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## PHASE 1 ENVIRONMENTAL SITE ASSESSMENT VOLUME 1

Capital Station 65 424 N. 7<sup>th</sup> Street Sacramento, CA 95814

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# PHASE I ENVIRONMENTAL SITE ASSESSMENT CAPITAL STATION 65 424 N 7<sup>th</sup> STREET SACRAMENTO, CALIFORNIA

#### 1.0 INTRODUCTION

#### 1.1 Executive Summary

The subject site occupies 424 and 426 North 7<sup>th</sup> Street, Sacramento, California, and consists of several parcels. The total area of the subject property equals approximately 55 acres. The site houses four main structures, which total approximately 1,410,000 ft². The building space is comprised of warehouse space, commercial office space, cold storage, and former food processing facilities. Except for the western portion, asphalt-paved parking areas and concrete encompass the subject site. A review of the Sanborn Maps indicate that the site was operated solely as a fruit and vegetable cannery since the early 1930s. Mr. Russell, a representative of Capital Station 65 LLC, stated that the buildings at 426 N 7<sup>th</sup> Street were constructed between the 1930s and 1970s.

Limited asbestos and lead-based paint surveys were not conducted at the property. Mr. Russell indicated that asbestos-containing material (ACM) in a friable form was used for insulating pipes within the structure at 426 N 7<sup>th</sup> Street. According to Mr. Russell, the material has since been removed. No information regarding the presence of lead containing paint was available.

During operation of the food processing facility, which closed down in the late 1990s, the facility was a permitted small quantity generator of hazardous waste. According to Mr. Russell, wastes previously stored, generated, and disposed of were characteristic of a cannery operation. Examples given were solid waste and wastewater from fruit and vegetable production, waste oil, solvents, paints, adhesives, aerosols, inks, lubricants, degreasers, metal cuttings/fines, laboratory chemicals (acids, bases, aromatic and aliphatic organic liquids, various reagents used in titrations, and other flammable and toxic chemicals associated with analytical chemistry), hypochlorites, chlorine, petroleum hydrocarbons, CFCs, ammonia and propane. According to Mr. Russell, 90% of the product piping associated with the former canning operations have been removed from the buildings, as have containers storing hazardous materials.

The site previously housed several underground fuel storage tanks. Evidence of an unauthorized release of petroleum hydrocarbons was noted during removal of the tanks in 1990. A subsurface investigation and remediation program was conducted under the direction of the Sacramento County Hazardous Materials Division (County HMD). The program included installation of numerous borings and monitoring wells and remediation by soil vapor extraction. One monitoring well was reportedly sampled for and found to be free of chlorinated hydrocarbons in 1996. The County HMD issued a "no further action" letter in December 1997.

The subject property previously housed three production wells, which were reportedly destroyed in 1986. A previous consultant reportedly interviewed the case manager at the Regional Water Quality Control Board, who recalled that samples collected before the wells were destroyed were clean.

Several sites in the immediate vicinity of the property were listed as having had leaking underground storage tanks. However, given the locations of these relative to the subject property and the predominantly southwest groundwater gradient direction, these sites are not expected to impact the property.

Based on the results of this Phase I Environmental Site Assessment (ESA), potential sources of liability on site include several above-ground fuel storage tanks utilized by existing businesses at the site, although the tanks appeared to be in good condition and properly located within secondary containment structures; lines and components associated with refrigeration systems containing ammonia and/or CFC's. These are considered minor concerns because they appeared to be properly maintained areas used during normal site operations. A previous Phase I ESA conducted in 1999 included other potential concerns including residual containers of hazardous materials left over from canning operations, cracked or etched concrete throughout the facility in close proximity to surface staining, an extensive drainage system throughout the facility that eventually emptied into the City sanitary sewer, and a hazardous materials storage area previously located in the northern portion of the property. None of these conditions appeared to be of concern during the most recent site inspection.

The previous Phase I report recommended additional investigation in the areas of cracked concrete near apparent surface staining, although none was conducted.

#### 1.2 Purpose

The purposes of this Phase I ESA are to identify existing or potential recognized environmental conditions (as defined by ASTM Standard E-1527) affecting the property that: 1) constitute or result in a material violation or a potential material violation of any applicable environmental law; 2) impose any material constraints on the operation of the property or require a material change in the use thereof; 3) require clean-up, remedial action or other response with respect to hazardous substances or petroleum products on or affecting the property under any applicable environmental law; 4) may affect the value of the property; and 5) may require specific actions to be performed with regard to such conditions and circumstances.

#### 1.3 Scope of Work

This Phase I ESA was conducted in accordance with the American Society for Testing and Materials (ASTM) Standard Practice E 1527-00.

The environmental services described in this report have been conducted in general accordance with current regulatory guidelines and the standard-of-care exercised by environmental consultants performing similar work in the project area. No other warranty, expressed or implied, is made regarding the professional opinions presented in this report. Please note that this study did not include an evaluation of geotechnical conditions or potential geologic hazards.

This document should be used only in its entirety. No portion of the document, by itself, is designed to completely represent any aspect of the project described herein. Ground Zero should be contacted if the reader requires any additional information or has questions regarding the content, interpretations presented, or completeness of this document.

The conclusions, recommendations and opinions contained herein are based on an analysis of the observed site conditions and the referenced literature. It should be understood that the conditions of a site could change with time as a result of natural processes or the activities of man on the subject property or nearby sites. In addition, changes to the applicable laws, regulations, codes, and standards of practice may occur due to government action or the broadening of knowledge. The findings of this report may, therefore, be invalidated over time, in part or in whole, by changes over which Ground Zero has no control.

#### 1.4 Unmet Requirements

Ground Zero has conducted this ESA in accordance with ASTM Standard E1527-00. No specific requirements have gone unmet.

#### 2.0 PROPERTY DESCRIPTION

The following sections describe the subject property:

#### 2.1 Property Location and Description

The site is located in the city of Sacramento, Sacramento County, California. A site location map (USGS Topographic Quadrangle, Sacramento East and Sacramento West, CA) is presented in Appendix 7.1.1. The site address is 424 and 426 N 7<sup>th</sup> Street.

#### 2.1.1 Legal Description

The site consists of several separate parcels, the legal descriptions of which are Assessor Parcel Numbers (APN) 001-0200-012, 001-0200-013, 001-0020-003, 001-0020-034, 001-0020-036, 001-0020-041, 001-0020-045, and 001-0020-046.

#### 2.1.2 Property Type, Size and Description

The subject site covers an area of approximately 55 acres and previously housed a fruit and vegetable cannery and associated offices, storage, maintenance facilities, scale house, vacant warehouses, and an operating cold storage facility. Current businesses include commercial office space, two concrete materials companies, and a livestock feed supplier.

#### 2.1.3 Improvements

The current buildings were reportedly constructed between the early 1930s through the 1960s. Building construction materials were various, including brick/cinderblock and wood for the majority of the old cannery buildings, concrete tilt-up for warehouses, and some corrugated metal siding. The main structure and warehouse occupies the northeastern portion of the subject site, with concrete and asphalt ground cover. The western portion of the subject site is mainly dirt with asphalt roads, and appears to have been used primarily for the storage of machinery. The entire perimeter of the property is enclosed by chain-link fencing, except for the southern portion, which is occupied by a cold storage facility (424 N 7<sup>th</sup> Street) and a vacant warehouse at the corner of N 5<sup>th</sup> Street and Richards Boulevard. A map showing site features is included in Appendix 7.1.2.

#### 2.1.4 Current Uses and Occupants of the Property

Current businesses at the property include commercial office space, two concrete materials companies, and a livestock feed supplier. Capitol Station 65, LLC occupies 424 N. 7<sup>th</sup> Street.

They run the cold storage facility on site. The Sacramento Habitat for Humanity occupies one of the old warehouses in the northern portion of the property and is listed as 426 N. 7<sup>th</sup> Street. Precision Concrete Materials, LLC, is also located at 426 N. 7<sup>th</sup> Street. They deliver unmixed concrete to job sites and mix as needed on site. Eun Ho America, which compresses bails of hay for shipment to Asia, is located in the most northeastern warehouse on the subject site, at 701 N. 7<sup>th</sup> Street. West Coast Carriers, a transporter of unmixed concrete, occupies the warehouse located on the southwestern portion of the property.

#### 2.1.5 Property Owners

The current owner of the property is Capital Station 65, a real estate development company. Prior to Capital Station 65, Lodi Mission Partners owned the properties from 1986 until 1999. Boulevard Properties owned the subject site from 1983-1986, and leased it to Sacramento Foods. From 1981-1983 the owners were T.H. Richards Processing. ROM Properties held interest in the site from 1979-1981. Borden Inc. was the earliest known owner.

#### 2.1.6 Summary of Prior ESAs, Checklists or Special Resources

A subsurface investigation of leaking underground storage tanks at the site resulted in the submittal of several Phase II Investigation summary reports and quarterly monitoring reports.

Subsurface investigations included the drilling of 21 soil borings, collecting additional soil samples from shallow trenches, installation of 8 groundwater monitoring, installation of 1 soil vapor extraction and 3 ambient air wells, periodic groundwater monitoring, and operation of soil vapor extraction equipment. The investigation concluded that soil and groundwater beneath several of the tanks were impacted by petroleum hydrocarbons. Subsequent to active and passive remediation of the site and installation of confirmatory borings, the site was closed by Sacramento County. A copy of the site closure letter from Sacramento County, which includes a comprehensive summary of investigation and remediation activities, is included in Appendix 7.2.1.

A prior Phase I ESA Report was prepared by Ground Zero Analysis, Inc. (Ground Zero) for Lodi Mission Partners in 1999. The previous Phase I ESA Report identified several potential sources of liability including a hazardous waste storage area located at the north end of the site, lines and components associated with the refrigeration units, product lines associated with operation of the former cannery, sumps and drains throughout the facility (although the drainage system reportedly emptied to the City sewer), miscellaneous containers of hazardous chemicals used in canning operations, and various localized areas of stained concrete.

None of the aforementioned potential liabilities were observed during the most recent site inspection. Mr. Bill Russell of Capital Station 65 indicated that these issues were addressed during decommissioning of the former cannery.

#### 3.0 RECORDS REVIEW

The following sections describe the records review.

#### 3.1 General Public Records

#### 3.1.1 Physical Setting Sources

The following sections describe the physical setting of the subject property.

#### 3.1.1.1 Topography

Based on the review of the United States Geological Survey (USGS) topographic maps, Sacramento East and Sacramento West Quadrangles, as well as a site inspection, the site sits on relatively flat terrain. Surface drainage across the site is generally to the west. The elevation of the site is approximately 25 feet above mean sea level.

#### 3.1.1.2 Geology

The site is located along the American River in the geomorphic province defined as the Great Valley. The site is situated on quaternary alluvium and stream deposits derived from metasedimentary and igneous rocks of the Sierra Nevada Batholith. Shallow sediments consist of interbedded clays, sands, silts, and gravels. Boring logs indicate that shallow soils beneath the site consist primarily of silt and silty sand to approximately 10-15 feet below ground surface (bgs) and silty sand to poorly graded sand from approximately 10-15 feet to 37 feet bgs, the maximum depth explored.

#### 3.1.1.3 Hydrology

The nearest surface drainage to the site is the American River, located approximately 150 feet north of the property. The depth to shallow groundwater in the vicinity of the site reportedly ranges from 3 to 30 feet below ground surface, and is greatly influenced by the nearby American and Sacramento rivers. The groundwater flow direction varies from north to south due to the influence of the rivers. The predominant groundwater flow direction is to the south.

#### 3.1.2 Historical Use Information

The following sections describe the historical use of the subject property.

#### 3.1.2.1 Prior Uses of the Property

The properties at 424 and 426 N. 7<sup>th</sup> Street have reportedly been operated as a food processing/canning facility since the 1930s, as indicated by the Sanborn Map report.

#### 3.1.2.2 Aerial Photograph Review

Aerial photographs for the years 1961, 1976 and 1987 are available for the site. The aerial photographs confirm the prior use of the property as described above. The 1987 and 1976 photographs show the site essentially unchanged from the observed condition during a site inspection by Ground Zero Analysis, Inc. personnel in 1999. The site is no longer operated as a canning facility. The northwestern-most warehouse was not yet built and, thus, does not appear in the 1961 photograph. The remainder of the site was essentially unchanged in 1961. Copies of the aerial photographs are included in Appendix 7.1.3.

#### 3.1.2.3 Fire Insurance Maps Review

Sanborn maps were available for the subject site in the years 1950, 1952, 1957, 1960, 1964-66, 1968 and 1970. The maps indicate the presence of three fuel storage tanks in the vicinity of the office/cafeteria in the central portion of the site. These fuel tanks were reportedly removed in the

early 1970s and replaced by 12,000-gallon tanks in 1975. A "gas & oil" storage area in the vicinity of the northernmost repair shop also is shown on the Sanborn maps. The same area housed a liquid propane storage tank during the 1999 site inspection, but no chemicals are stored there currently. Copies of pertinent portions of the Sanborn Maps are included in Appendix 7.1.4.

#### 3.1.3 Properties and Areas Surrounding Subject Property

The following sections describe the use of adjoining properties and surrounding areas.

#### 3.1.3.1 Current Uses of Adjoining Properties

The property at 424/426 N 7<sup>th</sup> Street is bounded to the north by the American River, to the east by N. 7<sup>th</sup> Street (office buildings, warehouses), to the west by 5<sup>th</sup> Street (office buildings, warehouses), and to the south by Richards Boulevard, a trucking facility, and the California State Printing Plant.

#### 3.1.3.2 Past Uses of Adjoining Properties

Based on the available Sanborn Fire Insurance maps, the adjacent and surrounding properties have had similar uses since at least 1952, the date of the earliest available Sanborn map.

#### 3.1.3.3 Current Uses of Surrounding Areas

The area surrounding the site is of mixed use, primarily industrial in nature, including warehouse, printing plant, a rail yard, and commercial offices.

#### 3.1.3.4 Past Uses of Surrounding Areas

Based on reviews of the available historical sources, the surrounding areas have had similar uses since the early 1950s.

#### 3.1.3.5 Potential Off-Site Concerns

A number of operating permits have been issued in the immediate vicinity of the property, primarily generators of small quantities of hazardous wastes, not uncommon for this type of use. Based on the environmental data base records review, soil and/or groundwater has been affected at several sites that are within close proximity of the subject property.

The State Printing Plant, located at 344 N. 7<sup>th</sup> Street, located approximately ¼ mile south of the subject property, the Yellow Cab Company located at 900 Richards Boulevard approximately 800 feet southeast of the property, and the SP-Purity Oil site located at 1342 A Street, approximately 2/3 mile southeast of the subject property have documented significant soil contamination, including volatile organic constituents (VOCs), petroleum hydrocarbons, lead, and PCBs. Extensive investigation and excavation (SP-Purity Oil site) have been conducted. Based on available information, it appears as though contamination from these sites has not migrated northward to the subject property. The groundwater gradient at these sites are generally toward the south, away from the subject property.

#### 3.2 Environmental Records Reviews

#### 3.2.1 Mapped Database Records Search

A computerized, environmental database search was performed by EDR on April 6, 2006. The EDR search included federal, state, and local databases. The search conducted by EDR exceeds the government records search requirements of ASTM Standard Practice for Environmental Site Assessments, E1527-00. The review was conducted to evaluate whether the site or properties within the vicinity of the site have reported any unauthorized releases of hazardous substances, permitted handling of hazardous materials, or permitted use of USTs. The resultant report is provided in Appendix 7.2.2. The report includes a brief description of each database, general site vicinity map, and map locations of reported sites within the prescribed radii from the subject property.

The subject property was identified on several databases as having used, stored and/or disposed of hazardous waste. Several surrounding properties with possible environmental concerns were also identified within the prescribed search radii from the site. A discussion of the properties within one-quarter mile of the site that appear on an ASTM required database is provided below.

SITE ADDRESS	SITE NAME(S)	DATABASE(S)	REASON FOR LISTING
424 N. 7 <sup>th</sup> Street	Lodi Mission Partners DBA Sierra Cold Storage	HAZNET, Sacramento Co. ML	Landfill disposal of asbestos-containing waste, former gasoline USTs
424 N. 7 <sup>th</sup> Street	Sacramento Foods (Div. of Borden Foods)	REF, CA FID UST, SWEEPS UST	Referred by County for questionnaire due to caustic liquids present at site, former UST location
424 N. 7 <sup>th</sup> Street		CHMIRS, Historical UST	Citizen complaint of accidental release of substance from refrigeration unit; 11 former USTs licensed at site
424 N. 7 <sup>tn</sup> Street	Capital Station 65	FINDS	General listing index of listed facilities
424 N. 7 <sup>III</sup> Street	_	ERNS	Reported release of hazardous substance, no details
601 N. 7th Street	Dept. of Health Services	Sacramento Co. ML	Follow up of UST site, no tanks reported
601 N. 7 <sup>th</sup> Street	Солtinental Сал Со.	LUST, Cortese	Former leaking underground tank, soil only release, case closed in 1986
601 N. 7th Street		CHMIRS	Hazardous materials incident report for December 1988, no details provided
426 N. 7 <sup>th</sup> Street	Sierra Fruit	EMI, RCRA-SQG, FINDS, HAZNET, LUST, Cortese, Sacramento Co. CS, Sacramento Co. ML	Air emissions reports 1987 through 1997, Small quantity generator of hazardous waste, former leaking underground tank case closed December 1997, manifested disposal of unspecified oil containing waste
344 N. 7 <sup>th</sup> Street	Office State Printing	LUST, CHMIRS, EMI, Sacramento Co. CS	Active leaking underground storage tank site with petroleum hydrocarbon contamination including MTBE, placed into local remediation program, groundwater affected, Hazardous materials incident report for July 1991, no details provided, air emissions report 1987-1990, Former leaking UST closed in 1988
344 N. 7 <sup>th</sup> Street	Office of State Publishing	FINDS, HAZNET, Sacramento Co. ML, LUST, Cortese, RCRA- LQG, CA FID UST, HIST UST, FTTS, Sacramento Co. CS, EMI, CA WDS, SWEEPS UST	Manifested disposal of aqueous solutions, hydrocarbon solvents, and liquids with chromium, UST site, Large quantity generator of hazardous waste with several violations (non-specific) noted, former leaking UST site for heater fuel closed in 1988, active UST site (as of 1993), waste discharge requirements (WDRs) issued for groundwater remediation or wastewater disposal, air emissions reports 1995-2003
790 Richards Blvd	Prince Truck Center	Sacramento Co. ML	Former gasoline UST
800 Richards Blvd	Imperial Die Cutting Inc.	Sacramento Co. ML	Former gasoline UST
840 Richards Blvd	Pacific Storage Company	CA FID UST, SWEEPS UST, HIST UST, Sacramento Co. ML	Inactive UST location, former gasoline UST
801 Richards Blvd	ALCOA Recycling	RCRA-SQG, FINDS, Sacramento Co. ML	Small quantity generator of hazardous waste
851 Richards Blvd	Cal-Air Conditioning	HAZNET, Sac Co. ML	Disposal of waste oil and mixed oil, and asbestos

			containing waste
900 Richards Blvd	Yellow Cab Company	LUST, Cortese, Sac. Co. CS, HAZNET, CA FID UST, SWEEPS UST, UST, Sac. Co. ML, HIST UST	Leaking UST, drinking water affected with MTBE, remedial action underway, disposal of unspecified oil containing waste and solvent mixture, UST location (gasoline and waste oil), four USTs reported
325 N. 7 <sup>th</sup> Street	Jefferson Smurfit Corp.	Sacramento Co. ML, CA WDS, HAZNET, Sacramento Co. ML	Industrial facility that treats and/or disposes of liquid or semisolid wastes, stormwater runoff, disposal of unspecified oil-containing waste and other organic solids
950 Richards Blvd	Sacramento Theatrical Lighting	HAZNET, Sacramento Co. ML	Disposal of aqueous solution and empty drums
950 Richards Blvd	Bergen Brunswig- Sacramento Div.	HIST UST, Sacramento Co. ML, CA FID UST, SWEEPS UST	Reportedly operated a gas station at location with nine USTs
434 N. 5 <sup>th</sup> Street	A&A Concrete Supply Inc.	Sacramento Co. ML	Unspecified listing
951 Richards Blvd	Cresco Restaurant Equipment	CA FID UST, SWEEPS UST, HIST UST, Sacramento Co. ML	Reportedly operated nine USTs
500 Richards Blvd	Roadrunner Freight System	RCRA-SQG, FINDS	Small quantity generator of hazardous waste, no violations found
500 Richards Blvd	Roadway Express	CA FID UST, SWEEPS UST, HIST UST, Sacramento, Co. ML	Inactive UST location, formerly two known USTs
500 Richards Blvd	AZ Freight Systems	Sacramento Co. ML	Unknown listing
500 Richards Blvd	Silver Eagle Co.	HAZNET	Disposal of alkaline solution without metals, surplus organics, liquids with pH<2, other organic solids
500 Richards Blvd	Big Valley Express	LUST, Cortese, Sacramento Co. CS	Leaking UST site, groundwater affected, post remediation monitoring, unknown status
601 N. 10 <sup>th</sup> Street	Quality Park Products	CA FID UST, SWEEPS UST, HAZNET, HIST UST, Sacramento Co. ML	UST site active as of 1993, disposal of unspecified solvent mixture and waste oil/mixed oil
521 N. 10 Street	Westco Products	Sacramento Co. ML	Unknown listing
515 10 <sup>th</sup> Street	Auto Glass Dist.	LUST, Cortese	Leaking UST case closed 1996, soil excavation conducted
501 10th Street	Midstate Contracting	Sacramento Co. ML	Unknown listing
600 N. 10 <sup>th</sup> Street		CHMIRS	Hazardous materials spill or release reported March 1989
601 N. 10 <sup>th</sup> Street	Anchor Group	RCRA-SQG, FINDS, HAZNET	Generation and disposal of aqueous solution with <10% total organic residues
600 N. 10 <sup>th</sup> Street	California State Lottery	Sacramento Co. ML	Unknown listing
1001 Richards Blvd	Marc Becker Diesel Fuel Injection	HAZNET, Sacramento Co. ML	Disposal of surplus organics, other organic solids
1001 Richards Blvd	Kitchen Cabinet Warehouse	Sacramento Co. ML	Unknown listing
609 N. 10 <sup>th</sup> Street	Downtown Auto & Truck	HAZNET, Sacramento Co. ML	Generation and disposal of aqueous solution with <10% total organic residues

Due to the property's close proximity to the American River, none of the properties listed above are expected to have a negative impact on the property because the predominant groundwater flow direction is to the south.

#### 3.2.2 Unmapped Orphan Sites

The orphan sites listed in EDR's report are included as sites that may or may not be located near the subject property, but lack sufficient data regarding exact location. None of these sites was observed to be near the subject property.

#### 4.0 PROPERTY RECONNAISSANCE AND INVESTIGATION

On April 6, 2006, Joe Vasquez of Ground Zero conducted a property reconnaissance and investigation. Mr. Bill Russell of Capital Station 65 accompanied Mr. Vasquez on the inspection.

#### 4.1 General Property Characteristics

The following sections describe the general property characteristics.

#### 4.1.1 Topographic Conditions

The property is located on a relatively flat parcel at an approximate elevation of 25 feet above mean sea level.

#### 4.1.2 Potable Water Source

The City of Sacramento supplies potable water to the site.

#### 4.1.3 Solid Waste Disposal

Currently, Mr. Russell stated, solid waste disposal is managed by BFI, part of Allied Waste Services of Sacramento.

According to Mr. Russell, when the canning facility was operational, solid waste consisted of the remnants of fruits and vegetables from processing operations. These wastes were managed through the use of liquid/solid separators. The liquids from processing were stored in an above ground storage tank with a volume approximately 20,000 gallons. The liquid was then neutralized using sodium hydroxide. Continuous point source monitoring was employed prior to discharge of the liquid to the sanitary sewer system. Mr. Russell stated that all of the required permits for the discharge of the above effluent were obtained. Solids from processing were trucked to farms in the Winters area for use as fertilizer. Any solid wastes characterized as hazardous that were generated were managed through hazardous waste brokers as a turn-key operation. Garbage refuse was managed through the City of Sacramento and/or sub-contractors for the disposal of non-hazardous solid wastes.

#### 4.1.4 Sewage Discharge and Disposal

As previously reported, according to Mr. Russell, sewage discharge and disposal for the site was initially permitted by the City of Sacramento Public Works Department and sanitary sewage and point source wastewater was discharged to the Sacramento publicly owned sanitary sewer system.

#### 4.1.5 Surface Water Drainage

No storm drains were apparent at the subject site. Previously, Mr. Russell had stated that he was not aware of any storm drains on the site. It appeared that stormwater drained via sheet flow.

#### 4.1.6 Source of Heating and Cooling

The heating, ventilation and air conditioning (HVAC) units are roof-mounted electrical units.

#### 4.1.7 Wells and Cisterns

No wells or cisterns are listed on the current EDR report and none were observed on site. According to the Sanborn Maps received for the September 1999 Phase 1 report, two wells were previously located at the subject site for use as a secondary water supply. Well No. 1 was reportedly located approximately 20 feet southwest of the receiving shed, and Well No. 2 was reportedly located inside the cannery building. A large diameter vertical concrete pipe with a metal lid is located in the general vicinity of the reported location of Well No. 1. It was

previously unclear if this was indeed Well No. 1, however, during the April 2006 site inspection the metal lid was removed and it was discovered that this was an access lid to the sites drainage system. No evidence of the Well No. 2 was visible. Mr. Russell has no knowledge of any wells on the property other than former monitoring wells that have since been destroyed. Mr. Russell stated that all water for the site was provided by the city.

According to Regional Board staff, three production wells formerly used at the site were abandoned in 1986. The former project manager at the Regional Board reported that he recalled the wells were "clean" at the time they were abandoned.

In addition to the production wells, eight groundwater monitoring wells, one soil vapor extraction well, and three ambient air wells were installed as part of the investigation and remediation program associated with the former USTs at the site. One of these wells was reportedly analyzed for chlorinated hydrocarbons by a State-certified analytical laboratory in 1996. All tested analytes were non-detect. Subsequent to active and passive remediation of the site and installation of confirmatory borings, the site was closed by Sacramento County and the wells were properly destroyed under permit from the County.

#### 4.1.8 Current Occupants

Several businesses currently reside on the subject site at 424/426 N. 7<sup>th</sup> Street. Capitol Station 65, LLC, a cold storage facility, currently occupies 424 N. 7<sup>th</sup> Street. Two businesses are located at 426 N. 7<sup>th</sup> Street: Precision Concrete Materials, LLC, and Habitat For Humanity. Eunho America has a listed address of 701 N. 7<sup>th</sup> Street, but according to Mr. Russell, they also reside on the subject site. West Coast Carriers, address unknown, also resides on the subject site.

#### 4.2 Potential Environmental Hazards

The following sections discuss potential environmental hazards.

#### 4.2.1 Hazardous Substances and/or Petroleum Products

The site is listed on the LUST database for the unauthorized release of gasoline reported in March 1990. Both soil and groundwater were impacted. A subsurface investigation and remediation program was conducted under the direction of the County HMD, which subsequently closed the site in December 1997 (Appendix 7.2.1). The facility was registered as small quantity generator of hazardous waste (EPA ID #CAD98209597) but is currently vacant.

#### 4.2.2 Labeled Containers and Drums

Two locations in the facility contained labeled industrial materials.

- Two 55-gallon drums of red denaturant were located in the northern side of the main cannery. The drums were located on pallets. Also on pallets, in the same location, were several 5-gallon cans of paint.
- Two 55-gallon drums of hydraulic oil were located in the Eun Ho America warehouse. The drums were in good condition.

• Multiple cans of paint of various sizes are stored in the Habitat for Humanity store room. They also store paint outside in the equipment storage area north of the site. The paint located out side is on pallets on asphalt.

Several locations in the facility were previously noted in the September 20, 1999 Phase 1 report as containing labeled containers or drums. None of the materials listed in the previous report were observed during the April 6, 2006 site inspection.

#### 4.2.3 Unlabeled Containers and Drums

No unlabeled containers or drums were observed on site.

#### 4.2.4 Disposal Locations

An outdoor area marked for hazardous waste storage was previously located at the north end of the subject site. Removal of hazardous wastes was reportedly performed by contracted vendors. No hazardous waste is currently being stored in that area.

An outdoor area is currently being used to store scrap metal and old building materials generated during the renovation of the old buildings. Mr. Russell explained that these materials are non-hazerdous and will be properly disposed of. Aside from dumpsters located on site, no other locations were visible for non-hazardous solid waste storage.

#### 4.2.5 Evidence of Releases of Hazardous Substances and/or Petroleum Products

During the April 6, 2006 site inspection rain from the previous night left the site wet. Ponding was discovered in many of the warehouses. Because of the large amounts of water on the ground surface, surface staining could not be observed. However, as noted in the September 1999 Phase 1 report surface staining from petroleum products (identified by Mr. Russell as hydraulic oil) was observed on the floor in the cannery building near the former location of the peach pitters and dumps. The surface staining covered several dikes leading to a nearby sump. Cracked concrete was also present in this area. Minor staining from petroleum products was also noted in a maintenance shop located in northernmost warehouse, and motor storage room near the QA/QC Lab.

An unidentified crystalline substance was observed growing out of joints in the concrete floor in the bottling room. This appeared to be the location of a former dike that was subsequently filled with concrete. Crystallization was also present in several areas where peelers were located in the main cannery. Similar crystals were noted on product lines where sodium hydroxide was used in the peeling process. The crystalline substances described in this paragraph are likely derived from a sodium hydroxide solution spilled during site operations.

#### 4.2.6 Polychlorinated Biphenyls

According to Mr. Russell, any PCB containing equipment was removed and properly disposed through hazardous waste brokers. No other potential sources of PCBs were noted at the site. According to Mr. Joe Simas, who worked at the facility since the early 1960s, PCB containing transformers had been present on the property through the early 1980s, but that these transformers were removed and properly disposed of. He indicated that PCB containing

transformers in the Sierra Cold Storage area were drained, refilled, and tested in accordance with regulations.

#### 4.2.7 Asbestos Containing Materials (ACMs)

Ground Zero personnel did not conduct a detailed inspection for evidence of ACMs. Mr. Bill Russell of Lodi Mission Partners indicated that all friable ACMs were removed from the subject site.

#### 4.2.8 Radon

Based upon the results of a California Statewide radon survey conducted in 1990 by the Department of Health Services, the average indoor radon concentration for Sacramento County is 0.665 pCi/L for 1st Floor living areas and 0.200 pCi/L for 2nd floor areas, both of which are well below the 4 pCi/L considered a health risk. Basements contained average radon concentrations of 8.350 pCi/L and may be a potential health risk.

#### 4.2.9 Lead Based Paint

No inspection for lead based paint was performed on this property. Due to the age of the buildings, the presence of leaded paint is possible. No information regarding the presence of lead paint was given.

#### 4.2.10 Lead in Drinking Water

No inspection for lead in drinking water was performed on this property.

#### 4.2.11 Landfills

One landfill was listed on the EDR solid waste facility/landfill database as being located approximately 0.8 mile north-northeast of the subject site.

#### 4.2.12 Pits, Sumps, Dry Wells and Catch Basins

Numerous sumps, catch basins, and associated dikes and drains are located throughout the site. According to Mr. Russell, this drainage system ultimately drains to the sanitary sewer system.

#### 4.2.13 Aboveground or Underground Storage Tanks

Several aboveground tanks were noted at the subject site:

- A 500-gallon above ground tank containing diesel was located in the Precision Concrete
  Materials yard. The tank is in double containment and appears to be in good condition. Mr.
  Chris Pisano, owner of Precision Concrete explained that they have not had any problems or
  unauthorized spills associated with their tank.
- A 500-1,000-gallon above ground tank containing diesel and a 200-gallon above ground tank containing propane were located at Eun Ho America. The diesel tank is located inside the warehouse, along the western wall, and is located in a double containment structure. The propane tank is located outside, along the northern side of the building.
- A 500-gallon above ground tank containing diesel is located in the West Coast Carriers truck yard. The tank is located along the northern wall of their warehouse and is in secondary

containment. Also associated with West Coast Carriers are two 20,000-gallon vertical tanks used for loading concrete into trucks.

Several aboveground tanks were previously noted at the subject site in the September 1999 Phase 1 report, however according to Mr. Russell they have subsequently been removed. They included fuel ASTs, large volume tanks for liquid wastewater associated with canning operations, and various tanks that contained food products.

No evidence of any underground storage tanks was observed on the property. The former tanks, five 12,000-gallon, one 8,000-gallon, and two 550-gallon were reportedly removed in 1990, followed by a subsurface investigation and remediation program, and subsequent site closure by Sacramento County and the Regional Board.

#### 4.2.14 Radiological Hazards

No evidence of radiological hazards was observed on the property.

#### 4.2.15 Additional Hazards

Other potential hazards noted on site include:

 Product lines located throughout the facility are labeled as containing or once containing hazardous and non-hazardous materials, including but not limited to caustics, hydraulic oil and wastewater.

Potential Hazards noted in previous Phase 1 report, that have since been removed:

- Hydraulic oil pumping units are located inside the main cannery, outside adjacent to the tomato peeling units, and outside north of the tomato canning. These units appeared to be well maintained and in good condition.
- Various remaining containers of hazardous materials in the maintenance area of the site, the QA/QC Lab, and main cannery.

#### 5.0 SUMMARY OF FINDINGS

The following section provides a summary of Ground Zero's findings related to the subject property.

#### 5.1 Findings and Conclusions

According to the available information, several potential environmental concerns remain at the property in the form of above ground fuel storage tanks, although the tanks appear to be well maintained and properly located within double-containment, and product lines associated with the cold storage facility. Some surface staining, which appeared to be petroleum or hydraulic oil, was previously observed on the site during a Phase I ESA conducted in 1999, but those same conditions were not noticable during the most recent site inspection. Although several off site sources of contamination were noted in close proximity to the subject site, they are not expected to adversely impact the subject site based on their regulatory status, location in relation to the subject site, and/or the expected groundwater flow.

#### 5.2 Investigation Requirements Not Satisfied

Ground Zero has conducted this ESA in accordance with ASTM Standard E1527-00. No known requirements have gone unmet.

#### 5.3 Actual or Potential Sources of Liability

Potential sources of liability include:

- 1. Lines and components associated with refrigeration systems containing Ammonia and/or CFCs. These appeared to be in good condition and are not considered a significant liability.
- Product lines associated with former canning production operations at the site. These
  appeared to be in good condition in 1999 and were reportedly emptied at that time.
  According to Mr. Russell, 90% of the product lines have been removed from the site. The
  remaining lines are not considered a significant liability.
- Several sumps and the associated dike system throughout the facility remain, although Mr.
  Russell indicated that nothing has been discharged to the sump system since the cannery
  ceased operation. The drainage system is reportedly connected to the City sanitary sewer
  system.
- 4. The previous Phase 1 noted cracked and/or etched concrete in numerous locations throughout the facility, some near areas of surface staining. The cracked portions of the concrete do not pose an existing liability because chemicals are no longer used in these areas. However, specific testing has not been conducted to investigate whether previously observed surface staining may have impacted soil beneath the cracked concrete.

#### 5.4 Actual or Potential Noncompliance issues

No potential noncompliance issues were noted during the site reconnaissance include:

#### 5.5 Recommendations for Further Investigation

Ground Zero makes no specific recommendations of further investigation at this time.

#### 5.6 Recommendations for Regulatory Reporting

Based upon the information contained in this Phase I, no further regulatory reporting is warranted at this time.

#### 5.7 Recommendations for Any Other Actions

Ground Zero makes no recommendations for any other specific action to be taken at the facility.

#### 6.0 CONSULTANT INFORMATION

#### 6.1 Project Personnel

The project manager for this investigation was John Lane, California Registered Environmental Assessor No. 06305. Joseph Vasquez performed the site reconnaissance. The environmental database search report, aerial photographs, and Sanborn Fire Insurance Maps were provided by EDR. John Lane conducted data review and prepared this report.

#### 6.2 Report Certification

This Phase I Environmental Site Assessment was performed under the direct supervision of John Lane, REA. Mr. Lane has reviewed and approved the report and submits that methods and procedures employed in the development of the report conform to minimum industry standards.

#### 6.3 Certification and Licensing

Ground Zero personnel associated with this report are properly licensed in the State of California to do the work described herein.

#### 6.4 Report Reliance

This assessment was performed at the Client's request utilizing methods and procedures consistent with good commercial or customary practices designed to conform to acceptable industry standards. This report may be distributed to and relied upon by Capital Station 65 LLC, its successors and assigns, with respect to a loan upon the project, together with any rating agency or any issuer or purchaser of any security collateralized or otherwise backed up by such loan. The independent conclusions represent Ground Zero's best professional judgment based on the conditions that existed and the information and data available to us during the course of this assignment. Factual information regarding operations, conditions, and test data provided by Client, owner, or their representative have been assumed to be correct and complete.

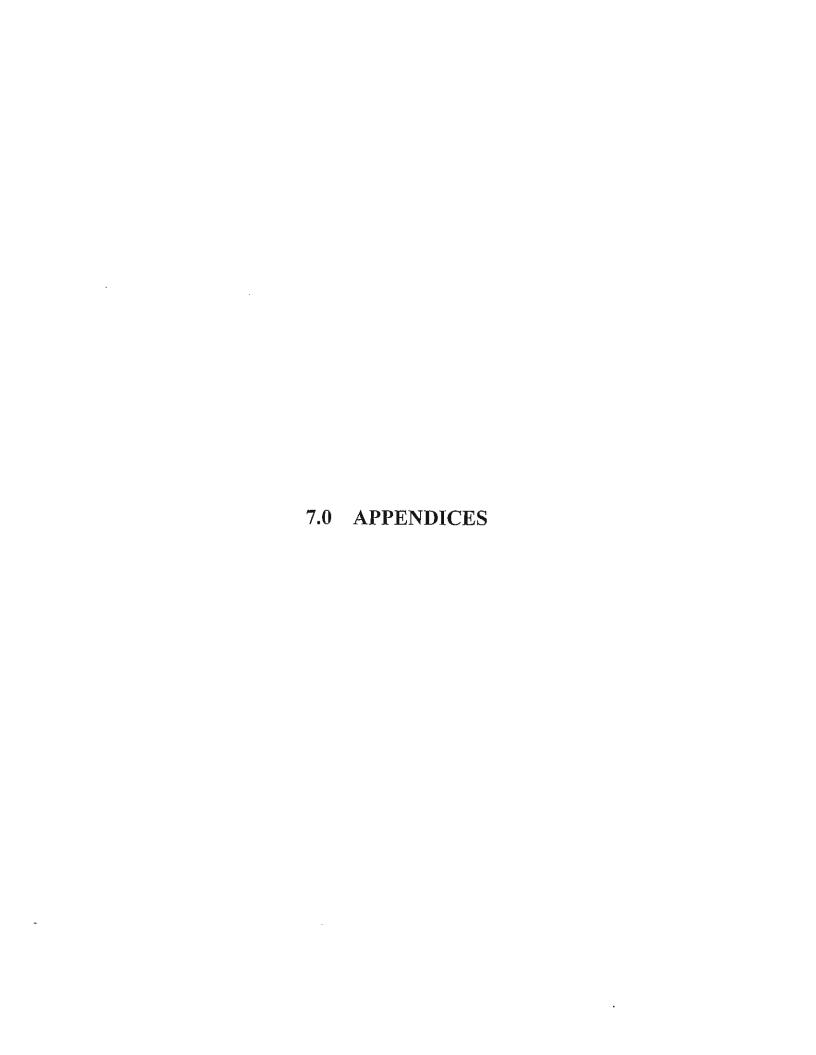
Respectfully,

Ground Zero Analysis, Inc.

Joseph L. Vasquez Staff Geologist

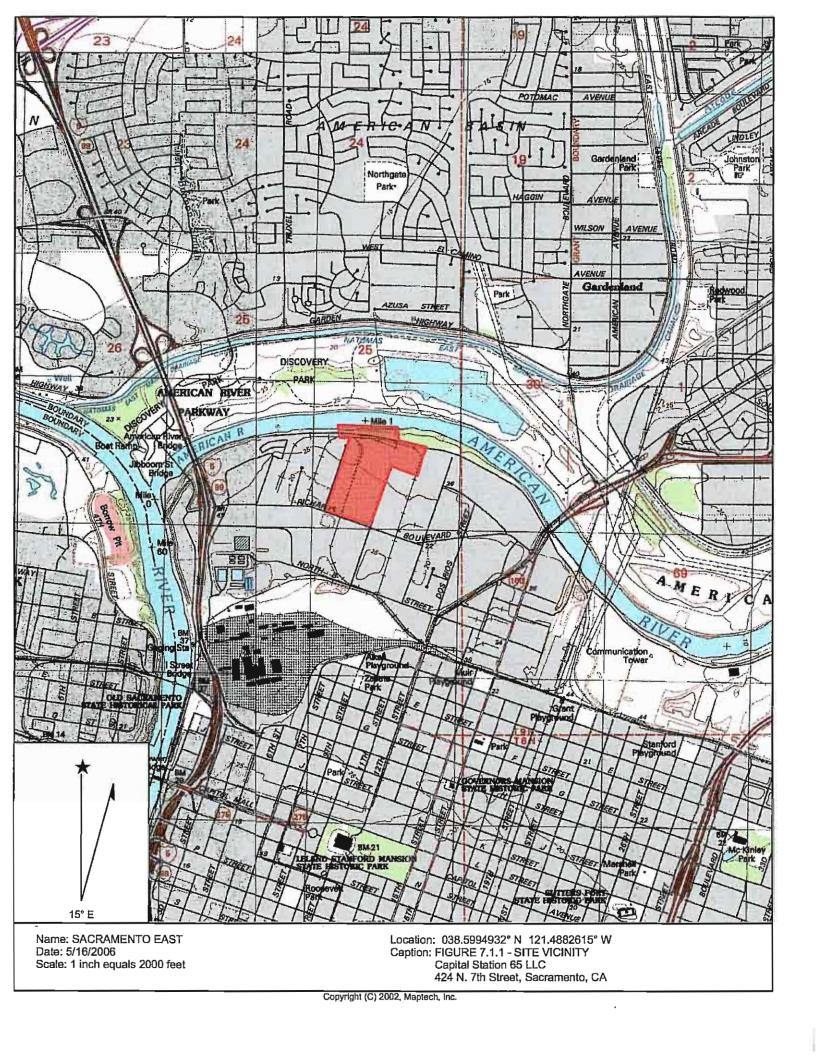
John P. Lane

CA Registered Environmental Assessor 06305

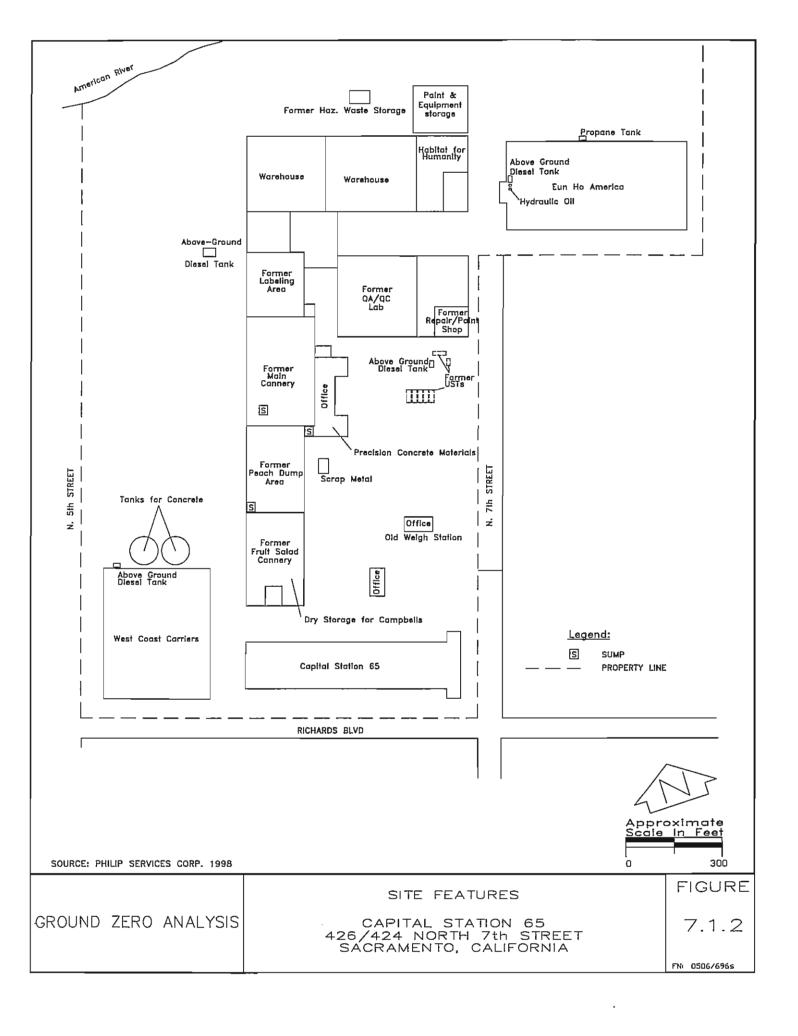


7.1 Property Background Information

7.1.1 U.S.G.S. Topographic Map



7.1.2 Site Maps



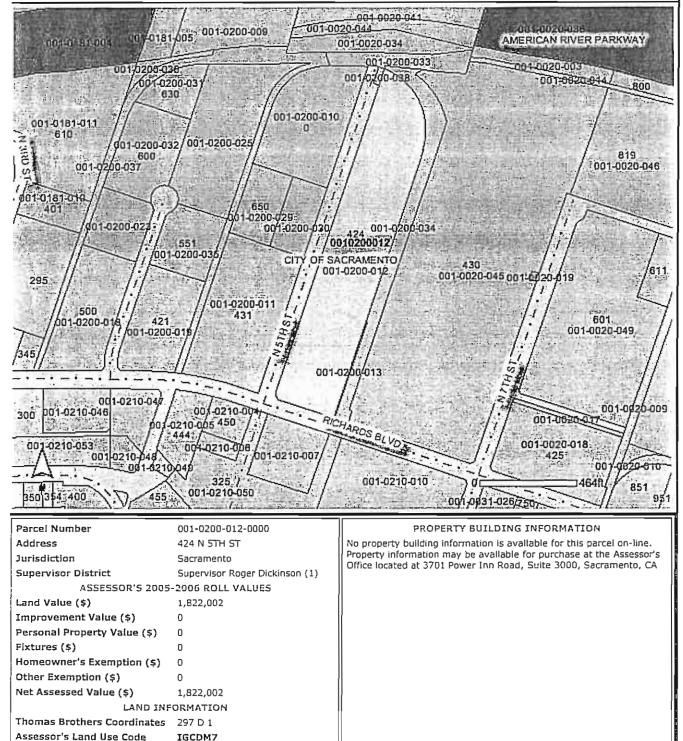
Draw and label your lot on this sheet if you want Rain Bird to plan your system. If faxing, draw in black ink.

Subdivision Name Lot Number

Approx. Parcel Area (sq ft)

### **County of Sacramento Assessor**

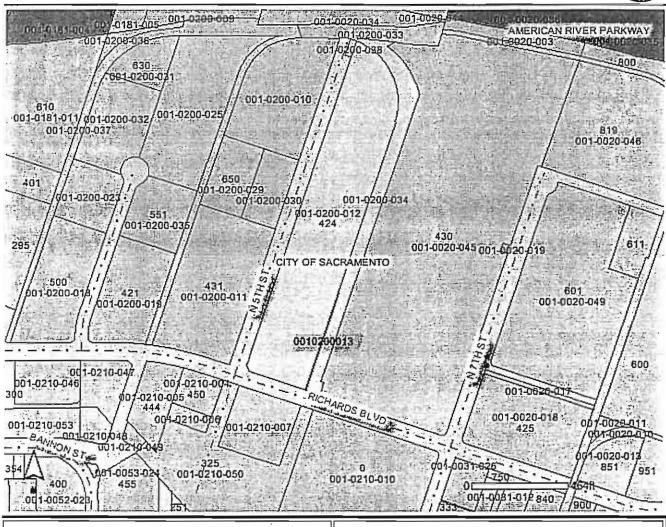




483,080.40

### County of Sacramento Assessor





Parcel Number 001-0200-013-0000
Address 0 RICHARDS BL
Jurisdiction Sacramento
Supervisor District Supervisor Roger Dickinson (1)
ASSESSOR'S 2005-2006 ROLL VALUES

Land Value (\$) 8,995

Improvement Value (\$) 0

Personal Property Value (\$) 0

Fixtures (\$) 0

Homeowner's Exemption (\$) 0

Other Exemption (\$) 0

Net Assessed Value (\$) 8,995

LAND INFORMATION
Thomas Brothers Coordinates 297 D 1
Assessor's Land Use Code IGCDM7
Subdivision Name

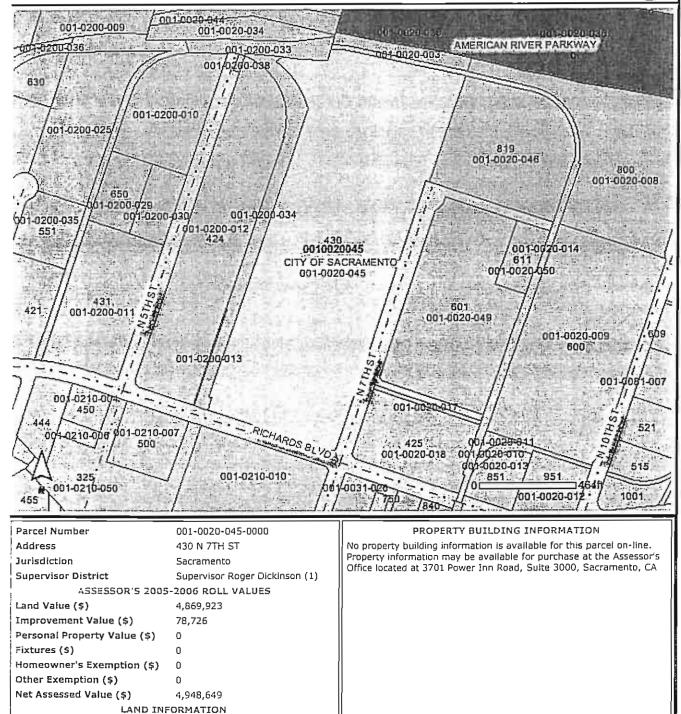
Lot Number
Approx. Parcel Area (sq ft) 2,375

### PROPERTY BUILDING INFORMATION

No property building information is available for this parcel on-line. Property information may be available for purchase at the Assessor's Office located at 3701 Power Inn Road, Suite 3000, Sacramento, CA

### County of Sacramento Assessor





Thomas Brothers Coordinates 297 D 1

IACDM7

1,291,118.40

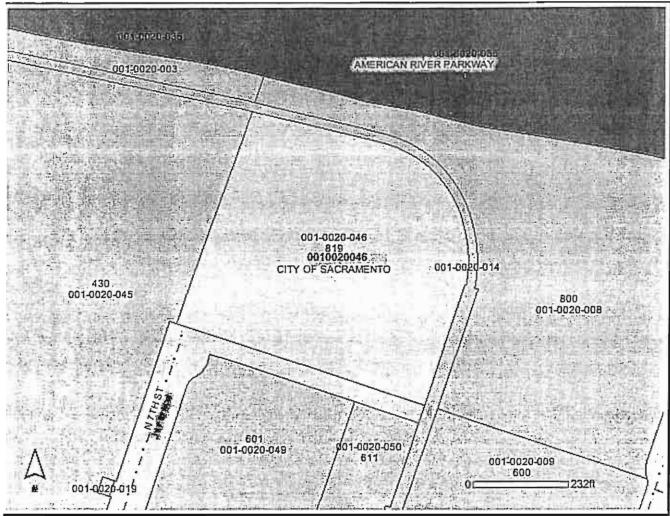
Assessor's Land Use Code

Approx. Parcel Area (sq ft)

Subdivision Name Lot Number

### County of Sacramento Assessor





Parcel Number Address

Jurisdiction

001-0020-046-0000 819 N 7TH ST

Sacramento

Supervisor District

Supervisor Roger Dickinson (1)

ASSESSOR'S 2005-2006 ROLL VALUES

Land Value (\$)

1,237,162

1,237,162

Improvement Value (\$)

Personal Property Value (\$) 0

Fixtures (\$) Homeowner's Exemption (\$)

Other Exemption (\$)

Net Assessed Value (\$)

LAND INFORMATION

Thomas Brothers Coordinates 297 D 1 IGCDM7

Assessor's Land Use Code Subdivision Name

Lot Number

Approx. Parcel Area (sq ft) 329,313.60

### PROPERTY BUILDING INFORMATION

No property building information is available for this parcel on-line. Property information may be available for purchase at the Assessor's Office located at 3701 Power Inn Road, Suite 3000, Sacramento, CA

MLEVEA

60,984

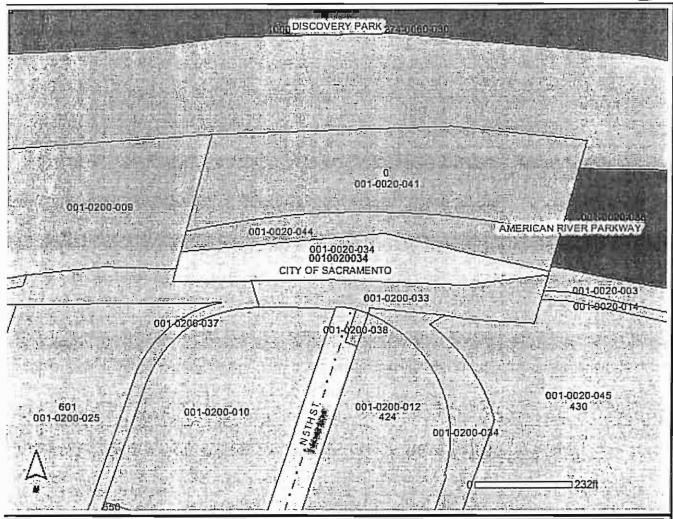
Assessor's Land Use Code

Approx. Parcel Area (sq ft)

Subdivision Name Lot Number

### **County of Sacramento Assessor**





 Parce! Number
 001-0020-034-0000

 Address
 0 N 5TH ST

 Jurisdiction
 Sacramento

 Supervisor District
 Supervisor Roger Dickinson (1)

supervisor bistrict Supervisor Roger Dickinson (1)

ASSESSOR'S 2005-2005 ROLL VALUES

Land Value (\$) 24,256

Improvement Value (\$) 0

Personal Property Value (\$) 0

Fixtures (\$) 0

Homeowner's Exemption (\$) 0

Other Exemption (\$) 0

Net Assessed Value (\$) 24,256

LAND INFORMATION

Thomas Brothers Coordinates 297 D 1
Assessor's Land Use Code MLEVEA

Subdivision Name

Lot Number

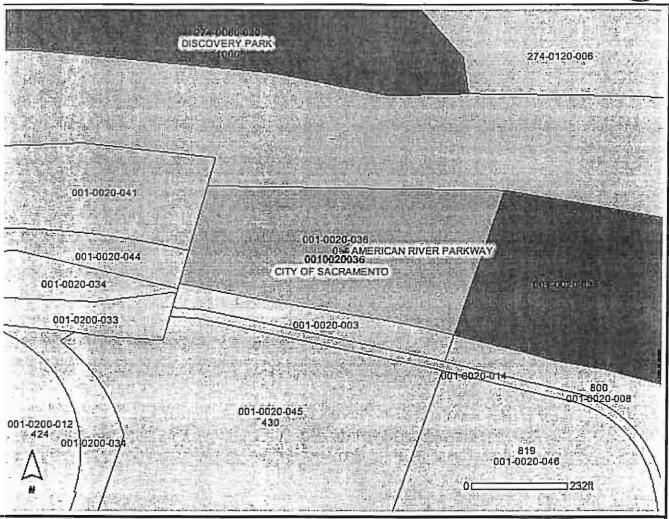
Approx. Parcel Area (sq ft) 59,677.20

### PROPERTY BUILDING INFORMATION

No property building information is available for this parcel on-line. Property information may be available for purchase at the Assessor's Office located at 3701 Power Inn Road, Suite 3000, Sacramento, CA

### **County of Sacramento Assessor**





Parcel Number 001-0020-036-0000 Address 0 N 7TH ST Jurisdiction Sacramento Supervisor District Supervisor Roger Dickinson (1) ASSESSOR'S 2005-2006 ROLL VALUES Land Value (\$) 81,593 Improvement Value (\$) Personal Property Value (\$) Fixtures (\$) Homeowner's Exemption (\$) Other Exemption (\$) Net Assessed Value (\$) 81,593 LAND INFORMATION Thomas Brothers Coordinates 297 D 1 Assessor's Land Use Code MLEVEA Subdivision Name Lot Number

196,891.20

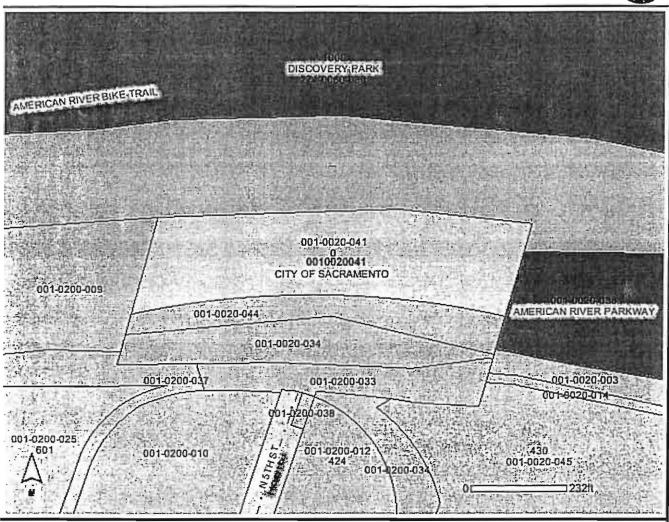
Approx. Parcel Area (sq ft)

### PROPERTY BUILDING INFORMATION

No property building information is available for this parcei on-line. Property information may be available for purchase at the Assessor's Office located at 3701 Power Inn Road, Suite 3000, Sacramento, CA

### **County of Sacramento Assessor**





 Parce! Number
 001-0020-041-0000

 Address
 0 N 5TH ST

 Jurisdiction
 Sacramento

 Supervisor District
 Supervisor Roger Dickinson (1)

 ASSESSOR'S 2005-2006 ROLL VALUES

Land Value (\$) 69,465
Improvement Value (\$) 0
Personal Property Value (\$) 0
Fixtures (\$) 0

Homeowner's Exemption (\$) 0
Other Exemption (\$) 0
Net Assessed Value (\$) 69,465
LAND INFORMATION

Thomas Brothers Coordinates 277 D 7
Assessor's Land Use Code MLEVEA

Subdivision Name Lot Number

Approx. Parcel Area (sq ft) 168,577.20

### PROPERTY BUILDING INFORMATION

No property building information is available for this parcel on-line. Property information may be available for purchase at the Assessor's Office located at 3701 Power Inn Road, Suite 3000, Sacramento, CA

7.1.3 Aerial Photographs



Date: 11/12/98

Aerial photographs for inquiry number: 310391.5

Property:

Sierra Quality Canners

426 N. 7th Street

Sacramento, CA 95814

# Environmental Data Resources, Inc. Aerial Photography Print Service

Environmental Data Resources, Inc.'s (EDR) Aerial Photography Print Service is a screening tool designed to assist professionals in evaluating potential liability on a target property resulting from past activities. ASTM E 1527-97, Section 7.3 on Historical Use Information, identifies the prior use requirements for a Phase I environmental site assessment. The ASTM standard requires a review of reasonably ascertainable standard historical sources. Reasonably ascertainable means information that is publicly available, obtainable from a source with reasonable time and cost constraints, and practically reviewable.

To meet the prior use requirements of ASTM E 1527-97, Section 7.3.2, the following standard historical sources may be used: aerial photographs, fire insurance maps, property tax files, land title records (although these cannot be the sole historical source consulted), topographic maps, city directories, building department records, or zoning/land use records. ASTM E 1527-97 requires "All obvious uses of the property shall be identified from the present, back to the property's obvious first developed use, or back to 1940, whichever is earlier. This task requires reviewing only as many of the standard historical sources as are necessary, and that are reasonably ascertainable and likely to be useful." (ASTM E 1527-97, Section 7.3.2, page 11.)

### Aerial Photographs

Aerial photographs are a valuable historical resource for documenting past land use and can be particularly helpful when other historical sources (such as city directories or fire insurance maps) are not reasonably ascertainable. The EDR Aerial Photograph Print Service includes a search of local aerial photograph collections flown by public and private agencies for the state of California. EDR's professional field-based researchers provide digitally reproduced historical aerial photographs at ten year intervals.

Please call Environmental Data Resources, Inc. Nationwide Customer Service at 1-800-352-0050 (8am-8pm ET) with questions or comments about your report.

Thank you for your business!

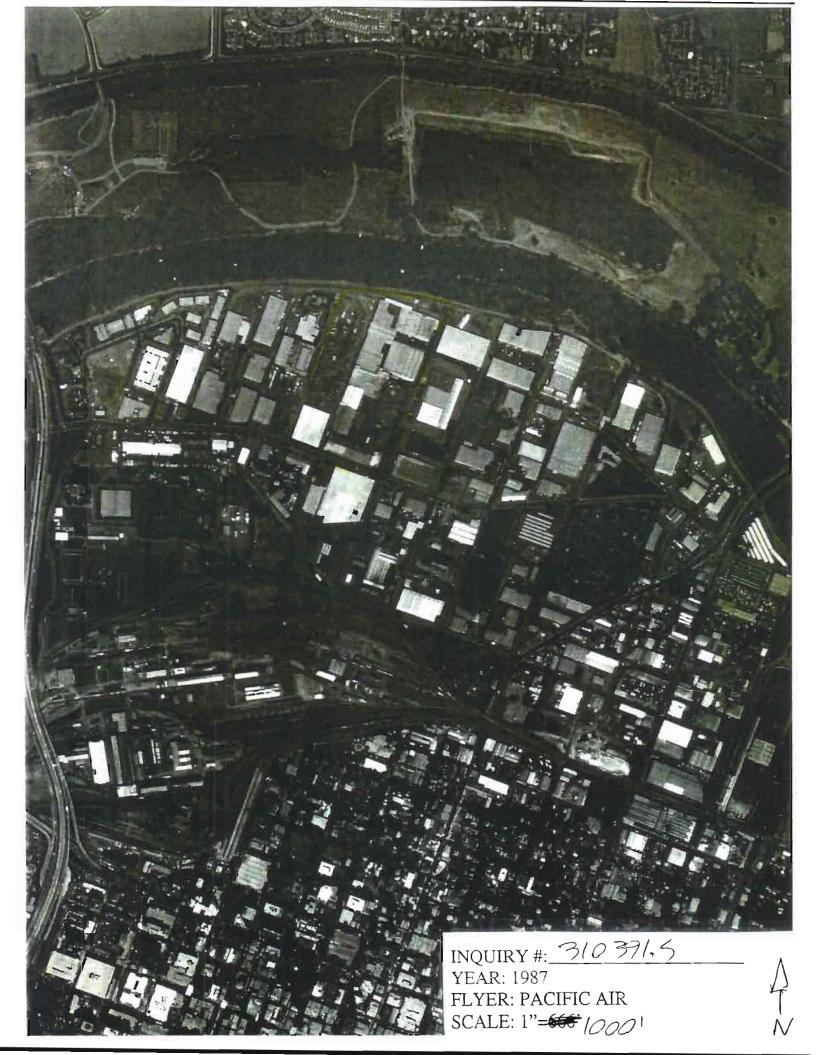
### Disclaimer

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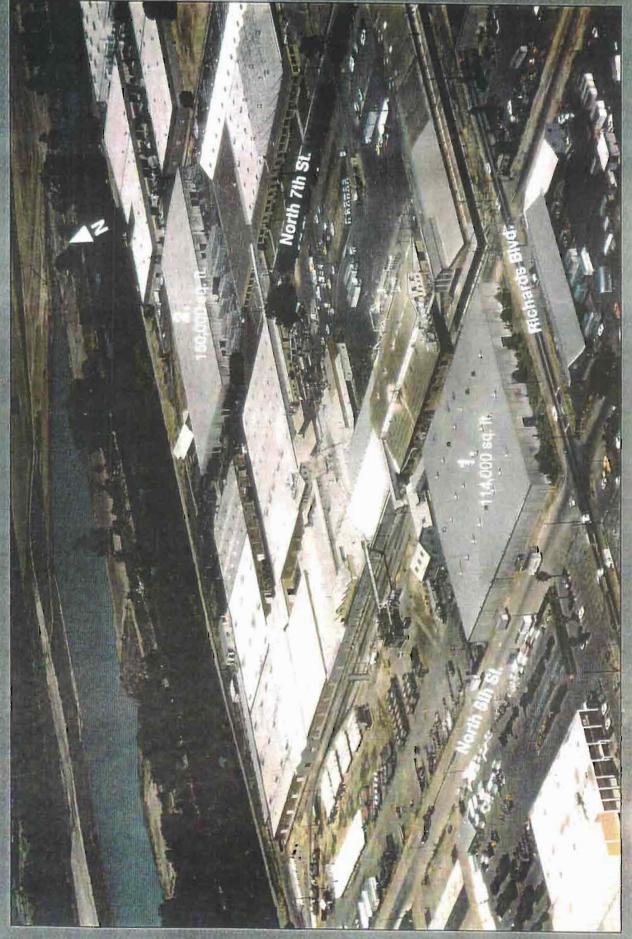






# Available: 150,000 & 114,000 sq. ft. Warehouse/Manufacturing Buildings

Sacramento, California



7.1.4 Fire Insurance Maps



"Linking Technology with Tradition"

# Sanborn<sup>™</sup> Map Report

Ship to:

John Lane Ground Zero Analysis, Inc. 1714 Main Street Escalon, CA 95320 Order Date: 11/09/98

Completion Date: 11/10/98

Inquiry #: 310391-4 (ABSTRACT)

P.O. #:

Site Name: Sierra Quality Canners

1952 - I map

Address: 426 N. 7th Street

City/State: Sacramento, CA 95814

Cross Streets: Richards Boulevard

1010141PEK

209-838-9888

Based on client-supplied information, fire insurance maps for the following years were identified:

1970 - 1 map 1968 - 1 map 1966 - 1 map 1965 - 1 map 1964 - 1 map 1960 - 1 map 1957 - 1 map

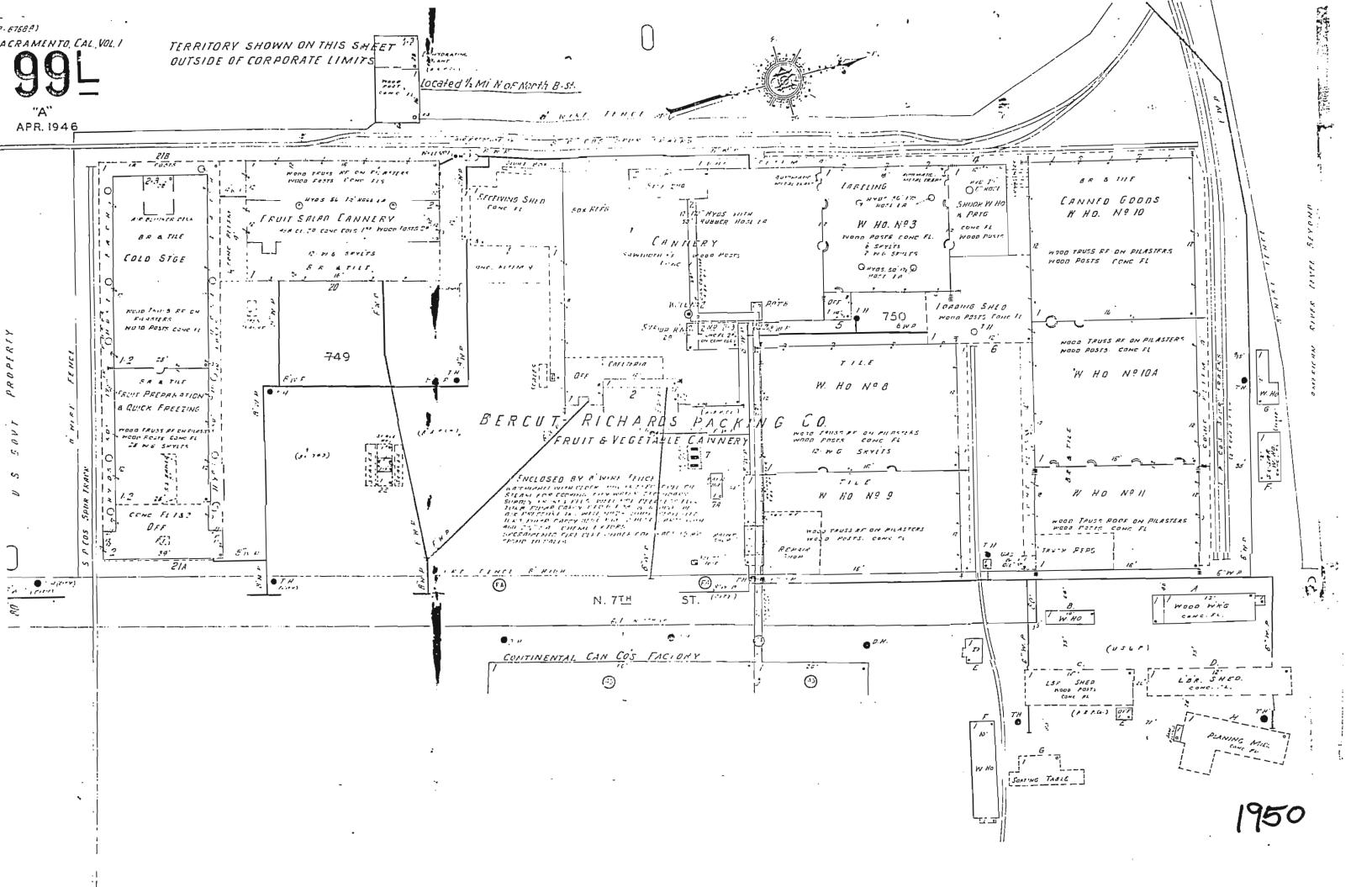
Total maps: 8

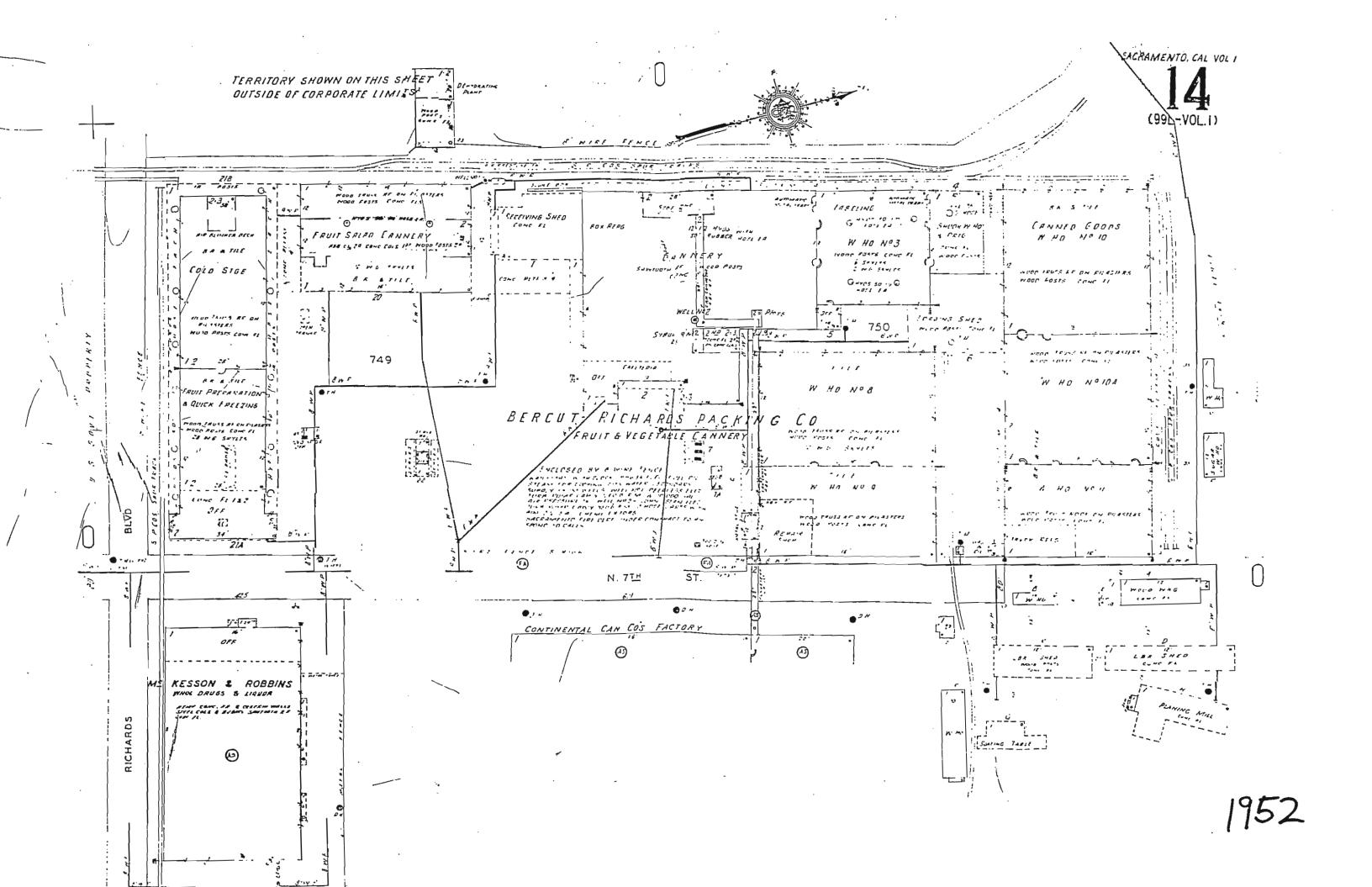
# Limited Permission to Photocopy

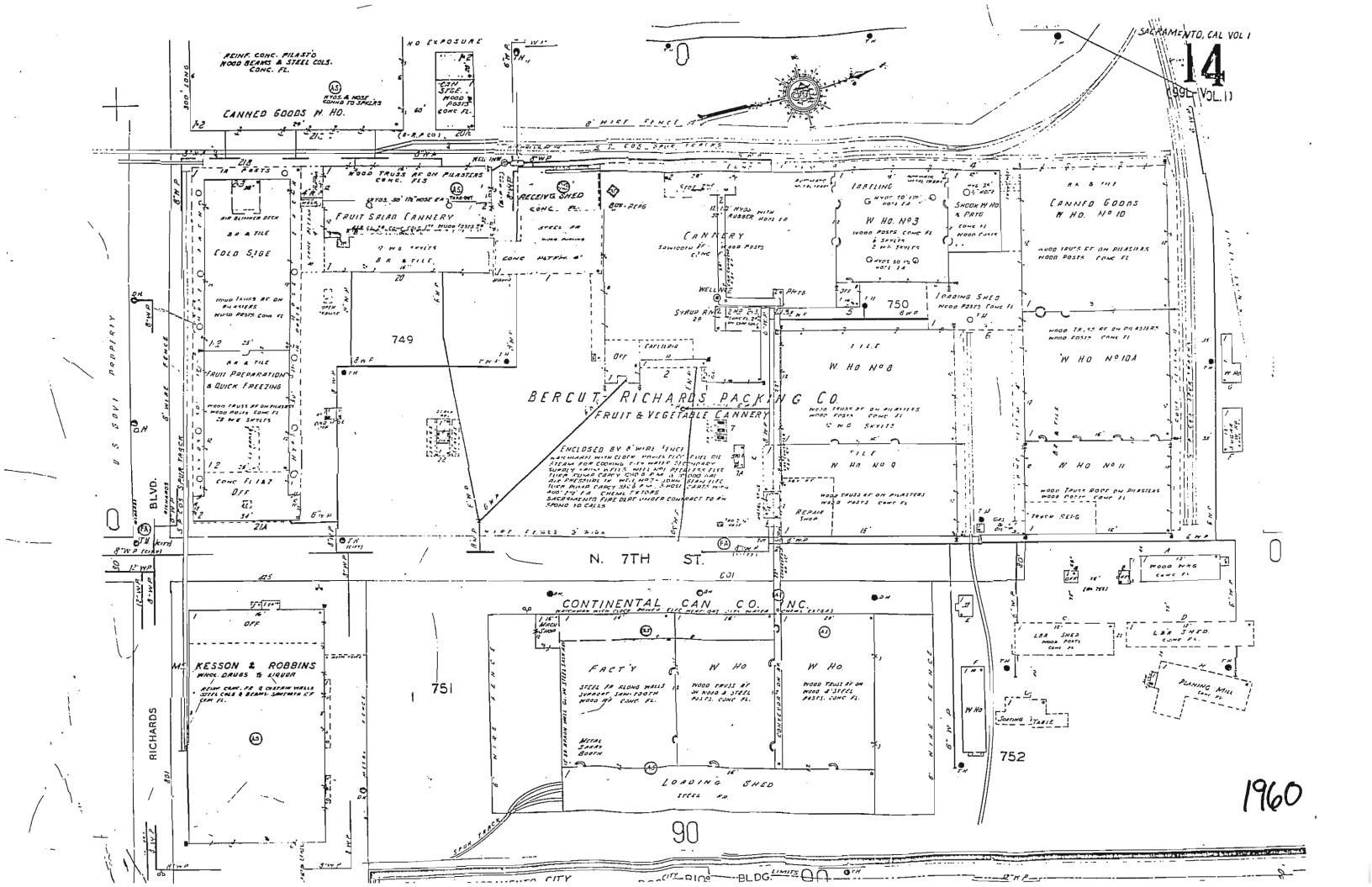
Ground Zero Analysis, Inc. (the client) is permitted to make up to THREE photocopies of this Sanborn Map transmittal and each fire insurance map accompanying this report solely for the limited use of its customer. No one other than the client is authorized to make copies. Upon request made directly to an EDR Account Executive, the client may be permitted to make a limited number of additional photocopies. This permission is conditioned upon compliance by the client, its customer and their agents with EDR's copyright policy; a copy of which is available upon request.

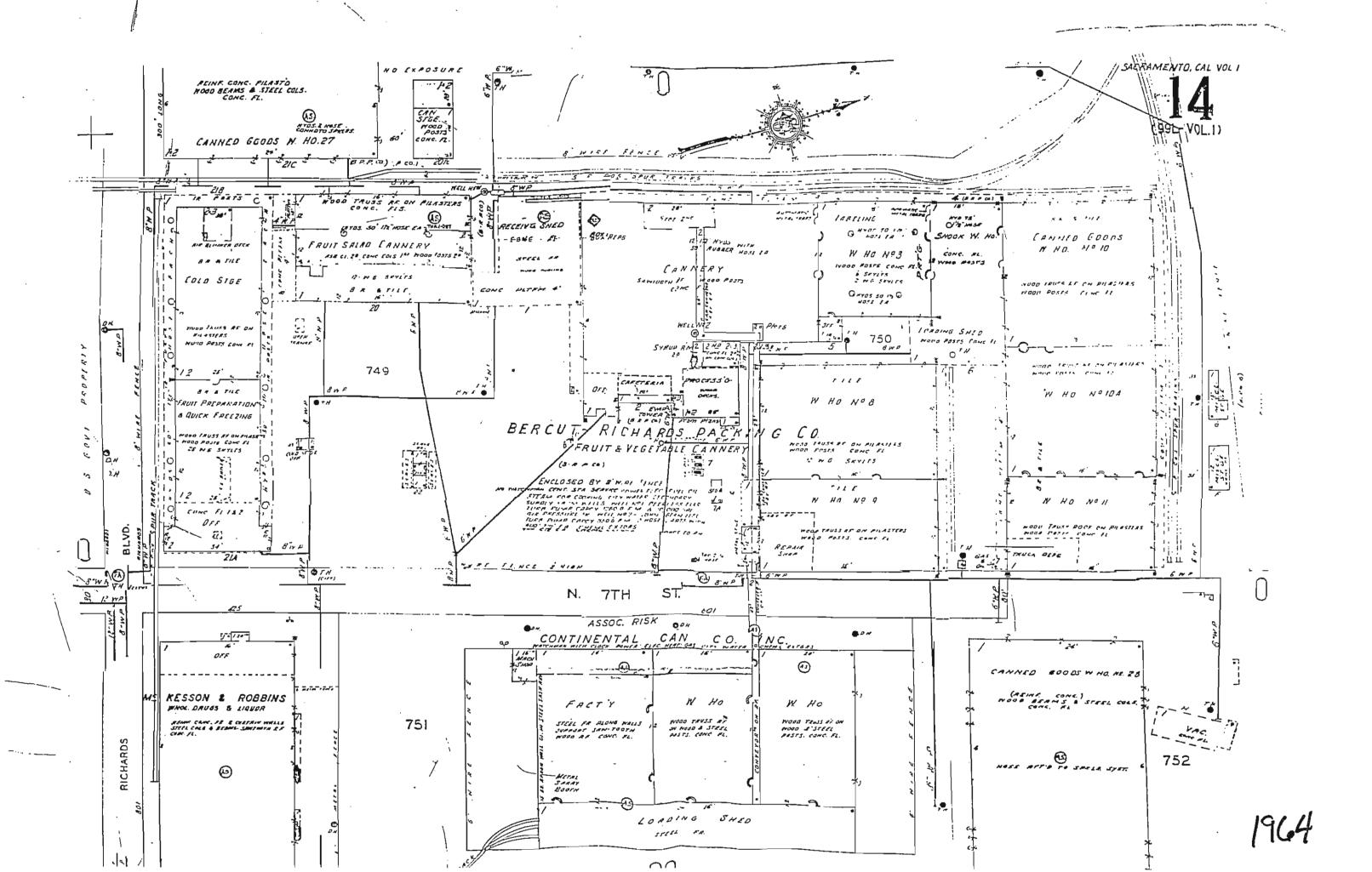
All maps provided pursuant to a Sanbom<sup>TM</sup> Map Report are currently reproducible copies of fire Insurance maps owned or licensed by Environmental Data Resources, Inc. NO WARRANTY, EXPRESSED OR IMPLIED, IS MADE WHATSOEVER. ENVIRONMENTAL DATA RESOURCES, INC. SPECIFICALLY DISCLAIMS THE MAKING OF ANY SUCH WARRANTIES, INCLUDING WITHOUT LIMITATION, WARRANTIES AS TO ACCURACY, VALIDITY, COMPLETENESS, SUITABILITY, CONDITION, QUALITY, MERCHANTABILITY, OR FITNESS FOR A PARTICULAR USE OR PURPOSE WITH RESPECT TO THE MAPS, THE INFORMATION CONTAINED THEREIN, OR THE RESULTS OF A SEARCH OR OTHERWISE. ALL RISK IS ASSUMED BY THE USER, Environmental Data Resources, Inc., assumes no liability to any party for any loss or damage whether arising out of errors or omissions, negligence, accident or any other cause. In no event shall Environmental Data Resources, Inc., its affiliates or agents, be liable to anyone for special, incidental, consequential or exemplary damages.

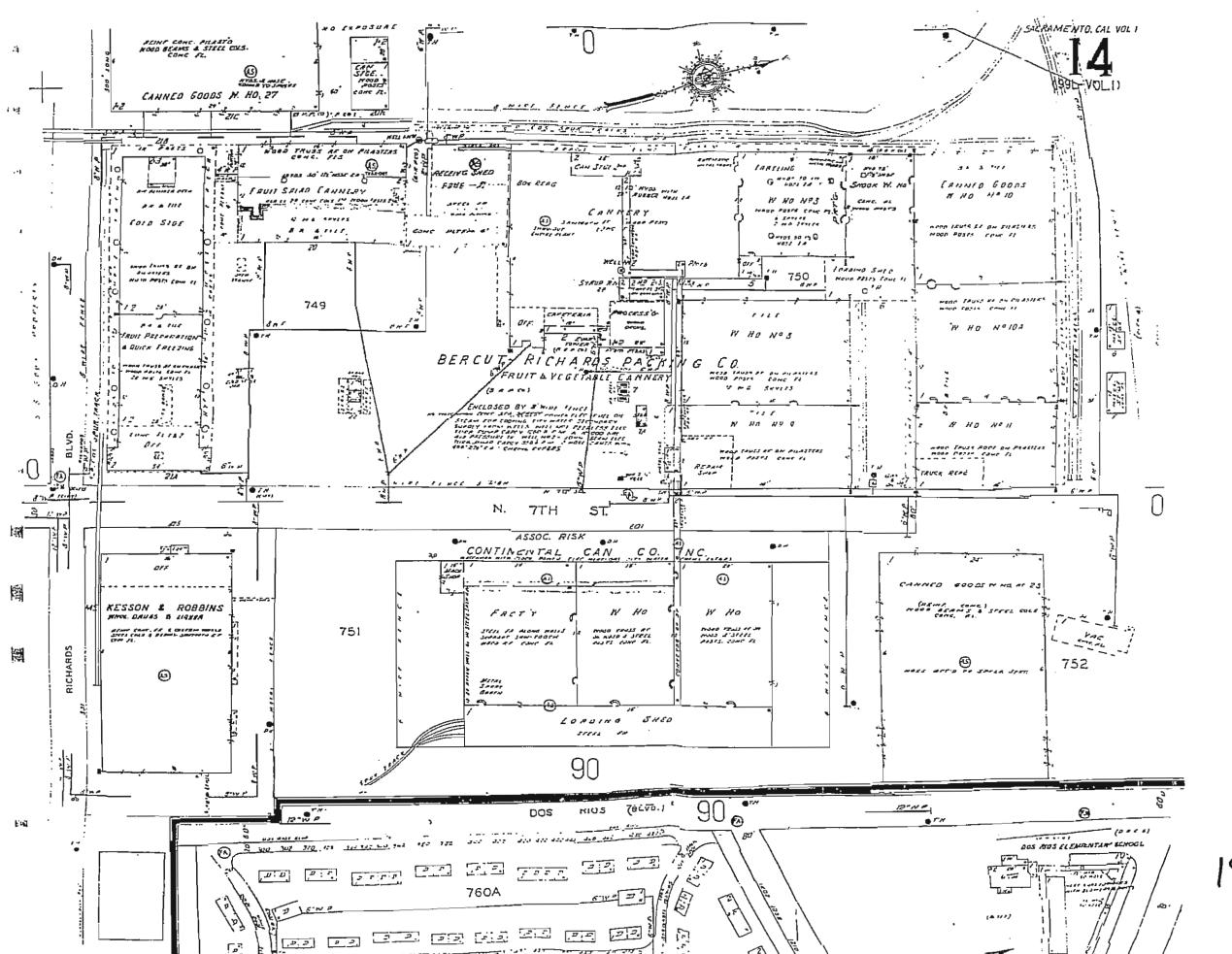
7.2 Governmental Agency Records Information











7.2.1 Site Closure Documentation



# COUNTY OF SACRAMENTO

# Environmental Management Department Mel Knight, Director

Bonnie Coleman, Manager
Administrative Services
Raymond E. Hackett, Manager
Environmental Health
Robert A. Knight, Manager
Hazardous Materials

December 22, 1997

Mr. Patrick Riddle Riddle-Isola 2291 W. March Lane, Suite 100D Stockton, CA 95207 RECEIVED JAN 22 1998 Ans'd\_\_\_\_

Dear Mr. Riddle:

SUBJECT: LOCAL OVERSIGHT PROGRAM SITE NO. A540

SIERRA QUALITY CANNERS

426 NORTH 7TH STREET, SACRAMENTO, CA 95814

This letter is being sent to provide you with the "No Further Action" letter, required by California's Underground Storage Tank Regulations, and the summary package used by the peer review group in approving the "No Further Action" status.

Please call me at (916) 386-6158 if you have any questions.

Sincerely,

Anita L. Benedict

Hazardous Materials Division

AB:co

Enclosures: NFA Letter

NFA Summary Package

c: James Brathovde - CVRWQCB (with enclosures)

Annabel Mackey - UST Cleanup Fund (with enclosures)

Greg Stahl - Groundzero (with enclosures)
Ralph Malloy - ASU (NFA Letter only)

W:\DATA\BENEDICT\A540.12



#### COUNTY OF SACRAMENTO

#### Environmental Management Department Mel Knight, Director

Bonnie Coleman, Manager
Administrative Services
Raymond E. Hackett, Manager
Environmental Health
Robert A. Knight, Manager
Hazardous Materials

December 22, 1997

Mr. Patrick Riddle Riddle-Isola 2291 W. March Lane, Suite 100D Stockton, CA 95207

Dear Mr. Riddle:

SUBJECT: LOCAL OVERSIGHT PROGRAM SITE NO. A540

SIERRA QUALITY CANNERS

426 NORTH 7TH STREET, SACRAMENTO, CA 95814

This letter confirms the completion of a site investigation and remedial action for the underground storage tanks located at the above-described location. Thank you for your cooperation throughout this investigation. Your willingness and promptness in responding to our inquiries concerning the underground storage tanks are greatly appreciated.

Based on information in the above-referenced file and with the provision that the information provided to this agency was accurate and representative of site conditions, no further action related to the underground tank release is required.

This notice is issued pursuant to a regulation contained in Section 2721(e) of the California Code of Regulations.

Please contact our office if you have any questions regarding this matter.

Sincerely

Mel Kniight, Director

**Environmental Management Department** 

MK:AB:co

W:\DATA\BENEDICT\A540.11

# NO FURTHER ACTION SUMMARY SIERRA QUALITY CANNERS 246 NORTH 7TH STREET, SACRAMENTO 42231/A540

JAN 2 2 1998 Ans'd.

LEAD STAFF: ALB

#### CHRONOLOGY

2-90

Four soil borings, SB-1 through SB-4, advanced near two UST locations, one with five 12,000 gallon fuel oil USTs, and the other with one 550 gallon gasoline UST and one 8,000 gallon gasoline UST. Soil and grab water samples collected. See Attachment 1 for UST and boring locations.

Sample results	(in	ppm	<b>:</b>
----------------	-----	-----	----------

TPHg TPHd BTEX	SB1-6' <10 <10 <.05	SB1-11' <10 <10 <.05	SB1-16' <10 10,000 <1	SB1-21' <10 3,900 <2
TPHg TPHd B T E X	SB2-6' 360,000 NA <20 32 120 250	SB2-11' NA 11,000 <.05 <.05 <.05 <.05 <.05	SB2-16' 49 NA <.05 <.05 <.05 <.05	SB2-21' 13 NA .41 <.05 .59
TPHg TPHd BTEX	SB3-6' <10 <10 NA	SB3-11' NA 2,000 NA	SB3-16' NA 1,400 NA	SB3-21' NA 2,700 NA
TPHg TPHd BTEX	SB4-6' NA 230 NA	SB4-11' NA 16 NA	SB4-16' <10 <10 NA	SB4-21' <10 <10 NA
TPHg TPHd B T E	SB1-W 1,654 NA .744 1.1 2.7 9.1	SB2-W NA 1,800 .15 <.05 <.05 <.05	SB3-W <1 3 <.002 <.002 <.002 <.002	SB4-W <1 2 <.0005 <.0005 .0052

- 4-20-90 All USTs removed. Strong odor and discoloration associated with the 550 gallon UST. The five 12,000 gallon and the 550 gallon USTs were constructed of single-wall fiberglass, which shattered when the overburden was removed.
- 4-25-90 Four soil samples taken at 14', at the bottom of the gasoline UST excavation. The exact sample locations are not known. No samples were collected from the fuel oil UST pit.

Sample results (in ppm):

	#1	#2	#3	#4
TPHg	3,500	4,100	43	26
TPHd	NA	NA	NA	NA
В	< 5	< 5	.21	.63
T	< 5	< 5	<.05	<.1
E	< 5	< 5	1.2	2.3
X	120	98	1.8	3.5
Total Pb	30	19	< 5	< 5

9-21-90 Four monitoring wells, MW-1 through MW-4, installed. Groundwater initially encountered at 20 feet bsg. See Attachment 1 for locations and Attachments 9 and 10 for historical groundwater monitoring data.

Soil sample results (in ppm):

	MW1-10'	MW1-20'	MW2-10'	MW2-20'
TPHg	< 1	8.2	< 1	< 1
TPHd	< 10	<10	13	<10
В	<.005	,55	<.005	<.005
T	<.005	.46	<.005	<.005
E	<.005	<.02	<.005	<.005
X	<.005	.074	<.005	<.005
	MW3-10'	MW3-20'	MW4-10'	MW4-20'
TPHg	<1	<1	< 1	<1
TPHd	160	< 10	26	< 10
BTEX	<.005	<.005	<.005	<.005

3-14-91 Three additional monitoring wells, MW-5 through MW-7 installed. See Attachment 1 for locations.

Soil sample results (in ppm):

	MW5-15'	MW6-15'	MW6-20'	MW7-15'
TPHg	<.2	<.2	<.2	<.2
TPHd	NA	NA	NA	NA
BTEX	<.001	<.001	<.001	<.001

6-91?? Installation of monitoring well MW-8 and vapor extraction well, EX-1. See Attachment 1 for locations.

Soil sample results (in ppm):

	MW-8-15'	EX-1-5'	EX-1-10'	EX-1-15'
TPHg	<1	16000	23	25
TPHd	NA	NA	NA	NA
В	<.005	56	.5	.25
Τ	<.005	680	.62	.18
E	<.005	290	.86	.62
X	<.005	1500	2.4	1.2
	EX-1-20'			
TPHg	35			
TPHd	NA			

TPHd NA
B .046
T .022
E .055
X .054

6-24-93 Additional soil samples collected from trenches and hand augered borings (1 through 7 in boxes) dug in the area of the former fuel oil USTs to confirm presence of contamination. See Attachment 1 for locations.

Soil sample results (in ppm):

TPHg TPHd BTEX	1-10' <.5 <10 <.005	1-17' <.5 <10 <.005	2-10' 510 10,000 <.05	2-11' <.5 160 <.005
TPHg TPHd B T E	3-10' 120 790 <.5 <.5 <.5 <.5	3-15' 1.5 47 <.005 <.005 <.005 <.005	4-7' 6.4 1300 <.005 <.005 .0066 <.005	4-10.5' 420 2000 <.5 <.5 <.5 <.5
TPHg TPHd B T E	5-10' 21 1100 <.005 .0056 <.005	5-13' 37 1000 <.05 <.05 <.05 <.05	5-15' 1.5 180 <.005 <.005 <.005 <.005	6-5' 5800 200 5.8 110 120 780

	6-10 <b>'</b>	6-16'	7-16'
TPHg	3400	1400	<.5
TPHd	19	25	<10
В	6.3	4.1	<.005
T	85	1.9	<.005
E	87	39	<.005
X	500	160	<.005

11-16-93 Hand augered borings (A through L) dug in attempt to define lateral extent of contamination. See Attachment 2 for boring locations.

Sample results (in ppm):

TPHg TPHd BTEX	A-5' <1 9.8 <.005	A-10' <1 <1 <.005	A-15' <1 <1 <.005
TPHg TPHd B T E X	B-5' < 1 < 1 < .005 < .005 < .005 < .005	B-10' <100 4300 <.2 .24 .29 1.5	B-15' <1 26 <.005 <.005 <.005
TPHg TPHd BTEX	C-5' <1 22 <.005	C-10' <1 49 <.005	C-15' <1 <1 <.005
TPHg TPHd B T E	D-5' 350 3800 <.1 1.4 .98 5.6	D-10' <100 9500 <.25 1.7 1.4 5.2	D-15' 160 11000 <.5 3.2 3.2 9.5
TPHg TPHd B T E	E-5' 36 44 <.02 <.02 .036	E-10' 59 10 .78 1 1.6 8.7	E-15' 1100 140 1.5 5.7 29 120

TPHg TPHd B T E X	F-5' 30 <1 .56 .24 1.6 2.2	F-10' 13 <1 .17 .091 .52 1.2	F-15' 31 <1 .68 .081 1.4 2.7
TPHg TPHd BTEX	G-5' <1 5.3 <.005	G-10' <1 <1 <.005	G-15' <1 280 <.005
TPHg TPHd BTEX	H-5' <1 <1 <.005	H-10' <1 <1 <.005	H-15' <1 <1 <.005
TPHg TPHd BTEX	I-5' < 1 6.5 < .005	I-10' <1 6.5 <.005	I-15' <1 <1 <.005
TPHg TPHd B T E X	J-5' 5.6 5.4 <.03 .034 .097 .24	J-10' 85 4200 .036 .34 .33	J-15' 3.5 38 <.03 .057 .085 .18
TPHg TPHd B T E X	K-5' <1 <1 <.005 <.005 <.005 <.005	K-10' 7.4 <1 .34 <.005 .41 .51	K-15' <1 <.005 <.005 <.005 <.005
TPHg TPHd B T E X	L-5' <1 <.005 <.005 <.005 <.005	L-10' <1 <1 <.005 <.005 <.005 <.005	L-15' <1 <1 .044 <.005 .006

See Attachments 3 through 8 for cross sections and extent of contamination in soil and water. Note that wells MW-1 through MW-8 are screened from 10 to 30 feet. EX-1 is screened from 5 to 35 feet.

- 5-26-94 Interim remediation plan using vapor extraction and bioventing approved.
- 6-17-94 Installation of three ambient air wells (AW-1, AW-2 and AW-3) to assist in the introduction of air to the subsurface. No soil samples submitted for analysis.
- 2-7-95 Start up of system. See Attachment 11 for calculated area of influence.
- 3-13-95 During visit to site to obtain quarterly groundwater samples it was discovered that the system had shut down due to unseasonably high groundwater levels. VES has not been operated since this time due to excessively high groundwater levels.
- 5-16-97 Five soil borings drilled to obtain lithologic and analytical information in the areas of the former gasoline and diesel USTs to determine if the "flushing" by the high groundwater levels have had any affect on the contamination levels in soil. Borings were placed as close as feasible to areas previously shown to have high levels of contamination. See Attachment 12 for boring locations, and Attachment 13 for a boring log.

S\_R\_1\_111

S-R-1-16'

S-R-1-20

Soil sample results (in ppm):

S\_R\_1\_6'

TPHg TPHd B T E X MTBE STLC Pb	<pre>S-B-1-6 &lt;1 NA &lt;.005 &lt;.005 &lt;.005 &lt;.005 &lt;.005 NA</pre>	S-B-1-11 <1 NA <.005 <.005 <.005 <.005 <.05 <1	S-B-1-16 14 NA .23 .048 .4 1.2 <.4 NA	3200 NA 3.1 50 69 280 <10
TPHg TPHd B T E X MTBE STLC Pb	S-B-1-24' 8000 NA 11 400 130 670 <20 NA	S-B-2-6' <1 NA <.005 <.005 <.005 <.005 <.005 NA	S-B-2-10' <1 NA <.005 <.005 <.005 <.005 <.05 NA	S-B-2-15' <1 NA <.005 <.005 <.005 <.005 <.005 NA
TPHg TPHd BTEX MTBE STLC Pb	S-B-2-20' <1 NA <.005 <20 NA	S-B-3-6' < 1 NA < .005 < .05 NA	S-B-3-11' <1 NA <.005 <.05 NA	S-B-3-17' <1 NA <.005 <.05 NA

	S-B-3-24'	S-B-4-6'	S-B-4-11'	S-B-4-17'
TPHg	< 1	< 1	< 1	< 1
TPHd	NA	NA	NA	NA
BTEX	<.005	<.005	<.005	<.005
MTBE	< 20	<.05	<.05	<.05
STLC Pb	NA	NA	NA	NA
	S-B-4-20'	S-B-5-7'	S-B-5-12'	S-B-6-17'
TPHg	S-B-4-20'	S-B-5-7' NA	S-B-5-12' NA	S-B-6-17' NA
TPHg TPHd				
_	<1	NA	NA	NA
TPHd	<1 NA	NA < 1	NA <1	NA <1

- 6-24-97 HHRA submitted. Pathways considered are volatilization from subsurface soil and groundwater into residential and commercial indoor air. The site failed a Tier 1 assessment for benzene in both soil and groundwater at a residence but passed at a commercial setting. See Attachment 14 for the HHRA data.
- 10-31-97 "No Further Action" status approved by HMD and CVRWQCB staff.
- 12-17-97 Destruction of all monitoring wells.

#### APPENDIX B CHECKLIST 426 NORTH 7TH STREET

- 1. Distance to production wells for municipal, domestic, agriculture, industry and other uses within 2,000 feet of the site;
  - A well search was conducted in June 1994. Fifteen wells were located within 2,000 feet of the site. See Attachments 15 and 16 for a listing of the wells and a map of the well locations.
- Site maps, to scale, of area impacted showing locations of former and existing tank systems, excavation contours and sample locations, borings and monitoring well elevation contours, gradients, and nearby surface waters, buildings streets, and subsurface utilities;
  - See various reports or attachments to this package.
- 3. Figures depicting lithology (cross section), treatment diagrams;
  - See March 10. 1994 "Addendum to Remedial Action Plan," or attachments to this package.
- 4. Stockpile soil remaining on-site or off-site disposal (quantity);
  - No stockpiles remaining. Soil returned to excavation after removal of USTs.

Monitoring wells remaining on-site, fate;

All wells properly destroyed.

6. Tabulated data of all groundwater elevations and depths to water;

See latest quarterly monitoring report or attachments to this report.

- 7. Tabulated results of all sampling and analyses:
  - Detection limits for confirmation sampling
  - Lead analyses

See March 10. 1994 "Addendum to remedial Action Plan" and the June 24, 1997 "Additional Subsurface Investigation Report," or attachments to this report

Most detection limits, with exception of those elevated by high TPH values and STLC lead, are acceptable.

STLC lead reported at <1 ppm in soil. Groundwater from EX-1, the most highly contaminated well, had <100 ug/L organic lead in March 1993.

- 8. Concentration contours of contaminants found and those remaining in soil and groundwater, both on- and off-site:
  - Lateral extent of soil contamination
  - Vertical extent of soil contamination
  - Lateral extent of groundwater contamination
  - Vertical extent of groundwater contamination

See the March 10. 1994 "Addendum to Remedial Action Plan" and the latest quarterly monitoring report, or attachments to this report.

 Zone of influence calculated and assumptions used for the subsurface remediation system an the zone of capture attained for the soil and groundwater remediaton system;

See the March 10. 1994 "Addendum to Remedial Action Plan."

10. Reports/information

- URF: filed 4/26/91

- QMRs: being submitted

- PAR: see RAP - RAP: 3/10/94

- Other

- Well and boring logs: in various reports

11. Best Available Technology (BAT) used or an explanation for not using BAT;

BAT was initially thought to be vapor extraction. However, dramatic increases in groundwater levels made the system ineffective. Additional investigation indicates that the rapid increase and decrease in water levels over time has remediated/flushed much of the contamination.

12. Reasons why "background" was/is unattainable using BAT;

Consultant calculates that MCLs will be achieved through anaerobic biodegradation in approximately in approximately 12 to 13 years. See Attachment 14.

13. Mass balance calculation of the substance treated versus that remaining;

Mass balance calculations indicate the estimated total mass of gasoline hydrocarbons in the vadose soil is 1.4 kg. Mass remaining in the saturated soils is approximately 450 kg and in groundwater approximately 5 kg. See Attachment 14 for calculations.

14. Assumptions, parameters, calculations and model used in risk assessments, and fate and transport modeling;

See Attachment 14 for risk assessment data.

15. Rationale why conditions remaining at the site will not adversely impact water quality, health or other beneficial uses;

Site passes HHRA for commercial property. Contaminated groundwater has been monitored for seven years. No migration of the plume has been seen and the levels in the contaminated wells are decreasing. Consultant estimates groundwater contamination will reach MCL for benzene (! ppb) in 12 to 13 years, assuming anaerobic conditions.

#### LOW RISK GROUNDWATER CRITERIA

1. The leak has been stopped and sources, including free product, have been removed or remediated.

USTs removed. No free product ever detected at site.

2. The site has been adequately characterized.

Both soil and groundwater have been defined to the zero-line.

3. The dissolved hydrocarbon plume is not migrating and chemical concentrations in groundwater do not increase with time.

Contamination in groundwater appears to be non-migrating and decreasing in contaminant levels. Soil contamination appears to have been significantly reduced due to "flushing" by groundwater fluctuations of the last few years.

4. No water wells, deeper drinking water aquifers, surface water or other sensitive receptors are likely to be impacted.

A well search was conducted in June 1994. Fifteen wells were listed within 2,000 feet of the site. See Attachments 15 and 16 for a listing of the wells and a map of the well locations.

5. The site presents no significant risk to human health or safety.

Pathways considered are volatilization from subsurface soil and groundwater into residential and commercial indoor air. The site failed a Tier 1 assessment for benzene in both soil and groundwater at a residence but passed at a commercial setting. See Attachment 14 for the HHRA data.

#### Case Closure Summary Leaking Underground Fuel Storage Tank Program

I. AGENCY INFORMATION	DATE: December 18, 1997
Agency Name: Sacramento County Environmental Mgmnt.	Address: 8475 Jackson Road, Suite 230
City/State/Zip: Sacramento, CA 95826	Phone: (916) 386-6160
Responsible staff person: Anita Benedict	Title:Hazardous Materials Specialist III
I. Case Information	
Site Facility Name: Sierra Quality Canners	
Site Facility Address: 426 N 7th Street sacramento, CA 9581	14

Local Case No: 4302

Stockton, CA 95207

2291 W. March Lane, #100D

removed

SWEEPS No:

Address

Lop Case No: A540

Phone Numbers

209-952-6262

4-20-90

Tank No.	Size in Gallons	Contents	Closed in-Place/Removed?	Date
1-5	10.000	fuel oil	removed	4-20-90
6	550	gasoline	removed	4-20-90

gasoline

#### III. Release and Site Characterization Information

RB LUSTIS Case No:

Responsible Parties

Mr. Patrick Riddle

Riddle-Isola

URF file date: 5-23-91

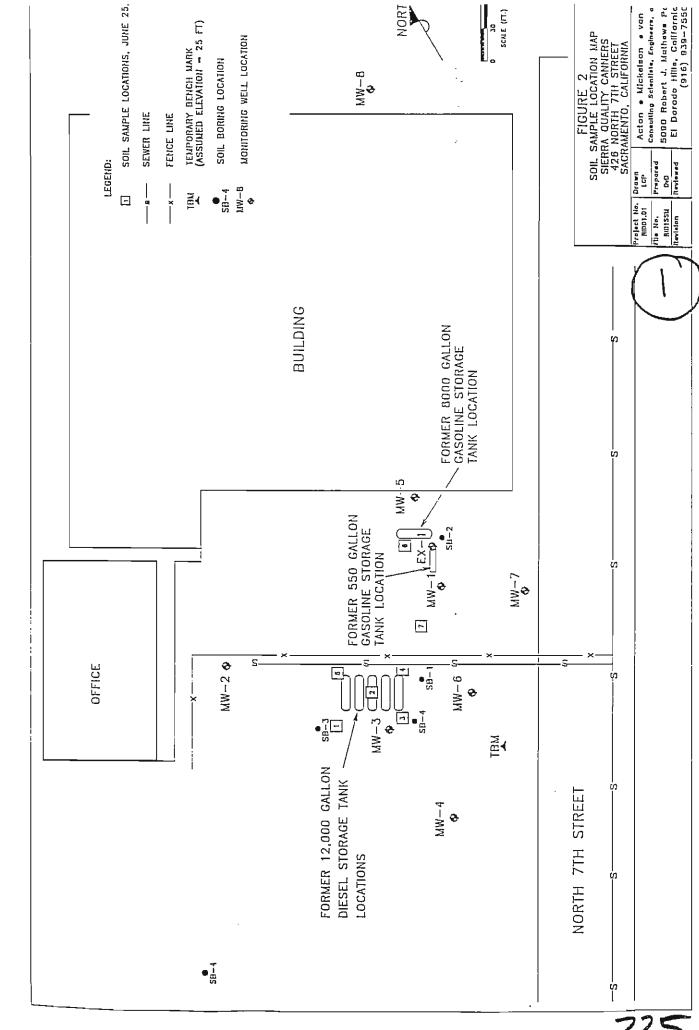
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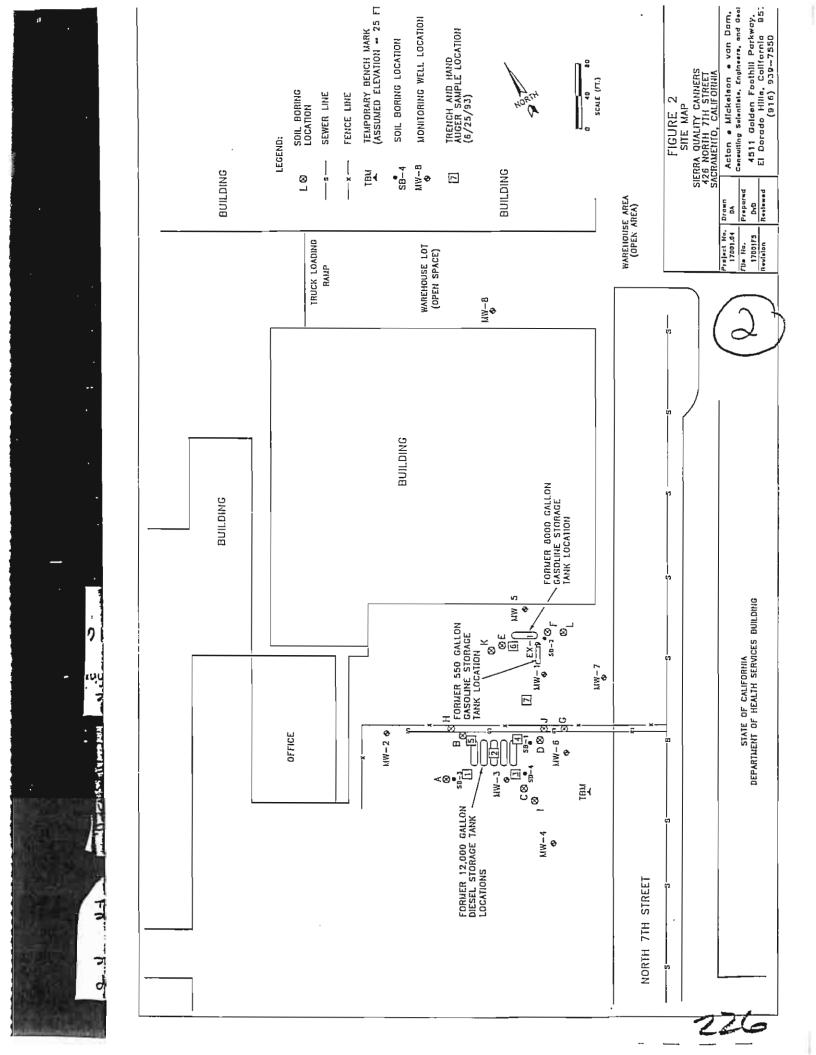
Cause and type o	f release: ruptured USTs			
Site characterizati	on_complete? (X)YES ()NO		Date approved by overs	sight agency: 10-31-97
Monitoring Wells	Installed? (X) YES () NO		Number: 9	Proper screen interval? (X) YES ()NO
Highest GW depth	below ground surface: 3.9'		Lowest Depth: 20.9'	Flow Direction: S-SW
Most Senistive Cu	urrent Use: Municipal			
Are drinking wate	r wells affected? () YES (X) NO		Aquifer name:	
ls surface water a	ffected? () YES (X) NO	Nearest/affected SW	name: American River	
Off-site beneficial	use impacts (addresses/locations):	None		
Report(s) on file?	(X) YES () NO		Where is report(s) filed	? SCEMD
Treatment and Dis	oosal of Affected Material			
Materials	Amount (Include Units)	Action (Treatment or D	isposal w/Destination)	Date
Tank	see above listing	removed		4-20-90
Piping	unknown			
Free Product	none			
Soil	none			
Groundwater	purge water	disposed of at Ramos	Environmental, West Sac.	9-29-97
Barrels	none			

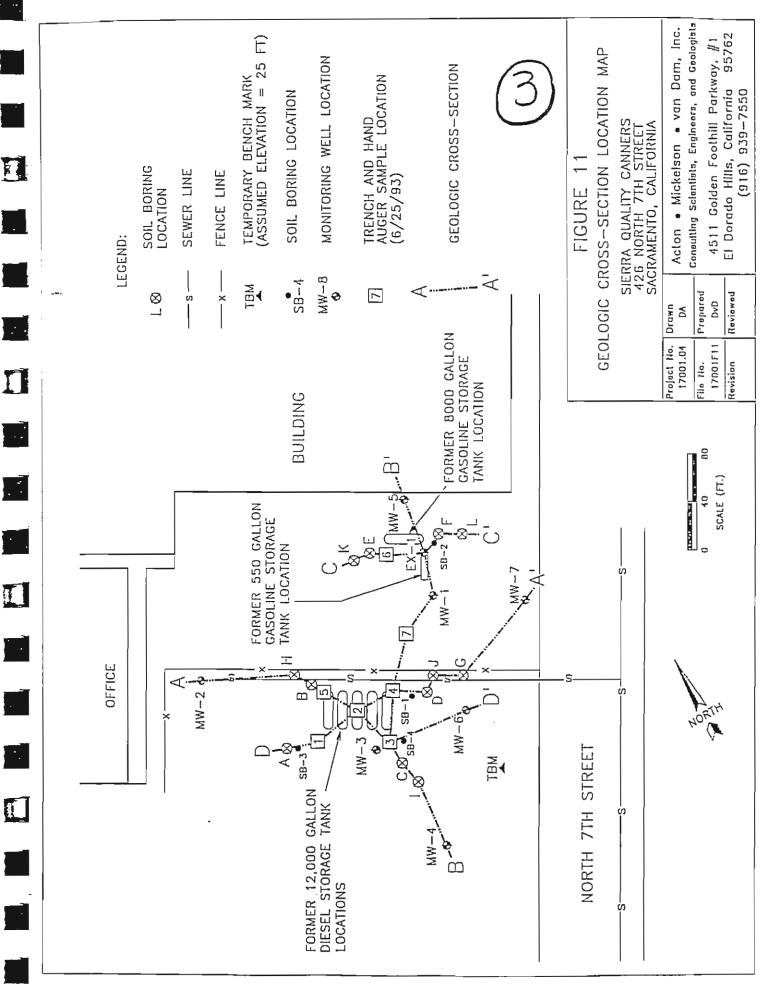
EXHIBIT N PAGE 1 OF 2

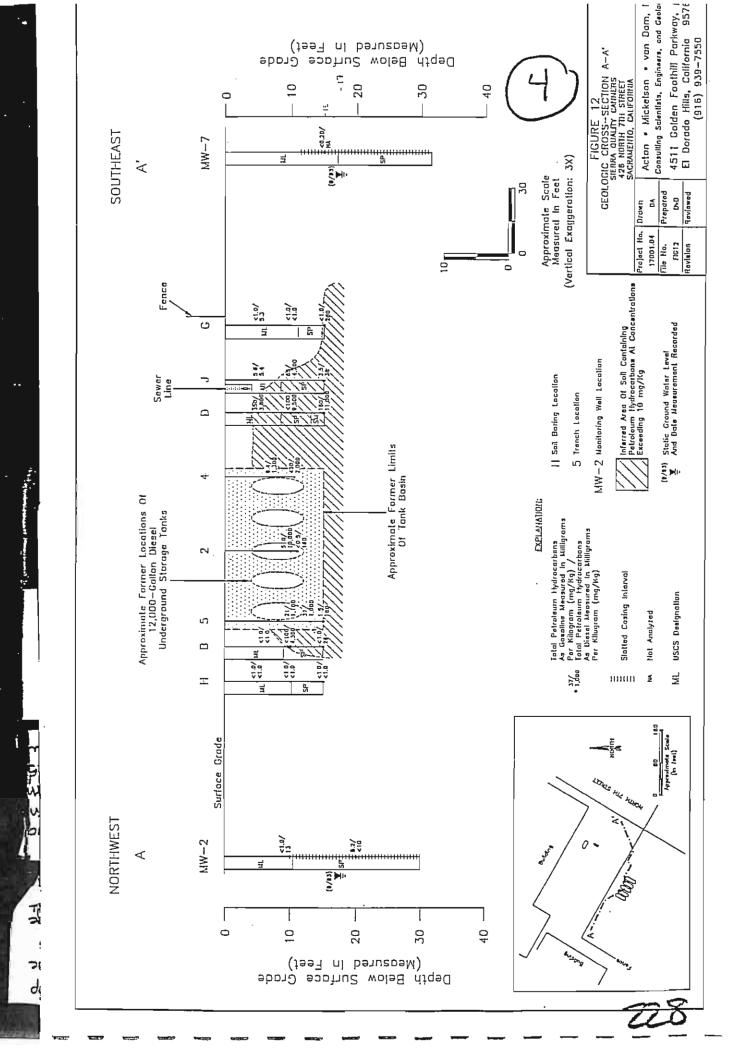
## Case Closure Summary Leaking Underground Fuel Storage Tank Program

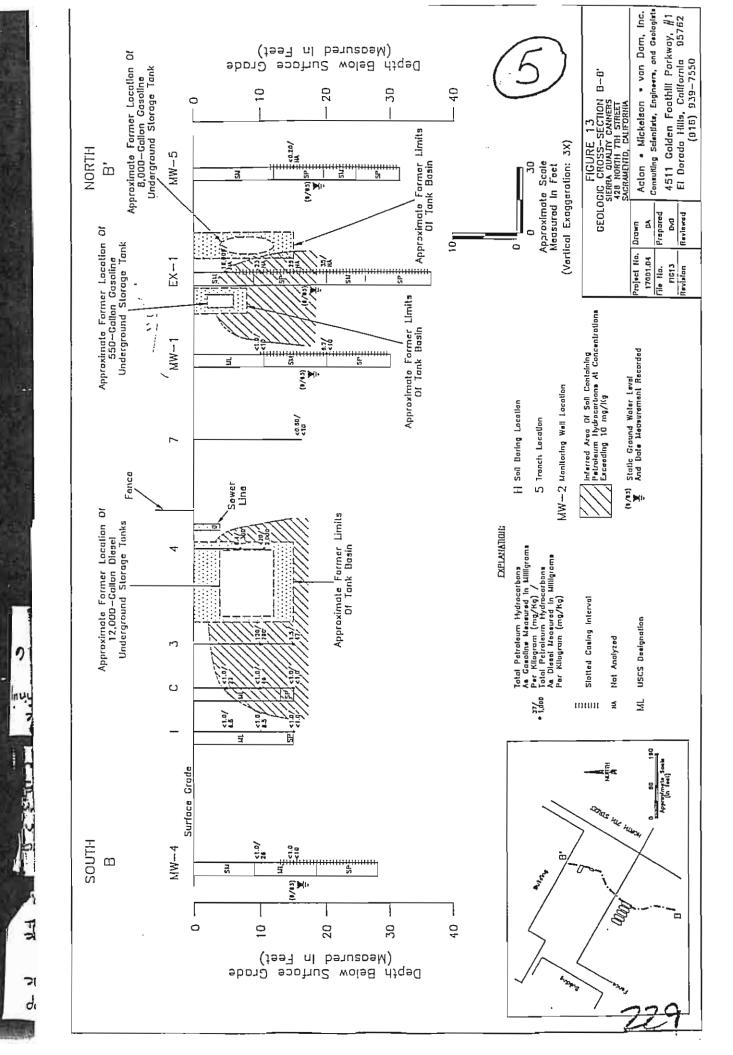
Contaminant	Soil (ppm)		Water (pp	m)	Contaminant	Soil (ppr	n)	Water (pp:	m)
	Before	After	Before	After		Before	After	Before	After
TPH (Gas)	360000	8000	16	1.1	Xylene	1500	670	4.5	.014
TPH_(Diesel)	11000	11000*	.19	<.05	Ethylbenzene	290	130	.95	.034
Benzene	56	11	1.4	.064	Oil & Grease				
Toluene	680	400	1.6	.0015	Lead	<1	<1	<.1	<.1
Oxvgenates	NA	NA	<.005	<.005	Other				
	eleted corrective action protect	e action protect public health fi ts: None	potential bene or current land	eficial uses per use? (X) YE				) NO	-
Monitoring well List Enforceme	nt Actions Take	en: Placement			No. Decommissione	ed: 9	No. R	Retained: 0	
V. Local Ag	gency Repre		)ata			Tit!	e; Director	SCEMD	
Signature:	Notificatio	)				Das	te: 12-18-9	7	
Date Submitte	ed to RB:10-29	9-97	R	B Response:C	Concurrance with NF	Α			
RWQCB Staff			Т	itle: Associate	Engineering Geolog	jist	Da	 ite:10-31-97	
\$ //L A	nal Comme	nts, Data,	etc.						





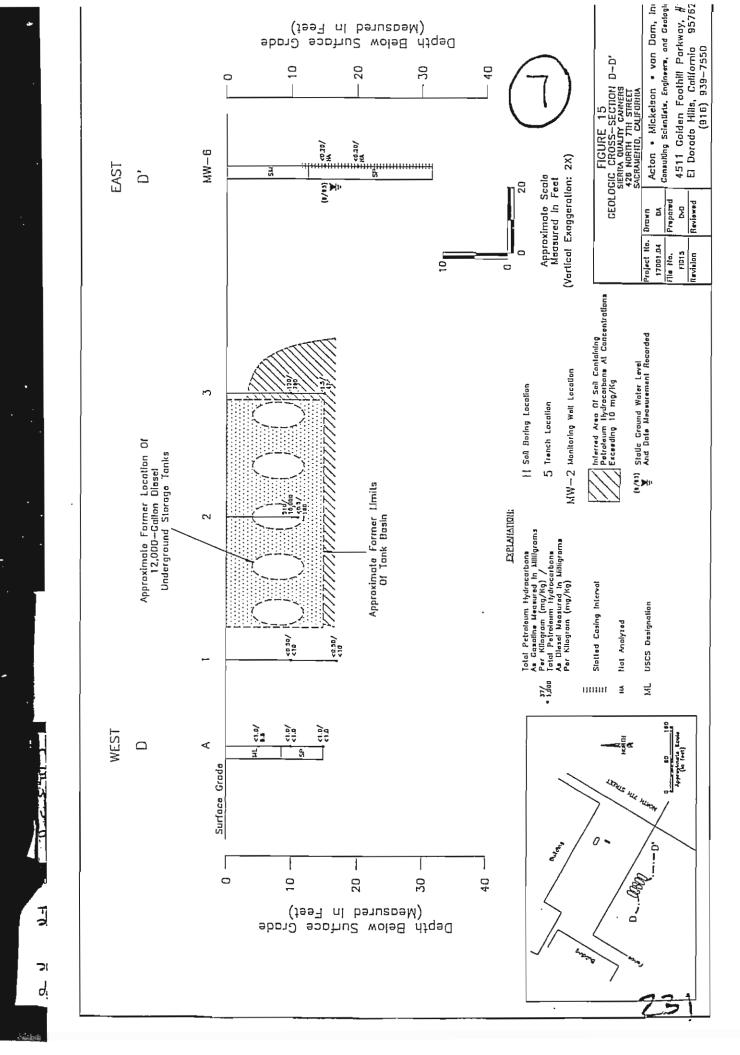


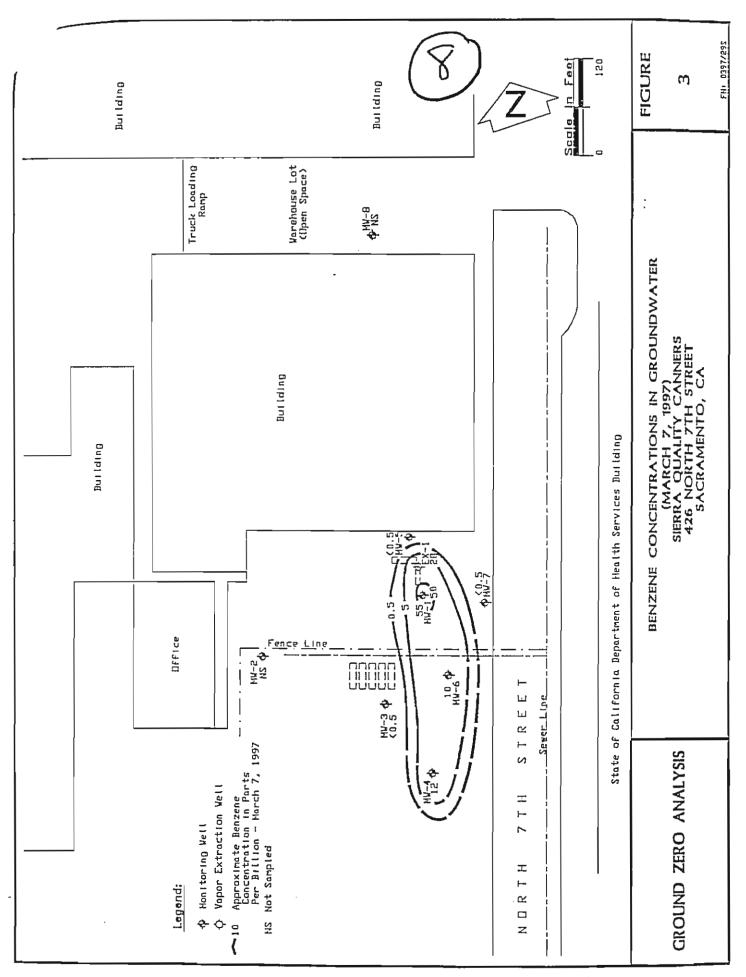




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N	10	NH	TO	H	NG	W	ELL	1
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	<u> </u>							
Date	Depth to GW	В	т	E	×	TPHg	TPHd	MTBE 8260
9/28/90	19.6	2800	110	460	150	8400	400	
3/19/91	19.3	4100	18	380	55	6400		
6/12/91	20.6	4000	32	410	68	6200		
10/24/91	20.9	9.6	<.3	<.3	<.3	2100		
3/24/92	17.4	3100	24	620	64	8700		
6/30/92	20.4	1300	5.8	44	15	3300		
10/6/92	21.1	1800	20	160	81	5000		
2/4/93	13.6	1300	9.9	130	32	3600	80	
5/21/93	14.9	22	2.1	2.9	1.7	140	60	
9/3/93	17.9	740	20	36	44	4800	< 50	
12/20/93	18.6	1600	27	160	140	5200	< 50	
3/28/94	19.2	260	<10	19	510	6500	< 50	
6/16/94	20.6	1000	< 25	52	46	3800	< 50	
9/29/94	20.3	1400	91	460	170	6200	1100	
12/22/94	19.8	1300	30	220	160	4400	550	
3/27/95	3.9	780	490	400	820	8200	< 50	
6/14/95	10.7	240	55	210	410	6300	< 50	
9/14/95	16.5	76	6.9	36	78	1400	<50	<u></u> ·
12/28/95	16.7	120	5.1	18	21	1800	< 50	
3/27/96	8.7	14	3.9	4.5	8.2	300	< 50	<5_
5/23/96	9.8	62	29	27	49	1100	< 50	
10/1/96	18.4	38	0.7	2.1	2.5	160	< 50	
12/20/96	11.5	120	3	24	25	1600	<50	
3/7/97	10.6	55	66	42	100	1900	<50	
6/4/97	6.3	22	<.5	2.8	5.9	300	< 50	
9/25/97	19.3	48	٧.5	۷.5	6.9	000	< 50	

MON	ITORI	NG	WEL	L 2
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Date	Depth to GW	В	Т	E	×	TPHg	TPHd	MTBE 8260
9/28/90	20.2	<.5_	0.6	<.5	0.9	<50	<300	
3/19/91	19.0	<.5	<.5	<.5_	0.7	<50	<50	
6/12/91	20.4	<.5	<.5	<.5	<.5_	< 50		
10/24/91	20.6	<.3	0.31	<.3_	1.3	< 50_		
3/24/92	17.1	<.5	<.5	<.5	<.5_	< 50		
6/30/92	20.1	<.5	<.5	<.5	<.5	< 50		
10/6/92	20.8	1.3	0.8	1.1	1.0	< 50		
2/4/93	13.3	<.5	<.5	<.5	<.5	< 50_	< 50	
5/21/93_	14.6	<.5	<.5	<.5	<.5	< 50	< 50	
9/3/93	17.6	<.5	<.5	<.5	<.5_	< 50	< 50	
12/20/93	18.3	<.5	<.5	<.5_	<.5_	< 50	< 50	
3/28/94	18.9	<.5	<.5	<.5	<.5_	< 50	< 50	
6/16/94	20.3	<.5	<.5	<.5	1.0	< 50_	< 50	
9/29/94	20.1	<.5	<.5_	<.5	<.5	< 50_	< 50	
12/22/94	19.5	<.5	<.5	<.5	<.5	< 50	< 50	
3/27/95	3.6	<.5	<.5	<.5	<.5	< 50	< 50	
6/14/95	10.4	<.5	<.5	<.5	<.5	< 50_	<50	
9/14/95	16.2	<.5	<.5	<.5	<.5	< 50	< 50	
12/28/95	16.4	<.5	<.5	<.5	<.5	< 50	<50	
3/27/96	8.4							
5/23/96	9.5			~~				
10/1/96	18.1	<.5	<.5	<.5	<.5	<50		
12/20/96	11.2			40 74				
3/7/97	10.3					E9 140		
6/4/97	17.9		***					
9/25/97	19.0	۷.5	۷.5	۷.5	<.5	< 50		

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Date	Depth to GW	В	T	E	X	TPHg	TPHd	MTBE 8260
9/28/90	20.5	<.5	0.7	<.5	0.9	<50	<300	
3/19/91	18.3	<.5	<.5	<.5	0.7	<50	<50	
6/12/91	19.7	<.5	<.5	<.5	<.5	<50		
10/24/91	20.0	0.37	0.44	0.36	1.3	< 50		
3/24/92	16.5	<.5	<.5	<.5	4.3	<50		
6/30/92	19.5	<.5_	<.5	<.5	2.4	< 50		
10/6/92	20.2	<.5	<.5	<.5	2.4	< 50		
2/4/93	12.7	<.5	<.5	<.5	0.7	< 50	< 50	
5/21/93	14.0	<.5	<.5	<.5	1.1	< 50	4100	
9/3/93	16.9	<.5	<.5_	<.5	4.2	170	110	
12/20/93	17.7	<.5	<.5	<.5	1.0	< 50	< 50	
3/28/94	18.2	<.5	<.5	<.5	3.6	<50	< 50	
6/16/94	19.6	<.5	<.5	<.5	3.6	64	< 50	
9/29/94	19.5	<.5	<.5	0.5	1.9	75	150	
12/22/94	18.8	<.5	<.5	<.5	1.3	60	< 50	
3/27/95	3.2	<.5	<.5	<.5	<.5	< 50	< 50	
6/14/95	9.7	<.5	<.5	<.5	<.5_	<50	< 50	
9/14/95	15.5	<.5	<.5	<.5	<.5	< 50	< 50	
12/28/95	15.8	<.5	<.5	<.5	<.5	<50	< 50	
3/27/96	7.7	<.5	<.5	<.5	<.5	< 50	<50	< 5
5/23/96	9.1	<.5	<.5	<.5	<.5	< 50	< 50	
10/1/96	17.4	<.5	<.5	<.5	<.5	<50	< 50	
12/20/96	10.9	<.5	<.5	<.5	<.5	< 50	<50	
3/7/97	9.5	<.5	<.5	<.5	<.5	< 50	<50	
6/4/97	17.2	<.5	<.5	<.5	<.5	< 50	< 50	
9/25/97	18.3	<.5	۷.5	۲.5	4.5	<50	< 5 <i>ō</i>	

MONITORING WEL	L 4
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Date	Depth to GW	В	Т	E	×	TPHg	TPHd	MTBE 8260
9/28/90	18.9	<.5_	<.5	<.5	<.5	< 50	<300	
3/19/91	17.7	<.5	<.5	<.5	<.5	< 50	<50	
6/12/91	19.0	12	63	6.7	54	230		
10/24/91	19.3	<.3	<.3	<.3	<.3_	<30		
3/24/92	15.9	<.5_	<.5	<.5	<.5	<50		
6/30/92	18.8	<.5	<.5	<.5	<.5_	< 50		
10/6/92	19.5	<.5	<.5	<.5	<.5	< 50		
2/4/93	12.3	<.5	<.5	<.5	<.5_	< 50	< 50	
5/21/93	13.2	< <u>.</u> 5	<.5	<.5	<.5_	<50	70	
9/3/93	16.3	<.5	<.5	< .5	<.5_	< 50	< 50	
12/20/93	17.1	<.5	<.5	<.5	<.5	< 50	< 50	
3/28/94	17.5	_<.5_	<.5	<.5_	<.5	< 50	< 50	
6/16/94	18.9	<.5	<.5	<.5_	<.5	< 50	<50	
9/29/94	18.8	<.5	<.5	<.5	<.5	< 50	< 50	
12/22/94	18.2	<.5	<.5	<.5	<.5	< 50	< 50	
3/27/95	2.8	<.5	<.5	<.5	<.5	< 50	< 50	
6/14/95	8.9	<.5	<.5	<.5	<.5	< 50	< 50	
9/14/95	14.9	<.5	<.5	<.5	<.5	< 50	<50	
12/28/95	15.2	<.5	<.5	<.5	<.5	<50	<50	
3/27/96	7.0	<.5	<.5	<.5	<.5	< 50	<b></b>	<5_
5/23/96	8.7	<.5	<.5	<.5	<.5	<50		
10/1/96	16.7	<.5	<.5	<.5	<.5	<50		
12/20/96	10.7	<.5	<.5	<.5	< .5	< 50		
3/7/97	8.7	<.5	<.5	<.5	<.5	< 50		
6/4/97	16.5	<.5	<.5	<.5	<.5	< 50		

9/25/97 17.7 <.5 <.5 <.5 <.5 <50

MONITO	RING	WELL	5
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Date	Depth to GW	В	Т	E	X	TPHg	TPHd	MTBE 8260
9/28/90	NI	NI	NI	NI	NI	NI	NI	NI
3/19/91	19.6	110	<.5	2.2	2	130		
6/12/91	21.6	150	64	10	61	480		
10/24/91	21.9	37	0.48	1.6	1.5	460		
3/24/92	18.4	51	<.5	2.4	1.6	360		
6/30/92	21.4	23	0.5	0.6	0.5	200		<u></u>
10/6/92	22.0	0.8	<.5	<.5	<.5	<50		
2/4/93	14.4	6.6	1.3	0.7	5.0	200	< 50	
5/21/93	16.0	14	0.5	<.5	1.0	110	< 50	
9/3/93	18.8	14	<.5	<.5	0.6	160	< 50	
12/20/93	19.4	1.8	<.5	<.5	<.5	< 50	< 50	
3/28/94	20.1	8.4	<.5	_<.5	<.5	800	< 50	
6/16/94	21.6	10	<.5	<.5	1.0	100	< 50	
9/29/94	21.3	2.8	<.5	<.5	<.5	<u> </u> < 50	< 50	
12/22/94	20.7	5.0	<.5	<.5	0.6	65	<50	
3/27/95	4.6	<.5	<.5	<.5	<.5	< 50	< 50	
6/14/95	11.7	9.5	<.5	<.5	<.5	<50_	< 50	
9/14/95	17.5	<.5	<.5	<.5	<.5	< 50	< 50	
12/28/95	17.6	<.5	<.5	<.5	<.5	<50	< 50	
3/27/96	9.8	<.5	<.5	<.5	<.5	<50		<5
5/23/96	10.4	<.5	<.5	<.5	<.5	< 50		
10/1/96	19.4	<.5	<.5	<.5	<.5	< 50		
12/20/96	12.0	<.5	<.5	<.5	<.5	<50	***	
3/7/97	11.7	<.5	<.5	<.5	<.5	<50		
6/4/97	19.3	60	50	120	200	1500		

9/25/97 20.3 10 4.6 14 33 640

M	4OI	JITC	RII	VG	WEI	1.6
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Date	Depth to GW	В	T	E	×	TPHg	TPHd	MTBE 8260
9/28/90	NI	IN	NI	NI	NI	NI	NI	NI
3/19/91	17.9	540	<.5	1.6	1.1	790		
6/12/91	19.8	130	50	5.8	44	490		
10/24/91	20.0	50	< 6	< 6	<.3	270		
3/24/92	16.6	170	<.5	1.5	1.2	670		
6/30/92	19.5	330	<.5	0.6	0.8	860		
10/6/92	20.2	280	<.5	1.2	2.1	1000	<u></u>	
2/4/93	12.9	380	4	29	17	1400	< 50	
5/21/93	13.9	150	1.1	4	1.6	540	< 50	
9/3/93	16.9	220	0.9	1.6	2.5	1100_	< 50	
12/20/93	17.7	260	< 5	< 5	7.7	620	< 50	
3/28/94	18.2	24	<.5	<.5	<.5	92	<50	
6/16/94	19.6	<. <u>5</u>	<.5	<.5	0.6	52	<50	
9/29/94	19.5	350	0.6	0.9	1.5	900	< 50	
12/22/94	18.9	110	29	<10	27	600	< 50	
3/27/95	3.2	260	3.8	16	7.8	940	< 50	
6/14/95	9.7	240	3.4	11	14	220	<50	
9/14/95								
12/28/95	15.8	25	<.5	<.5	2.3	210	<50	
3/27/96	7.7	11	<.5	2.9	2.0	90		<5
5/23/96	9.1	6.8	<.5	<.5	<.5	63		
10/1/96	17.4	<.5	<.5	<.5	<.5	<50		
12/20/96	11.0	19	<.5	<.5	<.5	190		
3/7/97	9.5	10	<.5	<.5	<.5	88		
6/4/97	17.2	<.5	<.5	<.5	<.5	<50		

9/25/97 18.3 <.5 <.5 <.5 <.5 < 50

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Date	Depth to GW	В	Т	E	×	TPHg	TPHd	MTBE 8260
9/28/90	NI	NI	NI	BI	NI	NI	NI	NI
3/19/91	18.5	<.5	<.5	<.5	<.5	< 50		
6/12/91	20.5	15	60	6.7	53	240		
10/24/91_	20.7	<.3	<.3	<.3	0.34	<30		
3/24/92	17.2	<.5	<.5	<.5	<.5	<50_		
6/30/92	20.3	<.5	<.5	<.5	<.5	<50_		
10/6/92	20.9	<.5	<.5	<.5	<.5	< 50		
2/4/93	13.4	<.5	<.5	<.5	<.5	< 50	< 50	
5/21/93	14.8	<.5	<.5	<.5	<.5	< 50	< 50	
9/3/93	17.7	<.5	<.5	<.5	<.5	< 50	< 50	
12/20/93	18.4	<.5	<.5	<.5_	<.5	< 50_	< 50	
3/28/94	18.9	<.5	<.5	<.5	<.5	< 50	< 50	
6/16/94	20.4	1.4	<.5	<.5	<.5	<50		
9/29/94	20.1	<.5	<.5	<.5	0.6	< 50	< 50	
12/22/94	19.6	<.5	<.5	<.5	<.5	< 50	<50	
3/27/95	3.7	<.5	<.5	<.5	<.5	< 50	< 50	
6/14/95	10.4	<.5	<.5	<.5	<.5	<50	< 50	
9/14/95	16.3	<.5	<.5	<.5	<.5	< 50	< 50	
12/28/95	16.5	<.5	<.5	<.5	<.5	< 50	<50	
3/27/96	8.5	<.5	<.5	<.5_	<.5	<50		< 5
5/23/96	9.6	<.5	<.5	<.5	<.5	< 50		
10/1/96	18.2	<.5	<.5	<.5	<. <u>5</u>	<50		
12/20/96	11.4	<.5	<.5	<.5	<.5	<50		
3/7/97	10.3	<.5	<.5	<.5	<.5	< 50		
6/4/97	18.0	<.5	<.5	<.5	<.5	<50		

9/25/97 19.1 <.5 <.5 <.5 <.5 <50

MON	ITORING	WELL	8
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Date	Depth to GW	В	Т	E	×	TPHg	TPHd	MTBE 8260
9/28/90	NI	NI	NI	BI	NI	NI	NI	NI
3/19/91	NI	NI	NI	NI	NI	NI	NI	NI
6/12/91	21.4	20	53	9.8	55	331		
10/24/91	21.6	0.84	1.2	0.36	2.2	<30		
3/24/92	17.9	<.5	<.5	<.5	<.5	<50_		
6/30/92	21.1	<.5	<.5	<.5_	<.5	<50		
10/6/92	21.8	<.5	<.5	<.5	<.5	< 50		
2/4/93_	14.1	<.5	<.5	<.5	<.5	< 50	< 50	
5/21/93	16.3	<.5	<.5	<.5	<.5	< 50	<50	
9/3/93	18.6	<.5	<.5	<.5	<.5	< 50	< 50	
12/20/93	19.1	<.5	<.5	<.5	<.5	< 50_	<50_	
3/28/94	20.1	<.5	<.5	<.5	<.5	< 50	<50	
6/16/94	21.5	<.5	<.5	<.5_	<.5	<50	< 50	
9/29/94	21.0	<.5	<.5	<.5	<.5	< 50	< 50	
12/22/94	20.4	<.5	<.5	<.5_	<.5	< 50	< 50	
3/27/95	3.4	<.5	<.5	<.5	<.5	< 50	<50	
6/14/95	11.8	<.5	<.5	<.5	<.5	< 50	<50	
9/14/95	17.2	<.5	<.5	<.5	<.5	< 50	<50_	
12/28/95	17.3	<.5	<.5	<.5	<.5	<50	<50	
3/27/96	10.1							
5/23/96	8.9							
10/1/96	19.3	<.5	<.5	<.5	<.5	<50		
12/20/96	10.1							
3/7/97	12.2							
6/4/97	19.3							

9/25/97 20.2 <.5 <.5 <.5 <.5 <50

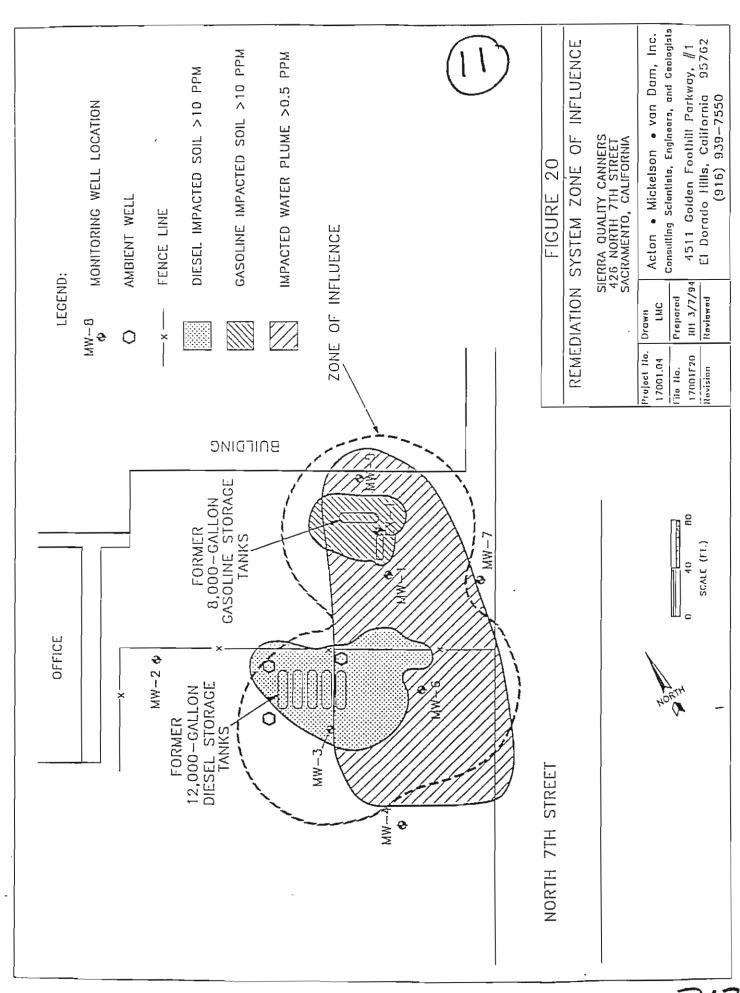
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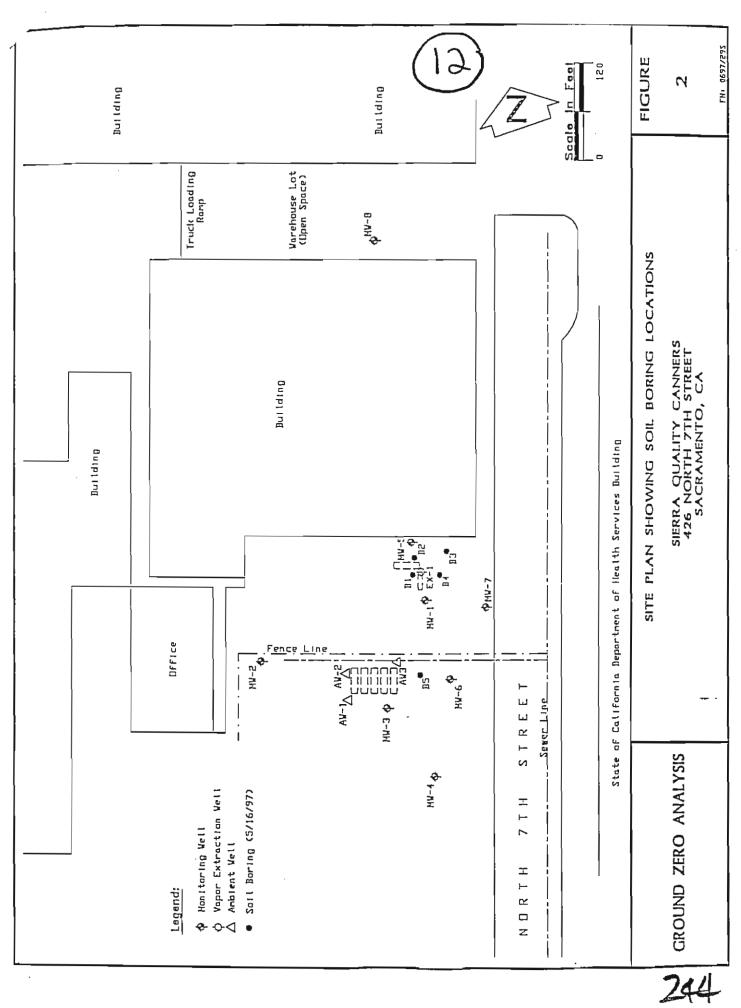
Date	Depth to GW	В	Т	E	X	TPHg	TPHd	MTBE 8260
9/28/90	NI NI	NI	NI	BI	NI	NI	NI	NI
3/19/91	NI	NI	NI	NI	NI	NI	NI	NI
6/12/91	21.0	1300	1300	450	2000	15000		
10/24/91	21.2	640	39	220	3709	9300		
3/24/92	17.7	250	40	67	210	900		
6/30/92	20.8	290	23	77	170	1900		
10/6/92	21.4	97	67	46	110	800		
2/4/93	13.8	1400	1600	840	2200	16000		
5/21/93	15.3	350	240	580	1100	7900	170	
9/3/93	18.2	180	33	140	260	5700	< 50	
12/20/93	18.8	260	27	77	82	1000	< 50	
3/28/94	19.5	83	26	<10	140	1300	< 50	
6/16/94	20.9	420	42	120	110	2600	< 50	
9/29/94	21.0	60	6	32	50	850	190	
12/22/94	20.1	86	15	51	68	1200	< 50	
3/27/95	4.1	74	140	330	1500	9400	< 50	
6/14/95	11.0	340_	120	950	4500	68000	< 50	
9/14/95	16.8	170	22	140	820	10000	< 50	
12/28/95	17.0	95	11	80	200	6000	< 50	
3/27/96	9.0	110	13	250_	450	7000	< 50	< 5
5/23/96	9.9	170	180	200	700	8300	<50	
10/1/96	18.7	100	22	250	660	6300	<50	
12/20/96	11.5	78	54	150	440	3800	<50	
3/7/97	10.9	28	6.3	68	140	2300	<50	
6/4/97	18.6	49	3.9	36	23	900	<50	
9/25/97	19.6	64	1.5	34	14	1100	<50	*

A <5 ppb for TBA, DIPE, ETBE, TAME by 8200. MITBE previously

### Flow Direction and Gradient Data 426 N. 7th Street

Date	Depth to GW (ft in MW-1)	Flow Direction	Gradient (ft/ft)
9-28-90	19.62		
10-17-90	20.72	SW	.001
3-14-91	19.31	NW	.001
3-17-91	18.77		
6-12-91	20.67		
10-25-91		SW	.0005
3-19-92	17.48	SW	.001
6-30-92	20.48	S	.001
10-6-92	21.14	SW	.001
2-4-93	11.52	SW	.001
5-21-93	10.18	E-NE	.0006
9-3-93	17.91	S-SW	.002
12-20-93		S-SW	.001
3-28-94	19.21	N-NE	.0001
6-16-94	20.64	S-SW	.001
9-29-94	20.39	S-SW	.0015
12-22-94		S-SW	.01
3-27-95	3.9	S-SW	.003
6-14-95	10.7	Ν	.0005
9-14-95		SW	.0002
12-28-95	16.7	S	.0007
3-27-96	8.7	S	.001
5-23-96	15.3	Ν	.0035
9-30-96	18.4	Flat	.0002 to .0007
12-20-96	11.5	Ν	.005
3-7-97	10.6	S	.002
6-3-97	18.3	S	.0003
9-25-97	17.3	5	.0001





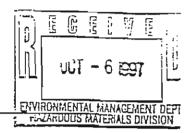
## (13)

#### GROUND ZERO ANALYSIS

LOG OF BORING B1

PROJECT _	INNERS	15	OCATION	42	5 NORTH 7TH S	TREET, SACRANER	NTO CA	PROJEC	T NO.	95-029		
DATE DRIL	LED _U	7/15/4/	L(	JGGFD RI	_ <del></del>	EDUCATION		REVIEWED	HY GREG	<u>P. 511</u>	HL RG N	o. 5023
DRILLING (	COMPANY	<u> </u>	// 04 - 5555	D	KILL	ER DAVE FISCH	4	METHOD .	GEOPROSE	JIRECT	PUSH	
BORE HOL	F DIAMEI	1ER _ 1 3/	THE DEPT.	H DRILLER	_ ر	75 FI DEF	TH TO WATER :	: INITIAL	2U F			
CASING TO	CPE NA		_ DIAMETER		IN.	. SCHEDULE		INTERVAL _		<u>+1</u>	το	FT_
SCREEN I	TPE NA		DIAMETER		.IN	SLOT SIZE	<u> </u>					
FILTER PA	CK TYPE	NA NEIT	TO PU									
		E NEAT	SEMENT TO SU	RFACE				INTERVAL _				
COMMENTS							_				PAGE _	1_ OF
MELL	DEPTH   (FT.)	PID (PP <b>LL</b> )	SAMPLE ID BLOWCOUNT	U.S.C. LOG			D	ESCRIPTION				
						0-3"	ASPHALT					
		-	-		-	3"-10.5"	PH					
	_ 2 _	_				2 -10.3	SILT: <5% SND L TGHKSS; N-L	r PLST: BRN: N-	N-L DKT 5	COOR	: ORGANIC	DLINCY;
	-				1		אזן; אסשס; דא	ROOTS COMMO	H		,	-'
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	J. 1	J			1	10.5-12/15'	POORLY GRADED		FM, PRLY C	2 מכה:	HD; <5≭	FKS; DRK
	12-	İ		SP			GRY: SL PO: MS	т; номо				
	[ 12 -		S-81-11		仁							
	<u> </u>	7	-	/	-	12/15-17/201	SILTY SAND: 80	0-85% FM. PRL	אב מכקס צו	2: 15-	20% FNS:	DRK
	14-		_	/			GRY; SL-H PO;	MET: HOND			<b>,</b>	
				/				•				
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	<u></u> 15−		1	SN	$\vdash$		- *1	•				
		4			ļ							
	_18_		5-31-16.51			17/20-25	POORLY GRADED	SAND; >95%	FN TO FN-	M PRL	צ סמאם צו	ND; <5%
				/	$\Gamma$		FMS: DRK GRY: SHEEN AT 21 FE		TRNG PO; W	ET; HO	MO: POSS	IBLE
	├ ┤	- 1		/	<b>-</b>	_	Difference At 21 7					
	-20-	_	S-B1-201	/								
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#### GROUND ZERO ANALYSIS, INC.



1714 Main Street Escalon, California 95320 Telephone: (209) 838-9888

Facsimile: (209) 838-9883

October 3, 1997

Ms. Anita Benedict County of Sacramento Hazmat Division 8475 Jackson Road, Suite 230 Sacramento, CA 95826

Subject:

Additional RBCA Evaluation, Mass Calculations and Remedial Time Estimate

Sierra Quality Canners, 426 North 7th St., Sacramento, California

Dear Ms. Benedict:

At your request we have enclosed with this letter a more detailed Risk Based Corrective Action (RBCA) analysis for residual gasoline contaminants in soil and groundwater at the subject property. Also included with the enclosed information are calculations of the residual mass of contaminants in place and an estimate of the maximum time necessary for groundwater contaminants to be reduced to MCLs via natural biodegradation. You will note that the concentration and affected volume parameters for vadose soil are somewhat different (more conservative) than those briefly presented as a part of the Additional Subsurface Investigation Report (June 24, 1997).

Our evaluation indicates that residual contaminants do not present an unacceptable risk to human health or the environment under a commercial property use. The total mass of gasoline hydrocarbons remaining in vadose soil is approximately 1.4 kg, in saturated soil approximately 450 kg, and in groundwater approximately 5 kg. The estimated worst-case timeframe to reduce benzene concentrations in groundwater to below the MCL of 1 part per billion is approximately 12-13 years by anaerobic biodegradation alone. None of the other BTEX constituents currently exceed their respective primary MCLs.

We hope that you will conclude from the data, as we have, that this site meets the criteria for a Low Risk Groundwater case closure. If you have any questions or comments please contact Ground Zero at your convenience.

Respectfully,

Ground Zero Analysis, Inc.

Gregory P. Stahl, RG 5023

CA Certified Hydrogeologist No. 264

Enclosure

c: Mr. Pat Riddle, Esq.

Mr. Brian Newman, RWOCB

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# GROUND ZERO ANALYSIS, INC.

1714 Main Street Escalon, California 95320 Telephone: (209) 838-9888 Facsimile: (209) 838-9883

October 3, 1997

Ms. Anita Benedict County of Sacramento Hazmat Division 8475 Jackson Road, Suite 230 Sacramento, CA 95826

Subject:

Sierra Quality Canners, 426 North 7th St., Sacrmento, CA

RBSLs, Mass Estimates, Remedial Time Estimate

Dear Ms. Benedict:

At the request of Sacramento County Hazmat Division, Ground Zero Analysis has prepared the following evaluation of Risk Based Screening Levels (RBSLs) for residual soil and groundwater contamination at the site. Estimates of the mass of residual contaminants and the timeframe for natural biodegradation to reduce contaminants to regulatory levels are also presented.

# SITE CLASSIFICATION AND INITIAL RESPONSE ACTIONS

Based on the data assembled from assessment efforts, the site was classified for risk in accordance with ASTM Designation E 1739-95.

The site parameters meet none of the criteria for Priority 1, 2 or 3 scenarios. The site was therefore classified as "Priority 4 - No Demonstrable Long Term Threat to Human Health or Safety of Sensitive Environmental Receptors".

For a listing of the criteria used in classification see Table 1 of ASTM E 1739-95.

The initial response actions taken at the site were to notify the appropriate authorities, excavate contaminated soil; institute a program of groundwater monitoring and sampling to evaluate the nature and extent of groundwater impact and the effect of natural attenuation on dissolved plume migration; conduct soil vapor extraction and aquifer pumping tests; prepare a Remedial Action



Plan; install and operate a soil vapor extraction system; and install confirmation soil borings to determine the effects of natural attenuation processes on residual soil contamination.

Recent soil and groundwater data indicated that the potential for risk to human health or the environment from residual contamination might be minimal (below the level of significance). Accordingly, the concentrations of the chemicals of concern that might result in significant risk under site conditions were determined and compared to existing levels of contamination. This process is described in the sections below.

### DEVELOPMENT OF TIER 1 RISK BASED SCREENING LEVELS

Potential exists for transitory current exposure and for future exposure should the property be redeveloped. Risk Based Screening Levels (RBSLs) were developed in order to determine if active cleanup would be required to assure human health and safety in that event.

The sections below describe the processes and parameters used in developing the RBSLs.

#### Chemicals of Concern

The chemicals routinely detected at the site that have the potential to pose a health risk include benzene, toluene, ethylbenzene, and xylenes. RBSLs were consequently developed for each.

# Exposure Pathways

The spectrum of possible exposure pathways at a given site for human receptors includes ingestion of contaminated soil or groundwater, dermal contact with and absorption of contaminants from soil or groundwater, and inhalation of vapors. Potential environmental receptors include wildlife and plantlife and the exposure pathways are similar. For a given site, one or more of these potential exposure pathways may exist and others may not.

Site characterization indicates that no current environmental exposure pathways exist. Since redevelopment of the property would have no effect on environmental receptors, this exposure pathway was not considered. The potential for leaching of soil contaminants to groundwater was not evaluated because soil contamination of significance exists only in the saturated zone. In the saturated zone, partitioning between soil and groundwater has almost certainly equilibrated.

Exposure pathways for potential human receptors were evaluated to determine which should be evaluated for risk.

sicrra/rbsi.txt



# Dermal Contact or Ingestion of Contaminated Soil

This exposure pathway was eliminated from consideration since no contaminated surface soils (less than 3 feet) currently exist at the site.

# Dermal Contact or Ingestion of Contaminated Groundwater

This exposure pathway was eliminated from consideration. The impacted shallow groundwater at the site is not currently used for any purpose. Moreover, the site is currently supplied with City water and no deeper production wells are in use. The only potential for exposure to contaminated groundwater is to technicians sampling the onsite monitoring wells. These individuals are trained in environmental health and safety procedures and any potential exposure would be extremely limited in duration.

# Inhalation of Vapors from Contaminated Soil or Groundwater

Under the current use of the property human exposure to vapors emanating from contaminated soil or groundwater would be transitory since the contaminated area is rarely occupied. The outdoor area is used for storage of miscellaneous equipment and is paved. Should the property be redeveloped, receptors could potentially be exposed to contaminants via inhalation of vapors. This exposure pathway was considered in detail. The contaminants identified at the site are volatile and exposure could result from volatilization from soil or groundwater.

# Volatilization from Surface Soil (less than 3 feet bgs)

Surface soil contamination does not exist at the site. Therefore, volatilization from surface soil was not considered in developing RBSLs.

# Volatilization from Subsurface Soil (greater than 3 feet bgs)

Subsurface soil contamination has been identified and characterized at the site. The results of soil borings installed in the area of contamination in May 1997 indicate that vadose soil contamination (above appx. 20 ft. bgs) is of limited extent and magnitude. Volatilization from vadose soil, however, could occur and was considered in developing RBSLs.

Contamination of saturated soils (greater than appx. 20 feet bgs) exists near the area of the former UST. Direct volatilization from saturated soils cannot occur due to the intervening, pore filling, groundwater medium. For this reason, volatilization from saturated soil was not considered a potential exposure pathway.



# Volatilization from Groundwater

Direct volatilization of contaminants from groundwater and indirect volatilization of contaminants from saturated soil through groundwater can be expected to occur. This exposure mechanism was also used to develop RBSLs.

# Indoor and Outdoor Exposure

Potential future receptors could be exposed to vapors either outdoors or inside any buildings that might be constructed over the area of contamination. Currently, only the potential for outdoor exposure exists.

Since indoor areas can confine vapors and have a lower rate of fresh air exchange, default RBSLs for enclosed spaces (indoor) are lower than those for outdoor exposure by an order of magnitude or more. Consequently, if RBSLs are met for volatilization to indoor air, RBSLs for outdoor air are superfluous.

The two exposure pathways evaluated in RBSL development, therefore, were volatilization from vadose soil and from groundwater to indoor air. Separate RBSLs were developed for exposure under a residential setting and for under an industrial/commercial setting.

# Potential Receptor Scenarios

Under the RBCA procedure, exposure to vapors by human receptors can be modeled under two scenarios, residential or commercial.

RBSLs for the residential scenario are more stringent by far than those developed for a commercial setting. The reasons for this are the extended daily, weekly and lifetime periods of exposure under the residential scenario as well as the greater health sensitivity of infants and children. RBSLs for a commercial setting are less stringent.

RBSLs were developed for both potential property uses.

# Parameters Used in Development of Tier 1 Lookup Table

RBSLs for the constituents of concern at the site were developed using the computer program *Tier 2 RBCA* by Groundwater Services, Inc.. This program incorporates (with some modifications) the default chemical, toxicological, exposure, hydrogeological and physical parameters used in ASTM E 1739-95. The program also uses the transport/concentration models and equations from the ASTM document.

The default parameters are used by the program in setting Tier 1 RBSLs. These default parameters, and consequently the Tier 1 RBSLs, are intentionally very conservative (maximizing



indicated health risk) and are designed as a screening measure. In general, more realistic parameters are substituted for default parameters where measured site characteristics are significantly different than default values. If contaminant levels do not exceed Tier 1 RBSLs more detailed analysis is generally not necessary due to the built-in conservatism of the model.

In our analysis, the parameters below were modified from the default values:

# Cancer Potency Factors ("Slope Factors")

Of the chemicals of concern at the site, benzene is the only known carcinogen, and this was the controlling factor in developing RBSLs. For non-carcinogens, toxicity as quantified by the reference dose (Rfd) controls the acceptable exposure levels. Cancer potency factors (CPF), in units of mg/kg-day <sup>-1</sup> are designed to be multiplied by any particular daily dose of a carcinogen in units of mg/kg-day, the product of which multiplication is the incremental increase in cancer risk at that dose. The cancer potency factor for benzene was modified from the default value as appropriate for California evaluations as described below:

#### Benzene:

Benzene is classified by the US EPA as a known carcinogen, weight of evidence "Category A". The CPF determined by the US EPA and used as the default value in the ASTM document is 2.9 E-2 mg/kg-day<sup>-1</sup>. However, the California EPA Office of Environmental Health Hazard Assessment has derived a CPF of 1.00 E-1 mg/kg-day<sup>-1</sup> (Cal EPA, 11/94). This more conservative figure was substituted for the default value in developing the RBSL for benzene.

### Contaminated Soil Area

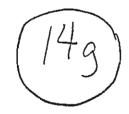
The default contaminated soil area is approximately 2,420 ft<sup>2</sup>. However, based on the soil samples collected from borings in May 1997, the value was changed to approximately 2830 ft<sup>2</sup>.

# Groundwater Mixing Zone Depth

The default groundwater mixing zone thickness is approximately 6.5 feet. However, based on site specific groundwater information, the value was changed to approximately 12 feet.

### Vadose Zone Thickness

The default vadose zone thickness is approximately 9.7 feet. However, based on the approximate seasonal low depth to groundwater the value was changed to approximately 18 feet.



# Capillary Zone Thickness

The default capillary zone thickness used by the program is approximately 2 inches. This value was changed to 6 inches to more accurately reflect the expected conditions in predominantly sandy soil.

# Soil Density

The default soil density is approximately 1.7 grams/cubic centimeter. However, based on the results from soil samples collected in May 1997, the value was changed to 1.26 grams/cubic centimeter. (A generic value of 100 lb/ft³ (1.6 g/cm³) was used in contaminant mass calculations).

### Soil pH

A soil pH of 7.1, as measured during May, 1997 was used in place of the default value of 6.5.

# Organic Carbon Fraction in Vadose Zone

The default organic carbon fraction in the vadose zone is 0.01. This value was changed to 0.017 based on the results of May 1997 soil sampling.

# Depth to Groundwater

The default depth to groundwater is approximately 10 feet. This value was changed to approximately 18.5 feet based on the average seasonal low depth to water measurements recorded since 1990.

# Depth to Top of Affected Soil

The default depth to top of affected soil is approximately 3.5 feet. This value was changed to approximately 16 feet based on the soil samples collected from the borings completed in May 1997.

# Thickness of Affected Subsurface Soil

The default thickness of affected subsurface soil is approximately 6.5 feet. This value was changed to approximately 2 feet based on the soil samples collected from the borings completed in May 1997.



# Foundation Crack Factor

The default value for foundation crack factor is 0.01 cm² void space/cm² foundation area. This value was modified due to its extreme conservatism. A study conducted by the Lawrence Berkeley Laboratory on building leakage examined more than 300 structures throughout the United States. Among other results, the study calculated a specific leakage area for these structures. Specific leakage in units of cm²/cm² generally ranged from 0.0002 to 0.0005. The foundation crack factor was changed to 0.001 cm²/cm².

# Risk Based Screening Levels and Comparison with Existing Concentrations

A printout of the computer analysis is presented in Attachment A. In accordance with the ASTM guidelines, the groundwater RBSLs for the chemicals of concern were calculated at a hazard index of 1 for non-carcinogens, an incremental increased risk of cancer of 10<sup>-6</sup> for known carcinogens and 10<sup>-5</sup> for possible human carcinogens.

Groundwater concentrations representative of current conditions were calculated using groundwater contaminant concentrations for the contaminated area (MW1, MW6, and EX1) from May 23, 1996 through June 4, 1997 to calculate a 95% confidence level average concentration for each constituent (BTEX).

Existing soil concentrations were calculated by projecting the most recent analytical data from boring S-B1 (the only boring in which TPHG and BTEX were detected in May 1997) through an estimated volume of soil. The limits of soil contamination were estimated from historical soil borings, but logarithmic contours within the affected area were based on the data from boring S-B1 (May 1997). A weighted average concentration was then calculated for each constituent. This method is more conservative than our previous method of merely averaging the concentrations of all samples collected in May 1997, most of which were non-detect.

Version 1.0 of the computer program will not calculate health risk due to indoor vapor exposure. However, since the risk equations are linear, the Hazard Index and the Incremental Cancer Risk associated with the potential exposure scenarios were calculated and are summarized on the pages that follow.

icrra/rbsl.txt



# RESIDENTIAL SETTING:

# SOIL:

Constituent	RBSL (mg/kg)	Avg. Conc. (mg/kg)	Exceeds RBSL?	Hazard Index	Increased Risk
Benzene	0.039	0.041	(yes)	NC	1.1 E-6
Toluene	340	0.024	no	7.1 E-5	NC
Ethylbenzene	> solubility	0.079	no	. NC	NC
Xylenes	> solubility	0.28	по	NC	NC

# GROUNDWATER:

Constituent	RBSL (mg/l)	Avg. Conc. (mg/l)	Exceeds RBSL?	Hazard Index	Increased Risk
Benzene	0.041	0.073	(yes)	NC	1.8 E-6
Toluene	190	0.046	no	2.4 E-4	NC
Ethylbenzene	> solubility	0.090	no	NC	NC
Xylenes	> solubility	0.26	no	NC	NC

# SUM:

Constituent	Hazard Index	Increased Risk
Benzene	NC	2.9 E-6
Toluene	3.1 E-4	NC



# **COMMERCIAL SETTING:**

# SOIL:

Constituent	RBSL (mg/kg)	Avg. Conc. (mg/kg)	Exceeds RBSL?	Hazard Index	Increased Risk
Benzene	0.10	0.041	по	NC	4.1 E-7
Toluene	880	0.024	no	2.7 E-5	NC
Ethylbenzene	> solubility	0.079	no	NC	NC
Xylenes	> solubility	0.28	по	NC	NC

# GROUNDWATER:

Constituent	RBSL (mg/l)	Avg. Conc. (mg/l)	Exceeds RBSL?	Hazard Index	Increased Risk
Benzene	0.13	0.073	no	NC	5.6 E-7
Toluene	490	0.046	no	9.4 E-5	NC
Ethylbenzene	> solubility	0.090	no	NC	NC
Xylenes	> solubility	0.26	no	NC	NC

# SUM:

Constituent	Hazard Index	Increased Risk
Benzene	NC	9.7 E-7
Toluene	1.2 E-4	NC



#### CONCLUSIONS:

# Residential Property Use:

It is difficult to conclude with confidence whether volatilization of gasoline constituents from vadose soil would be expected to result in a significant health risk to potential human receptors under a residential property use (the average benzene concentration and the controlling RBSL differ by only 5%). The concentrations of benzene volatilizing from contaminated groundwater might, however, result in an indoor air concentration that would exceed the level of significance for carcinogens (10<sup>-6</sup> incremental cancer risk) in a residential use setting.

The total incremental cancer risk due to benzene exposure is estimated to be approximately 2.9 E-6, slightly above the target level of significance (1.0 E-6). The hazard index is orders of magnitude below the level of significance of 1.

# Commercial Property Use:

No significant risk would exist to human receptors from gasoline constituents volatilizing from soil or groundwater to indoor air under a industrial/commercial property use. The expected total incremental cancer risk due to benzene exposure is approximately 9.7 E-7, below the level of significance. The hazard index is four orders of magnitude less than the level of significance for toxic effects.

#### MASS CALCULATIONS

### Soil:

The limits of impacted soil (zero line) were determined from historical non-detect data points (approximate radius of 30 feet, an area of 2827 ft) divided into logarithmic contours. The thickness of affected vadose soils is 2 feet (16-18 ft. bgs) and the thickness of affected saturated soil is 12 feet (18-30 ft. bgs). Consequently, the volume of affected vadose zone soil is 5655 ft<sup>3</sup> and the volume of affected saturated soil is 33929 ft<sup>3</sup>. We used the generic soil bulk density value of 100 lb/ft<sup>3</sup> (45.5 kg/ft<sup>3</sup>) in the contaminant mass calculations.

Computer printouts of input/output data and sketches of estimated areal extent of contaminants are included in Attachment B.

### Vadose Zone

The contaminant concentration on which the isoconcentration contours in the vadose zone were based were derived from the most recent body of data (5/16/97), wherein a single sample collected in the vadose zone at 16.5 feet bgs in boring B1 had detectable concentrations.

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mass of analyte in soil = (avg. conc. in  $mg/kg \times 10^{-6}$ )(bulk density in  $kg/ft^3$ )(vol. affected soil in  $ft^3$ )

The average concentration for each zone of contamination is the average of the upper and lower concentration contours.

Contaminant	Volume (ft³)	Avg. Conc. (mg/kg)	Mass(kg)
TPHG Zone 1 TPHG Zone 2 Total mass of TPHG in Valve. Conc. of TPHG in V		<del>-</del>	0.17 1.22
Benzene Zone 1 Benzene Zone 2 Total mass of Benzene in Avg. Conc. of Benzene in		<del>=</del>	0.004 0.006
Toluene Total mass of Toluene in Avg. Conc. of Toluene in		_	0.007
Ethylbenzene Zone 1 Ethylbenzene Zone 2 Total mass of Ethylbenzen Avg. Conc. of Ethylbenzen	e in Vadose Zone =	<del>-</del>	0.015 0.005
Xylenes Zone 1 Xylenes Zone 2 Xylenes Zone 3 Total mass of Xylenes in Y Avg. Conc. of Xylenes in Y			0.041 0.029 0.003

# Saturated Soil

The contaminant concentration on which the isoconcentration contours in saturated soil zone were based were derived from the most recent body of data (5/16/97), wherein two samples collected in the saturated zone at 20 and 24 feet bgs in boring B1 had detectable concentrations.

mass of analyte in soil = (avg. conc. in mg/kg x  $10^{-6}$ )(bulk density in kg/ft<sup>3</sup>)(vol. affected soil in ft<sup>3</sup>)

The average concentration for each zone of contamination is the average of the upper and lower concentration contours.

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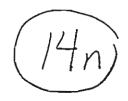


Contaminant	Volume (ft <sup>3</sup> )	Avg. Conc. (mg/kg)	Mass (kg)
TPHG Zone 1	1847	3300	277
TPHG Zone 2	6635	500	151
TPHG Zone 3	11461	50	26
TPHG Zone 4	13986	5	3
Total mass of TPHG in Sa	turated Soil = 458 k	g	
Avg. Conc. of TPHG in Sa	aturated Soil = 297	mg/kg	
Benzene Zone 1	942	6.1	0.26
Benzene Zone 2	4486	2.8	0.57
Benzene Zone 3	14514	0.28	0.18
Benzene Zone 4	13986	0.028	0.02
Total mass of Benzene in S	Saturated Soil $= 1.04$	4 kg	
Avg. Conc. of Benzene in	Saturated Soil $= 0.6$	7 mg/kg	
	4		
Toluene Zone 1	603	138	3.79
Toluene Zone 2	2450	28	3.12
Toluene Zone 3	6597	2.8	0.84
Toluene Zone 4	13911	0.28	0.18
Toluene Zone 5	10367	0.028	0.01
Total mass of Toluene in S			
Avg. Conc. of Toluene in S	Saturated Soil $= 5.1$	6 mg/kg	
Ebenz. Zone 1	602	75	2.06
Ebenz. Zone 2	603	75	2.06
	2450	28	3.12
Ebenz. Zone 3	6597	2.8	0.84
Ebenz. Zone 4	13911	0.28	0.18
Ebenz. Zone 5	10367	0.028	0.01
Total mass of Ethylbenzen		•	
Avg. Conc. of Ethylbenzer	ie in Saturated Soil =	= 4.04 mg/kg	
Contaminant	Volume (ft3)	Ava Cone (malica)	Macs (Isa)
Xylenes Zone 1	<u>Volume (ft³)</u> 1357	Avg. Conc. (mg/kg)	<u>Mass (kg)</u> 16.24
Aylenes Zone 1	1337	263	10.24

<u>Contaminant</u>	<u>Volume_(ft³)</u>	Avg. Conc. (mg/kg)	<u>Mass (kg)</u>
Xylenes Zone 1	1357	263	16.24
Xylenes Zone 2	4072	28	5.19
Xylenes Zone 3	6786	2.8	0.86
Xylenes Zone 4	13270	0.28	0.17
Xylenes Zone 5	13119	0.028	0.01

Total mass of Xylenes in Saturated Soil = 22.47 kg Avg. Conc. of Xylenes in Saturated Soil = 14.60 mg/kg

mileda/erraic



# Dissolved Phase (Groundwater)

Based on the isoconcentration map from May 23, 1996, the area of groundwater contamination was 13,200 ft<sup>2</sup>. The aquifer thickness is estimated to be 12 ft., thus the affected volume is 158,400 ft<sup>3</sup>. The porosity of the soil was measured at 0.38. The analyte concentrations used in calculating the 95% confidence level concentrations were from wells MW1, MW6, and EX2 from 05/23/96 through 06/04/97, inclusive. The 95% confidence level concentration was then projected through the affected volume to calculate the mass of contaminant in the groundwater.

mass of analyte in groundwater =

(conc. in  $\mu g/1 \times 10^{-9}$ )(volume in ft<sup>3</sup>)(porosity)(7.48 gal/ft<sup>3</sup>)(8.34 lb/gal)(0.4536 kg/lb)

<u>Contaminant</u>	95% Conf. Conc. (μg/l)	<u>Mass (kg)</u>
TPHG	2941	5.0
Benzene	73	0.12
Toluene	46	0.08
Ethylbenzene	90	0.15
Xylenes	25 <i>5</i>	0.43

# Total Mass Of Contaminants At Site

All masses in kg.

Analyte	Vadose Mass	Saturated <u>Mass</u>	Groundwater <u>Mass</u>	Total Mass
TPHG	1.39	458	5.0	464
Benzene	0.010	1.04	0.12	1.17
Toluene	0.007	7.94	0.08	8.03
Ethylbenzene	0.020	6.21	0.15	6.38
Xylenes	0.073	22.47	0.43	22.97



# TIME FRAME FOR CONTAMINATION REDUCTION

Biodegradation half-lives can be used to determine the time period to achieve a given contaminant reduction by solving the following formula for "x":

$$1-Y = (0.5)^x$$

where:

Y = desired contaminant reduction (decimal fraction)

x = number of half-lives

rearranging terms:

$$x = \frac{\log(1-Y)}{\log(0.5)}$$

The 95% confidence level for benzene in groundwater (73 ppb) is the only analyte to exceed MCLs. To reduce the level of benzene to the MCL of 1 ppb would require a 98.6% reduction, or 6.2 half-lives. Since the most conservative anaerobic biodegradation half-life for benzene is approximately 24 months (Howard, 1991), benzene concentrations should reach 1 ppb in 12.4 years or less.

Respectfully,

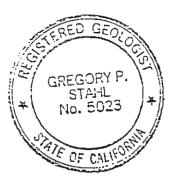
Ground Zero Analysis, Inc.

Jeanne Buckthal, Geologist

Gregory P. Stahl, RG 5023

CA Certified Hydrogeologist No. 264

Attachments



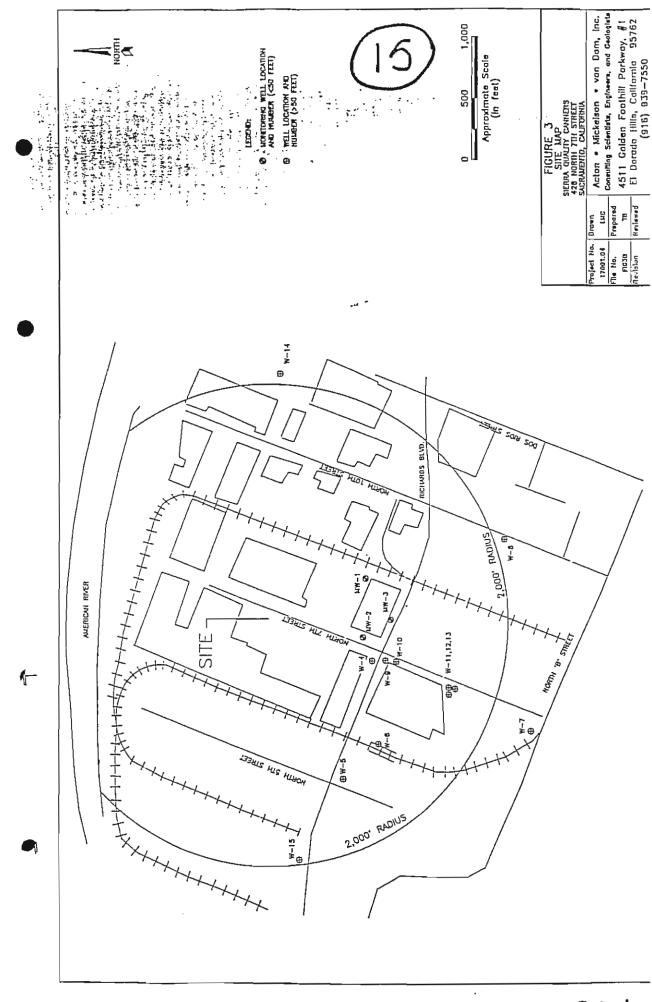


TABLE 1

# INVENTORY OF WELLS LOCATED IN TOWNSHIP 9N, RANGE 4E, SECTION 25, COUNTY SACRAMENTO

								- 6 -		(			(	16	)_
Total Depth (feet)	38	38	40	233	124	121	250	811	250	06	>75	Unknown	206	09	119
Use	MW	MW	MW	Cooling	Unknown	Unknown	Unknown	Unknown	Unknawn	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown
Approx. Sercened Interval (foct)	16-36	11-31	16-36	150-175	None	None	160-190 210-220	95-118	None	None	60.75	None	142-148 149-164 190-206	None	87.5-119
Reported Static Waler Level (feet)	20	20	19	20	20	23	16	Unknown	Unknown	Unknown	81	Unknown	61	Unknown	Unknown
Year Drilled	1988	1988	1988	1962	1952	1953	1961	Unknown	Unknown	1954	1953	Unknown	1954	0661	1950's
Well Location	801 Richards Blvd. (NE)	425 N. 7th Street	801 Richards Blvd. (middle block)	NW corner Richards Blvd./	75' South Richards Blvd.	85' E. of 5th Street/ 640' S. of Richards Blvd.	200' N. of B Street/ 350' W. of Intersection of 7th and B Streets	165' West of 10th Street/ 666' N. of Bannon	North 7th and Richards Blvd.	North 7th and Richards Blvd.	170' West of North 7th, Two Blocks South of Richards Blvd.	170' West of North 7th, Two Blocks South of Richards Blvd.	Two Blocks South of Richards Blvd, 330' West of North 7th	North 10th and Vine 130' North of Vine 170' East of Railroad Track	401 Bannon
Owner's Address	8401 Jackson Road, Sacramento, CA	8401 Jackson Road, Sacramento, CA	8401 Jackson Road, Sacramento, CA	Box 1079 Sacramento, CA	500 Richards Blvd.	P.O. Box 2728 Sacramento, CA	P.O. Box 1079 Sacramento, CA	Unknown	Department of Public Works	North 7th and Richards Blvd.	North 7th and Richards Blvd.	North 7th and Richards Blvd.	North 7th and Richards Divd.	4817 Myrilo Street Sacramento, CA	401 Bannon Street Sacramento, CA
Owner	Charles T. Massic	Charles T. Massie	Charles T. Massic	State of California, Div. of Architecture	Kyle & Company	Applegate Drayage	State of California Dept. of General Services	Unknown	State of California, Div. of Architecture	State Printing Plant	State Printing Plant	State Printing Plant	State Printing Plant	MMC Construction	Julie West
Well I.D.	MWI	MW2	MW3	W4	. W5	9/\	W7	W8	6M	01W	WII	W12	W13	W14	WIS

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# PHASE II ENVIRONMENTAL SITE ASSESSMENT SUMMARY

# GROUND ZERO ANALYSIS, INC.

1714 Main Street Escalon, California 95320-1927 Telephone: (209) 838-9888 Facsimile: (209) 838-9883

July 19, 2006

Mr. Billy Downing Loan Officer PFF Bank & Trust 1610 Arden Way, Suite 299 Sacramento, CA 95815

Subject: Drilling Investigation Report

Former Cannery Site, 424 N. 7<sup>th</sup> Street, Sacramento, CA

Dear Mr. Downing:

Enclosed is a copy of the reference report. This report is submitted at the request of Mr. Steve Goodwin of Capital Station 65, LLC.

Please feel free to call me or Greg Stahl of Ground Zero at (209) 838-9888 if you have any questions regarding this submittal.

Sincerely,

Ground Zero Analysis, Inc.

John P. Lane

CA Registered Geologist 6795

Enclosure

JPL

# GROUND ZERO ANALYSIS, INC.

1714 Main Street Escalon, California 95320 Telephone: (209) 838-9888 Facsimile: (209) 838-9883

July 19, 2006

Mr. Steve Goodwin Capital Station 65, LLC 424 N. 7<sup>th</sup> Street Sacramento, CA 95814

Subject: Drilling Investigation Report

Former Cannery Site, 424 N. 7<sup>th</sup> Street, Sacramento, CA

Dear Mr. Goodwin:

This letter report summarizes the Phase II subsurface investigation performed at the subject site. The investigation included advancing nineteen soil borings in order to collect soil and groundwater samples at locations recommended by ADR Environmental Group, Inc. (ADR) on behalf of PFF Bank & Trust. A site vicinity map is presented in Figure 1.

#### BACKGROUND

The site was operated as a fruit and vegetable cannery since the 1930s until the facility closed in the mid-1990s. The structures housed a main cannery, QA/QC laboratory, bottling and labeling departments, maintenance, repair and fabricating shops, offices, and warehouses for the storage of canned goods. During operation, the facility was a permitted small quantity generator of hazardous waste associated with the cannery operation.

The cannery also operated several underground fuel storage tanks containing gasoline and diesel. A subsurface investigation and remediation program was conducted under the direction of the Sacramento County Hazardous Materials Division (County HMD) beginning in 1990. The program included installation of numerous borings and monitoring wells and remediation by soil vapor extraction. The County HMD issued a "No Further Action" letter in December 1997 and closed the site with residual soil and groundwater contamination remaining in the subsurface, based upon a human health risk assessment conducted by Ground Zero Analysis, Inc. (Ground Zero) and approved by the County HMD.

#### PHASE II INVESTIGATION FIELD WORK

The Phase II subsurface investigation was conducted to address concerns outlined by ADR in a letter dated June 21, 2006. ADR recommended a drilling program to investigate potential contamination issues related to past activities at ten specific locations throughout the facility. A copy of ADR's table of recommended assessment actions in included as Attachment 1.

On July 13 and 14, 2006, an experienced Ground Zero geologist supervised the advancement of nineteen soil borings at the subject site. V&W Drilling, Inc. (C57-720904) advanced the borings using a Geoprobe 5400 direct-push drilling rig under permits issued by the County HMD. The borings were 2-1/4 inches in diameter and were advanced at locations recommended by ADR. The drilling locations were confirmed in the field prior to drilling during a site inspection conducted by ADR and Ground Zero personnel on July 11, 2006. Boring locations are shown in Figure 2.

Soil samples were collected at 5 and 10 feet bgs to evaluate potential soil contamination related to past site operations. Samples were collected using a core sampler lined with clear acetate sleeves. Ground Zero's geologist subjectively evaluated the soil samples using a photoionization detector (PID) and by noting any odors or discoloration. Unless field conditions dictated otherwise, soil samples collected at 5 feet bgs were selected for analyses, based upon discussions with ADR staff. Soil samples were immediately capped and temporarily stored in an ice chest refrigerated to a temperature of approximately 4° Centigrade and delivered under chain of custody protocol to Argon Laboratories (ELAP #2359).

Discrete groundwater samples were collected from eight of the soil borings, based upon recommendations by ADR (see Attachment 1). Shallow groundwater beneath the site was first encountered at depths ranging from approximately 11 to 14 feet bgs. The shallow groundwater samples were collected using a discrete interval groundwater sampling device (SB1, SB4, SB6, SB7, SB8, SB9, SB19) or by installing temporary ¾-inch diameter, PVC casing and screen into the borehole (SB18). The water samples were collected by inserting a length of small-diameter PVC and polyethylene tubing with a stainless steel check valve into the temporary well casing or discrete interval sampler. The samples were collected into 40-ml VOA vials containing hydrochloric acid preservative and 1L amber jars as appropriate, sealed, labeled, and immediately placed in the refrigerated ice chest. The samples were then submitted to Argon Laboratories, under chain of custody protocol, for analysis.

After sampling, the borings were grouted from the bottom to the ground surface using neat cement grout.

# RESULTS OF INVESTIGATION

PID readings in cored samples were generally between 0.1 and 6.3 ppm, which is generally considered background. Exceptions were a reading of 13.8 ppm at 10 feet in boring SB5 (near the

northwest diesel tank), 15.8 ppm at 5 feet in SB6 (near Habitat for Humanity), and 37.5 at 10 feet in SB8 (near the former gasoline USTs). No odors were noted in borings SB5 or SB6, but a gasoline odor was noted in boring SB8 beginning at approximately 7 feet bgs. An organic odor was noted boring SB13, which was drilled near a process water sump within the main cannery building. No PID readings were collected at this boring. Due to the observed odors in borings SB8 and SB13, additional samples were analyzed in these areas, including a groundwater sample from boring SB8 and soil samples from 10 feet bgs in boring SB13. An additional sample was also analyzed from boring SB14 due to discoloration noted in the sample collected from a depth of 10 feet bgs.

Soil and groundwater samples were analyzed for constituents of concern based upon recommendations made by ADR (see Attachment 1). Specific analyses were dependent upon these recommendations and included one or more of the following:

- Total extractable petroleum hydrocarbons as diesel by EPA Method 8015M;
- Total extractable petroleum hydrocarbons as motor oil by EPA Method 8015M;
- Total petroleum hydrocarbons as gasoline by EPA Method 8015M;
- Volatile Organic Compounds by EPA Method 8260B;

# Soil Analytical Results

No constituents of concern were detected in any soil sample with the exception of the soil sample collected from boring SB8, which contained various volatile components of gasoline including butyl benzene isomers, ethylbenzene, p-isopropyltoluene, isopropylbenzene, naphthalene, n-propylbenzene, trimethylbenzene isomers, and xylenes. This boring was drilled in the area where previous investigation and remediation was conducted due to a reported release from the former gasoline USTs. That investigation was closed by the regulatory agencies in 1997 as a low-risk contamination case. Residual gasoline contamination in this boring was not unexpected. No diesel contamination was detected in this boring. Soil analytical results are summarized in Table 1.

# **Groundwater Analytical Results**

No constituents of concern were detected in any groundwater sample with the exception of the groundwater sample collected from boring SB8, which contained various volatile components of gasoline including benzene, n-butyl benzene, ethylbenzene, isopropylbenzene, naphthalene, n-propylbenzene, trimethylbenzene isomers, and xylenes. Groundwater analytical results are summarized in Table 1.

#### **SUMMARY**

Ground Zero conducted a subsurface investigation at the subject site July 13 and 14, 2006 to investigate areas of potential environmental impact recommended by ADR. Soil samples at 19 locations throughout the site and groundwater samples at 8 locations were analyzed for the

presence of petroleum hydrocarbons and chlorinated solvents as appropriate. No constituents of concern were noted in any soil or groundwater samples collected during this investigation, with the exception of residual gasoline constituents in boring SB8. Boring SB8 is located in an area that was the subject of previous soil and groundwater investigation and remediation activities related to historical gasoline USTs housed there. The previous investigation/remediation activities were required and overseen by the County HMD and the Regional Water Quality Control Board. The case was closed by the agencies in 1997 as a low-risk contamination case.

Aside from the known impacts due to the aforementioned gasoline USTs, analytical results of soil and groundwater samples collected during this investigation suggest that past and/or current activities have not resulted in major impacts to underlying soil and/or groundwater. No additional investigations are warranted at this time.

Please feel free to call me or Greg Stahl of Ground Zero at (209) 838-9888 if you have any questions regarding this submittal.

No. 6795

Sincerely,

Ground Zero Analysis, Inc.

John P. Lane

CA Registered Geologist No. 6795

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Attachments: Site Vicinty Map

Site Plan Showing Boring Locations

Table of Analytical Results

Copy of Recommended Assessment Actions Table prepared by ADR

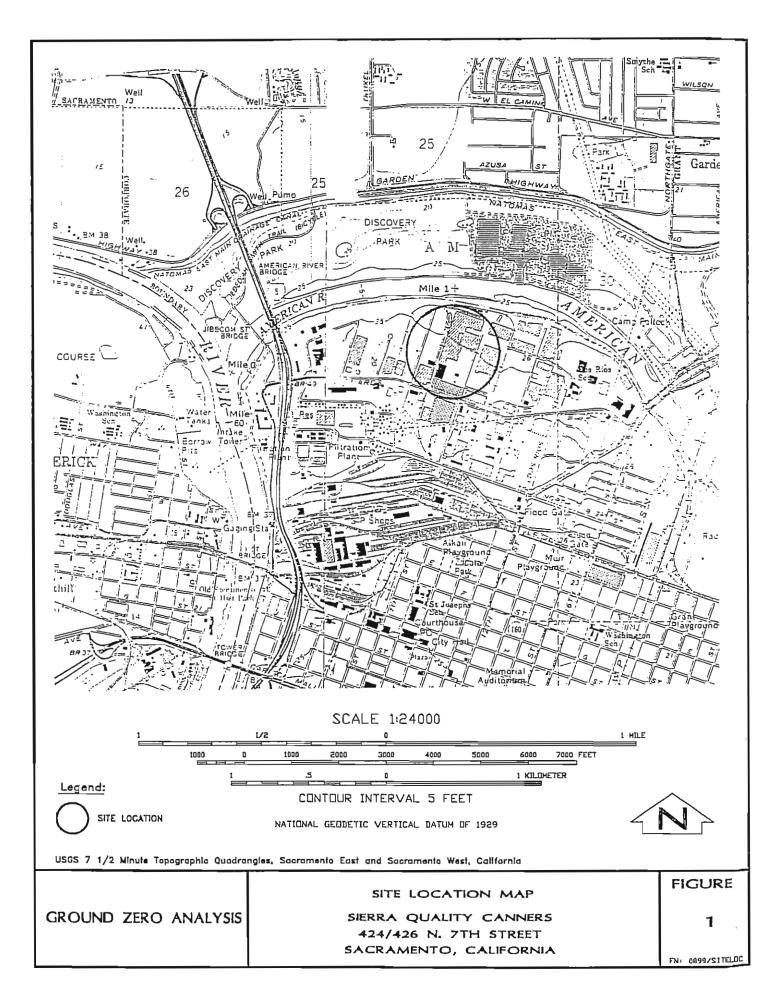
Note: A copy of the Laboratory Report will be provided when finalized.

# TABLE 1 - CAPITAL STATION 65 PRELIMINARY ANALYTICAL RESULTS

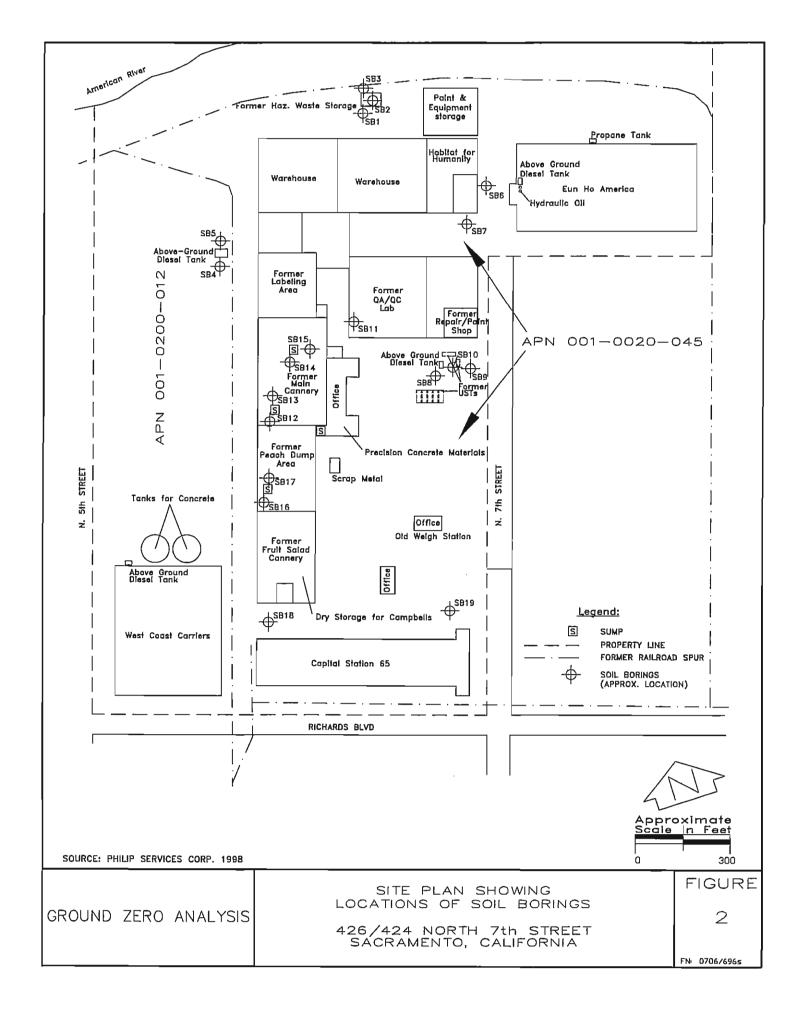
Samples Collected July 13-14, 2006

	1	1	1	TPH-	TPH-	
AREA DESCRIPTION	SAMPLE	MATRIX	TPH-Gas	Diesel	Motor Oil	VOCs
Former Hazardous Waste	SB1-5	Soil	ND	ND	ND	ND
Storage Area	SB1-GW	Water	ND	ND	ND	ND
	SB2-5	Soil	ND	ND	ND	ND
	SB3-5	Soil	ND	ND	ND	ND
Existing Aboveground Diesel	SB4-5	Soil		ND	_	ND
Tank in NW portion of site	SB4-GW	Water	_	ND		ND
, , , , , , , , , , , , , , , , , , , ,	SB5-5	Soil	_	ND		ND
Concrete Pit near Habitat for	SB6-5	Soil	ND	ND	ND	ND
Humanity	SB6-GW	Water	ND	ND	ND	ND
Former "Gas/Oil" Tank near SE	SB7-5	Soil	ND	ND	ND	ND
Corner of Habitat for Humanity	SB7-GW	Water	ND	ND	ND	ND
Existing Aboveground Diesel	SB8-10	Soil	11000 mg/kg	ND		n-Butylbenzene 45 mg/kg
Tank at Precision Concrete						sec-Butylbenzene 13 mg/kg
(Area of former USTs removed						tert-Butylbenzene 16 mg/kg
and site closure issued with						ethylbenzene150 mg/kg
residual gasoline remaining)						p-Isopropyl toluene 17 mg/kg
	}					isopropylbenzene 44 mg/kg
						naphthalene 160 mg/kg
	1					n-Propylbenzene 150 mg/kg
						1,2,4-trimethylbenzene 1100 mg/kg
						1,3,5-trimethylbenzene 290 mg/kg
						xylenes 920 mg/kg
	SB8-GW	Water	92000 ug/L	ND		benzene 280 ug/L
	000 011	· vate	02000 ug/L	112		n-Butylbenzene 48 ug/L
						ethylbenzene 4100 ug/L
						isopropylbenzene 240 ug/L
						naphthalene 1400 ug/L
						n-Propylbenzene 600 ug/l
						toluene 180 ug/L
						1,2,4-trimethylbenzene 4100 ug/L
						1,3,5-trimethylbenzene 940 ug/L
			1			xylenes 16000 ug/L
Former Solvent/Paint Storage	SB9-5	Soil	ND	ND	ND	ND
3	SB9-GW	Water	ND	ND	ND	ND
	SB10-5	Soil	ND	ND	ND	ND
Floor Stain in QA/QC Lab	SB11-5	Soil	ND	ND	ND	ND
Process Water Sumps in	SB12-5	Soil	ND	ND '	ND	ND
Main Cannery Building	SB13-5	Soil	ND	ND I	ND	ND
	SB13-10	Soil	ND	ND	ND	ND
	SB14-5	Soil	ND	ND	ND	ND
	SB14-10	Soil	ND	ND	ND	ND
	SB15-5	Soil	ND	ND	ND	ND
	SB16-5	Soil	ND	ND	ND	ND
	SB17-5	Soil	ND	ND	ND	ND
Ammonia/Haz Waste Storage	SB18-5	Soil	ND	ND	ND	ND
near Cold Storage Building	SB18-GW	Water	ND	ND	ND	ND
Parking Lot near Cold Storage	SB19-5	Soil	ND	ND	ND	ND
	SB19-GW	Water	ND	ND	ND	ND
	,	Soil	1.0 mg/kg	5.0 mg/kg	20 mg/kg_	0.005 mg/kg; SB8 8.0 mg/kg
Detection Limits		Water	50 ug/L	50 ug/L	250 ug/L	0.5 ug/L; SB8 40 ug/L
	1	, , , , , ,		SB8 250		

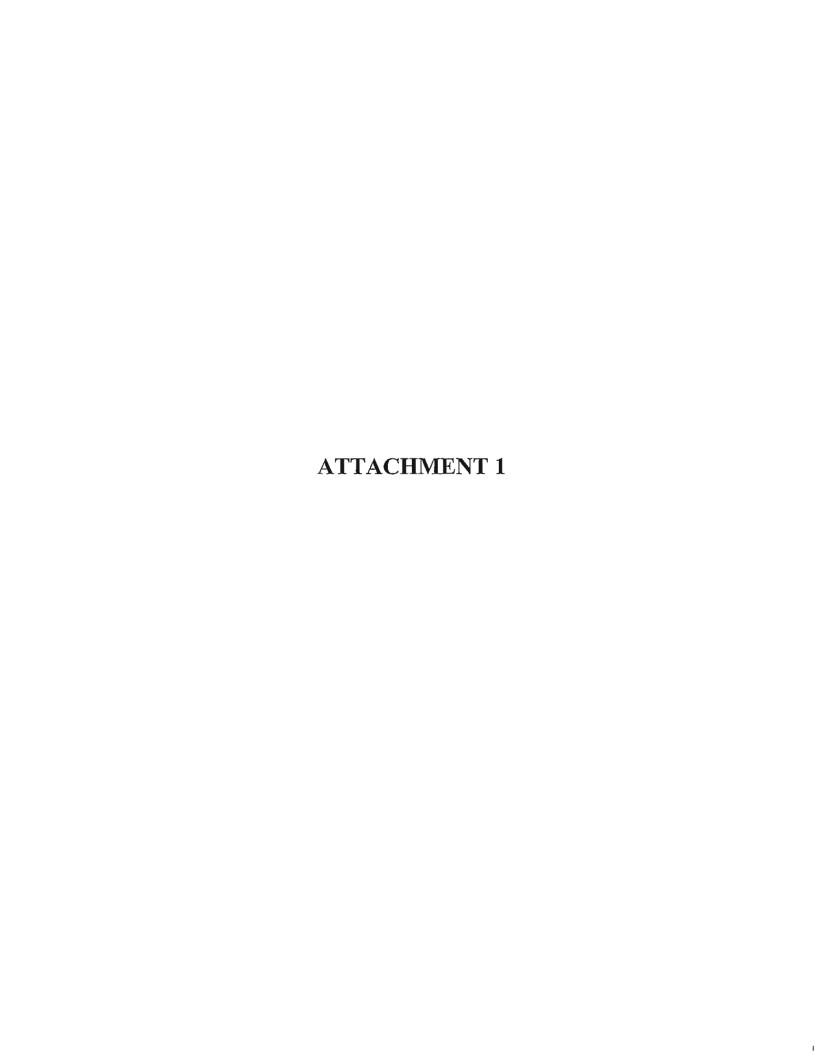
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Area Description	Past Activities	Recommended Assessment Actions	Recommended Analyses
Former Hazardous Waste Storage Area, north edge of site	Drummed waste storage	Drill 3 soll borings around perlmeter of storage area; 2 borings advanced to 10 feet below grade, collecting samples at 5 and 10 feet below grade; 1 borling advanced to groundwater, collecting soll samples at 5 foot intervals and a groundwater sample.	3 soll and 1 groundwater for VOCs, petroleum hydrocarbons (total petroleum hydrocarbons as gasoline [TPHg], as diesel [TPHd], and as motor oil [TPHmg])
Existing above ground diesel storage tank near fire suppression pump house, northwest portion of site	Fuel storage	Drill 2 soil borings adjacent to existing AST; 1 boring to 10 feet below grade, collecting soil samples at 5 and 10 feet below grade; 1 boring advanced to groundwater, collecting soil samples at 5 foot intervals and a groundwater sample	2 soll and 1 groundwater for VOCs, petroleum hydrocarbons (TPHd)
Concrete pit along east side of current "Habitat for Humanity" tenant space (former "Truck Repair" shop)	Unknown (possible UST or sump)	Drill 1 soil boring adjacent to concrete pit to 10 feet below grade, collecting samples at 5 and 10 feet below grade	1 soll for VOCs, petroleum hydrocarbons (TPHg, TPHd, and TPHmo)
Near southeast comer of current "Habitat for Humanity" tenant space, near where Sanborn maps Indicate "O!! and Gas" storage	Oil and gas storage, possible dispensing	Drill 1 soil boring to groundwater collecting soil samples at 5 foot intervals; collect groundwater sample	1 soll and 1 groundwater for VOCs, petroleum hydrocarbons (TPHg, TPHd, and TPHmo)
Existing above ground diesel storage tank (Precision Concrete yard)	Motor fuel storage and dispensing	Drill 1 soil boring to 10 feet below grade, collect soil samples at 5 and 10 feet below grade	1 soll for VOCs, petroleum hydrocarbons (TPHd)
Former solvent/paint(?) storage shed, east of existing above ground diesel storage tank	Possible location of solvent and paint storage, per Bill Russell	Drill 2 soil borings through old building slab (shed now removed); 1 soil boring to 10 feet, collecting samples at 5 and 10 feet below grade; 1 soil boring to groundwater, collecting soil samples at 5 foot Intervals; collect groundwater sample	2 soll and 1 groundwater for VOCs, petroleum hydrocarbons (TPHg, TPHd, and TPHmo)
Floor stains in area of former QA/QC lab	Laboratory testing (stain origin unknown)	Drill 1 soil boring to 5 feet below grade through existing building slab; collect soil samples at 2.5 and 5 feet below grade	1 soll for VOCs, petroleum hydrocarbons (TPHg, TPHd, and TPHmo)
Sumps (3) within "Main Cannery" building	Collection points for wash down water generated within cannery	Orill 2 soil borings at each sump (total of 6 borings) to 10 feet below grade through existing building slab; collect soil samples at 5 and 10 feet below grade	6 soll for VOCs, petroleum hydrocarbons (TPHg, TPHd, and TPHmo)
Ammonia/hazardous waste storage area near southwest corner of existing Cold Storage compressor room	Potential hazardous materials storage	Drill 1 soil boring to groundwater; collect soil samples at 5 foot intervals; collect groundwater sample	1 soll and 1 groundwater for VOCs, petroleum hydrocarbons (TPHg, TPHd, and TPHmo)
Parking lot near cold storage operation office	Unknown (no suspected activities in this area; this boring is a general check of groundwater quality in this portion of the site)	Drill 1 soil boring to groundwater; collect soil samples at 5 foot intervals; collect groundwater sample	1 soll and 1 groundwater for VOCs, petroleum hydrocarbons (TPHg, TPHd, and TPHmo)