Pico Power Project

Appendix 8.14-A
Phase I Environmental Site Assessment
850 Duane Avenue

October 2002

PHASE I ENVIRONMENTAL ASSESSMENT REPORT
DUANE AVENUE AT LAFAYETTE STREET
SANTA CLARA, CALIFORNIA 95050

Prepared for:

Silicon Valley Power
1500 Warburton Avenue
Santa Clara, CA 95050-3796
(408) 261-5480

Prepared by:

SCS Engineers
6850 Regional Street, Suite 240
Dublin, California 94568-2920
(925) 829-0661

June 3, 2002
File No. 01202038.00

Environmental Consultants

6850 Regional Street
Suite 240
Dublin, CA 94568-2920

925 829-0661
FAX 925 829-5493
www.scseng.com

SCS ENGINEERS

June 3, 2002
File No. 01202038.00

Mr. John Roukema
Silicon Valley Power
1500 Warburton Avenue
Santa Clara, CA 95050-3796
Phone: (408) 261-5480
Fax: (408) 241-8291

Subject: **Phase I Environmental Assessment Report for Property at Duane Avenue and Lafayette Street, Santa Clara, California**

Dear Mr. Roukema:

Enclosed are two (2) copies of the above-referenced report for your review.
SCS appreciates the opportunity to work with Silicon Valley Power on this project. Should you have any questions regarding this submittal, please contact either of the undersigned.

Sincerely,

Emily Harris
Staff Geologist

Steve Clements, RG, REA
Project Director
SCS ENGINEERS

Enclosures

This Phase I Environmental Assessment Report dated June 3, 2002 for property located at the southwest corner of the intersection of Duane Avenue and Lafayette Street in Santa Clara, California, was prepared and reviewed by the following:

Emily Harris
Staff Geologist

Steve Clements, RG, REA
Project Manager

Lenard Long, P.E.
Vice-President
SCS ENGINEERS

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EXECUTIVE SUMMARY

SCS Engineers conducted a Phase I Environmental Assessment of property located at the southwest corner of the intersection of Duane Avenue and Lafayette Street in Santa Clara, California (the "Property"), for the City of Santa Clara (Silicon Valley Power). This assessment was performed in general conformance with ASTM E1527-00.

The approximately two-acre Property is located in a commercial and light industrial area of Santa Clara. The Property is largely vacant, with portions utilized by the City of Santa Clara for use as a driveway, parking area, and equipment storage area.

There are no historic records of development on the Property. The parcel immediately to the south of the Property has been occupied by the City of Santa Clara Kifer Substation since at least 1971.

The inspection of the Property identified a wash station for cleaning of City of Santa Clara street sweepers, located in the southeast portion of the Property. Discharge runoff water flows north and drains into the ground on the Property. In addition, review of aerial photographs indicated the possible presence of a circular depression containing varying amounts of water between 1976 and 1984.

Regulatory database information identified known and suspected contamination sites in the area surrounding the Property. Groundwater impacts, including elevated trichloroethene concentrations, are reported at nearby upgradient sites. Contaminants have historically been detected in groundwater at nearby sites at least 700 feet away from the Property.

Based on this information, soil and shallow groundwater beneath the Property may have been impacted by historic operations in the area, and further investigation is recommended.

SECTION 1

INTRODUCTION

The City of Santa Clara (Silicon Valley Power) retained SCS Engineers (SCS) to prepare a Phase I Environmental Assessment for property located at the southwest corner of the intersection of Duane Avenue and Lafayette Street in Santa Clara, California (the "Property"). A Site Vicinity map is provided as Figure 1. This assessment was performed in general accordance with ASTM E1527-00 guidelines for Phase I Environmental Site Assessment Reports.

Resumes of project personnel are provided as Appendix A.

PURPOSE

The purpose of this investigation was to identify any *recognized environmental conditions* as defined in ASTM Standard E1527-00, ("the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater, or surface water of the property. The term includes hazardous substances or petroleum products even under conditions in compliance with laws. The term is not intended to include *de minimis* conditions that generally do not present a material risk of harm to public health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies.") on the Property or in the immediate area. This assessment is intended to constitute an appropriate inquiry into the previous ownership and uses of the property consistent with good commercial or customary practice, as part of the due diligence process required by the innocent landowner defense under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA a.k.a. Superfund), the Superfund Amendments and Reauthorization Act of 1986 (SARA), and the Small Business Liability Relief and Brownfields Revitalization Act of 2002.

SCOPE OF WORK

This Phase I Environmental Assessment is based on:

- Review of historical site use information (topographic maps, aerial photographs, Sanborn fire insurance maps, city records, existing reports, etc.),
- Field observations made during site visits conducted on May 22 and 28, 2002,
- Review of federal, state, and local regulatory databases. The search distances are those specified by ASTM E1527-00, and
- Review of appropriate regulatory agency files.

SPECIAL TERMS AND CONDITIONS

Property Access

Access to the Property was arranged through Mr. Don McArthur of the City of Santa Clara. SCS was not escorted during our site visits, however.

Use by Third Parties

This report has been prepared specifically for Silicon Valley Power with application to a Phase I Environmental Assessment for property located at the southwest corner of the intersection of Duane Avenue and Lafayette Street in Santa Clara, California. The report has been prepared in accordance with the care and skill generally exercised by reputable professionals, under similar circumstances, in this or similar localities. No other warranty, expressed or implied, is made as to the professional opinions presented herein. This report is not a legal opinion.

No other party, known or unknown to SCS, is intended as a beneficiary of this work product, its content or information embedded therein. Third parties use this report at their own risk. Third party reliance letters may be issued on request and upon approval of Silicon Valley Power and payment of a fee for such letters. SCS assumes no responsibility for the accuracy of information obtained from, compiled or provided by third-party sources such as regulatory agency listings.

LIMITATIONS

This assessment focused on potential sources of hazardous substances or petroleum products that could be considered a liability due to their possible presence in significant concentrations (e.g., above acceptable limits set by the Federal or state government) or due to the potential for contamination migration through exposure pathways (e.g., groundwater). Materials that may contain substances which are not currently deemed hazardous by the federal or state of California EPA were not considered as part of this study.

Hazardous substances naturally occurring in plants, soils, and rocks, (e.g., heavy metals, naturally occurring asbestos, or radon) are not typically considered in these assessments. Similarly, construction debris (e.g., discarded concrete, asphalt) is not considered to be of concern unless observations suggest that hazardous substances are likely to be present in significant concentrations or likely to migrate.

Unless otherwise noted, sampling and laboratory analyses of soil, water, air, building materials, or other media, were not performed as part of this assessment. Positive identification of hazardous substances can only be accomplished through sampling and appropriate laboratory analysis.

SECTION 2

SITE LOCATION AND USE

The Property is located at the southwest corner of Duane Avenue and Lafayette Street in the City of Santa Clara. US Highway 101 trends northwest-southeast approximately 415 feet north of the Property, and east-west trending Central Expressway bypasses the Property approximately 0.25-mile south of the Property. The Property is located approximately 0.75-mile west of the Guadalupe River in an area developed for commercial and light industrial use. A Site Vicinity map is presented as Figure 1.

Approximately the western two-thirds of the Property is utilized as a driveway, parking area, street-sweeper wash station, and equipment storage area by the City of Santa Clara and the City of Santa Clara Kifer Substation (the "Substation"). No buildings or other structures occupy the Property. Approximately the eastern third of the Property is densely vegetated with trees, shrubs, and grasses and appears to be unused.

SITE HISTORY

The history of the site was evaluated using the following sources:

- USGS Topographic maps,
- Sanborn Fire Insurance maps, and
- Historical aerial photographs.

Topographic Maps

The U.S. Geological Survey, Milpitas, California (1961, photorevised 1980) 7.5 minute quadrangle map was reviewed as part of this assessment. Developments surrounding the Property are mapped as urban. The parcel northeast of the Property is occupied by public storage units, and is designated as City land.

Sanborn Fire Insurance Maps

Sanborn Fire Insurance Maps were obtained from Environmental Data Resources, Inc. (EDR) of Southport, Connecticut and reviewed as part of this assessment. Maps showing the Property were not available and our review consisted of maps dated 1961 and 1966, depicting parcels south of the Property. Copies of maps are provided in Appendix B.

Both maps show a vast industrial complex south of Central Expressway identified as "Owens-Corning Fiberglass Corporation." In addition, a small "Pacific Gas and Electric Company Kifer Substation" is depicted as being owned by Santa Clara County, in the region south of the Property.

Aerial Photographs

Aerial photographs of the Property and vicinity (dated 1954, 1960, 1966, 1971, 1976, 1980, 1984, 1990, 1996, and 1999) from Pacific Aerial Surveys of Oakland, California were reviewed as part of this assessment. A list of aerial photographs reviewed is provided in Appendix C.

The 1954 and 1960 photos show the Property as vacant or occupied by an agricultural field. US Highway 101 had been built and runs east-west north of the Property, and Lafayette Street runs north-south and bypasses the Property to the east. Scattered commercial or residential developments surrounded the intersection of Highway 101 and Lafayette Street. Bounding the Property directly to the north and south were small areas of land occupied by small buildings and cars, which were possibly residences or farms. In the 1960 photo, a small development including five buildings and a parking area had been built immediately north of the Property. In both photos and all later photos, a large industrial complex, now known as Owens Corning Fiberglass Corporation, is shown south of Central Expressway.

In the 1966 photo, the center portion of the Property appeared to be occupied with buildings, and the western half was vacant. The eastern corner of the Property, bordering Lafayette Street, was densely vegetated. West of the Property and parcels to the north and south of the Property appeared to be dirt or agricultural fields. Developments existed to the south of the Property, as well as to the east across Lafayette Street. Land north of the Property was largely vacant, and north of Highway 101 consisted of vacant or agricultural fields with scattered buildings.

In the 1971 photo, the Property and surrounding parcels were similar to that of the 1966 photo. The eastern area of the Property that consisted of dense vegetation in the previous photo now consisted of dirt or grass, with a distinct row of trees separating it from the central section of the Property. South of the Property were the beginnings of the Substation that exists today. Raymond Street, located west of the Property, was constructed by 1971.

By 1976, Duane Avenue had been built along the eastern border of the Property. The Property remained vacant in this photo, and a circular area within the eastern portion of the Property appeared depressed relative to the sides, which appeared graded. It appears that varying amounts of water have been present in the depression. This suggests the possibility of a dumping pit in this location. The Substation south of the Property was more developed, and commercial buildings occupied parcels to the west and south of the Substation. A new commercial building had been constructed west of the Property. The area just south of Highway 101 was further developed. Public storage units had been developed northeast of the Property on the parcel bordered by Highway 101, Duane Avenue, and Lafayette Street.

In the 1980 photo, the apparent depression observed in the eastern portion of the Property looked to be shallower, with vegetation possibly growing in and around it. The central part of the Property had visible tire tracks in the dirt surface forming a road crossing the Property. An additional building had been built west of the Property.

The 1984 and subsequent photos showed no indication of the suspected depression on the Property. In the 1984 photo, white areas covered the dirt in the western portion of the Property. These white areas were not observed in the 1990 or later photos. It was evident from the 1990 photo that the southern tip of the Property was being used as a parking area, likely for employees at the Substation. By 1990, the Substation had been increased to twice its former size. The dirt road traversing the Property now connected to Raymond Street.

The 1996 and 1999 photos depicted the Property in its present configuration. In the 1999 photo, several cars were parked in all areas of the Property except the vegetated eastern portion. It appeared that equipment was being stored on the Property. Between 1996 and 1999, a new commercial building and associated parking lots had been constructed immediately to the west of the Property.

Building Permits

The Planning Office of Santa Clara County was contacted in search of environmental documents. However, environmental files were unavailable, and SCS was referred to the Assessor's Office. The assessor's office had no historic information about the Property.

Santa Clara Fire Department Files

Santa Clara Fire Department files are accessible only for properties having addresses. Because there are no known past or present addresses for the Property, historical records pertaining to the Property were not available. Records for four nearby sites were reviewed at the Santa Clara Fire Department, and are discussed in later sections.

Historical Property Use Summary

Based on information revealed through review of historical sources, the Property has historically remained vacant. Aerial photographs indicate that as early as 1976, the Property has been utilized by the city and/or neighboring landowners for various purposes such as an access road, parking area, and equipment storage area. In the eastern portion of the Property, aerial photographs suggest the historic presence of a water filled depression between 1976 and 1984.

AREA RECONNAISSANCE

The Property is located in a commercial and light industrial area of the city of Santa Clara, approximately 415 feet south of US Highway 101, 0.25-mile north of Central Expressway, and 0.5-mile northwest of the San Jose International Airport. No gas stations, monitoring wells, or remediation equipment were observed during a drive-through reconnaissance of streets within approximately 0.25-mile of the Property.

GEOLOGIC AND HYDROGEOLOGIC CONDITIONS

The Property is located within the San Jose Valley approximately 0.75-mile west of the Guadalupe River and one mile east of San Tomas Aquino Creek, at an elevation of approximately 39 feet above mean sea level. Site topography is relatively flat with a gentle slope towards the north-northeast (USGS, 1961).

This area is underlain by interfluvial basin deposits that mainly consist of organic-rich clay and silty clay (USGS, 1971). The depth to bedrock is approximately 500 feet below ground surface or greater (Wahler Associates, 1984).

The general groundwater regime in the area consists of two aquifer systems. The deeper aquifer extends from approximately 200 feet bgs to bedrock, and the shallow aquifer extends from ground surface to depths of between 50 and 200 feet. A generally clayey aquitard separates these zones (Wahler Associates, 1984). Based on a review of Santa Clara Valley Water District (SCVWD) files for site investigations in the nearby area, first groundwater in the vicinity of the Property is anticipated at approximately 7 to 12 feet bgs (SCVWD, 2001). Groundwater is anticipated to flow to the north-northeast (Levine Frick, 2002; SCVWD, 2000).

SECTION 3

SITE RECONNAISSANCE

Visits to the Property and surrounding area were conducted by Emily Harris of SCS on May 22 and 28, 2002. A Site Map is provided as Figure 2. Photographs of the Property are provided in Appendix D.

The Property is made up of two parcels comprising approximately two acres, and it is enclosed with a chain-link fence. A gate at the entrance to the Property from Duane Avenue opens to a dirt driveway, which traverses the Property to the south and west. A cylindrical metal box stands close to the entrance to the Property, and is surrounded by four bumper-posts. Its padlock is labeled "Property of Santa Clara Utilities."

The middle of the Property consists of a large open driveway and storage area, which encircle an electrical tower. The outer edge of the driveway is used for storage of equipment and debris, including traffic barricades, metal piping, broken asphalt pieces, foam pieces, piles of dirt and gravel, trash, 50-gallon garbage bins with trash, a pile of chopped wood, metal structure components, spiral structures that are thought to be ceramic insulators, and construction debris. Also observed were cut pieces of oil-stained telephone poles, an uncovered 5-gallon bucket filled with a dark liquid, an old battery, and two covered 5-gallon buckets labeled "Driveway Resurfacer" and "GreenLee 5200' Poly Line." This area exhibited some oil-like staining of the ground.

The western portion of the property is separated by an additional chain-link fence, and includes a trailer, three industrial storage bins, a port-a-potty, a mobile home, and parked cars and equipment. Adjacent to the trailer are seven gas cans, four 5-gallon buckets labeled "Chevron Hydraulic Oil," and a generator. The gas cans and hydraulic oil buckets rest on a wooden pad, and are not secondarily contained. Between two industrial storage bins is an unlabeled 55-gallon drum. The drum is contained with a lid, but it sits on the ground without a pad or secondary containment. For safety reasons, SCS did not disturb the observed containers; therefore, it is not known if they are full.

The southern tip of the Property contains additional storage of piping, buckets of tools, and other unidentifiable debris. One industrial storage bin and one port-a-potty are located in this area. Subsurface utility marker flags in this area extend north to Duane Avenue, and are labeled as natural gas and storm drain utilities.

A hydrant with an attached hose is located in the southeastern portion of the Property. A sign is posted near the hydrant stating "Please Clean After Each Use – No Dumping." During the site visit, two City of Santa Clara street-sweepers were thoroughly hosed off by their operators in this area, generating a large volume of discharge water that appeared to drain via surface flow into the highly vegetated northeastern portion of the Property. Don McArthur of the City of Santa Clara reported that this street-sweeper dewatering area has been in existence for greater than 20 years.

The Property is bounded to the south by the Substation, with the southernmost point of the Property wrapping around the eastern boundary of the Substation. The Substation appears to be in good condition. No chemical storage was observed on the site.

North of the west boundary of the Property is a commercial building at 870 Duane Avenue, and associated parking lots. On the south wall of this building, facing the Property, are two signs posted, stating "Warning – Diesel Fuel." This likely refers to the existence of a diesel storage tank; however, this site was not reported in the Environmental Data Resources, Inc. database report (discussed in Section 4), so its presence is not necessarily indicative of a *recognized environmental condition.*

Across Duane Avenue is a Public Storage facility. A commercial building and parking lot occupy the parcel west of the Property. To the east of the Property is Lafayette Street, with several commercial facilities on the opposite side of the street, including additional public storage units, a building identified as "Lafayette Telecom Center – Coming Soon," Used Tire Warehouse, and Precision Sheet Metal.

PCB Equipment

Observations for possible polychlorinated biphenyl (PCB)-containing electrical transformers and related equipment were noted during the site visit. A buried vault potentially containing a

transformer was observed in the northeast corner of the Property. One pad-mounted transformer was observed, with a label stating "Non-PCB."

According to Pacific Gas & Electric (PG&E), no PCB-containing materials have been used in the manufacturing of transformers since 1969. In 1990, PG&E implemented a remediation program to remove and/or replace all PCB-containing transformers. According to PG&E, over 99% of the PCBs that existed prior to 1990 have been removed. PG&E is responsible for mitigation of impacts related to discharges from their transformers.

Asbestos-Containing Materials

As part of environmental assessments, buildings are typically observed for obvious signs of Asbestos-Containing Building Materials (ACBMs). However, because there are no buildings on the Property, ACBM observations were not applicable.

SECTION 4

REGULATORY RECORDS REVIEW

Environmental Data Resources Inc. (EDR) of Southport, Connecticut was contacted for a database report on sites listed on various federal and state databases within up to one mile of the Property. A description of each of the databases searched is included in the report, which is attached as Appendix E. The EDR databases include National Priorities List (NPL), Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS), Leaking Underground Storage Tank (LUST), Solid Waste Landfill (SWLF), and California Spills, Leaks, Investigation and Clean-up Cost Recovery Listings (CA SLIC) sites. Sites included on these lists within 0.25 mile that have the potential to impact the Property are discussed in the following text. As a general rule, sites beyond 0.25 mile are not anticipated to impact a site significantly. Any sites beyond 0.25 miles with a high potential to impact the Property are discussed, however.

The EDR databases also include hazardous waste generators, USTs, and Resource Conservation and Recovery Act (RCRA) violators. These sites use or store hazardous materials and thus may pose a potential problem in the event of a spill of leak. However, unless these sites also appear in an agency list of contaminated sites, there is no evidence of any problems at this time. Therefore, sites on these lists will not be discussed unless on or in close proximity to the Property. Please refer to Appendix E for further information on these sites.

REGULATORY DATABASE SITES

The Property does not appear on any of the databases reviewed.

The following table summarizes the number of sites identified within the databases searched by EDR. Please note that some databases duplicate others and some sites may be listed more than once.

Database	Number of Sites		
	0 – 1/4 miles	1/4 – 1/2 miles	1/2 - 1 mile
US EPA National Priority List (NPL)	0	0	0
US EPA RCRA Corrective Actions (CORRACTS)	1	0	6
US EPA CERCLIS	0	0	0
California equivalent CERCLIS (Cal-Sites)	1	7	11
California Leaking Underground Storage Tanks (LUST)	12	19	--
California Solid Waste & Landfill Facilities (SWLF)	1	1	--
California Properties with Hazardous Waste (Cortese)	7	17	83
California Registered Underground Storage Tanks (UST)	2	--	--
SRWQCB list (CA SLIC)	2	10	--
US EPA Hazardous Waste Generators	47	--	--

-- Beyond the Search Radius

Nearby Properties

As shown on the above table, several properties listed on regulatory databases are located near the Property. These properties, which may have impacted the Property, include:

- PG&E Kifer Sub-Station, 2970 Lafayette Street (HAZNET)
- Pacific Bell, 3025 Raymond Avenue (LUST)
- Safety Specialists Inc., 3060 Raymond Street (HAZNET)
- STI Foundry Inc., 975 Comstock Street (FINDS, HAZNET, RCRIS-LQG)
- Clementina LTD., 840 Comstock Street (HAZNET, LUST, Cortese, CA FID UST, HIST UST)
- A&A Foreign Auto Wreckers, 800 Comstock Street (HAZNET, LUST)
- Carnation Dairies, 891 Laurelwood Road (LUST, Cortese)
- Owens Corning Fiberglas Corporation, 960 Central Expressway (FINDS, HAZNET, LUST, RCRIS-LQG, TRIS, CA SLIC, CA FID UST, AST, CERC-NFRAP, HIST UST)

- Monsanto Chemical Co., 2710 Lafayette Street (RCRIS-SQG, FINDS, LUST, CA SLIC, CERC-NFRAP)

SCS requested files for these sites from the SCVWD, San Francisco Bay Regional Water Quality Control Board (SFBRWQCB), and the Santa Clara Fire Department. Summaries of information available on these sites are provided in the following section.

PG&E Kifer Substation – 2970 Lafayette Street is located directly south of the Property. There were no records on file for this site at the SCVWD, SFRWQCB, or the Santa Clara Fire Department. The EDR report indicates that the site has transported hazardous materials off-site. However, no violations are reported.

Pacific Bell - 3025 Raymond Avenue is located approximately 700 feet northwest of the Property. Groundwater and soil has been impacted with VOCs, including BTEX and MTBE, following the removal of one 8,000-gallon UST containing diesel in 1997. The most recent groundwater analytical results of sampling in 2001 reported an MTBE concentration of 8.8 ppb. Residual petroleum hydrocarbon concentrations seem to be attenuating, and the plume appears to be localized around the tank pit. SCVWD granted Case Closure for this site in June 2001 (SCVWD, 2001).

Safety Specialists Inc. – 3060 Raymond Street is located approximately 700 feet west of the Property. A semi-conductor manufacturing plant currently operates at the site. Tenants previous to CITEL fabricated plastic products. SCFD records included inspection reports for generators and hazardous chemical inventory statements; indications of significant environmental concerns were not encountered (SCFD).

STI Foundry Inc. – 975 Comstock Street is located approximately 700 feet south-southwest of the Property. This site was historically used to process silicon wafers into semiconductor devices, and contained an on-site buried neutralization system that included three 317-gallon USTs. Aqueous wastes, including some acids, were piped to the system, neutralized with a caustic as necessary, and discharged to the sewer. Maximum concentrations on record at the SCFD for select VOCs in groundwater are as follows: 120 parts per billion (ppb) trans-1,2-dichloroethene, 12,000 ppb trichloroethene (TCE), 140 ppb naphthalene, and 290 ppb phenol (Wahler Associates, 1984). Maximum concentrations of other chemicals historically encountered in groundwater on this site are 21 ppm fluoride, 0.03 ppm arsenic, and 0.06 ppm barium (EMCON 1997). Also on file at the SCFD were UST closure permits, a UST closure plan, hazardous chemical inventory statements, and inspection reports for generators.

Clementina LTD. – 840 Comstock Street is located approximately 700 feet south of the Property. One 1,000-gallon gasoline UST, one 500-gallon waste oil UST, one 500-gallon diesel UST, and one 750-gallon clarifier were removed and surrounding soil was excavated in 1993. Petroleum hydrocarbons detected prior to tank removal were undetected during the 1996 sampling event. Case closure was granted by the SCVWD in August 1996. (SCVWD, 1996)

A & A Foreign Auto Wreckers – 800 Comstock Street is located approximately 750 feet south-southeast of the Property. One 500-gallon UST containing gasoline was removed in 2000. Confirmation sampling of soil and groundwater after tank removal exhibited TPH-g and TPH-d concentrations in soil of 130 parts per million (ppm) and 27 ppm, respectively. No petroleum hydrocarbons were detected in groundwater. Case Closure was granted by the SCVWD in June 2000. (SCVWD, 2000)

Carnation Dairies – This dairy product distribution facility located at 891 Laurelwood Road is approximately 900 feet north-northeast of the Property. One 12,000-gallon diesel UST and one 10,000-gallon gasoline UST were removed in 1987. Soil samples collected following UST removal from beneath the diesel tank were found to contain semi-volatile and nonvolatile hydrocarbons. Three groundwater monitoring wells were installed in 1987 and 1989. Five groundwater sampling events between 1989 and 1991 have yielded samples with nondetectable concentrations of TPH-d and BTEX. Although the extent of soil contamination has not been defined, recent groundwater analytical results indicate that petroleum hydrocarbons in the soil are no longer impacting groundwater. Case Closure was granted in 1992. (SCVWD, 1992)

Owens Corning Fiberglass Corporation – 960 Central Expressway is located approximately 1075 feet south/southwest of the Property. Groundwater flow was reported to flow north at this site. This site formerly contained a 2,000-gallon Stoddard solvent UST, which was removed in November 1988, and a 4,000-gallon gasoline UST, which was removed in September 1998. In 1988, prior to tank removal, on-site groundwater monitoring wells contained TPH-g and BTEX compounds. TPH-g was detected at a maximum concentration of 1,300 ppm. Benzene, toluene, ethylbenzene, and xylenes were detected at maximum concentrations of 6 ppm, 29 ppm, 17 ppm, and 96 ppm, respectively. In an effort to remediate soil and groundwater, a groundwater extraction system was put into operation in 1992 which pumped groundwater into an above ground storage tank. Following the removal of both USTs, MTBE, benzene, and TPH-g resided in soil at maximum concentrations of 4.5 ppm, 0.007 ppm, and 2 ppm, respectively. The most recent groundwater samples were collected in February 2000, and exhibited 340 ppb TPH-g, 6.2 ppb benzene, 1.0 ppb toluene, 5.3 ppb ethylbenzene, 9.5 ppb xylenes, and 2.2 ppb MTBE (ATC Associates, 2002). As of February 2001, the groundwater extraction system had extracted approximately 24 million gallons of groundwater, and approximately 127 pounds of gasoline. Case closure was granted in October 2001 by the SCVWD. Residual petroleum hydrocarbon contamination and solvent contamination still exist in groundwater at this site. Petroleum hydrocarbon contamination is detectable at concentrations below regulatory concern, and solvent contamination, particularly TCE, is likely attributable to the upgradient former Monsanto Company Facility at 925 Walsh Avenue, which is reportedly currently conducting solvent remediation. (SCVWD, 2001).

Monsanto Chemical Company – 2710 Lafayette Street is located approximately 2600 feet south of the Property. Monsanto owned this property from 1953 to 1983, and during this time a plastics and resin manufacturing plant was operated on the eastern portion of the site. Since 1983, ownership of the site has changed hands several times. In the 1990s, the occurrence of TCE in groundwater was discovered, and since its discovery, water remediation systems for TCE

have been in operation. Most recent TCE concentrations on file were between 0.031 ppm and 1.5 ppm, dated June 2001. (Kleinfelder, 2001)

LANDFILLS

A review of the California Solid Waste Information System and State Water Resources Control Board Waste Management Unit Database System conducted as part of the EDR database report identified two landfills within one-half mile of the Property.

Praxair Inc. Plant #858 – this landfill is located approximately 800 feet south-southwest of the Property at 1025 Comstock Street. This landfill accepts friable asbestos waste and other municipal wastes. No violations are on record, and this landfill is not considered to present a *recognized environmental condition.*

Roman Tires Inc. – 800 Laurelwood Road is located approximately 1350 feet northeast of the Property. The facility is a waste tire site. No violations are on record, and this facility is not considered to present a *recognized environmental condition.*

OIL AND GAS WELLS

Munger Map No. *W-23* dated June 1999 was reviewed for information regarding oil and gas wells in the vicinity of the Alignment. No oil or gas wells are mapped within one mile of the Alignment.

SECTION 5

FINDINGS AND OPINIONS

The results of this assessment have revealed the following:

- The majority of the approximately 2-acre Property is currently used as a driveway, parking area, and equipment storage area by the City of Santa Clara. Present on-site during SCS site visits were tractors and other construction equipment, employee vehicles, four industrial storage bins, a trailer, a mobile home, an unlabeled 55-gallon drum, various concrete and metal structures, stockpiles of asphalt and dirt, trash, chopped wood, oil-stained telephone poles, and small amounts of industrial chemical products.

- A street sweeper wash station exists in the southeast portion of the Property, which has been used for over 20 years to clean City of Santa Clara street sweepers. Discharge water flows north into a highly vegetated area of the Property, and eventually sinks into the ground. Discharge water likely contains contaminants including oils, metals, and PCBs.

- Review of aerial photographs indicated the historic presence of a water-filled depression in the eastern portion of the Property between 1976 and 1984. Water within the depression may have been associated with street sweeper operations and could have impacted soil in the area. Site uses during 1976 and 1984 may have included the use of the depression as a storage or disposal area for hazardous materials.

- Several nearby sites have recorded releases of contaminants to groundwater. In particular, the STI Foundry site is located approximately 700 feet upgradient. Groundwater concentrations of TCE have been identified at up to 12,000 ppb.

CONCLUSIONS

SCS has performed a Phase I Environmental Assessment in general conformance with ASTM Practice E1527-00 of property located at the southwest corner of the intersection of Duane Avenue and Lafayette Street in Santa Clara, California.

Based on the information revealed through this assessment, SCS recommends that a limited subsurface investigation consisting of soil, soil vapor, and groundwater sampling be conducted on the Property. The investigation should be designed to assess impacts to the Property in the region of the street sweeper wash station and historic depression.

REFERENCES

ATC Associates, Inc., April 26, 2002. Semiannual Groundwater Monitoring Report, First Half 2002.

City of Santa Clara Planning Division, City of Santa Clara City Hall, 1800 Warburton Avenue, Santa Clara, CA 95050. (408) 615-2450.

EMCON, November 24, 1997. Health and Safety Plan, SEMTECH Corporation, 975 Comstock Street, Santa Clara.

EMCON, November 25, 1997. Letter Re: Closure Plan to Abandon In-Place Three USTs; SEMTECH Corporation, Inc., 975 Comstock Street, Santa Clara.

Environmental Data Resources, Inc., The EDR Radius Map Report, Inquiry Number: 0775901.1r, May 7, 2002.

Kleinfelder, 2001. 2001 Semiannual Report, Equity Office Properties Site, Santa Clara, California.

Levine Fricke, May 6, 2002. Recommendation for Site Closure, ACI Distribution, Inc., 750 Walsh Avenue, Santa Clara, California, January 1 to March 31, 2002.

Munger Map Book, California – Alaska Oil and Gas Fields, 40th Edition, June 1999. *Map No. W-23.*

Pacific Aerial Surveys, 8407 Edgewater Drive, Oakland, California, 94621, (510) 632-2020.

San Francisco Regional Water Quality Control Board, 1515 Clay Street, Oakland, California. (Melinda Wong, 510/622-2300)

Santa Clara Fire Department Hazardous Materials Division, 1675 Lincoln Street, Santa Clara, CA 95050. (408) 615-4960.

Santa Clara Valley Water District, June 8, 1992. Case Closure Recommendation, Carnation Dairy, 891 Laurelwood Road, Santa Clara.

Santa Clara Valley Water District, August 29, 1996. Underground Storage Tank Case Closure—Clementine Yard, 840 Comstock Street, Santa Clara, CA.

Santa Clara Valley Water District, June 8, 2000. Fuel Leak Site Case Closure—Anderson Property, 800 Comstock Street, Santa Clara, CA.

Santa Clara Valley Water District, September 27, 2000. Fuel Leak Case Closure—Container Corporation, 2600 De La Cruz Boulevard, Santa Clara, CA.

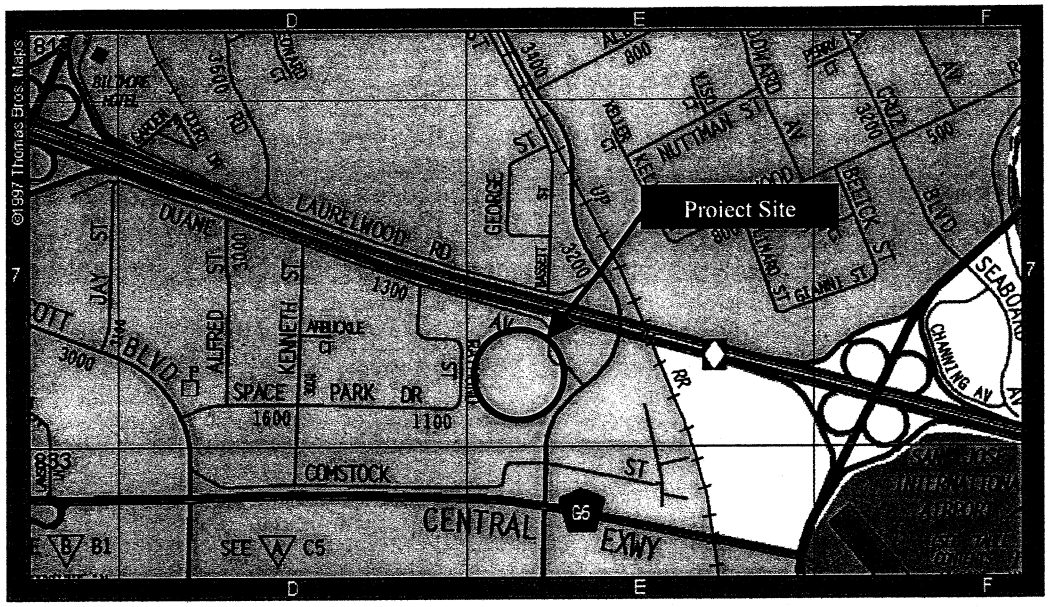
Santa Clara Valley Water District, October 1, 2001. Case Closure Letter, Owens Corning Fiberglass Corporation.

Santa Clara Valley Water District Leaking Underground Tank Program, 1020 Blossom Hill Road, San Jose, California 95123 (Roberta Novelli, 408/265-2600)

United States Geological Survey, 1961 Milpitas, California 7.5 Minute Topographic Map (Photorevised 1980).

United States Geological Survey, 1971, *Geologic Map of Late Cenozoic Deposits, Santa Clara County, California..*

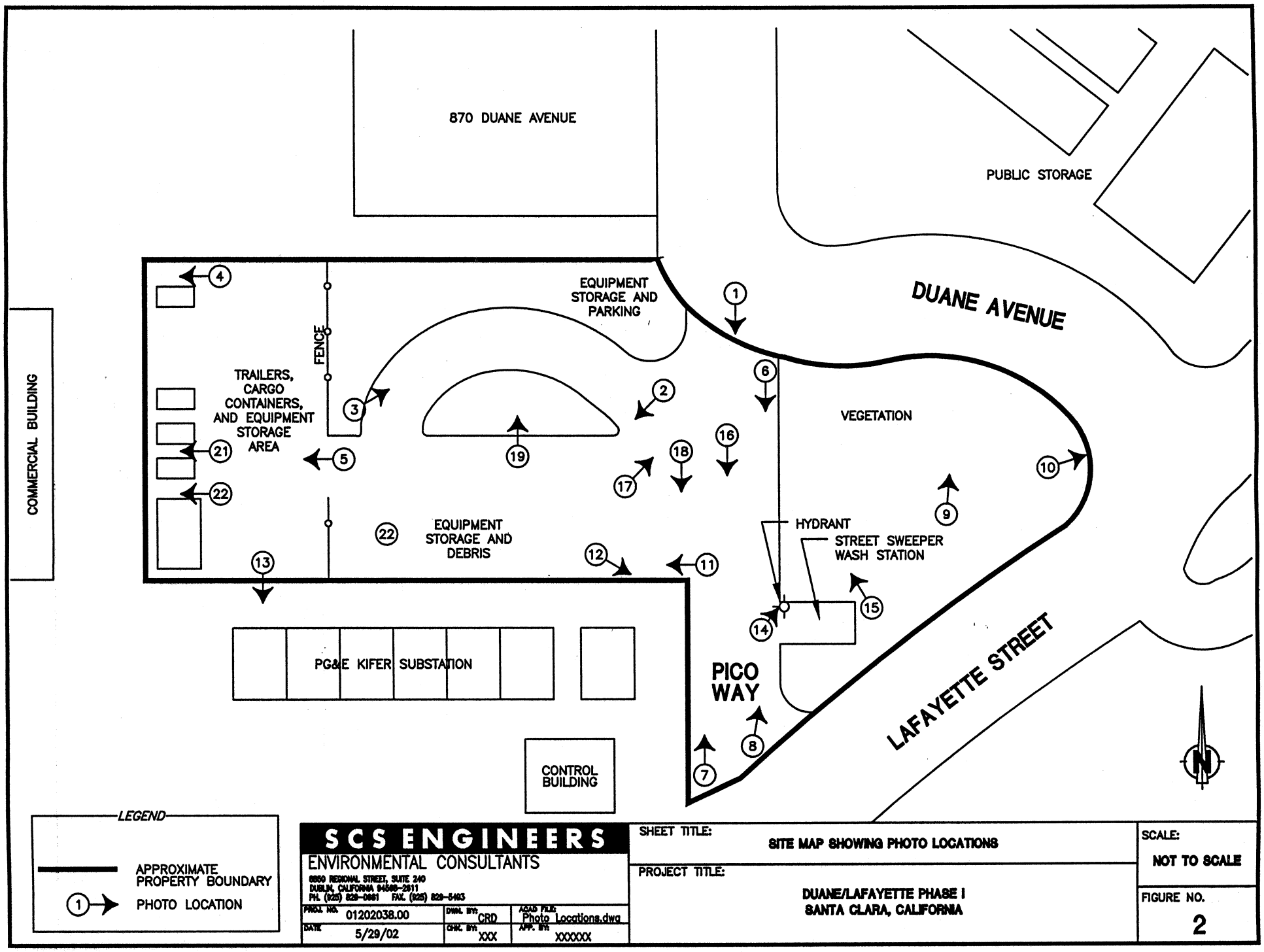
Wahler Associates, Geotechnical Engineers, July 1984. Soil and Groundwater Assessment, 975 Comstock and 3060 Raymond Street, Santa Clara, California.



N

Site Location Map
Duane Avenue at Lafayette Street
Santa Clara, California

Figure 1.



LEGEND

APPROXIMATE PROPERTY BOUNDARY

1 PHOTO LOCATION

SCS ENGINEERS

ENVIRONMENTAL CONSULTANTS

8950 REGIONAL STREET, SUITE 240
DUBLIN, CALIFORNIA 94568-2611
PH. (925) 828-0681 FAX. (925) 829-5403

PROJ. NO.	DWN. BY:	ACAD FILE:
01202038.00	CRD	Photo Locations.dwg
DATE	CHK. BY:	APP. BY:
5/29/02	XXX	XXXXX

SHEET TITLE: SITE MAP SHOWING PHOTO LOCATIONS

PROJECT TITLE: DUANE/LAFAYETTE PHASE I
SANTA CLARA, CALIFORNIA

SCALE: NOT TO SCALE

FIGURE NO. 2

EMILY C. A. HARRIS, STAFF GEOLOGIST

Education

B.A., Geology, Macalester College, St. Paul, MN, 2000

Experience Summary

Ms. Harris has worked as a geologist in the environmental industry since graduating from college. She has been involved with numerous projects around the country related to the investigation of hazardous chemicals in soils and groundwater. Her project experience has included the following:

- Environmental assessments of properties prior to real estate transfer. This involves evaluating past on-site operations, identifying potentially contaminated sites, and record searches of files maintained by regulatory agencies both for the subject and adjacent properties.
- Evaluation of analytical data related to environmental remediation projects, including identification of potential environmental concerns.
- Preparation of numerous quarterly monitoring reports for submittal to regulatory agencies, environmental site assessment reports, and health and safety plans.
- Monitoring and sampling of well systems to determine the presence and nature of subsurface contaminants in groundwater, including collection of groundwater quality indicator parameters.
- Direction of subsurface soil sampling using direct push methods, including logging soil using United Soil Classification System criteria.
- Aquifer slug tests and analysis of results.
- Project team member in soil excavation projects, including confirmation soil sampling and air monitoring.

Ms. Harris has participated in a certified health and safety program in compliance with OSHA Standard 29 CFR 1910.120. She is knowledgeable of incident response operations, team functions, personnel safety, and field equipment. She is able to recognize and evaluate potential chemical and physical hazards and associated risks in field operations; discuss and use personnel protective equipment, such as respiratory protection and protective clothing; use and interpret direct reading instruments; and examine and establish Standard Operating Safety Guidelines to ensure safe and effective response operations.

STEVEN J. CLEMENTS, R.G., R.E.A., SENIOR PROJECT GEOLOGIST

Education

B.S., Geology, University of California, Riverside, 1991

Registrations

Registered Geologist - California (No. 6740)
Registered Environmental Assessor - California (No. 6837)

Affiliations

Geological Society of America
Association for the Environmental Health of Soils
National Ground Water Association

Experience Summary

Mr. Clements has worked as a geologist in the environmental industry for over 10 years. He has managed numerous projects related to the investigation of groundwater and soil conditions at hazardous chemical release sites, underground storage tank sites, and landfills. Selected projects in which he has participated are listed below:

Southern Santa Clara County City: Planned and managed groundwater investigation to define the lateral and vertical extent of groundwater impacted with MTBE. Included preparation and submittal of Workplans, summary reports, and a Corrective Action Plan for regulatory approval, direction of field personnel to install and sample multiple groundwater monitoring wells, completion of aquifer pumping tests to evaluate aquifer characteristics and assist with the design of a groundwater treatment system and groundwater modeling.

Central California Landfill: Managed investigation program to assess the potential for subsurface fires at a Central California Landfill. Direct push methods were used to install temporary landfill gas sampling points from which vapor samples were collected and analyzed to assess the potential for subsurface fires.

Reliance Steel and Aluminum Company, Hayward, CA: Planned and managed soil and groundwater investigation to characterize the extent of contamination associated with a leaking underground storage tank, leaking hydraulic lines, and a chlorinated solvent spill. Included the preparation of workplans, summary reports, and a Corrective Action Plan for regulatory submittal.

San Jose Redevelopment Agency: Planned and managed multiple Phase I Environmental Assessments and Phase II Site Investigations of properties prior to real estate transfer. Site Investigations included coordination of subcontractors and the direction of field personnel to collect and analyze soil, vapor, and groundwater samples. Contaminants included heavy metals, hexavalent chromium, PCBs, chlorinated solvents, oils, gasoline, and MTBE.

STEVEN J. CLEMENTS, R.G., R.E.A. (continued)

Menlo Park, CA: Planning and design of an aquifer pumping test program to estimate site specific hydrogeologic properties for inclusion in a site-wide groundwater model. Statistical analysis of soil and groundwater data to evaluate remedial options and assist with the completion of a Baseline Human Health Risk Assessment and Scoping Ecological Risk Assessment. In addition, Mr. Clements prepared an Interim Remedial Measures Workplan that was submitted to the California Department of Toxic Substances Control.

Mar Ventures, Torrance, CA: Managed groundwater monitoring program for former steel mill site. Included the direction of field personnel and submittal of quarterly monitoring reports to the regulatory agency. Completed downgradient groundwater investigation resulting in final site closure.

Mr. Clements has participated in a certified health and safety program in compliance with OSHA Standard 29 CFR 1910.120. He is knowledgeable of incident response operations, team functions, personnel safety, and field equipment. He is able to recognize and evaluate potential chemical and physical hazards and associated risks in field operations; discuss and use personnel protective equipment, such as respiratory protection and protective clothing; use and interpret direct reading instruments; and examine and establish Standard Operating Safety Guidelines to ensure safe and effective response operations.

Publications

Clements, S. J., and K. H. Lister. Closure of a Site Used for Collection of Waste Pesticides and Mixing of Rodenticide Baits. Eighth Annual West Coast Conference on Contaminated Soils and Groundwater. Abstracts and Supplemental Information. Association for the Environmental Health of Soils (AEHS). p. 205. 1998.

Droser, M. L., G. Hampt, and S. J. Clements. Environmental Patterns in the Origin and Diversification of Rugose and Deep-Water Scleractininan Corals. Fifth North American Paleontological Convention, Abstracts and Programs. p. 89. 1992; Courier Forschungs - Institut Senckenberg. Vol. 164. pp. 47-54. 1993.

LENARD D. LONG, P.E., PROJECT DIRECTOR

Education

B.S., Civil Engineering, California State University, Chico, 1976
Postgraduate Studies, Soil Engineering, California State University, San Jose, 1978-79

Registrations

Civil Engineer; California
Geotechnical Engineer; California
General Engineering Contractor (Class A) with HazMat Handling Certification

Affiliations

American Society of Civil Engineers (ASCE)
National Water Well Association (NWWA)

Experience Summary

Mr. Long has a 25-year record of successfully managing environmental, geotechnical and construction projects for the petroleum, chemical, transportation, utility and manufacturing industries. His experience includes the management of multi-disciplined technical staff for regulatory compliance issues, investigations, feasibility studies, systems design, operations and maintenance. His experience also includes monitoring and remedial construction for projects ranging in size up to $20 million dollars. His dedication to client service, teamwork and providing value has earned him a coveted professional reputation as a person who can identify client needs and get the job done right the first time.

PROJECT EXPERIENCE

Environmental Engineering:

Managed a $2 million multi-chemical groundwater treatment system design along with its construction on a 100-acre Chemical Plant in Antioch, California. The system included co-mingling plumes, twenty cluster wells, 200 gpm air stripping tower with aqueous phase carbon polishing and vapor phase carbon off-gas treatment. Using steam, the vapor phase carbon unit was designed for onsite regeneration.

Managed the groundwater and vapor extraction systems Operation and Maintenance Program, ($1 million annual budget), for Southern Pacific Railroad in Sacramento, California. This program included multi-phase extraction systems, catalytic off-gas treatment, off-gas scrubbing, and groundwater air stripping and carbon treatment.

At numerous sites throughout California, Mr. Long has managed underground storage tank remediation programs for Unocal and Conoco Oil Companies. The multi-million dollar programs

LENARD D. LONG, P.E. (continued)

included setting strategy, agency negotiation, site investigations, feasibility studies, remedial action plans, treatment system implementation, operation and maintenance, and quarterly monitoring. Remediation included pump and treat, vacuum extraction, sparging, bioremediation, dig and haul, etc.

Mr. Long is the lead remediation engineer and contractor at several AgChem sites throughout the Central Valley. The former PureGrow sites have remediation programs that include pesticide removal, tank removals, and phytoremediation at two sites with high nitrates. As the remediation engineer and contractor, his responsibilities include design of systems, workplan preparation and implementation of the remedy.

Mr. Long is the engineering consultant for assessment, feasibility studies, design, and implementation of a 50-gpm water treatment system in Morgan Hill to remove MTBE and other gasoline compounds resulting from a fuel spill. The evaluations include working with hydrogeologists to model the plume using 3D Modflow techniques. The system consist of dual-phase water and vapor extraction, air stripping, catalytic oxidation of the air stripper off-gas and final carbon polishing.

Mr. Long is the remediation engineer responsible to manage and execute demolition, decomissioning, and corrective actions, including solvent and PCB impacted soil removal for a Brownfields redevelopment project at a former chemical plant in Menlo Park, California. This former chemical facility had a Dowtherm boiler that used PCB fluid; significant spills were reported. Tasks included the following:

- Records and data collection, review, and evaluation for a number of properties to aid in the selection of a targeted list of chemicals of concern to remediate.
- Agency negotiations (San Mateo County. & California Environmental Protection Agency (Cal-EPA) DTSC) including workplans, sampling and analysis plans, and quality assurance/quality control plans.
- Additional investigations of selected priority pollutants.
- Corrective Measure Study
- Health and Ecological Risk Assessment.
- Remediation cost evaluations.

Principal Civil and Construction Engineer for an engineering efficiency review of a multi-million dollar low level radioactive soil removal (250,000 cy) project, State and National Superfund Site, in West Chicago, Illinois. This third party review involved the evaluation of subcontracts, costing and productivity of materials handling and rail car loading. The result of the review increased client awareness of actual costs, provided tighter control of subcontractor's costs and confirmed that the owner had diligent personnel attached to the $200 million project.

Mr. Long was the lead engineer at the Santa Fe Inter-modal Terminal in San Bernardino, California. He has completed the design and construction management of a two million dollar, 7000 scfm, soil vapor phase treatment system for the removal of Volatile Organic Compounds.

LENARD D. LONG, P.E. (continued)

Environmental Engineer involved in planning and strategy sessions for the redevelopment of the Sacramento Rail Yard. This project includes critical path scheduling and costing for remediation of multiple contaminate sites, geotechnical consideration for the construction of a 1/2 million cubic yard Class II landfill, and materials handling planning.

Authored the Remedial Design and Implementation Plan (RDIP) for PCB-impacted soil, Aydin State Superfund, Palo Alto, California. The system included a pump and treatment system for water impacted with PCBs.

Author for Storm Water Pollution Presentation Plans (SWPPP), California Army National Guard, Camp San Louis Obispo, Fresno AVCRAD and Camp Roberts military installations. These plans included thousands of acres and multiple drainage discharge locations, with special emphasis on Total Suspended Solids and metals loading to receiving streams.

Responsible engineer for the Storm Water Pollution Prevention Plan for Conoco Asphalt Terminal located in Elk Grove, California. Mr. Long performed the initial sampling events for tills project.

Provided sampling and consultation for an Odor Abatement Study, Cal Oils, Richmond, California. The study included establishment of baseline odor and chemical composition of vapors emanating from the corn germ extraction facility. Point sources within the facility were identified and odor capture and destruction systems evaluated. One of the options evaluated was a gas-fired turbine with regenerative electric power capabilities.

Remediation projects range from service station sites to 100-acre chemical plants. Types of contaminants encountered typically range from gasoline to crude oil, organic lead, mercury, and arsenic to TCE, TCA, PCE and other solvents. He was responsible for the design and construction of a $2.5 million dollar pump and treat system for a major chemical plant in California. The systems include air stripping, off-gas air treatment with vapor phase carbon and aqueous phase liquid carbon polishing to remove organic lead.

Geotechnical Engineering:

Mr. Long has been responsible for hundreds of geotechnical investigation involving hazards such as landslides, erosion problems, collapsible soil, soft bay mud, liquefaction and highly expansive soil conditions. A few notable projects are identified below:

Geotechnical Consultant on the Federal Courthouse excavation-dewatering project for Southern Pacific Railroad located in Sacramento, California. This project included groundwater modeling, flow characteristics, and predictive impact of local chemicals in groundwater. He developed groundwater treatment scenarios for contingency implementation if the events that impacted groundwater chemicals were beyond discharge requirements.

As the Geotechnical Engineer for the project, he designed an erosion control and countermeasures for a 50,000 cy earth flow at Camp San Luis Obispo. The studies included hydraulic and slope stability calculations, sediment retention basin and earth structure's design. In addition, he is the

LENARD D. LONG, P.E. (continued)

erosion control consultant for four mine reclamation projects at the Camp. The mines have both adverse erosion and metals impacts to nearby streams. Mr. Long is the technical consultant to the US Army Corps of Engineers and California National Guard.

Geotechnical and construction consultant for the design and installation of a 60-feet deep soil mixing chemical barrier wall installed by GeoCon at the Sacramento rail yard. Included in the project were design drawings, specification, contracting, permitting, and construction performance monitoring.

Responsible engineer for hundreds of geotechnical investigations, foundation designs and earthwork construction. Geotechnical projects varied from retaining walls to 9story hotels to I million cubic yard slope stability studies and mass grading, moving millions of cubic yards of earth.

Geotechnical Engineer for corrective measures on the Pittman Canal landslide and erosion from storm damage of 1985. Landslide damage included I million cubic yards of earth flow materials. Corrective measures included regrading, gabion wall construction, subdrainage and slope flattening.

Mr. Long was the Geotechnical Engineer for PG&E's Drum Reservoir sediment removal project. A reservoir sediment removal study was completed which lead to the design of a 50-foot high earthen sediment retention dam. The study involved offshore sediment drilling, sampling, gold assay and economic evaluations, 300,000 cy of sediment removal, retention dam construction, area drainage improvement and construction monitoring.

Contractor and/or Construction Management

Mr. Long is a licensed contractor with hazardous material handling certification in California for 12-years. During that time, he has removed many thousands of cubic yards of contaminated soil and dozens of underground storage tanks. His contracting experience includes special expertise using insitu treatment technologies and solar powered treatment equipment. A few notable projects follow:

Designed and performed above ground bioremediation (landfarming) of 2,000 cubic yards of diesel impacted soil, Catellus Corp., Huron, California. The treatment included irrigation management, nutrient addition and periodic soil mixing.

Designed and construction management of a dioxin plume encapsulation system, consisting of a 35 foot deep slurry trench with HDPE barrier liner and multi-media cap at a State Superfund site, Port of Oakland, California. Mr. Long changed the initial feasibility study design to one that was more practical and constructable, thus saving the client over a half million dollars.

Designed and constructed an enhanced insitu bioremediation treatment system for a fuel hydrocarbon spill. The system consisted of groundwater extraction and re-injection using hydrogen peroxide as the oxygen source for a redevelopment site in San Jose.

LENARD D. LONG, P.E. (continued)

Performed the surgical removal of hydrocarbon-impacted soil, the impacted soil was located from 60 to 80 feed below the ground, using large diameter augers for Ace Oil State Superfund, Galt, California. Using large diameter drilling techniques to remove the impacted soil allowed removal without massive excavation and shoring, thereby saving hundreds of thousands of dollars.

Designed and constructed a 50-foot deep excavation for the Los Angeles Center development removing 50,000 cy soil, of which 2,000 cy was fuel-impacted, in downtown Los Angeles. The work involved many meetings with multi-party, multi-consultant and multi-legal council, on a very visual and sensitive site subject to development of a skyscraper. The impacted soil was landfarmed onsite and then removed.

Mr. Long has significant hands-on experience and training in kinetics and chemistry of explosives, recognition/classification, safe handling/remote removal procedures and remediation (destruction, chemical stabilization and bioremediation). He was the responsible engineer and contractor on a $2 million dollar removal of 2,000 DNT & TNT barrels and drums located in solid waste landfill at an explosive site in the State of Washington. He also provided consultation for the assessment of a 1,000-acre explosive manufacturing site in Colorado that contained acid

spills, nitroglycerin, PETN, black powder, etc. Has been involved with State Superfund and RCRA remedial investigation, feasibility studies, and corrective actions in the States of Montana, Colorado and Washington.

Contractor for a mile long Bunker C fuel pipeline removal and decontamination project, DuPont, Washington

Environmental Data Resources, Inc.

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Sanborn® Map Report

Ship to: Loran Bures
SCS Engineers
3711 Long Beach Boulevard
Long Beach, CA 90807

1051389KEN 562-426-9544

Order Date: 5/7/2002 **Completion Date:** 05/08/2002
Inquiry #: 775901.2S
P.O. #: 01-12200
Site Name: Duane Ave/Lafayette St
Address: Duane Ave/Lafayette St
City/State: Santa Clara, CA 95054
Cross Streets:

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

1961 - 1 - map
1966 - 1 - map

Total Maps: 2

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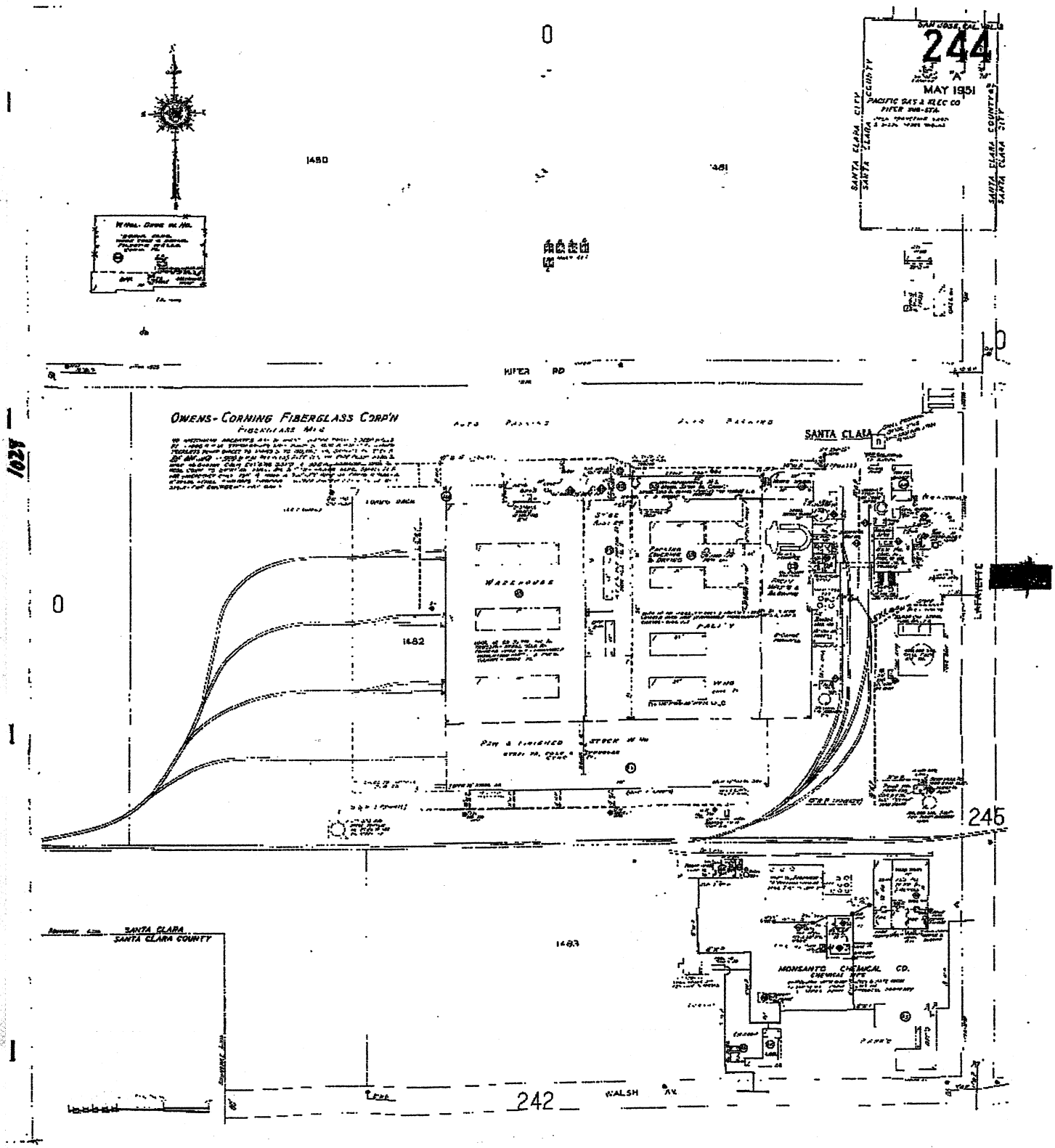

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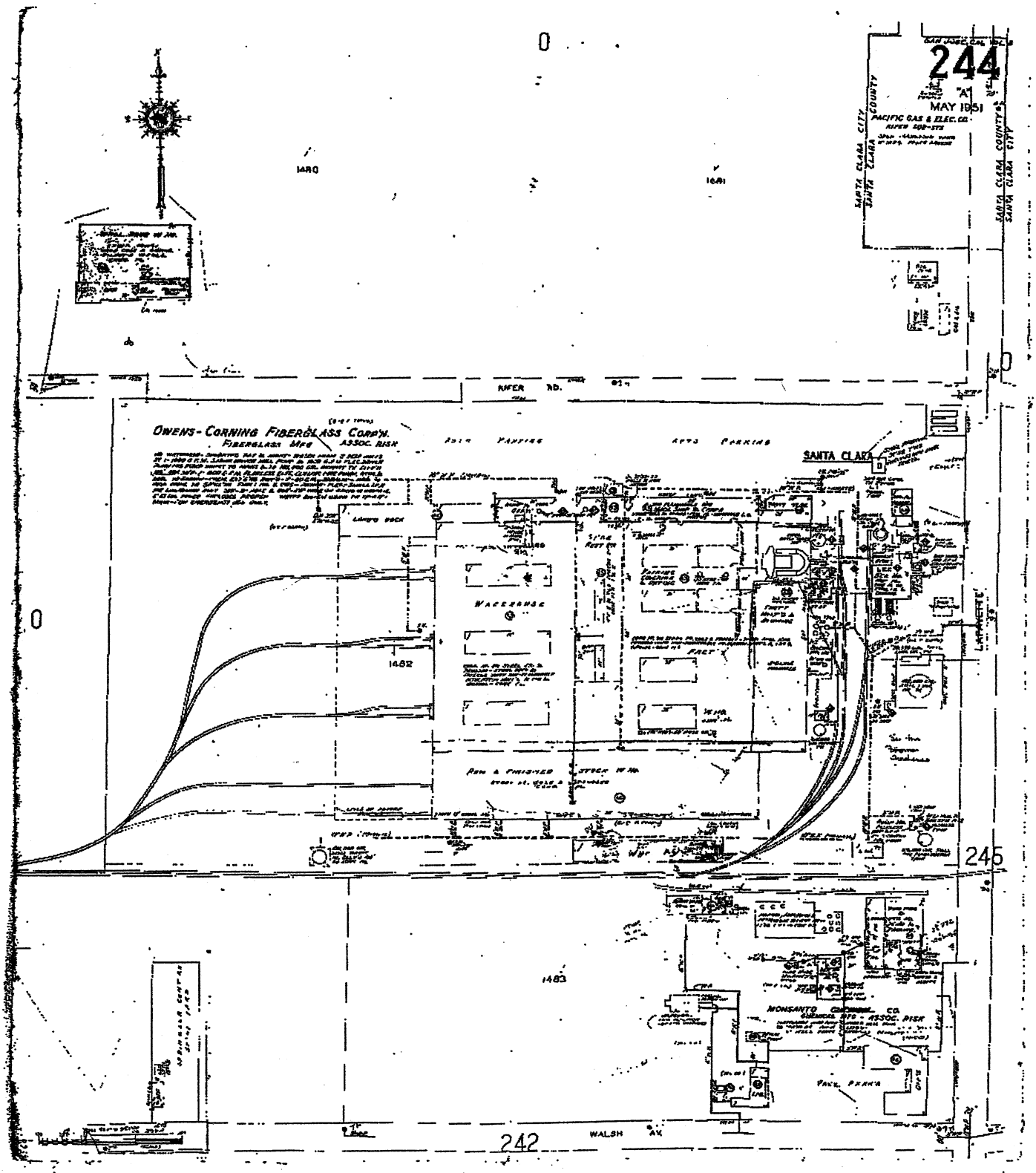

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Pacific Aerial Surveys
8407 Edgewater Drive
Oakland, California 94621

Phone: (510) 632-2020
FAX: (510) 638-5628

For: EMILY HARRIS
Phone: ( )
FAX: ( )

From: ANDREA
Search Charged:
Run Date: 16 May 02

PASFIND — Aerial Photography Library Search — v.051498

Client Name: SCS ENG
Site Name: SANTA CLARA

X = 593066.5 Y = 4136834.1

Film ID	Line	Frame	Scale	Date	STEREO PAIRS? (✓) YES ( ) NO
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AV 5472	7	12	1:24000	07-25-97	
AV 5417	10	11	1:12000	06-10-97	
AV 5200	124	62	1:12000	10-09-96	
AV 5200	125	69	1:12000	10-09-96	✓
KAV 4861	6	7	1:24000	06-22-95	
KAV 4861	7	7	1:24000	06-22-95	
AV 4625	24	71	1:12000	07-11-94	
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AV 1138	10	11	1:12000	04-28-74	
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AV 965	11	34	1:48000	09-02-70	
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AV 385	6	8	1:30000	08-22-60 ✓
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SF-AREA	3	74	1:36000	05-07-58
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Milpitas	0	0	1:24000	QUAD

Number of finds = 55

INSTRUCTIONS

Please place a check mark next to the dates that you wish to review and FAX them back to us at (510) 638-5628. The dates that have a scale of 1:12,000 or lower have the best resolution and detail.

SCALE: The scales listed in the "Scale" column are the scales at which the negatives were flown. The numbers represent a ratio of similar units. The proper usage requires a conversion of the second number to a measurement unit. For example, to arrive at an approximate scale of 1" = xxxx', divide the second number by 12, so that 1:12,000 will convert to 1" = 1,000'.

NOTE: To better serve you, please allow 2-3 working days after you have faxed back your selections before visiting so we may have time to pull them from files or, if necessary, print them from the negatives. The frame numbers listed above are approximate in their locations. In the cases where two lines are listed, the photo that best centers your site will be chosen. All photos are available in stereoscopic pairs.

COST: The cost to conduct a photo review is $90.00 PLUS $2.00 more for each year viewed. In cases where the area of study is vast (greater than 9,000 by 9,000 feet) and requires more than 1 or 2 photos, each photo required to cover the entire site will count as one. Five dates chosen where 6 photos for each date are required will equal $90.00 plus $60.00.

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