1971, 1972.
- Polk's City Directories, Oakland: 1967, 1969.
- Sanborn Fire Insurance Maps: 1902, 1912, 1951, 1952, 1954, 1959, 1962, 1967, 1970.

ATTACHMENTS

FIGURE 1
PROPERTY VICINITY MAP

FIGURE 2
PROPERTY PARCEL MAP

FIGURE 3
PROPERTY SITE PLAN

ATTACHMENT A
PROPERTY PHOTOGRAPHS

**ATTACHMENT B
ENVIRONMENTAL DISCLOSURE
INTERVIEW FORM**

ATTACHMENT C
PIERS IDENTIFIED HAZARDOUS
MATERIALS SITES RADIUS REPORT