EXHIBIT K

PHASE I SUBSURFACE INVESTIGATION REPORT
LAWRY'S CALIFORNIA CENTER
LOS ANGELES, CALIFORNIA

August 9, 1991
LF 2377

LEVINE·FRICKE

PHASE I SUBSURFACE INVESTIGATION REPORT LAWRY'S CALIFORNIA CENTER LOS ANGELES, CALIFORNIA

August 9, 1991
LF 2377

Prepared for:

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August 12, 1991

REFER TO FILE NO.

6161.905

Thomas N. Fuelling
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Los Angeles, California 90065

Re: Lawry's California Center

Dear Tom:

Enclosed please find for your files a copy of the final Phase I Subsurface Investigation Report dated August 9, 1991 prepared by Levine•Fricke with respect to the above-referenced property.

If you have any questions or comments, please do not hesitate to contact me.

Very truly yours,

Lon Novatt

Lon B. Novatt, for
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A Partnership Including
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C O N T E N T S

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August 9, 1991 LF 2377

Phase I Subsurface Investigation
Lawry's California Center
Los Angeles, California

1.0 INTRODUCTION

Levine•Fricke has completed a Phase I Subsurface Investigation at Conopco, Inc.'s (Conopco) Lawry's California Center located at 570 West Avenue 26 in Los Angeles, Los Angeles County, California ("the Site"; Figure 1). The Scope of Work for the investigation was described in Levine•Fricke's Work Order No. 1 (May 21, 1991) to Conopco's legal counsel, Freeman, Freeman & Smiley ("Freeman et al."), with revisions described in Levine•Fricke's June 14, 1991 correspondence to Freeman et al.

Previous work at the Site includes an Environmental Assessment which was performed by Applied Geosciences of Tustin, California. Findings from this assessment are summarized in Applied Geosciences' April 12, 1991 Environmental Assessment report (herein referred to as "the Assessment Report"). The Assessment Report indicates that several underground storage tanks ("USTs") were previously located on the Site, and that the current status of these USTs is not known.

1.1 Site Description

The Site consists of a 17-acre parcel which is developed with a total of 17 buildings, including warehouses, food processing facilities, chemical, microbiology and packaging laboratories, office facilities, and restaurants, with landscaped courtyards and appurtenant parking areas. The Site also includes a print shop, a machine shop, maintenance areas and chemical storage areas. The general Site configuration is shown in Figure 2. Specific areas investigated are shown in Figures 2A through 2E.

The Lawry's plant is serviced by two three-stage clarifiers at the locations shown in Figure 2. One of these clarifiers is located in the Process Building and services the frying plant maintenance shop area (herein referred to as "the MSA clarifier"), and one clarifier services the liquid packaging area located adjacent to and east of the Process Building (herein referred to as the "LPA clarifier").

Historical information indicates that commercial and industrial facilities have previously been located within the boundaries of the Site. These facilities included manufacturing plants, plating shops, a machine shop, auto repair shops and fueling facilities. Historical documents relating to these facilities were reviewed during this investigation. Refer to Section 2.1 for information relating to these former industrial sites.

1.2 Objectives and Scope of Work

The objectives for the Phase I subsurface investigation were to:

- Evaluate the Site to identify locations where soils may have been affected by chemical discharges from subsurface vessels (clarifiers and USTs) or chemicals used at the Site; and
- Evaluate the contents of the MSA and LPA clarifiers.

The investigation included performing a reconnaissance-level Site inspection, reviewing available historical documents and UST records maintained by the City of Los Angeles Fire Department (LAFD), performance of a limited geophysical survey, performance of a soil-gas survey, collection of sludge samples from the MSA and LPA clarifiers, and chemical analysis of the sludge samples. These activities are described in detail in Section 2.0.

2.0 SITE INVESTIGATION

2.1 Review of Historical Documents and Los Angeles Fire Department Records

2.1.1 Review of Historical Documents

In an attempt to determine past commercial and/or industrial activities conducted within the Site boundaries, available Sanborn Fire Insurance Maps (Sanborn maps) for the Site were reviewed. Sanborn maps identify specific businesses and can provide information regarding chemical handling, including the location of storage areas, USTs, sumps, clarifiers and other containment vessels.

Levine•Fricke reviewed Sanborn maps for the Site dating from 1920, 1950 and 1970. These maps listed the names and identified the types of businesses at specific addresses;

however, additional information regarding chemical handling practices for these facilities was not included. The Sanborn maps were correlated with Los Angeles County Assessor's parcel maps to compare previous addresses with the current Site configuration. The approximate locations of historic industrial properties at the Site are shown in Figure 3.

2.1.2 Review of Los Angeles Fire Department Records

The LAFD Underground Tank Unit records were also reviewed for current and historic UST permits, tank abandonments and related documentation. Information obtained from the LAFD was used to help identify previous and current UST locations.

The LAFD records provided documentation dating from 1946 to the present. However, the degree of accuracy or completeness of these records is not known. Permits filed for UST installation describe the approximate locations of USTs relative to city streets. It should be noted that realignment of the city streets has occurred since 1950, therefore the reference points for the UST locations may have changed. The LAFD data was used to identify past and current UST locations. (Refer to Figure 3.)

2.2 Performance of a Site Inspection

Levine•Fricke performed a walk-through reconnaissance inspection of the Site on June 19, 1991 to observe current chemical handling practices and evaluate evidence indicating the possible release(s) of chemicals to the environment.

The Process Building at the Site contains three laboratories: a chemical laboratory, a microbiology laboratory, and a packaging laboratory. The chemical and microbiology laboratories are located on the second floor, and the packaging laboratory is located on the first floor. Small quantities of chemicals are stored in cabinets and beneath hoods in the chemical laboratory. Lawry's staff indicated that hazardous materials are not stored in either the microbiology laboratory or the packaging laboratory.

Degreasing units were observed in the maintenance shops which service the Seasoning Department and the Taco Frying Plant. The Maintenance Building yard included a degreasing unit and three small sheds used for the storage of oil, paint, mineral spirits and other materials. A small shed used to store oil and other materials is located adjacent to the liquid packaging area and east of the Process Building.

2.3 Performance of a Limited Geophysical Survey

A magnetic geophysical survey was performed at several areas on the Site. The areas included in the geophysical survey were selected based upon past industrial uses at the Site, as described in Section 2.1. The geophysical survey was performed by Spectrum Environmental Services, Inc. of Sylmar, California on June 19 and 26, 1991.

The magnetic survey identified seven anomalies at the locations shown in Figures 2A through 2E. Although the anomalies were identified as metallic objects in the subsurface, the geophysical data did not conclusively identify USTs.

It should be noted that the freeway structure which extends over the southern portion of the Site provided interference which limited interpretation of the magnetic data gathered in that area. (See Figures 2 and 2E.)

Ground penetrating radar (GPR) was used in an attempt to locate USTs in the Jeffries Building (see Figure 2B) and beneath the freeway structure (see Figure 2). The effectiveness of the GPR was limited due to the condition of the soils (grain-size and moisture content), and as a result the GPR provided data for depths less than approximately two feet from ground surface. Due to the shallow depths, this information was not useful for evaluating subsurface structures in the Jeffries Building and beneath the freeway structure.

2.4 Performance of a Soil-Gas Survey

A soil-gas survey was conducted at a total of 51 locations in areas shown in Figures 2A through 2E. Soil-gas samples were collected at depths ranging from about six to seven feet below grade. The soil-gas survey was performed near areas of previous industrial activity, near the magnetic anomalies detected by the geophysical survey, and in areas beneath the freeway structure, where limited useful geophysical data were obtained. (See Figure 2E.) The soil-gas survey was performed by Tracer Research Corporation (TRC) of Tucson, Arizona on June 25, 26 and 27, 1991. A copy of TRC's July 1991 report describing their methodologies and presenting the qualitative data is included as Appendix A.

The soil-gas samples were analyzed for components of fuel, including total volatile hydrocarbons (TVHC) and benzene,

toluene, ethylbenzene and xylenes (BTEX), and the following volatile organic compounds (VOCs):

- 1,1-dichloroethene (1,1-DCE)
- cis-1,2-dichloroethene (cis-1,2-DCE)
- 1,1-dichloroethane (1,1-DCA)
- cis-1,2-dichloroethane (1,2-DCA)
- 1,1,1-trichloroethane (1,1,1-TCA)
- trichloroethene (TCE)
- tetrachloroethene (PCE)
- methylene chloride
- carbon tetrachloride

These compounds were selected for the soil-gas analyses based upon their presence in fuel, past prevalent usage in industrial processes, and amenability to detection in soil vapor samples.

The soil-gas survey detected elevated concentrations of TVHC (greater than 100 parts per billion [ppb]) and benzene, toluene and xylenes (greater than 50 ppb) in samples SG-1 and SG-2, located in the northwestern corner of the Site (Figure 2A). These data suggest that a fuel leak may have occurred in this area. The soil-gas survey did not detect elevated concentrations of TVHC or benzene, toluene and xylenes at other locations at the Site. The soil-gas survey also detected relatively low concentrations of PCE (less than 10 ppb) and TCA (less than 1 ppb) in soil-gas samples collected from nearly all locations across the Site. Refer to Appendix A for a summary of the soil-gas data presented in a table in TRC's report.

The presence of low concentrations of PCE and TCA in soil-gas samples collected from areas across the Site suggests more than a local source of VOCs. Ground water to the north of the Site, upgradient relative to ground-water flow, is known to be affected by VOCs. Due to the presence of regionally VOC-affected ground water, a Superfund area (the Pollock Superfund Area) has been designated. California Regional Water Quality Control Board (RWQCB) staff indicate that the southern boundary of the Pollock Superfund Area is located approximately one mile to the northwest of the Site (personal

communication, Dave Bacharowski, RWQCB, June 1991). The low concentrations of PCE and TCA detected in the soil-gas samples may therefore reflect regional ground-water conditions.

2.5 Clarifier Sampling and Analysis

To evaluate possible waste streams, sludge samples were collected from the MSA and LPA clarifiers and submitted for chemical analysis. The sampling activities and analytical data are described below.

2.5.1 Sludge Sampling

To evaluate waste streams associated with the MSA and LPA clarifiers, sludge samples were collected for analysis. The samples were collected using a clean Teflon sampling cup and placed in laboratory-provided jars which were appropriate for the selected test methods. The sample jars were sealed, labeled and placed in a cooled ice chest for transport to the analytical laboratory. Strict Chain-of-Custody protocol was maintained throughout the sample handling process.

2.5.2 Chemical Analysis of Sludge Samples

Sludge samples collected from the LPA and MSA clarifiers were analyzed for VOCs using EPA Method 8260 and for semi-volatile organic compounds (SVOCs) using EPA Method 8270. In addition to these analyses, sludge sampled from the MSA clarifier was analyzed for California Assessment Manual (CAM) metals. The analysis of the sludge samples was performed on a "rush" one week laboratory turnaround basis. It should be noted that relatively high detection limits for the EPA Method 8260 and 8270 analyses resulted from the high number of dilution factors (ranging from 10 to 5,000) of the sludge matrices.

The analyses were performed by BC Analytical Laboratory of Glendale, California. The laboratory is certified by the California Department of Health Services for the proposed test methods. Copies of the laboratory data sheets are included as Appendix B.

Volatile Organic Compounds

Chemical analysis of sludge samples collected from the LPA and MSA clarifiers did not generally detect VOCs at concentrations which exceeded the laboratory detection limits, which ranged

from 0.01 to 1 parts per million (ppm). The exception was methyl ethyl ketone (MEK), which was detected in a sludge sample collected from the LPA clarifier at a concentration of 0.120 ppm. Lawry's personnel indicated that MEK is not used at the Site (personal communication, Ed Loney, 1991). The source of MEK detected in the sludge sample is therefore not currently known.

The analysis semi-quantified several hydrocarbons and alcohols which appear to be derived from food processing oil and grease. The semi-quantified VOCs are not priority pollutant compounds, and the concentrations of these compounds were estimated by the analytical laboratory.

Semi-Volatile Organic Compounds

Chemical analysis of sludge samples collected from the LPA and MSA clarifiers did not detect SVOCs at concentrations which exceeded the laboratory detection limits (ranging from 60 to 10,000 ppm).

The analysis semi-quantified several acids which appear to be derived from food processing oil and grease. The semi-quantified compounds are not priority pollutant compounds, and the concentrations of these compounds were estimated by the analytical laboratory.

CAM Metals

CAM metals analyses were performed on samples of sludge collected from the MSA clarifier because of machining done in this area. Chemical analysis of these sludge samples detected concentrations of various metals, including barium, beryllium, chromium, copper, lead, molybdenum, nickel, thallium, vanadium and zinc. The CAM metals were detected at relatively low concentrations (i.e., did not exceed the Total Threshold Limit Concentration (TTLC) or ten times the Soluble Threshold Limit Concentration [STLC] for the respective metals) and are therefore considered to be non-hazardous.

3.0 RECOMMENDATIONS

Levine•Fricke recommends that a Phase II Investigation be performed at the Site to further evaluate potential environmental concerns identified during the Phase I Subsurface Investigation. As planned, the proposed Phase II

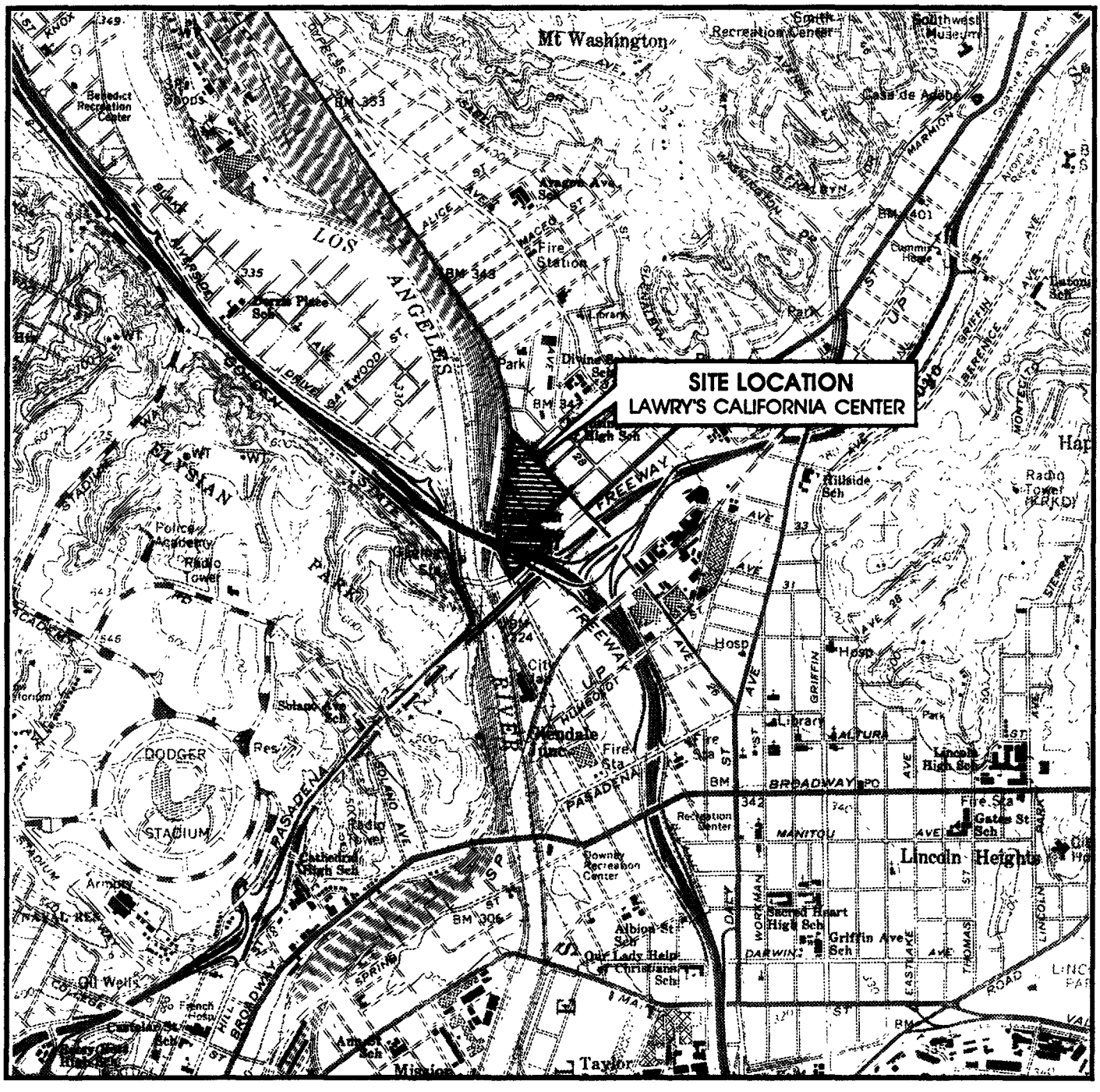
Investigation will include the evaluation of soil conditions in the following areas:

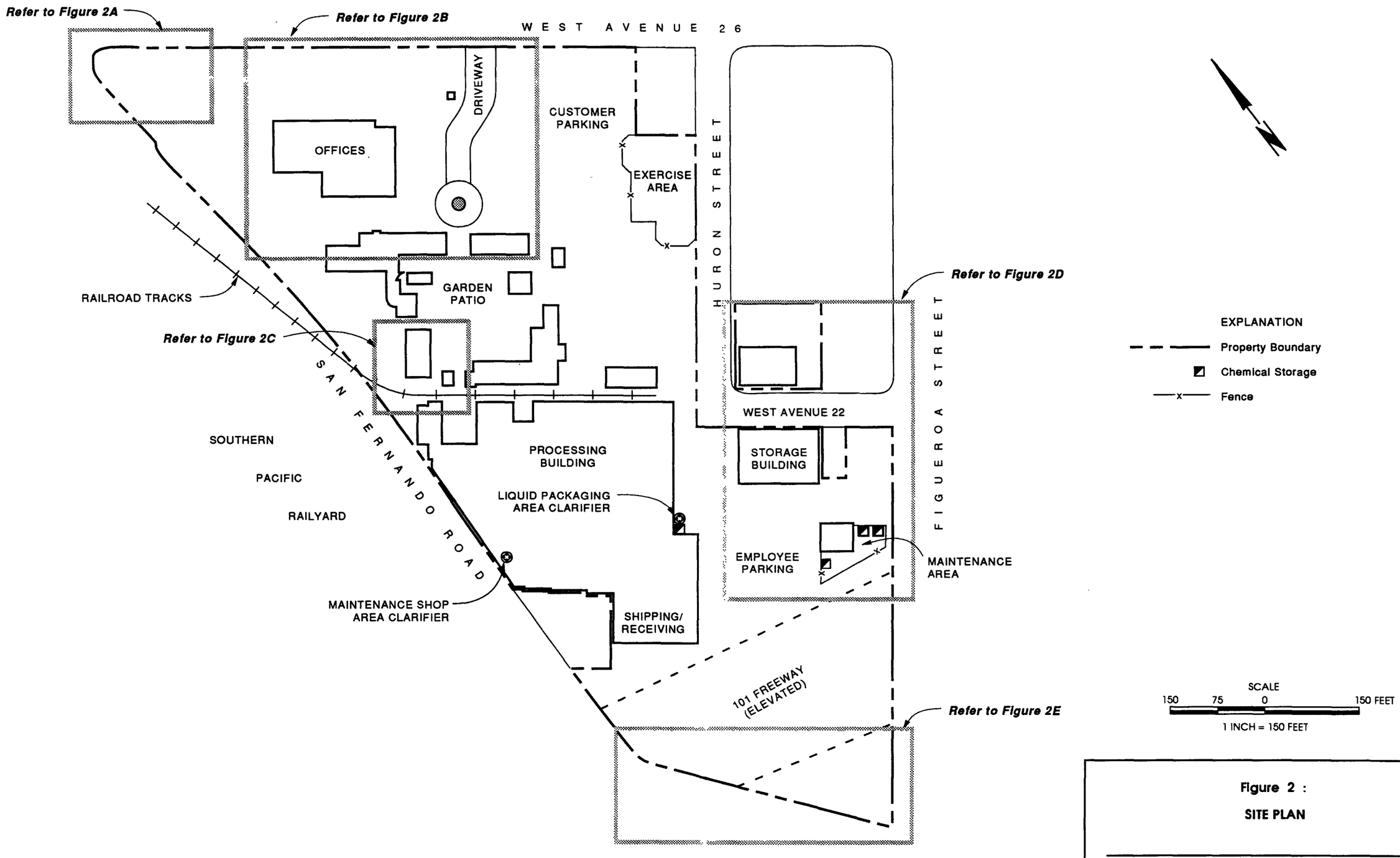
- near each of the seven magnetic anomalies identified at the Site;
- in the vicinity of selected qualitative soil-gas sampling locations;
- near chemical storage areas;
- in the vicinity of the LPA and MSA clarifiers; and
- in the vicinity of former plating shops.

In addition, Levine•Fricke recommends that the LPA and MSA clarifiers be cleaned and inspected, and that additional soil-gas sampling be conducted in a few locations that could not be addressed during the Phase I investigation.

Levine•Fricke will provide specific recommendations for the proposed Phase II Investigation under separate cover. These recommendations will include descriptions of proposed sampling locations, recommended analytical methods and standard field protocols.

FIGURES


SITE LOCATION
LAWRY'S CALIFORNIA CENTER
Mt Washington
Recreation Center
Southwest Museum
Casa de Adobe
Benedict Recreation Center
LOS ANGELES
Fire Station
Park
Divine Sch
High Sch
FREEWAY
Hillside Sch
Radio Tower
Police Academy
Radio Tower
Hosp
Library
ALTURA
Lincoln High Sch
BROADWAY
Fire Sta
Gates St Sch
MANITOU
Lincoln Heights
Recreation Center
Downey Recreation Center
Sacred Heart High Sch
Griffin Ave Sch
Albion St Sch
Our Lady Help Christians Sch
DODGER STADIUM
Solano Ave Sch
Cathedral High Sch
Armory
Oil Wells
French Hosp
Castelar St Sch
Amelia Sch
Mission
Taylor
PASADENA
RIVER
SPRING
HILL
BROADWAY
DARWIN
EASTLAKE
THOMAS
LINCOLN
GRIFFIN
DAVY
WORKMAN
ELYSIAN PARK
STADIUM
COLLEGE
ACADEMY
Benedict Recreation Center
Dorris Place Sch
Elysian Park Sch
Glassell St
Fire Sta
Mendale Junc
Fire Sta
Fire Sta
Radio Tower
Radio Tower
Radio Tower
Hosp
Hosp
Hillside Sch
Divine Sch
Park
Park
Park



Base map provided by Lawry's Foods, Inc. (undated).

Figure 2 :

SITE PLAN

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Lawrys-California Center

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ENGINEERS, HYDROGEOLOGISTS & APPLIED SCIENTISTS

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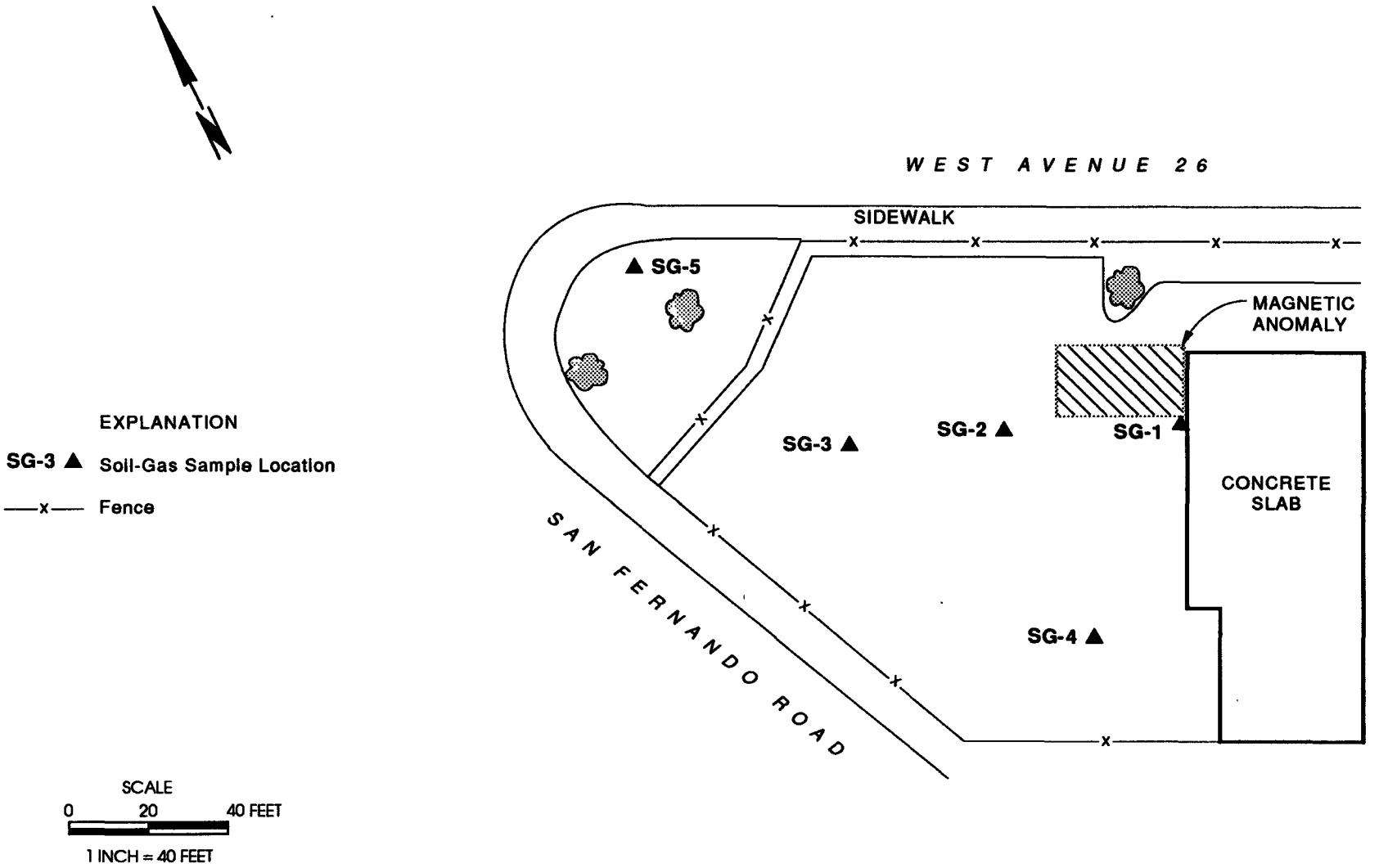
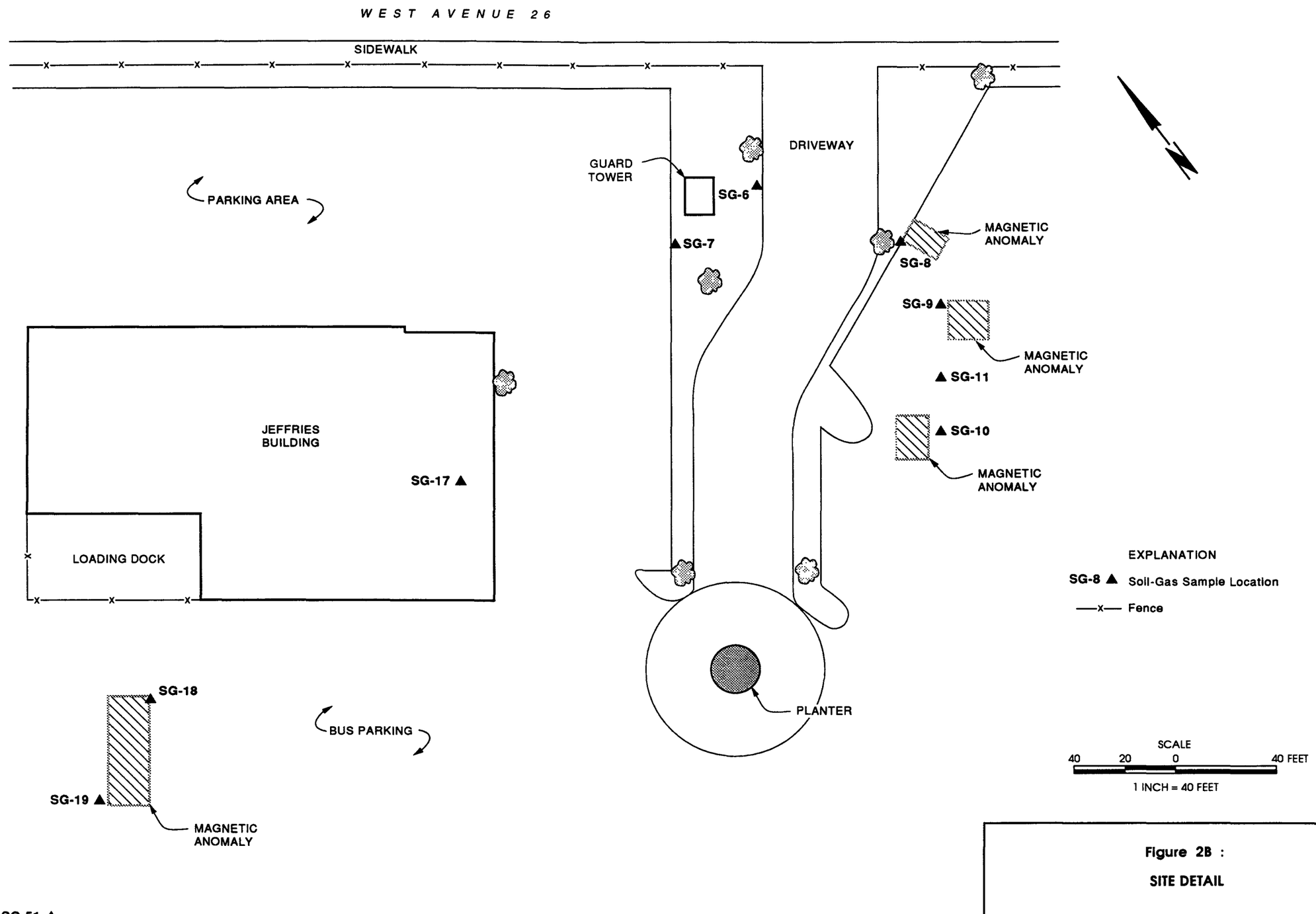


Base map by Levine•Fricke field measurements.

Figure 2A : SITE DETAIL



Base map by Levine•Fricke field measurements.

Figure 2B :

SITE DETAIL

Project No. 2377
Lawrys-California Center

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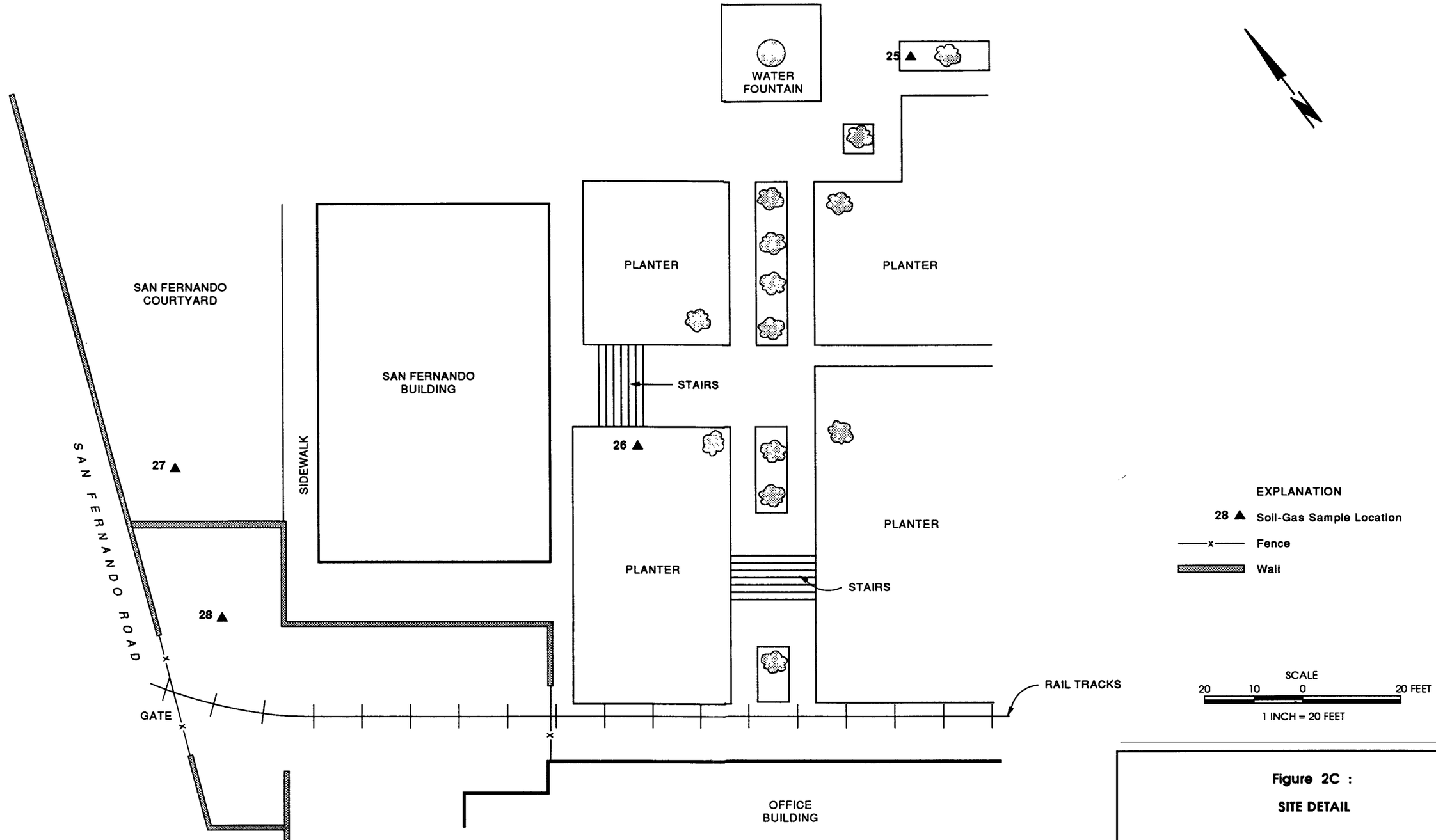

Base map by Levine•Fricke field measurements.

Figure 2C :

SITE DETAIL

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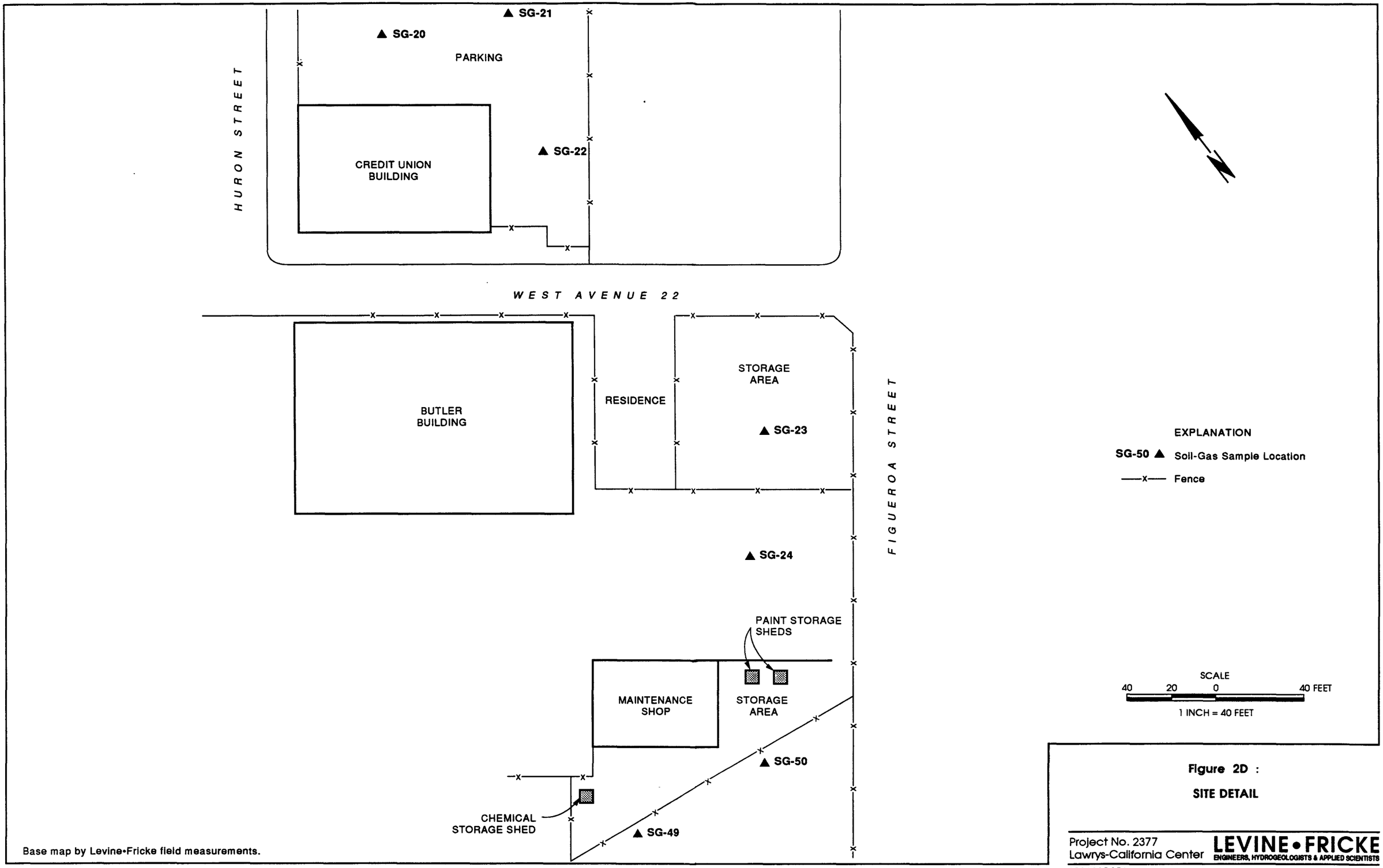

Base map by Levine•Fricke field measurements.

Figure 2D :

SITE DETAIL

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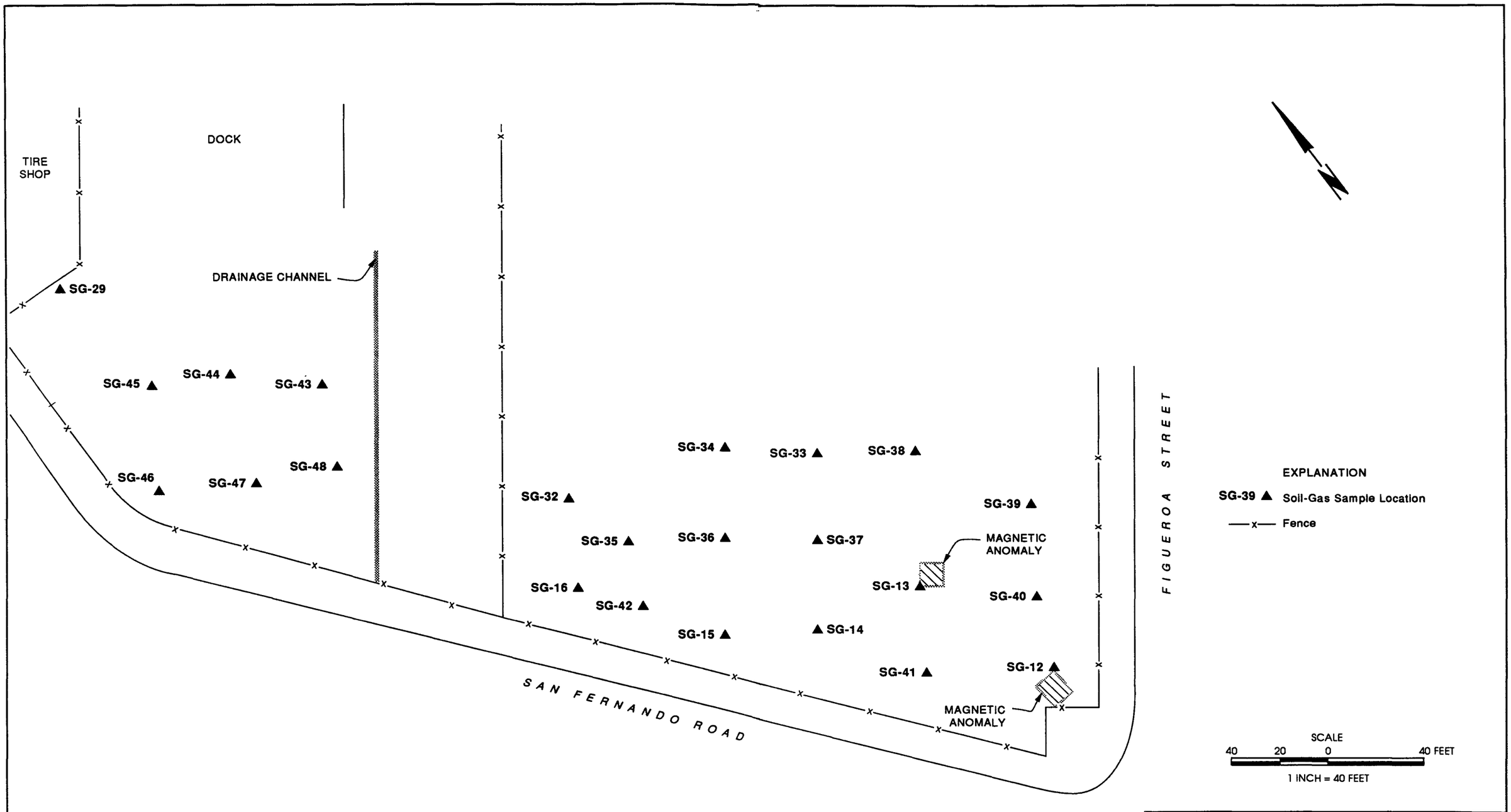

Base map by Levine•Fricke field measurements.

Figure 2E :

SITE DETAIL

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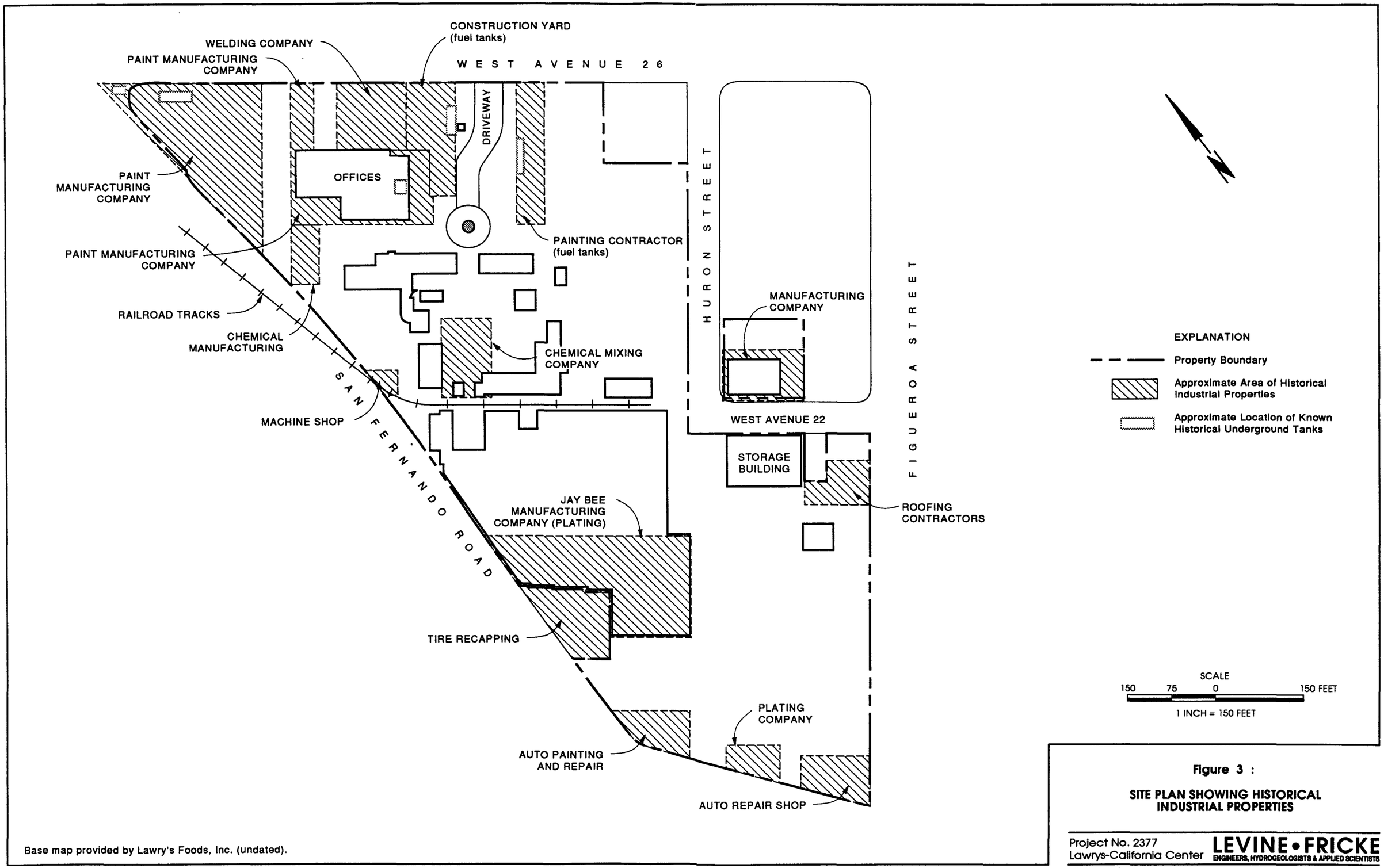

Base map provided by Lawry's Foods, Inc. (undated).

Figure 3 :

SITE PLAN SHOWING HISTORICAL INDUSTRIAL PROPERTIES

Project No. 2377
Lawrys-California Center

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APPENDICES

A P P E N D I X A

Tracer Research Corporation
Soil-Gas Survey Report

Tracer Research Corporation

PREPARED FOR:

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SHALLOW SOIL GAS INVESTIGATION

LOWRY FOODS

LOS ANGELES, CALIFORNIA

JULY 1991

SUBMITTED BY:

Tracer Research Corporation

191432S.REP
1-91-432-S

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INTRODUCTION

A shallow soil gas investigation was performed by Tracer Research Corporation (TRC) at the Lowry Foods site located in Los Angeles, California. The investigation was conducted on July 25-27, 1991 under contract to Levine-Fricke. The purpose of the investigation was to delineate the extent of possible contamination in the subsurface.

During this survey, a total of 51 soil gas samples were collected and analyzed. Samples were analyzed for volatile organic compounds from the following suite:

COMPOUND	DETECTOR
1,1-dichloroethene (1,1-DCE)	ECD
methylene chloride (CH2CL2)	ECD
1,1-dichloroethane (1,1 DCA)	ECD
cis-1,2-dichloroethene (cis-DCE)	ECD
1,2-dichloroethane (1,2-DCA)	ECD
1,1,1-trichloroethane (TCA)	ECD
carbon tetrachloride (CCL4)	ECD
trichloroethene (TCE)	ECD
tetrachloroethene (PCE)	ECD
benzene	FID
toluene	FID
ethylbenzene	FID
xylenes	FID
total volatile hydrocarbons (TVHC)	FID

Xylenes are reported as the total of the three xylene isomers. Total hydrocarbons are reported as gasoline range compounds consisting of approximately C4-C9 aliphatic, alicyclic, and aromatic compounds.

The compounds in this suite were chosen as target compounds because of their suspected presence in the subsurface and amenability to soil gas technology. Soil gas samples were screened on a gas chromatograph equipped with an electron capture detector (ECD) and a flame ionization detector (FID).

SHALLOW SOIL GAS INVESTIGATION - METHODOLOGY

Shallow soil gas investigation refers to a method developed by TRC for investigating underground contamination from volatile organic chemicals (VOCs) such as industrial solvents, cleaning fluids and petroleum products by looking for their vapors in the shallow soil gas. The method involves pumping a small amount of soil gas out of the ground through a hollow probe driven into the ground and analyzing the gas for the presence of volatile contaminants. The presence of VOCs in shallow soil gas indicates the observed compounds may either be in the vadose zone near the probe or in groundwater below the probe. The soil gas technology is most effective in mapping low molecular weight halogenated solvent chemicals and petroleum hydrocarbons possessing high vapor pressures and low aqueous solubilities. These compounds readily partition out of the groundwater and into the soil gas as a result of their high gas/liquid partitioning coefficients. Once in the soil gas, VOCs diffuse vertically and horizontally through the soil to the ground surface where they dissipate into the atmosphere. The contamination acts as a source and the above ground atmosphere acts as a sink, and typically a concentration gradient develops between the two. The concentration gradient in soil gas between the source and ground surface may be locally distorted by hydrologic and geologic anomalies (e.g. clays, perched water); however, soil gas mapping generally remains effective because distribution of the contamination is usually broader in areal extent than the local geologic barriers and is defined using a large database. The presence of geologic obstructions on a small scale tends to create anomalies in the soil gas-groundwater correlation, but generally does not obscure the broader areal picture of the contaminant distribution.

Soil gas contaminant mapping helps to reduce the time and cost required to delineate underground contamination by volatile contaminants. The soil gas investigation does this by outlining the general areal extent of contamination. Conventional bore holes or observation wells are used to verify both the presence and extent of the subsurface

contamination as indicated in the soil gas survey. In this manner, soil gas contaminant mapping can assist in determining the placement of monitoring wells. Thus the likelihood of drilling unnecessary monitoring wells is reduced. The soil gas survey is not intended to be substitute for conventional methodology, but rather to enable conventional methods to be used efficiently.

EQUIPMENT

Tracer Research Corporation utilized a one ton Ford analytical van that was equipped with one gas chromatograph and two Spectra Physics computing integrators. In addition, the van had two built-in gasoline powered generators that provide the electrical power (110 volts AC) to operate all of the gas chromatographic instruments and field equipment. A specialized hydraulic mechanism consisting of two cylinders and a set of jaws was used to drive and withdraw the sampling probes. A hydraulic hammer was used to assist in driving probes past cobbles and through unusually hard soil.

SOIL GAS SAMPLING PROCEDURES

Sampling probes consisted of 7-14 foot lengths of 3/4 inch diameter hollow steel pipe that were fitted with detachable drive tips. Soil gas probes were advanced 6-14 feet below grade. Once inserted into the ground, the above-ground end of the sampling probes were fitted with a steel reducer and a length of polyethylene tubing leading to a vacuum pump. Gas flow was monitored by a vacuum gauge to insure that an adequate flow was obtained.

To adequately purge the volume of air within the probe, 2 to 5 liters of gas was evacuated with a vacuum pump. During the soil gas evacuation, samples were collected in a glass syringe by inserting a syringe needle through a silicone rubber segment in the evacuation line and down into the steel probe. Ten milliliters of gas were collected for immediate analysis in the TRC analytical field van. Soil gas was subsampled (duplicate

injections) in volumes ranging from 1 uL to 2 mL, depending on the VOC concentration at any particular location.

Sample probe vacuums ranged from 1-5 inches Hg. The maximum pump vacuum was measured at 20 inches Hg.

ANALYTICAL PROCEDURES

A Varian 3300 gas chromatograph was used for the soil gas analyses. It was equipped with an electron capture detector (ECD) and a flame ionization detector (FID). Compounds were separated on a 6' by 1/8" OD packed column with SP-1000/OV-101 as the stationary phase in a temperature controlled oven. Nitrogen was used as the carrier gas.

Halocarbon and hydrocarbon compounds detected in the samples were identified by chromatographic retention time. Quantification of compounds was achieved by comparison of the detector response of the sample with the response measured for calibration standards (external standardization). Instrument calibration checks were run periodically throughout the day and system blanks were run at the beginning of the day to check for contamination in the soil gas sampling equipment. Air samples were also routinely analyzed to check for background levels in the atmosphere.

Detection limits for the compounds of interest were a function of the injection volume as well as the detector sensitivity for individual compounds. Thus the detection limit varied with the sample size. Generally, the larger the injection size the greater the sensitivity. However, peaks for compounds of interest were kept within the linear range of the analytical equipment. If any compound had a high concentration, it was necessary to use small injections, and in some cases to dilute the sample to keep it within linear range. This may have caused decreased detection limits for other compounds in the analyses.

The detection limits for the halocarbon compounds were approximately 0.0003 ug/L. The detection limits for the hydrocarbon compounds were approximately 0.02 ug/L.

Detection limits were dependant upon the conditions of the measurement, in particular, the sample size. If any component being analyzed was not detected, the detection limit for that compound in that analysis is given as a "less than" value (e. g. < 0.1 ug/L). Detection limits obtained from GC analyses were calculated from the current response factor, the sample size, and the estimated minimum peak size (area) that would have been visible under the conditions of the measurement.

QUALITY ASSURANCE/QUALITY CONTROL PROCEDURES

Tracer Research Corporation's normal quality assurance procedures were followed in order to prevent any cross-contamination of soil gas samples. These procedures are described below:

- Steel probes are used only once during the day and then washed with high pressure soap and hot water spray or steam-cleaned to eliminate the possibility of cross-contamination. Enough probes are carried on each van to avoid the need to reuse any during the day.
- Probe adaptors (TRC's patented design) are used to connect the sample probe to the vacuum pump. The adaptor is designed to eliminate the possibility of exposing the sample stream to any part of the adaptor. Associated tubing connecting the adaptor to the vacuum pump is replaced periodically as needed during the job to insure cleanliness and good fit. At the end of each day the adaptor is cleaned with soap and water and baked in the GC oven.
- Silicone tubing (which acts as a septum for the syringe needle) is replaced as needed to insure proper sealing around the syringe needle. This tubing does not directly contact soil gas samples.
- Glass syringes are usually used for only one sample per day and are washed and baked out at night. If they must be used twice, they are purged with carrier gas

(nitrogen) and baked out between probe samplings.

- Injector port septa through which soil gas samples are injected into the chromatograph are replaced on a daily basis to prevent possible gas leaks from the chromatographic column.
- Analytical instruments are calibrated each day by analytical standards from Chem Service, Inc. Calibration checks are also run after approximately every five soil gas sampling locations.
- Subsampling syringes are checked for contamination prior to sampling each day by injecting nitrogen carrier gas into the gas chromatograph.
- Prior to sampling each day, system blanks are run to check the sampling apparatus (probe, adaptor, 10 cc syringe) for contamination by drawing ambient air from above ground through the system and comparing the analysis to concurrently sampled ambient air analysis.
- All sampling and subsampling syringes are decontaminated each day and no such equipment is reused before being decontaminated. Microliter size subsampling syringes are reused only after a nitrogen carrier gas blank is run to insure it is not contaminated by the previous sample.
- Soil gas pumping is monitored by a vacuum gauge to insure that an adequate gas flow from the vadose zone is maintained. A reliable gas sample can be obtained if the sample vacuum gauge reading is at least 2 inches Hg less than the maximum pump vacuum.

APPENDIX A: ANALYTICAL DATA

LEVINE-FRICKE/LOWERY FOODS/LOS ANGELES, CALIFORNIA JOB #1-91-432-S
6/25/91
CONDENSED DATA

SAMPLE	BENZENE ug/l	TOLUENE ug/l	ETHYL BENZENE ug/l	XYLENES ug/l	TVHC ug/l
AIR	<0.02	<0.03	<0.06	<0.06	<0.06
SG-1-6'	55	49	<5	200	1100
SG-2-6'	150	64	I	570	5020
SG-3-7'	<0.05	<0.06	<0.1	<0.01	<0.1
SG-4-6'	0.3	<0.06	<0.1	<0.1	1
SG-5-6'	<0.05	<0.06	<0.1	<0.1	0.6
SG-6-6'	<0.05	<0.06	<0.1	<0.1	<0.1
SG-7-6'	<0.05	<0.06	<0.1	<0.1	<0.1
SG-8-7'	<0.05	<0.06	<0.01	<0.1	<0.1
SG-9-6'	<0.05	<0.06	<0.1	<0.1	<0.1
SG-10-7'	<0.05	<0.06	<0.1	<0.1	<0.1
SG-11-7'	<0.05	<0.06	<0.1	<0.1	<0.1
AIR	0.1	<0.03	<0.06	<0.06	<0.06

Analyzed by: M. Caldon
Proofed by: KLW

Tracer Research Corporation

LEVINE-FRICKE/LOWERY FOODS/LOS ANGELES, CALIFORNIA JOB #1-91-432-S
6/25/91
CONDENSED DATA

SAMPLE	CH2CL2 ug/l	1,1-DCE ug/l	1,1-DCA ug/l	CIS 1,2-DCE ug/l	1,2-DCA ug/l	TCA ug/l	CCL4 ug/l	TCE ug/l	PCE ug/l
AIR	<0.04	<0.08	<0.09	<1	<0.06	<0.001	<0.0003	<0.003	<0.00
SG-1-6'	<0.2	<0.4	<0.5	<6	<0.3	<0.007	<0.002	<0.01	<0.00
SG-2-6'	<0.08	<0.2	<0.2	<2	<0.1	<0.003	<0.0006	<0.005	<0.00
SG-3-7'	<0.08	<0.2	<0.2	<2	<0.1	0.009	<0.0006	<0.005	0.4
SG-4-6'	<0.08	<0.2	<0.2	<2	<0.1	0.01	<0.0006	0.007	10
SG-5-6'	<0.08	<0.2	<0.2	<2	<0.1	0.02	<0.0006	0.001	3
SG-6-6'	<0.08	<0.2	<0.2	<2	<0.1	0.003	<0.0006	<0.005	<0.00
SG-7-6'	<0.08	<0.2	<0.2	<2	<0.1	0.01	<0.0006	<0.005	<0.00
SG-8-7'	<0.08	<0.2	<0.2	<2	<0.1	0.009	<0.0006	<0.005	<0.00
SG-9-6'	<0.08	<0.2	<0.2	<2	<0.1	0.005	<0.0006	<0.005	0.02
SG-10-7'	<0.08	<0.2	<0.2	<2	<0.1	0.003	<0.0006	<0.005	0.03
SG-11-7'	<0.08	<0.2	<0.2	<2	<0.1	0.004	<0.0006	<0.005	0.009
AIR	<0.04	<0.08	<0.09	<1	<0.06	<0.001	<0.0003	<0.003	<0.00

Analyzed by: M. Caldon
Proofed by: KLW

LEVINE-FRICKE/LOWRY FOODS/LOS ANGELES, CALIFORNIA JOB #1-91-432-S
6/26/91
CONDENSED DATA

SAMPLE	BENZENE ug/l	TOLUENE ug/l	ETHYL BENZENE ug/l	XYLENES ug/l	TVHC ug/l
AIR	<0.02	<0.02	<0.04	<0.04	<0.04
SG-12-7'	<0.03	<0.05	<0.08	<0.08	<0.08
SG-13-7'	<0.03	<0.05	<0.08	<0.08	<0.08
SG-14-6'	<0.03	<0.05	<0.08	<0.08	<0.08
SG-15-6'	<0.03	<0.05	<0.08	<0.08	<0.08
SG-17-6'	<0.03	<0.05	<0.08	<0.08	<0.08
SG-18-7'	<0.03	<0.05	<0.08	<0.08	<0.08
SG-19-7'	<0.03	<0.05	<0.08	<0.08	<0.08
SG-20-6'	<0.03	<0.05	<0.08	<0.08	<0.08
SG-21-6'	<0.03	<0.05	<0.08	<0.08	<0.08
SG-22-6'	<0.03	<0.05	<0.08	<0.08	<0.08
SG-23-6'	<0.03	<0.05	<0.08	<0.08	0.6
SG-24-7'	<0.03	<0.05	<0.08	<0.08	<0.08
SG-25-6'	<0.03	<0.05	<0.08	<0.08	<0.08
SG-26-6'	<0.03	<0.05	<0.08	<0.08	<0.08
SG-27-6'	<0.03	<0.05	<0.08	<0.08	<0.08
SG-28-7'	<0.03	<0.05	<0.08	<0.08	<0.08
SG-29-7'	<0.03	<0.05	<0.08	<0.08	0.6
SG-30-6'	<0.03	0.5	<0.08	<0.08	4
SG-31-6'	<0.03	<0.05	<0.08	<0.08	0.4

Analyzed by: M. Caldon
Proofed by:_____

LEVINE-FRICKE/LOWRY FOODS/LOS ANGELES, CALIFORNIA JOB #1-91-432-S
6/26/91
CONDENSED DATA

SAMPLE	CH2CL2 ug/l	1,1-DCE ug/l	1,1-DCA ug/l	CIS 1,2-DCE ug/l	1,2-DCA ug/l	TCA ug/l	CCL4 ug/l	TCE ug/l	PCE ug/l
AIR	<0.03	<0.05	<0.05	<0.3	<0.03	<0.0007	<0.0002	<0.0009	<0.001
SG-12-7'	<0.05	<0.1	<0.1	<0.6	<0.07	0.09	<0.0006	<0.001	2
SG-13-7'	<0.05	<0.1	<0.1	<0.6	<0.07	0.04	0.009	<0.001	0.7
SG-14-6'	<0.09	<0.2	<0.2	<1	<0.1	0.03	<0.0005	<0.003	0.5
SG-15-6'	<0.09	<0.2	<0.2	<1	<0.1	<0.002	<0.0005	<0.003	0.2
SG-17-6'	<0.05	<0.1	<0.1	<0.6	<0.07	0.09	<0.0003	<0.002	0.01
SG-18-7'	<0.05	<0.1	<0.1	<0.6	<0.07	0.008	<0.0003	<0.002	0.01
SG-19-7'	<0.05	<0.1	<0.1	<0.6	<0.07	0.05	<0.0003	<0.002	0.02
SG-20-6'	<0.05	<0.1	<0.1	<0.6	<0.07	0.02	<0.0003	<0.002	0.4
SG-21-6'	<0.09	<0.2	<0.2	<0.1	<0.1	0.01	<0.0005	<0.003	0.4
SG-22-6'	<0.1	<0.2	<0.2	<1	<0.2	0.02	<0.0008	<0.005	0.2
SG-23-6'	<0.05	<0.1	<0.1	<0.6	<0.07	0.8	<0.0003	<0.002	0.5
SG-24-7'	<0.1	<0.2	<0.2	<1	<0.2	0.2	<0.0008	<0.005	0.7
SG-25-6'	<0.05	<0.1	<0.1	<0.6	<0.07	0.01	<0.0003	<0.002	0.007
SG-26-6'	<0.05	<0.1	<0.1	<0.6	<0.07	0.008	<0.0003	<0.002	<0.002
SG-27-6'	<0.05	<0.1	<0.1	<0.6	<0.07	0.01	<0.0003	<0.002	0.009
SG-28-7'	<0.05	<0.1	<0.1	<0.6	<0.07	0.05	<0.0003	<0.002	0.02
SG-29-7'	<0.3	<0.5	<0.5	<3	<0.3	0.9	<0.002	<0.009	1
SG-30-6'	<3	<5	<5	<30	<3	1	<0.02	<0.09	9
SG-31-6'	<0.3	<0.5	<0.5	<3	<0.3	0.7	<0.002	<0.009	4

Analyzed by: M. Caldon
Proofed by:_____

LEVINE-FRICKE/LOWRY FOODS/LOS ANGELES, CALIFORNIA JOB #1-91-432-S
6/27/91
CONDENSED DATA

SAMPLE	BENZENE ug/l	TOLUENE ug/l	ETHYL BENZENE ug/l	XYLENES ug/l	TVHC ug/l
AIR	<0.02	<0.03	<0.05	<0.06	<0.06
SG-16-7'	<0.04	<0.05	<0.1	<0.1	<0.1
SG-32-7'	<0.04	<0.05	<0.1	<0.1	<0.1
SG-33-7'	<0.04	<0.05	<0.1	<0.1	<0.1
SG-34-7'	<0.04	<0.05	<0.1	<0.1	<0.1
SG-35-7'	<0.04	<0.05	<0.1	<0.1	<0.1
SG-36-7'	<0.04	<0.05	<0.1	<0.1	<0.1
SG-37-7'	<0.04	<0.05	<0.1	<0.1	<0.1
SG-38-7'	<0.04	<0.05	<0.1	<0.1	<0.1
SG-39-7'	<0.04	<0.05	<0.1	<0.1	
SG-40-7'	0.1	0.8	0.5	0.2	2
SG-41-7'	<0.04	<0.05	<0.1	<0.1	0.4
SG-42-7'	<0.04	<0.05	<0.1	<0.1	<0.1
SG-43-7'	<0.04	<0.05	<0.1	<0.1	<0.1
SG-44-7'	<0.04	<0.05	<0.1	<0.1	0.2
SG-45-7'	<0.04	<0.05	<0.1	<0.1	0.6
SG-46-7'	<0.04	<0.05	<0.1	<0.1	<0.1
SG-47-7'	<0.04	<0.05	<0.1	<0.1	<0.1
SG-48-7'	<0.04	<0.05	<0.1	<0.1	0.9
SG-49-7'	<0.04	<0.05	<0.1	<0.1	<0.6
SG-49-14'	<0.04	<0.05	<0.1	<0.1	<0.1
SG-50-7'	<0.04	<0.05	<0.1	<0.1	<0.1
SG-51-7'	<0.04	<0.05	<0.1	<0.1	<0.1
AIR	<0.02	<0.03	<0.05	<0.06	<0.06

Analyzed by: M. Caldon
Proofed by: KLW

LEVINE-FRICKE/LOWRY FOODS/LOS ANGELES, CALIFORNIA JOB #1-91-432-S
6/27/91
CONDENSED DATA

SAMPLE	CH2CL2 ug/l	1,1-DCE ug/l	1,1-DCE ug/l	CIS 1,2-DCE ug/l	1,2-DCA ug/l	TCA ug/l	CCL4 ug/l	TCE ug/l	PCE ug/l
AIR	<0.07	<0.06	<0.07	<0.5	<0.1	0.0005	<0.0002	<0.001	<0.001
SG-16-7'	<0.1	<0.1	<0.1	<0.9	<0.2	0.03	<0.0004	<0.003	0.2
SG-32-7'	<0.1	<0.1	<0.1	<0.9	<0.2	0.09	<0.0004	<0.003	0.5
SG-33-7'	<0.1	<0.1	<0.1	<0.9	<0.2	0.03	<0.0004	<0.003	0.3
SG-34-7'	<0.1	<0.1	<0.1	<0.9	<0.2	0.07	<0.0004	<0.003	0.6
SG-35-7'	<0.1	<0.1	<0.1	<0.9	<0.2	0.05	<0.0004	<0.003	0.3
SG-36-7'	<0.1	<0.1	<0.1	<0.9	<0.2	0.03	<0.0004	<0.003	0.3
SG-37-7'	<0.1	<0.1	<0.1	<0.9	<0.2	0.1	<0.0004	<0.003	0.2
SG-38-7'	<0.1	<0.1	<0.1	<0.9	<0.2	0.02	<0.0004	<0.003	0.2
SG-39-7'	<0.1	<0.1	<0.1	<0.9	<0.2	0.6	<0.0004	<0.003	1
SG-40-7'	<0.1	<0.1	<0.1	<0.9	<0.2	0.06	<0.0004	<0.003	2
SG-41-7'	<0.2	<0.2	<0.2	<2	<0.4	0.3	0.2	<0.003	2
SG-42-7'	<0.1	<0.1	<0.1	<0.9	<0.2	0.01	<0.0004	<0.003	0.1
SG-43-7'	<0.1	<0.1	<0.1	<0.9	<0.2	0.4	0.02	<0.003	0.6
SG-44-7'	<0.1	<0.1	<0.1	<0.9	<0.2	0.9	<0.0004	<0.03	0.9
SG-45-7'	<0.7	<0.6	<0.7	<5	<1	1	<0.002	<0.01	1
SG-46-7'	<0.8	<0.6	<0.9	<5	<1	0.1	<0.002	<0.01	0.4
SG-47-7'	<0.4	<0.3	<0.3	<2	<0.6	0.1	0.03	<0.007	0.4
SG-48-7'	<0.4	<0.3	<0.3	<2	<0.6	0.5	0.3	<0.007	2
SG-49-7'	<0.4	<0.3	<0.3	<2	<0.6	0.4	<0.001	0.1	2
SG-49-14'									
SG-49-14'	<0.4	<0.3	<0.3	<2	<0.6	0.3	<0.001	<0.1	1
SG-50-7'	<0.4	<0.3	<0.3	<2	<0.6	0.1	<0.001	<0.006	1
SG-51-7'	<0.4	<0.3	<0.3	<2	<0.6	0.5	<0.001	<0.006	0.06
AIR	<0.07	<0.06	<0.07	<0.5	<0.1	<0.0009	<0.0002	<0.001	<0.0001

Analyzed by: M. Caldon

A P P E N D I X B

Laboratory Certificates and Chain-of-Custody Documentation

Analytical Report

LOG NO: A91-07-082

Received: 08 JUL 91

Mailed: 7/17/91

Mr. Steve Torres
Levine-Fricke
1920 Main Street, Suite 750
Irvine, California 92714

Project: 2377

REPORT OF ANALYTICAL RESULTS

LOG NO	SAMPLE DESCRIPTION, SLUDGE, LIQUID SAMPLES	DATE SAMPLED
07-082-1	LPA-Clarifier	08 JUL 91

PARAMETER	07-082-1
B/N,A Ext.Pri.Poll. (EPA-8270)	
Date Analyzed	07/12/91
Date Extracted	07/10/91
Dilution Factor, Times	300
1,2,4-Trichlorobenzene, mg/kg	<60
1,2-Dichlorobenzene, mg/kg	<60
1,2-Diphenylhydrazine, mg/kg	<60
1,3-Dichlorobenzene, mg/kg	<60
1,4-Dichlorobenzene, mg/kg	<60
2,4,5-Trichlorophenol, mg/kg	<200
2,4,6-Trichlorophenol, mg/kg	<60
2,4-Dichlorophenol, mg/kg	<200
2,4-Dimethylphenol, mg/kg	<60
2,4-Dinitrophenol, mg/kg	<300
2,4-Dinitrotoluene, mg/kg	<60
2,6-Dinitrotoluene, mg/kg	<60
2-Chloronaphthalene, mg/kg	<200
2-Chlorophenol, mg/kg	<200
2-Methyl-4,6-dinitrophenol, mg/kg	<600
2-Methylnaphthalene, mg/kg	<200
2-Methylphenol (o-Cresol), mg/kg	<60
2-Nitroaniline, mg/kg	<200
2-Nitrophenol, mg/kg	<200
3,3'-Dichlorobenzidine, mg/kg	<200
3-Nitroaniline, mg/kg	<200
4-Bromophenylphenylether, mg/kg	<60
4-Chloro-3-methylphenol, mg/kg	<60
4-Chloroaniline, mg/kg	<200

1200 Pacifico Avenue
Anaheim, CA 92805

714/978-0113
Fax: 714/978-9284

BCA B C Analytical

Analytical Report

LOG NO: A91-07-082

Received: 08 JUL 91

Mr. Steve Torres
Levine-Fricke
1920 Main Street, Suite 750
Irvine, California 92714

Project: 2377

REPORT OF ANALYTICAL RESULTS

LOG NO	SAMPLE DESCRIPTION, SLUDGE, LIQUID SAMPLES	DATE SAMPLED
07-082-1	LPA-Clarifier	08 JUL 91

PARAMETER	07-082-1
4-Chlorophenylphenylether, mg/kg	<60
4-Methylphenol (p-Cresol), mg/kg	<60
4-Nitroaniline, mg/kg	<200
4-Nitrophenol, mg/kg	<300
Acenaphthene, mg/kg	<60
Acenaphthylene, mg/kg	<60
Aniline, mg/kg	<60
Anthracene, mg/kg	<60
Benzidine, mg/kg	<3000
Benzo(a)anthracene, mg/kg	<60
Benzo(a)pyrene, mg/kg	<60
Benzo(b)fluoranthene, mg/kg	<60
Benzo(g,h,i)perylene, mg/kg	<60
Benzo(k)fluoranthene, mg/kg	<60
Benzyl Alcohol, mg/kg	<60
Benzoic acid, mg/kg	<600
Butylbenzylphthalate, mg/kg	<60
Chrysene, mg/kg	<60
Di-n-octylphthalate, mg/kg	<60
Dibenzo(a,h)anthracene, mg/kg	<60
Dibenzofuran, mg/kg	<60
Dibutylphthalate, mg/kg	<200
Diethylphthalate, mg/kg	<200
Dimethylphthalate, mg/kg	<200
Fluoranthene, mg/kg	<60
Fluorene, mg/kg	<60
Hexachlorobenzene, mg/kg	<60
Hexachlorobutadiene, mg/kg	<60

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Project: 2377

REPORT OF ANALYTICAL RESULTS

LOG NO	SAMPLE DESCRIPTION, SLUDGE, LIQUID SAMPLES	DATE SAMPLED
07-082-1	LPA-Clarifier	08 JUL 91

PARAMETER	07-082-1
Hexachlorocyclopentadiene, mg/kg	<60
Hexachloroethane, mg/kg	<60
Indeno(1,2,3-c,d)pyrene, mg/kg	<60
Isophorone, mg/kg	<60
N-Nitrosodimethylamine, mg/kg	<60
N-Nitrosodiphenylamine, mg/kg	<60
N-Nitrosodi-n-propylamine, mg/kg	<200
Nitrobenzene, mg/kg	<60
Naphthalene, mg/kg	<60
Phenanthrene, mg/kg	<60
Phenol, mg/kg	<60
Pentachlorophenol, mg/kg	<200
Pyrene, mg/kg	<200
Bis(2-chloroethoxy)methane, mg/kg	<200
Bis(2-chloroethyl)ether, mg/kg	<200
Bis(2-chloroisopropyl)ether, mg/kg	<200
Bis(2-ethylhexyl)phthalate, mg/kg	<200
Semi-Quantified Results **	
A C18 Unsaturated Carboxylic Acid, mg/kg	30000
Hexadecanoic Acid, mg/kg	2000
Octadecanoic Acid, mg/kg	3000

** Quantification based upon comparison of total ion count of the compound with that of the nearest internal standard.

1200 Pacifico Avenue
Anaheim, CA 92805

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B C Analytical

Analytical Report

LOG NO: A91-07-082

Received: 08 JUL 91

Mr. Steve Torres
Levine-Fricke
1920 Main Street, Suite 750
Irvine, California 92714

Project: 2377

REPORT OF ANALYTICAL RESULTS

LOG NO	SAMPLE DESCRIPTION, SLUDGE, LIQUID SAMPLES	DATE SAMPLED
07-082-1	LPA-Clarifier	08 JUL 91

PARAMETER	07-082-1
Vol.Pri.Poll. (EPA-8240/8260)	
Date Analyzed	07/09/91
Date Extracted	07/09/91
Dilution Factor, Times	10
1,1,1-Trichloroethane, ug/L	<10
1,1,2,2-Tetrachloroethane, ug/L	<10
1,1,2-Trichloroethane, ug/L	<10
1,1-Dichloroethane, ug/L	<10
1,1-Dichloroethene, ug/L	<10
1,2-Dichloroethane, ug/L	<10
1,2-Dichlorobenzene, ug/L	<10
1,2-Dichloropropane, ug/L	<10
1,3-Dichlorobenzene, ug/L	<10
1,4-Dichlorobenzene, ug/L	<10
2-Chloroethylvinylether, ug/L	<10
2-Hexanone, ug/L	<50
Acetone, ug/L	<100
Acrolein, ug/L	<500
Acrylonitrile, ug/L	<500
Bromodichloromethane, ug/L	<10
Bromomethane, ug/L	<10
Benzene, ug/L	<10
Bromoform, ug/L	<10
Chlorobenzene, ug/L	<10
Carbon Tetrachloride, ug/L	<10
Chloroethane, ug/L	<10
Chloroform, ug/L	<10
Chloromethane, ug/L	<10

1200 Pacifico Avenue
Anaheim, CA 92805

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BCA B C Analytical

Analytical Report

LOG NO: A91-07-082

Received: 08 JUL 91

Mr. Steve Torres
Levine-Fricke
1920 Main Street, Suite 750
Irvine, California 92714

Project: 2377

REPORT OF ANALYTICAL RESULTS

LOG NO	SAMPLE DESCRIPTION, SLUDGE, LIQUID SAMPLES	DATE SAMPLED
07-082-1	LPA-Clarifier	08 JUL 91

PARAMETER	07-082-1
Carbon Disulfide, ug/L	<10
Dibromochloromethane, ug/L	<10
Ethylbenzene, ug/L	<10
Freon 113, ug/L	<10
Methyl ethyl ketone, ug/L	120
Methyl isobutyl ketone, ug/L	<50
Methylene chloride, ug/L	<10
Styrene, ug/L	<10
Trichloroethene, ug/L	<10
Trichlorofluoromethane, ug/L	<10
Toluene, ug/L	<10
Tetrachloroethene, ug/L	<10
Vinyl acetate, ug/L	<100
Vinyl chloride, ug/L	<10
Total Xylene Isomers, ug/L	<10
cis-1,2-Dichloroethene, ug/L	<10
cis-1,3-Dichloropropene, ug/L	<10
trans-1,2-Dichloroethene, ug/L	<10
trans-1,3-Dichloropropene, ug/L	<10
Semi-Quantified Results **	
A C10H16 Hydrocarbon, ug/L	90
A C2 Alcohol, ug/L	300
A C3 Alcohol, ug/L	100
Methylpropenyldisulfide, ug/L	200
Methylthiopropene (C4H8S), ug/L	80

** Quantification based upon comparison of total ion count of the compound with that of the nearest internal standard.

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REPORT OF ANALYTICAL RESULTS

LOG NO	SAMPLE DESCRIPTION, SLUDGE, LIQUID SAMPLES	DATE SAMPLED
07-082-2	MSA-Clarifier	08 JUL 91

PARAMETER	07-082-2
Nitric Acid Digestion with HCl, Date	07/09/91
Nitric Acid Digestion, Date	07/09/91
Arsenic, mg/kg	<0.2
Antimony, mg/kg	<0.4
Barium, mg/kg	9.5
Beryllium, mg/kg	0.04
Cadmium, mg/kg	<0.2
Chromium, mg/kg	3.0
Cobalt, mg/kg	<0.06
Copper, mg/kg	13
Lead, mg/kg	0.9
Mercury, mg/kg	<0.2
Molybdenum, mg/kg	0.3
Nickel, mg/kg	0.9
Selenium, mg/kg	<0.2
Silver, mg/kg	<0.6
Thallium, mg/kg	1.2
Vanadium, mg/kg	0.20
Zinc, mg/kg	16

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BCA B C Analytical

Analytical Report

LOG NO: 491-07-082

Received: 08 JUL 91

Mr. Steve Torres
Levine-Fricke
1920 Main Street, Suite 750
Irvine, California 92714

Project: 2377

REPORT OF ANALYTICAL RESULTS

LOG NO	SAMPLE DESCRIPTION, SLUDGE, LIQUID SAMPLES	DATE SAMPLED
07-082-2	MSA-Clarifier	08 JUL 91

PARAMETER	07-082-2
B/N,A Ext.Pri.Poll. (EPA-8270)	
Date Analyzed	07/10/91
Date Extracted	07/10/91
Dilution Factor, Times	5000
1,2,4-Trichlorobenzene, mg/kg	<1000
1,2-Dichlorobenzene, mg/kg	<1000
1,2-Diphenylhydrazine, mg/kg	<1000
1,3-Dichlorobenzene, mg/kg	<1000
1,4-Dichlorobenzene, mg/kg	<1000
2,4,5-Trichlorophenol, mg/kg	<2000
2,4,6-Trichlorophenol, mg/kg	<1000
2,4-Dichlorophenol, mg/kg	<2000
2,4-Dimethylphenol, mg/kg	<1000
2,4-Dinitrophenol, mg/kg	<5000
2,4-Dinitrotoluene, mg/kg	<1000
2,6-Dinitrotoluene, mg/kg	<1000
2-Chloronaphthalene, mg/kg	<2000
2-Chlorophenol, mg/kg	<2000
2-Methyl-4,6-dinitrophenol, mg/kg	<10000
2-Methylnaphthalene, mg/kg	<2000
2-Methylphenol (o-Cresol), mg/kg	<1000
2-Nitroaniline, mg/kg	<2000
2-Nitrophenol, mg/kg	<2000
3,3'-Dichlorobenzidine, mg/kg	<2000
3-Nitroaniline, mg/kg	<2000
4-Bromophenylphenylether, mg/kg	<1000
4-Chloro-3-methylphenol, mg/kg	<1000
4-Chloroaniline, mg/kg	<2000

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REPORT OF ANALYTICAL RESULTS

LOG NO	SAMPLE DESCRIPTION, SLUDGE, LIQUID SAMPLES	DATE SAMPLED
07-082-2	MSA-Clarifier	08 JUL 91

PARAMETER	07-082-2
4-Chlorophenylphenylether, mg/kg	<1000
4-Methylphenol (p-Cresol), mg/kg	<1000
4-Nitroaniline, mg/kg	<2000
4-Nitrophenol, mg/kg	<4000
Acenaphthene, mg/kg	<1000
Acenaphthylene, mg/kg	<1000
Aniline, mg/kg	<1000
Anthracene, mg/kg	<1000
Benzidine, mg/kg	<40000
Benzo(a)anthracene, mg/kg	<1000
Benzo(a)pyrene, mg/kg	<1000
Benzo(b)fluoranthene, mg/kg	<1000
Benzo(g,h,i)perylene, mg/kg	<1000
Benzo(k)fluoranthene, mg/kg	<1000
Benzyl Alcohol, mg/kg	<1000
Benzoic acid, mg/kg	<10000
Butylbenzylphthalate, mg/kg	<1000
Chrysene, mg/kg	<1000
Di-n-octylphthalate, mg/kg	<1000
Dibenzo(a,h)anthracene, mg/kg	<1000
Dibenzofuran, mg/kg	<1000
Dibutylphthalate, mg/kg	<2000
Diethylphthalate, mg/kg	<2000
Dimethylphthalate, mg/kg	<2000
Fluoranthene, mg/kg	<1000
Fluorene, mg/kg	<1000
Hexachlorobenzene, mg/kg	<1000
Hexachlorobutadiene, mg/kg	<1000

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REPORT OF ANALYTICAL RESULTS

LOG NO	SAMPLE DESCRIPTION, SLUDGE, LIQUID SAMPLES	DATE SAMPLED
07-082-2	MSA-Clarifier	08 JUL 91

PARAMETER	07-082-2
Hexachlorocyclopentadiene, mg/kg	<1000
Hexachloroethane, mg/kg	<1000
Indeno(1,2,3-c,d)pyrene, mg/kg	<1000
Isophorone, mg/kg	<1000
N-Nitrosodimethylamine, mg/kg	<1000
N-Nitrosodiphenylamine, mg/kg	<1000
N-Nitrosodi-n-propylamine, mg/kg	<2000
Nitrobenzene, mg/kg	<1000
Naphthalene, mg/kg	<1000
Phenanthrene, mg/kg	<1000
Phenol, mg/kg	<1000
Pentachlorophenol, mg/kg	<2000
Pyrene, mg/kg	<2000
Bis(2-chloroethoxy)methane, mg/kg	<2000
Bis(2-chloroethyl)ether, mg/kg	<2000
Bis(2-chloroisopropyl)ether, mg/kg	<2000
Bis(2-ethylhexyl)phthalate, mg/kg	<2000
Semi-Quantified Results **	
A C18 Unsaturated Carboxylic Acid, mg/kg	400000
Hexadecanoic Acid, mg/kg	90000
Tetradecanoic Acid, mg/kg	2000

** Quantification based upon comparison of total ion count of the compound with that of the nearest internal standard.

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REPORT OF ANALYTICAL RESULTS

LOG NO	SAMPLE DESCRIPTION, SLUDGE, LIQUID SAMPLES	DATE SAMPLED
07-082-2	MSA-Clarifier	08 JUL 91

PARAMETER	07-082-2
Vol.Pri.Poll. (EPA-8240/8260)	
Date Analyzed	07/10/91
Date Extracted	07/10/91
Dilution Factor, Times	1000
1,1,1-Trichloroethane, mg/kg	<1
1,1,2,2-Tetrachloroethane, mg/kg	<1
1,1,2-Trichloroethane, mg/kg	<1
1,1-Dichloroethane, mg/kg	<1
1,1-Dichloroethene, mg/kg	<1
1,2-Dichloroethane, mg/kg	<1
1,2-Dichlorobenzene, mg/kg	<1
1,2-Dichloropropane, mg/kg	<1
1,3-Dichlorobenzene, mg/kg	<1
1,4-Dichlorobenzene, mg/kg	<1
2-Chloroethylvinylether, mg/kg	<1
2-Hexanone, mg/kg	<5
Acetone, mg/kg	<10
Acrolein, mg/kg	<50
Acrylonitrile, mg/kg	<50
Bromodichloromethane, mg/kg	<1
Bromomethane, mg/kg	<1
Benzene, mg/kg	<1
Bromoform, mg/kg	<1
Chlorobenzene, mg/kg	<1
Carbon Tetrachloride, mg/kg	<1
Chloroethane, mg/kg	<1
Chloroform, mg/kg	<1
Chloromethane, mg/kg	<1

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Project: 2377

REPORT OF ANALYTICAL RESULTS

LOG NO	SAMPLE DESCRIPTION, SLUDGE, LIQUID SAMPLES	DATE SAMPLED
07-082-2	MSA-Clarifier	08 JUL 91

PARAMETER	07-082-2
Carbon Disulfide, mg/kg	<1
Dibromochloromethane, mg/kg	<1
Ethylbenzene, mg/kg	<1
Freon 113, mg/kg	<1
Methyl ethyl ketone, mg/kg	<5
Methyl isobutyl ketone, mg/kg	<5
Methylene chloride, mg/kg	<1
Styrene, mg/kg	<1
Trichloroethene, mg/kg	<1
Trichlorofluoromethane, mg/kg	<1
Toluene, mg/kg	<1
Tetrachloroethene, mg/kg	<1
Vinyl acetate, mg/kg	<10
Vinyl chloride, mg/kg	<1
Total Xylene Isomers, mg/kg	<1
cis-1,2-Dichloroethene, mg/kg	<1
cis-1,3-Dichloropropene, mg/kg	<1
trans-1,2-Dichloroethene, mg/kg	<1
trans-1,3-Dichloropropene, mg/kg	<1
Semi-Quantified Results **	
A C9H12 Aromatic Hydrocarbon, mg/kg	10
A Second C9H12 Aromatic Hydrocarbon, mg/kg	10
A Saturated Hydrocarbon, mg/kg	7
A Third C9H12 Aromatic Hydrocarbon, mg/kg	10

** Quantification based upon comparison of total ion count of the compound with that of the nearest internal standard.

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BCA B C Analytical

Analytical Report

LOG NO: A91-07-082

Received: 08 JUL 91

Mr. Steve Torres
Levine-Fricke
1920 Main Street, Suite 750
Irvine, California 92714

Project: 2377

REPORT OF ANALYTICAL RESULTS

Results for EPA 8240/8260 for sample A91-07-082-1 are reported on a weight/volume basis; all other results are on a weight/weight basis.

Samples were formerly logged on order A91-07-043.
--C. Jacks 07/17/91

Charles Jacks

Charles Jacks, Ph.D., Laboratory Director

1200 Pacifico Avenue
Anaheim, CA 92805

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B C Analytical

CHAIN OF CUSTODY / ANALYSES REQUEST FORM

✓ A91-07-082

Project No.: [illegible]	Field Logbook No.:	Date: [illegible]	Serial No.: Nº N- [illegible]
Project Name: Lawry's LA.	Project Location: Los Angeles		
Sampler (Signature): [illegible]			Samplers:

SAMPLES						ANALYSES									
SAMPLE NO.	DATE	TIME	LAB SAMPLE NO.	NO. OF CON-TAINERS	SAMPLE TYPE	EPA 601	EPA 624	[illegible]	[illegible]	[illegible]	[illegible]	HOLD	RUSH	REMARKS
CLO-1A,B,C	7/8			3	Solid			✓						
CLO-2	↓			1	↓				[illegible]			[illegible]		Run CAM [illegible] USE
CLO-3				2						✓				
CLI-1A,B,C				3			✓							
CLI-2				1					✓					
CLI-3	↓			2	↓					✓				

RELINQUISHED BY: (Signature) [illegible]	DATE [illegible]	TIME [illegible]	RECEIVED BY: (Signature) [illegible]	DATE [illegible]	TIME [illegible]
RELINQUISHED BY: (Signature)	DATE	TIME	RECEIVED BY: (Signature)	DATE	TIME
RELINQUISHED BY: (Signature)	DATE	TIME	RECEIVED BY: (Signature)	DATE	TIME
METHOD OF SHIPMENT:	DATE	TIME	LAB COMMENTS:		

Sample Collector:
LEVINE/FRICKE
1920 Main St., Ste. 750
Irvine, CA 92714

LEVINE-FRICKE
4019 Westerly Place, Suite 103
Newport Beach, California 92660
(714) 955-1390 FAX (714) 955-0683

Analytical Laboratory:
[illegible]

Sampling Copy (White) Lab Copy (Green) File Copy (Yellow) Field Copy (Pink) FORM NO. 86/COC/ARF