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SOIL AND GROUND WATER  
QUALITY RECONNAISSANCE  
CENTRAL AVENUE AND NINTH STREET PARCEL  
ALAMEDA, CALIFORNIA

July 1994

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*Current property owner*

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**LOVNEY ASSOCIATES**  
Environmental / Geotechnical / Engineering Services

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NOV 11 1994

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July 20, 1994  
1027-1, MV060906

Mr. and Mrs. Gary Pearce  
3235 Guillermo Place  
Hayward, California 94542

**RE: SOIL AND GROUND WATER  
QUALITY RECONNAISSANCE  
CENTRAL AVENUE AND  
NINTH STREET PARCEL  
ALAMEDA, CALIFORNIA**

Dear Mr. and Mrs. Pearce:

As requested, we are pleased to present this report summarizing our soil and ground water quality reconnaissance at the above-referenced site. This investigation was performed in accordance with our proposal dated January 14, 1993.

On April 20, 1994, our environmental geologist supervised the drilling of three exploratory borings on-site. Two borings, EB-1 and EB-2, were drilled in the approximate location of three former fuel underground storage tanks (USTs). The third boring, EB-3, was drilled in the anticipated down-gradient direction in terms of ground water flow of the former on-site service garage. Laboratory analysis of a soil sample collected from near the top of the shallow water-bearing zone from boring EB-1 detected 95 parts per million (ppm) total petroleum fuel hydrocarbons (TPH) as gasoline. In addition, a petroleum odor and discoloration were noted in the soil from boring EB-1 between depths of approximately 10 and 20 feet below the ground surface. Based upon the results of a laboratory leachability analysis, the residual gasoline hydrocarbons appeared leachable.

Laboratory analysis of ground water samples collected from boring EB-1 detected elevated levels of petroleum hydrocarbons as gasoline (76,000 parts per billion (ppb)), benzene (2,200 ppb), toluene (8,800 ppb), and ethylbenzene (2,500 ppb). In addition, motor oil range petroleum hydrocarbons were detected in the ground water samples collected from borings EB-2 and EB-3.

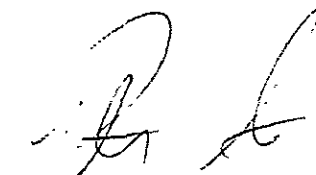
We refer you to the text of the report for details regarding our findings and recommendations. If you have any questions, please call.

Very truly yours,

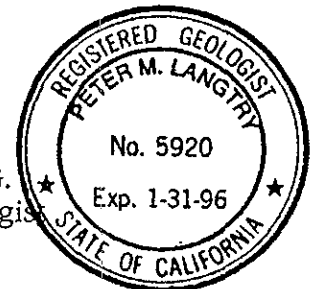
**LOWNEY ASSOCIATES**

Bridget A. Baxter  
Environmental Geologist

RLH:PML:BAB:tjc



Peter M. Langtry, R.G.  
Environmental Geologist



**A00195**

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SOIL AND GROUND WATER QUALITY RECONNAISSANCE

For

CENTRAL AVENUE AND NINTH STREET PARCEL  
Alameda, California

To

Mr. and Mrs. Gary Pearce  
3235 Guillermo Place  
Hayward, California 94542

July 1994

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SOIL AND GROUND WATER QUALITY RECONNAISSANCE  
CENTRAL AVENUE AND NINTH STREET PARCEL  
ALAMEDA, CALIFORNIA

1.0 INTRODUCTION

In this report, we present the results of our soil and ground water quality reconnaissance for the referenced site located at 900 Central Avenue and 1326 Ninth Street, in Alameda, California (Figure 1). The purpose of this investigation was to evaluate previous site usage and soil and ground water quality at the site.

We understand that the subject property was formerly a Mohawk Service Station; three 550-gallon gasoline underground storage tanks (USTs) and a waste oil UST (of unknown volume) were formerly located on-site. The four USTs were reportedly removed from the site in 1975. No information was available on the locations of the tanks. The site is currently occupied by a condominium which was reportedly constructed in 1980.

The scope of work performed during our investigation included the following:

- ▼ Evaluating the locations of the former USTs through review of historical aerial photographs and Sanborn Fire Insurance Maps.
- ▼ Supervising the drilling and logging of three soil exploratory borings near the suspect gasoline USTs location and down-gradient of the suspected

1.1 Purpose

1.2 Site  
Description/  
Background

1.3 Scope of Work

A00198

waste oil UST location with respect to the anticipated regional ground water flow direction. Collecting soil samples and ground water grab samples from each boring.

- ▼ Analyzing selected soil and ground water samples from the exploratory borings for total petroleum hydrocarbons (TPH) as gasoline and benzene, toluene, ethylbenzene, and xylenes (BTEX); TPH as diesel, TPH as motor oil, total petroleum oil, and volatile organic compounds (VOCs).
- ▼ Evaluating the leachability of the TPH as gasoline, diesel, and BTEX; 1,2-dichloroethane; and ethylene dibromide from a selected soil sample.
- ▼ Preparing this report.

## 2.0 SITE HISTORY REVIEW

To evaluate the location of the former USTs, we reviewed historical aerial photographs and Sanborn Fire Insurance Maps. A summary of the information obtained from each source is presented below in Table 1. In addition, we reviewed fire department documents obtained by you; these records indicate that a permit was issued for the former tanks in 1931. The permit indicated that the gasoline tanks were located beneath the sidewalk. In addition, a hand-written note on the permit dated September 24, 1975, indicated that the four tanks were removed. Copies of the documents reviewed are presented in Appendix A.

A00199

▼ **Aerial Photographs**

Stereo paired aerial photographs taken for Pacific Aerial Surveys of Oakland, California were reviewed. The aerial photographs reviewed were dated 1959 and 1971. Copies of the photographs are presented in Appendix A.

▼ **Sanborn Fire Insurance Maps**

We contacted the Sanborn Mapping and Geographic Information Service for historic fire insurance maps of the site and immediate vicinity. Sanborn originally produced these maps to illustrate buildings in sufficient detail for insurance underwriters to determine risks and establish premiums. Sanborn Maps for the years 1897, 1948, 1950, and 1987 were reviewed. Copies of the Sanborn maps are presented in Appendix A.

TABLE 1. Historical Research

Source	Date of Publication	Observation
Sanborn Map	1897	SITE: Undeveloped VICINITY: Scattered residential
Sanborn Map	1948	SITE: "Gas & Oil" present at northern portion of site; "grease garage" at southeastern portion of site. VICINITY: Residential neighborhood
Sanborn Map	1950	SITE: Same as 1948 Sanborn Map VICINITY: Same as 1948 Sanborn Map
Aerial Photograph AV-337-05-31 1:9,600	July 3, 1959	SITE: Occupied by service station; possible fuel pump island observed at the northern portion of property. VICINITY: Residential neighborhood
Aerial Photograph AV-995-02-09 1:12,000	June 19, 1971	SITE: Occupied by service station; possible fuel pump island at northern portion of property. VICINITY: Residential neighborhood
Sanborn Map	1987	SITE: Occupied by current residence VICINITY: Residential neighborhood

A00200

Based on our review, the gasoline USTs were likely located at the northwest corner of the site, near the intersection of Central Avenue and Ninth Street (Figure 2). Our review of the available aerial photographs and Sanborn maps did not reveal the location of the suspect former waste oil tank.

### 3.0 SOIL AND GROUND WATER QUALITY EVALUATION

To evaluate soil and ground water quality at the site, three exploratory borings (EB-1, EB-2, and EB-3) were drilled on April 20, 1994 at the locations shown on Figure 2. Borings EB-1 and EB-2 were located in the suspect location of the former gasoline USTs; boring EB-3 was located in the anticipated down-gradient direction of the former garage building with respect to the anticipated regional shallow ground water flow. The three exploratory borings were drilled to a depth of 19 to 20 feet below ground surface (bgs), into the shallow ground water-bearing zone beneath the site. Boring logs and sampling protocol are presented in Appendix B.

The uppermost stratum encountered beneath the site, Stratum Af, consisted of silty sand fill to a depth of 3 to 5 feet bgs. Stratum B, a sandy silt, was encountered underlying Stratum Af to the maximum depth explored, approximately 20 feet bgs. In boring EB-1, Stratum B was discolored greenish-gray between depths of approximately 10 to 20 feet bgs. In addition, a petroleum odor was detected in EB-1 between 10 to 20 feet bgs.

#### 3.1 Subsurface Exploration

##### 3.1.1 Subsurface Materials

7+4=11ms

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Ground water was encountered in the three on-site borings within Stratum B at depths ranging from 16 to approximately 19 feet bgs. The shallow ground water is expected to flow in a southwesterly direction, toward the San Francisco Bay. However, ground water flow beneath the site may be complex due to tidal fluctuations in the San Francisco Bay and Alameda Harbor.

3.1.2 Shallow Ground Water

To evaluate soil quality, soil samples collected from the three borings from the 14.5- to 17.0-foot depth interval, near the top of the shallow water-bearing zone, were selected for laboratory analysis. These sample intervals were selected for analysis since petroleum hydrocarbons which are less dense than water, tend to adsorb onto the soil near the top of the ground water-bearing zones.

3.2 Soil Quality

Waste Oil Tank  
↓  
EB-3

The soil samples collected from the three borings were analyzed for TPH as gasoline, BTEX, and TPH as diesel. These analyses were selected based on the former presence of fuel on-site. In addition, the soil sample collected from EB-3, down-gradient of the potential area of the former waste oil tank, was also analyzed for total petroleum oil and VOCs since these compounds can be associated with waste oil. Analytical results are presented in Table 2 and the complete analytical results are presented in Appendix C.

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TABLE 2. Analytical Results for Soil Samples  
(concentrations in ppm)

	EB-1	EB-2	EB-3
Depth (feet bgs)	14.5 to 15.0	16.5 to 17.0	14.5 to 15.0
TPH as motor oil	<10	<10	<10
TPH as diesel	39†	<5	<5
TPH as gasoline	95	<1.0	<1.0
Benzene	0.4	<0.005	<0.005
Toluene	0.5	<0.005	<0.005
Ethylbenzene	0.9	<0.005	<0.005
Xylenes	5.2	<0.005	<0.005
Total Petroleum Oil	NA	NA	31
Volatile Organic Compounds	NA	NA	ND

< - Compound was not detected at or above the specified laboratory detection limit

† - Characterized by analytical laboratory as being non-diesel C6-C15 (see analytical data in Appendix C).

NA - Not Analyzed

ND - None detected above laboratory detection limits

To evaluate the leachability of petroleum hydrocarbons, the soil sample collected from EB-1 was additionally analyzed for pH and toxicity characteristic leachability potential (TCLP), TPH as gasoline, diesel, BTEX, 1,2-dichloroethane (1,2-DCA), and ethylene dibromide (EDB) (EPA Test Method 5030/8240). The fuel fingerprint analysis included 1,2-DCA and EDB because they are common fuel additives. The standard TCLP test method includes agitation of the sample in an acetic acid solution at a pH of 4.9 for a period of 18 hours. However, to simulate actual on-site conditions the sample was analyzed using a modified TCLP extraction in which the pH was adjusted to match the pH of the soil sample. Analytical results are presented below in Table 3, and the complete analytical results are presented in Appendix C.

### 3.3 Leachability Evaluation

A00203

TABLE 3. TCLP Analytical Results for EB-1 Soil Sample  
(concentrations in ppb)

	EB-1
Depth (feet)	14.5 - 15.0
pH	4.93 ± 0.05
TPH as gasoline	4,300
Benzene	9
Toluene	170
Ethylbenzene	72
Xylenes	520
TPH as diesel	<300
1,2-dichloroethane	<3
Ethylene dibromide	<3

To evaluate ground water quality at the site, ground water grab samples collected from exploratory borings EB-1, EB-2, and EB-3 were analyzed for TPH as gasoline, TPH as diesel, and BTEX. The ground water grab sample collected from boring EB-3 was additionally analyzed for total petroleum oil and VOCs. The basis for selecting these analyses is discussed above in Section 3.3. Analytical results are summarized in Table 4 and the complete analytical results are presented in Appendix C. Table 4 also compares the analytical results with current drinking water standards.

Drinking water standards, or Maximum Contaminant Levels (MCLs), are established by the State Department of Health Services. MCLs have not been established for gasoline, diesel, or petroleum oil.

### 3.4 Ground Water Quality

A00204

TABLE 4. Analytical Results for Water Samples  
(concentrations in ppb)

	EB-1	EB-2	EB-3	MCL
TPH as motor oil	<1,000	720	820	--
TPH as diesel	16,000*	<50	<50	--
TPH as gasoline	76,000	<50	<50	--
Benzene	2,200	<0.5	<0.5	1
Toluene	8,800	<05	<0.5	100
Ethylbenzene	2,500	<0.5	<0.5	680
Xylenes	1,600	<0.5	<0.5	1,750
Total Petroleum Oil	NA	NA	<500	--
Volatile Organic Compounds	NA	NA	ND	--

\* - Characterized by analytical laboratory as a non-diesel mix (C5-C20)

NA - Not Analyzed

ND - None detected above laboratory detection limit

TPH - Total Purgeable Hydrocarbons, quantified as motor oil, diesel, or gasoline

MCL - Maximum Contaminant Level, taken from "Region 9 Environmental Agency Drinking Water Standards and Health Advisory Table," August 1991

#### 4.0 CONCLUSIONS

The purpose of this investigation was to briefly evaluate the past site usage, including the potential locations of the former on-site USTs, and soil and ground water quality beneath the site.

Based on a review of fire department records supplied by you, historical aerial photographs, and Sanborn maps, a gasoline service station was formerly on the site from at least 1931 to 1975. We understand that the three fuel USTs and waste oil UST were removed from the site in 1975.

Based on the information reviewed, the former gasoline USTs were located in the northern portion of the property near the intersection of Central Avenue and Ninth Street. The approximate locations of the fuel USTs, as shown on the 1948 and 1950 Sanborn

A00205

maps, are presented in Figure 2. Borings EB-1 and EB-2 were drilled in the former fuel UST area.

Our review of aerial photographs and Sanborn maps did not identify the former location of the waste oil UST. Boring EB-3 was drilled in the anticipated down-gradient direction from the former on-site service station structure and, thus, potentially down-gradient of the former waste oil tank location.

Petroleum odors and fuel impacted soil were encountered in boring EB-1 between depths of 10 feet and 20 feet bgs. In our opinion, the petroleum fuel hydrocarbons appear to be localized in the soil in the northern portion of the former fuel tank area, near boring EB-1. Petroleum compounds were not detected nor were discoloration/petroleum odors noted in the soil collected from boring EB-2.

Elevated levels (16,000 ppb diesel range and 76,000 ppb gasoline range) petroleum hydrocarbons were detected in the ground water sample collected from boring EB-1. Gasoline and diesel range petroleum hydrocarbons were not detected in the ground water samples collected from EB-2 and EB-3; however, 720 ppb and 820 ppb motor oil range petroleum hydrocarbons were detected in the EB-2 and EB-3 ground water samples, respectively. The source of the motor oil range petroleum hydrocarbons in the ground water may have been leakage from the waste oil tank or from an unidentified source.

The compounds reported as TPH as diesel in the EB-1 ground water sample were characterized by the laboratory as having a carbon range of C5 to C20

A00206

(containing hydrocarbon molecules made up of 5 to 20 carbon atoms). Gasoline and diesel fuels typically have a carbon range of C4 to C12 and C10 to C22, respectively. Therefore, the analytical data suggest that the diesel range hydrocarbons detected may partially be a result of gasoline hydrocarbons being detected in the diesel scan plus weathered diesel. According to our conversation with the analytical laboratory, the diesel range hydrocarbons detected may also be a result of fuel oil or stoddard solvent, which have similar hydrocarbon ranges to diesel. The source of the fuel oil or stoddard solvent, if present, is not clear.

Laboratory analysis of a soil sample collected from boring EB-3 detected low levels of petroleum oil (31 ppm). The total petroleum oil analysis, which detected the 31 ppm petroleum oil, detects compounds at a higher range (compounds with more carbons atoms) than does the TPH as motor oil analysis. The source of the total petroleum oil detected may be leakage of oil from the former waste oil tank. Alternatively, the low levels detected may also have been a result of naturally occurring organic compounds picked up in the oil analysis.

## 5.0 RECOMMENDATIONS

Since elevated levels of petroleum fuel hydrocarbons were detected in the ground water near the former gasoline tank area, consideration should be given to further evaluation of the extent of impacted soil and ground water. If desired, we would recommend the installation of three ground water monitoring wells on-site to document ground water quality and flow

A00207

direction. A minimum of three ground water monitoring wells are needed to evaluate ground water flow directions. One of the wells, in our opinion, should be installed in the approximate location of boring EB-1; this well could be installed with a 4-inch diameter casing so it can be used for site remediation, if need. The remaining wells could be installed with 2-inch diameter casings.

To evaluate the off-site extent of petroleum hydrocarbons detected in the former fuel tank area, we recommend performing a soil vapor survey on Central Avenue and Ninth Street. A soil vapor survey would consist of driving steel probes into the ground to a depth of approximately 15 feet. Soil vapor would then be pumped from the probes and analyzed on-site for total volatile hydrocarbons. Four to six probes would likely be sufficient, in our opinion. To document ground water quality off-site, we would additionally recommend driving one or more of the probes to a depth of approximately 20 feet, into the shallow water-bearing zone, and collecting ground water grab samples from the probes. The ground water grab sample should be analyzed for TPH as gas and BTEX, TPH as diesel, and TPH as motor oil. Please note that depending upon the conditions encountered on- or off-site, additional borings or wells may be desirable.

If the petroleum hydrocarbon impacted ground water is contained on-site and shows a trend of decreasing concentrations over time, ground water remediation may not be necessary. However, we understand that you desire to remediate the site in preparation for sale of the property.

A00208

Remedial technologies commonly applied to petroleum fuel impacted sites include excavation, soil vapor extraction, ground water extraction, and air sparging. Excavation of the impacted soil may not be feasible due to the depth and proximity to the existing on-site structure. Soil vapor extraction is an effective and proven technology that removes volatile organic hydrocarbons by extracting soil vapor. Soil vapor extraction additionally increases the natural aerobic biodegradation in the soil by pulling air into the contaminated zone. Soil vapor extraction also can reduce hydrocarbons dissolved in the ground water by decreasing the air pressure above the impacted ground water, which results in increased volatilization from the aqueous to the vapor phase. Air sparging involves forcing air into the contaminated ground water under pressure. The air, as it is forced through the ground water, further increases the volatilization of volatile hydrocarbons from the ground water and also increases natural biodegradation processes. Soil vapor extraction and air sparging can be effectively used concurrently. Ground water extraction can also be used to remove impacted ground water and to retard off-site migration of the impacted ground water. Based on our experience with similar impacted sites, soil vapor extraction and air sparging may be the most appropriate remedial technology. However, field pilot testing would need to be performed to verify the effectiveness of these methods at the site and to cost-effectively design a practical system.

Extracted soil vapors would need to be treated on-site prior to discharge to the atmosphere. Common vapor treatment technologies include carbon

A00209



adsorption or thermal/catalytic incineration. If ground water is extracted, it would also need to be treated on-site prior to discharging into the sanitary or storm sewer. Air and/or water discharge permits would need to be obtained from the appropriate regulatory agencies. The discharge permits would require periodic monitoring and sampling of the discharge stream and periodic reporting. Soil vapor extraction/air sparging commonly require one-half to two years to remediate gasoline impacted sites. Based on our experience with similar sites, the installation of a remedial system at the site could cost from \$50,000 to \$100,000, depending on the technologies selected. Monthly operation could cost from \$4,000 to \$6,000. Compact treatment systems are available that should be able to operate efficiently at the site.

If a greater degree of comfort is desired by you regarding the former waste oil tank, additional borings could be drilled on-site in the suspected waste oil tank locations to evaluate soil quality. If waste oil impacted soil is encountered, remedial options, in addition to those discussed above, may need to be implemented.

Based on these results, consideration should be given to contacting an environmental attorney regarding obligations to submit this report to appropriate regulatory agencies as well as to help obtain financial assistance from the principal responsible parties who operated the former on-site service station.

A00210

## 6.0 LIMITATIONS

Soil deposits and rock formations may vary in type, strength, and many other important properties across any geologic area. The study that we have made assumes that the data obtained in the field and laboratory are reasonably representative of field conditions and that the subsurface conditions are reasonably susceptible to interpolation and extrapolation between sampling locations.

The accuracy and reliability of geo- or hydrochemical studies are a reflection of the number and type of samples taken and the extent of the analysis conducted, and is thus inherently limited and dependent upon the resources expended. Chemical analyses were performed for specific parameters during this investigation, as detailed in the scope of services. Please note that additional constituents not searched for during this investigation may be present in soil and ground water at the site. Our sampling and analytical plan was designed using accepted environmental engineering principles and our judgment for the performance of a reconnaissance soil quality investigation and was based on the degree of investigation desired by you. It is possible to obtain a greater degree of certainty, if desired, by implementing a more rigorous soil sampling program or by further sampling of monitoring wells to establish a more in-depth evaluation of ground water quality.

This report was prepared for the use of Mr. and Mrs. Gary and Karen Pearce in evaluating soil and ground water quality at the referenced site at the time of this

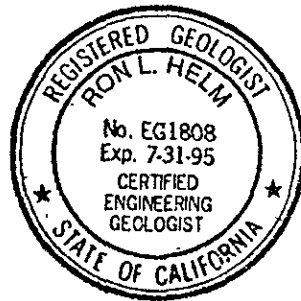
A00211

study. We make no warranty, expressed or implied, except that our services have been performed in accordance with environmental engineering principles generally accepted at this time and location. The chemical and other data presented in this report can change over time and are applicable only to the time this study was performed.

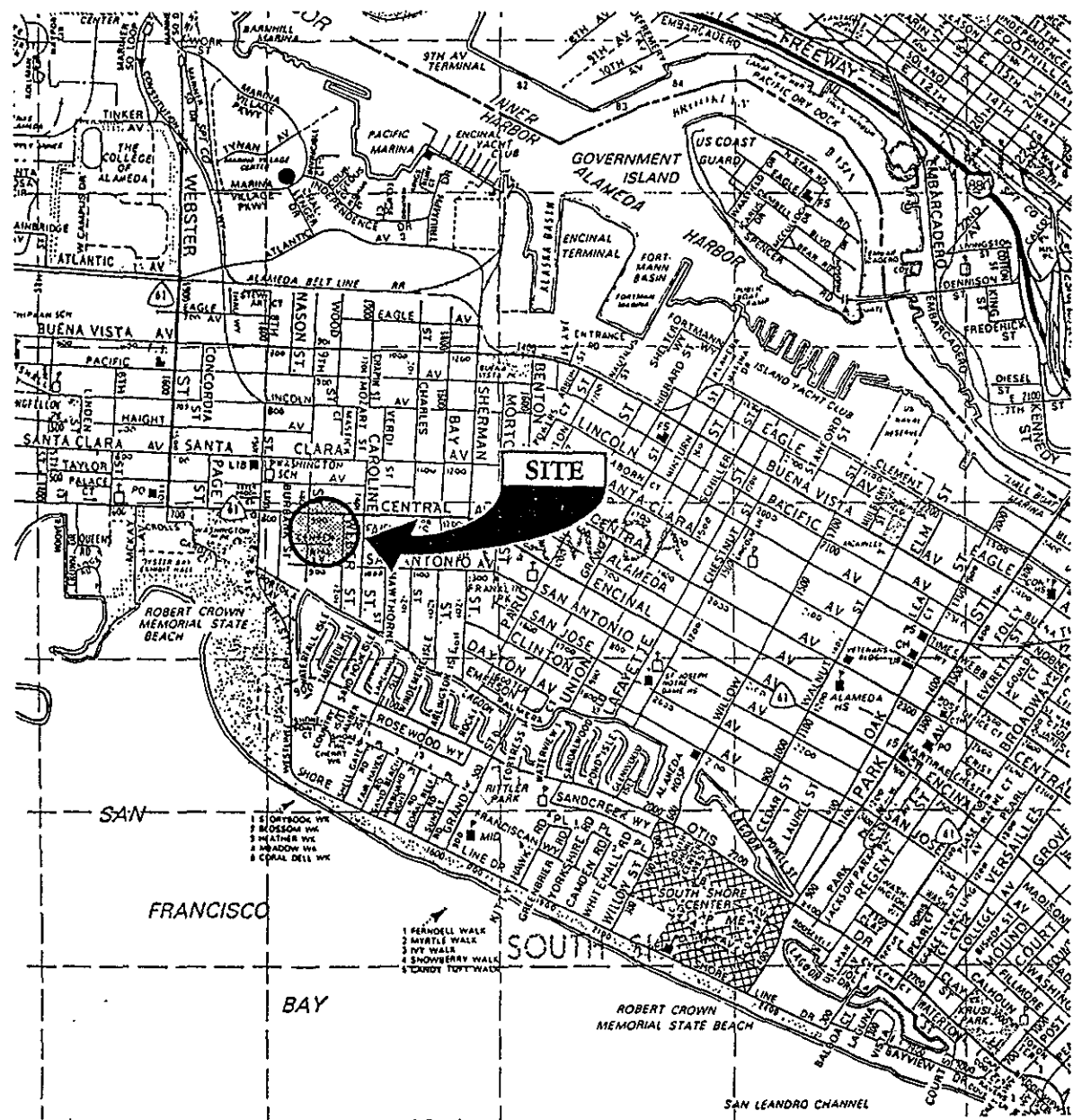
\* \* \* \* \*



Ron L. Helm  
Environmental Geologist  
Quality Assurance Reviewer



A00212



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1027-1, 5/28 88'EB

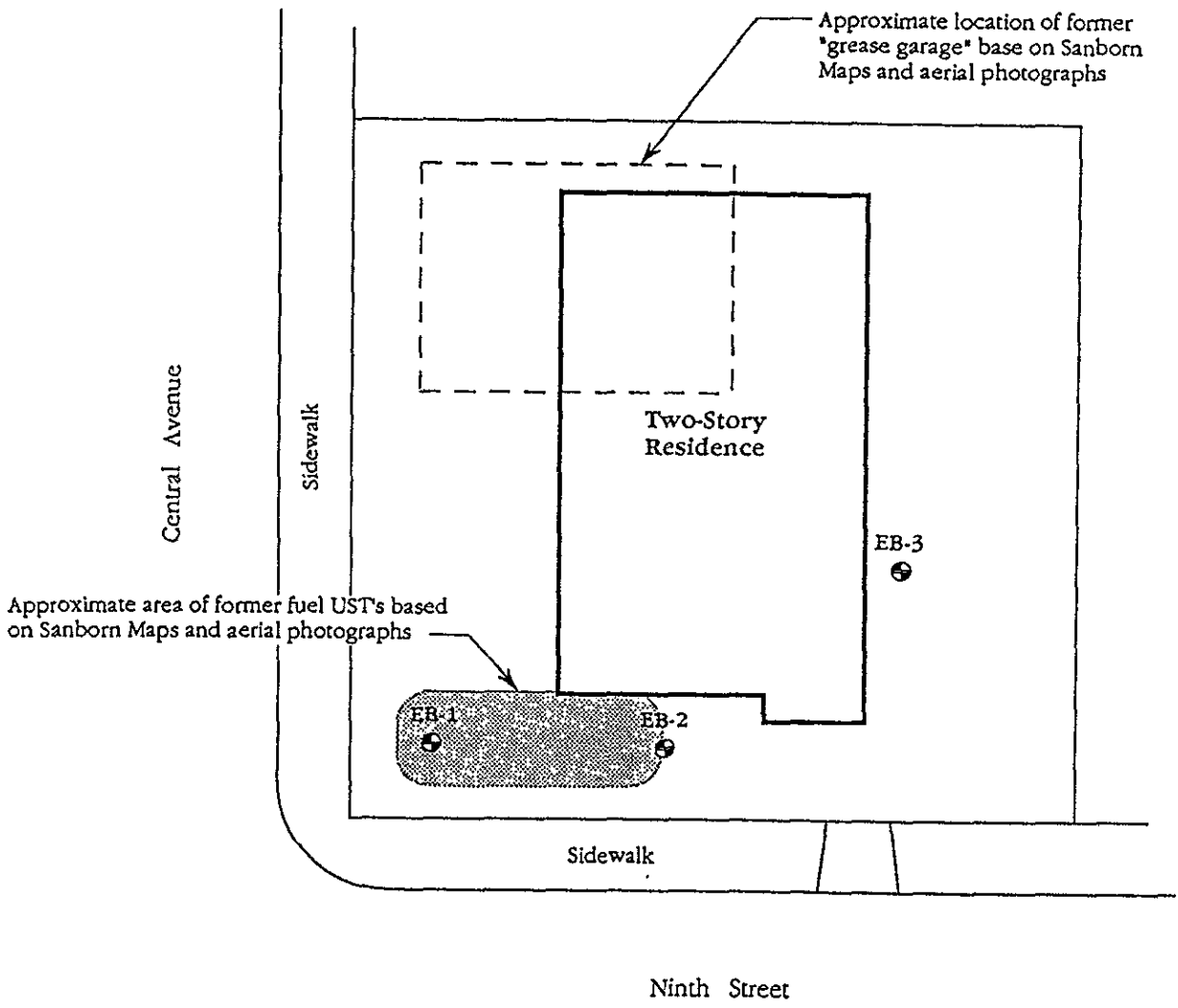
VICINITY MAP  
CENTRAL AND 9TH STREET  
Alameda, California

A00214

**LOWNEY ASSOCIATES**  
Environmental/Geotechnical/Engineering Services

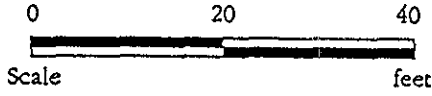
FIGURE 1

1027-1, June 1994



**LEGEND**

⊙ - Approximate location of exploratory boring



Base Unknown, dated 4/94.

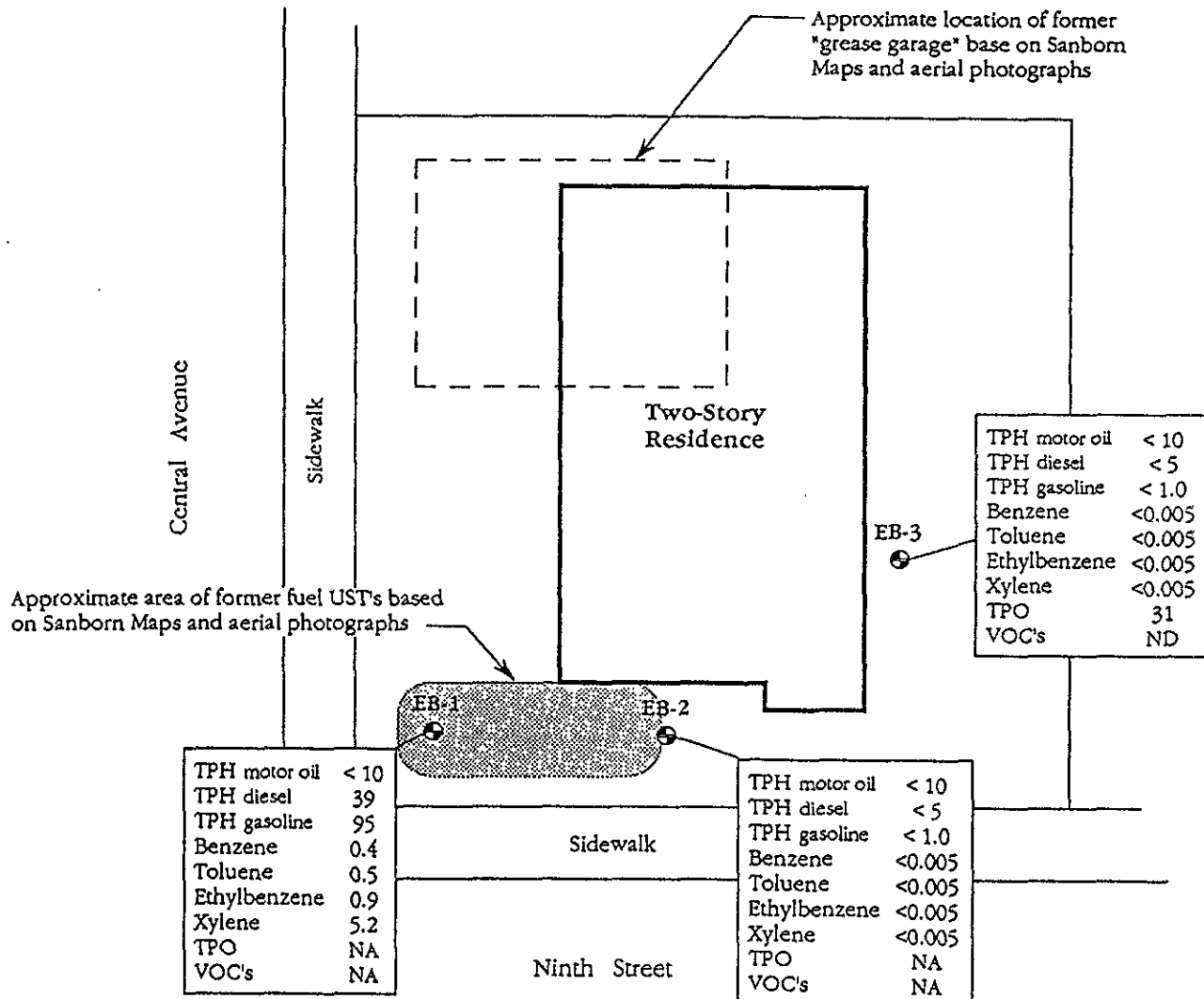
1027-1, 5/26 88\*EB

**SITE PLAN**  
**CENTRAL AND 9TH STREET**  
Alameda, California

**LOWNEY ASSOCIATES**  
Environmental/Geotechnical/Engineering Services

**A00215**

**FIGURE 2**  
1027-1, June 1994



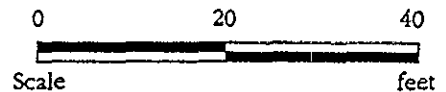
**LEGEND**

● - Approximate location of exploratory boring

TPH - Total petroleum hydrocarbons

TPO - Total petroleum oil

Concentrations in parts per million (ppm)



Base Unknown, dated 4/94. ...

1027-1, 526 B6 EB

**SOIL CONCENTRATIONS**  
**CENTRAL AND 9TH STREET**  
Alameda, California

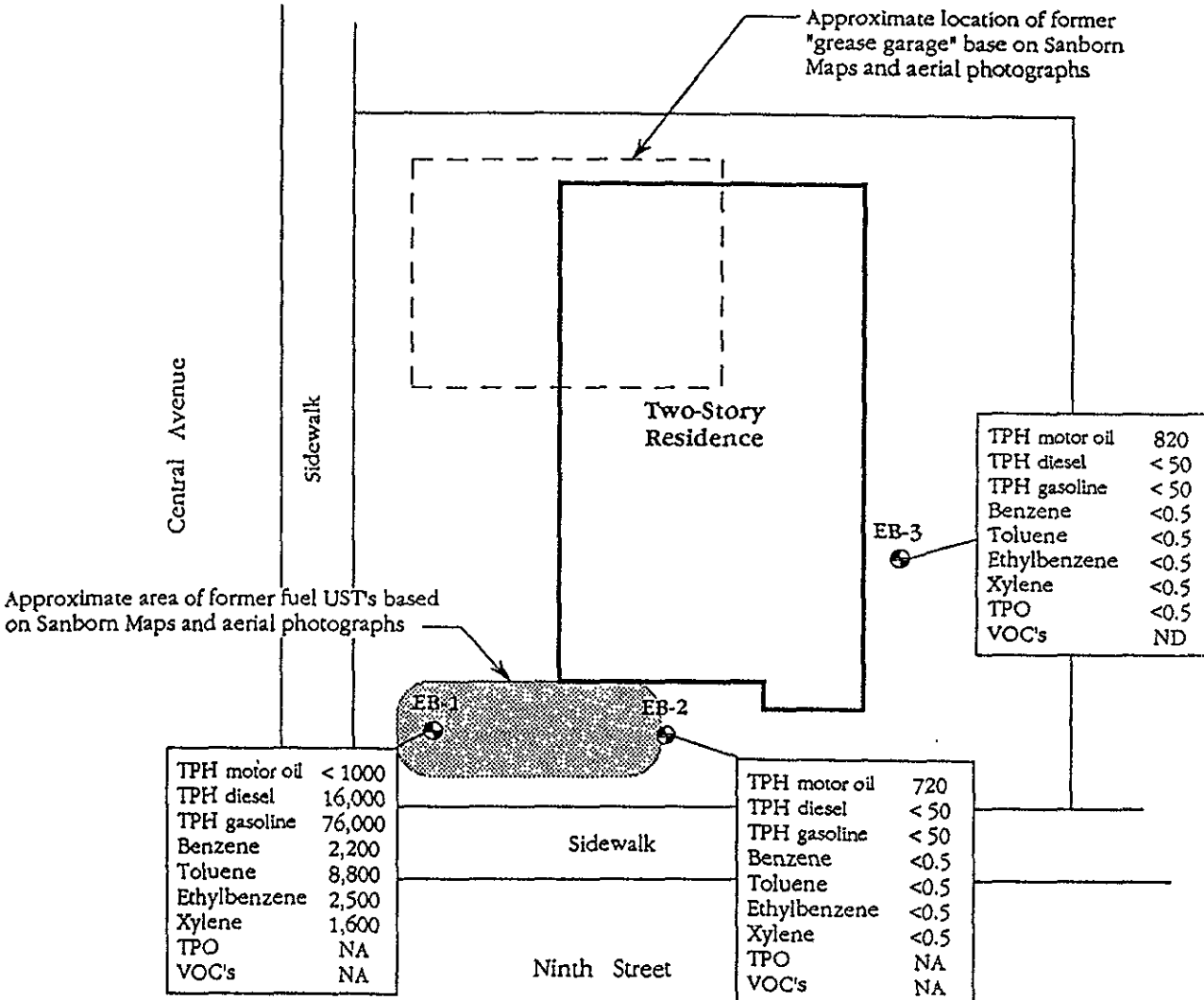
**A00216**

**LOVNEY ASSOCIATES**  
Environmental/Geotechnical/Engineering Services

**FIGURE 3**  
1027-1, June 1994



Anticipated Direction  
of Ground Water Flow



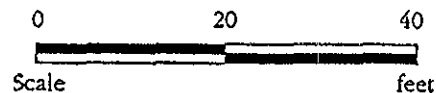
**LEGEND**

⊕ - Approximate location of exploratory boring

TPH - Total petroleum hydrocarbons

TPO - Total petroleum oil

Concentrations in parts per billion (ppb)



Base Unknown, dated 4/94.

1027-1, 5/26 BB/EB

**GROUND WATER CONCENTRATIONS**  
CENTRAL AND 9TH STREET  
Alameda, California

A00217

APPENDIX A  
SITE HISTORY INFORMATION

A00218



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THIS SANBORN MAP IS A CERTIFIED COPY  
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SPECT

1897

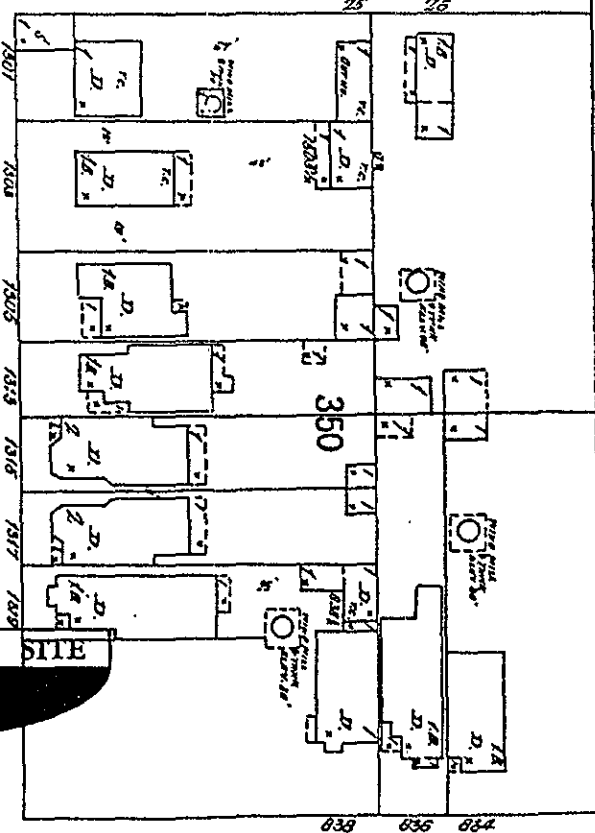
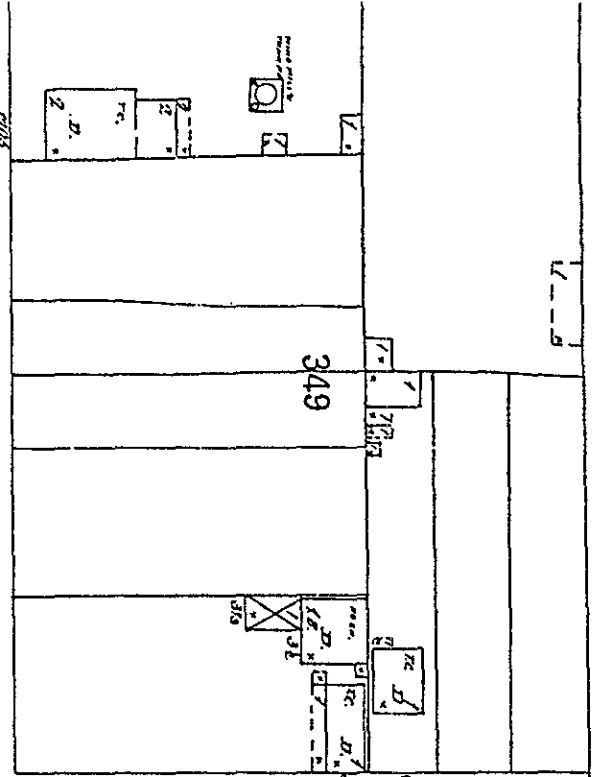
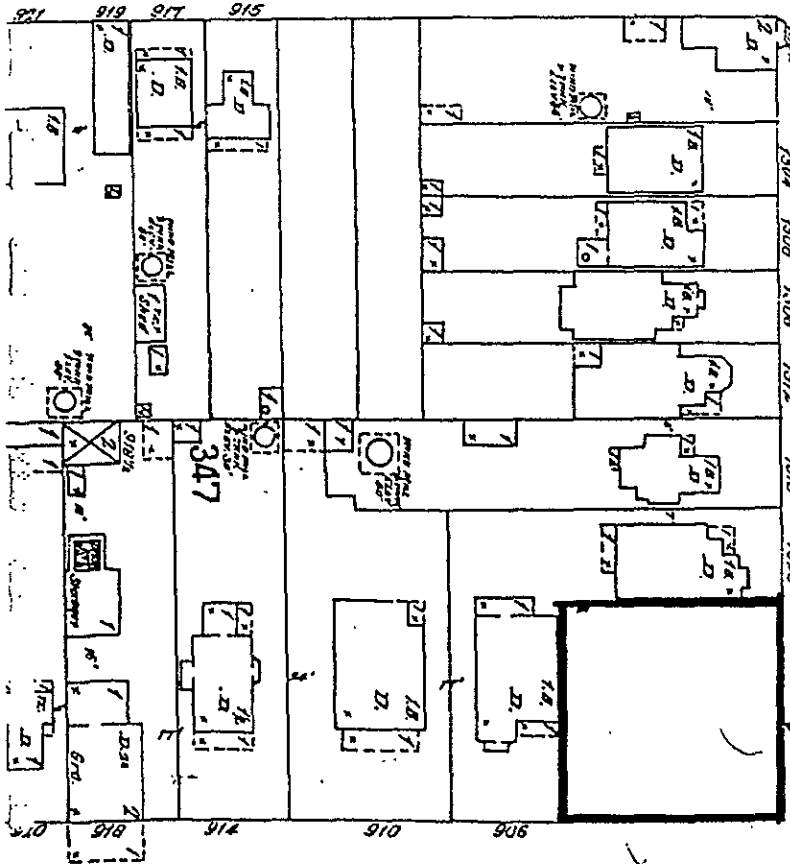
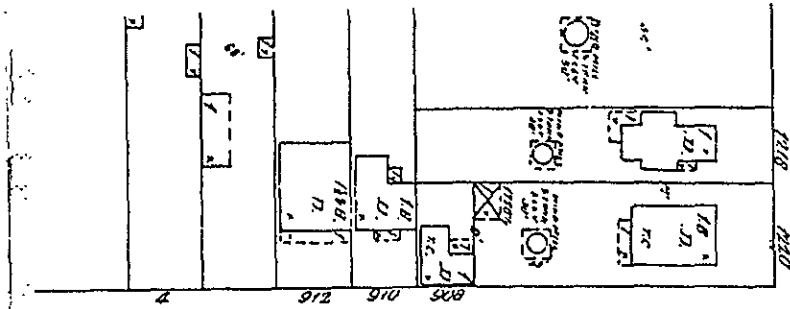
NINTH FORMERLY McPHERSON

CENTENNIAL

AVE.

CENTRAL

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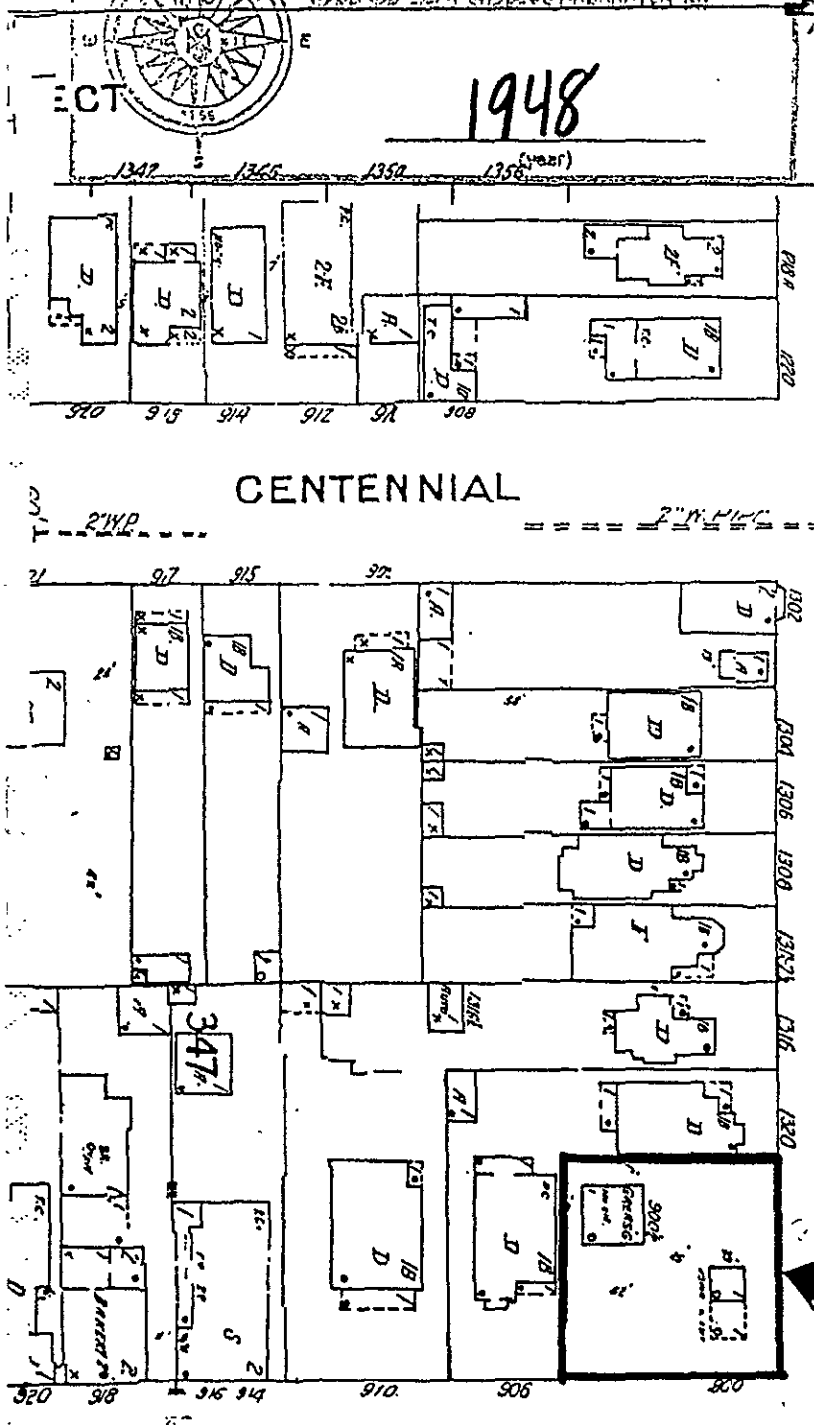
S.P.R.R. (SOUTHERN PACIFIC RAILROAD)

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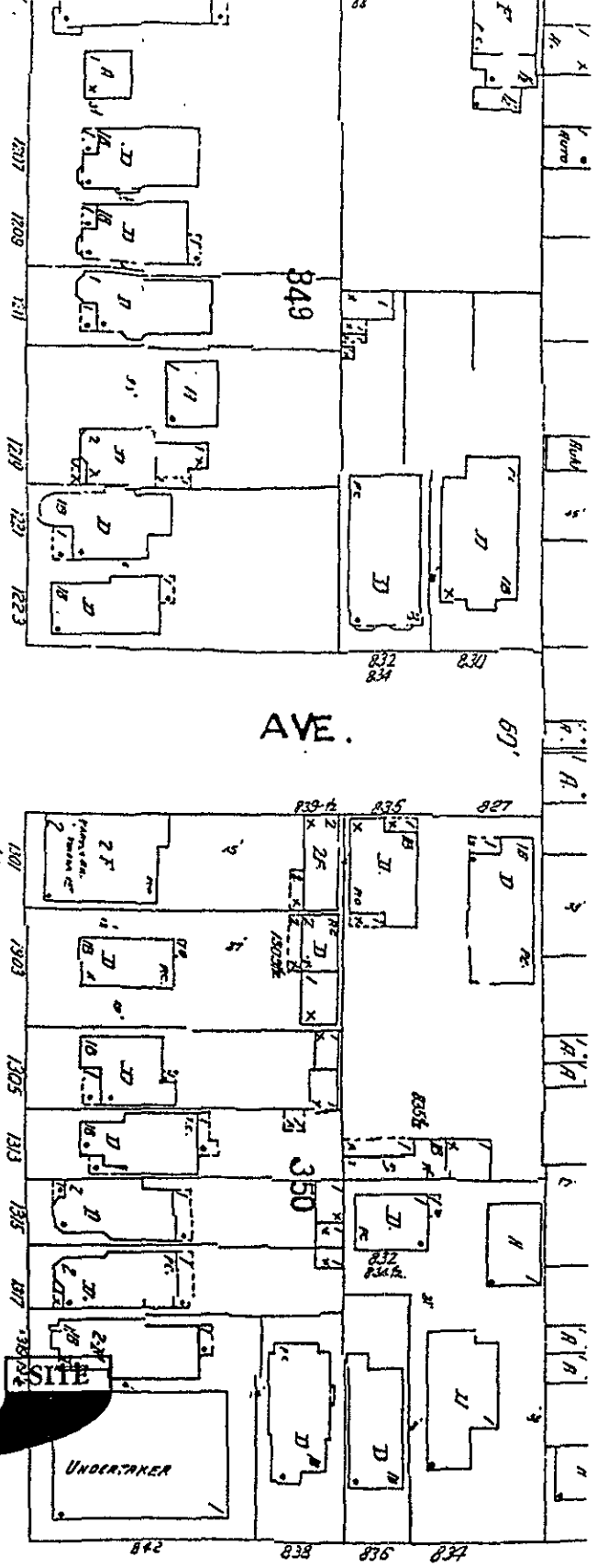
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NINTH FORMERLY McPHERSON



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A00220

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 INFORMATION ON THIS MAP IS DERIVED FROM  
 SANBORN FIELD SURVEYS CONDUCTED IN:

**1950**  
 (year)

NINTH FORMERLY McPHERSON

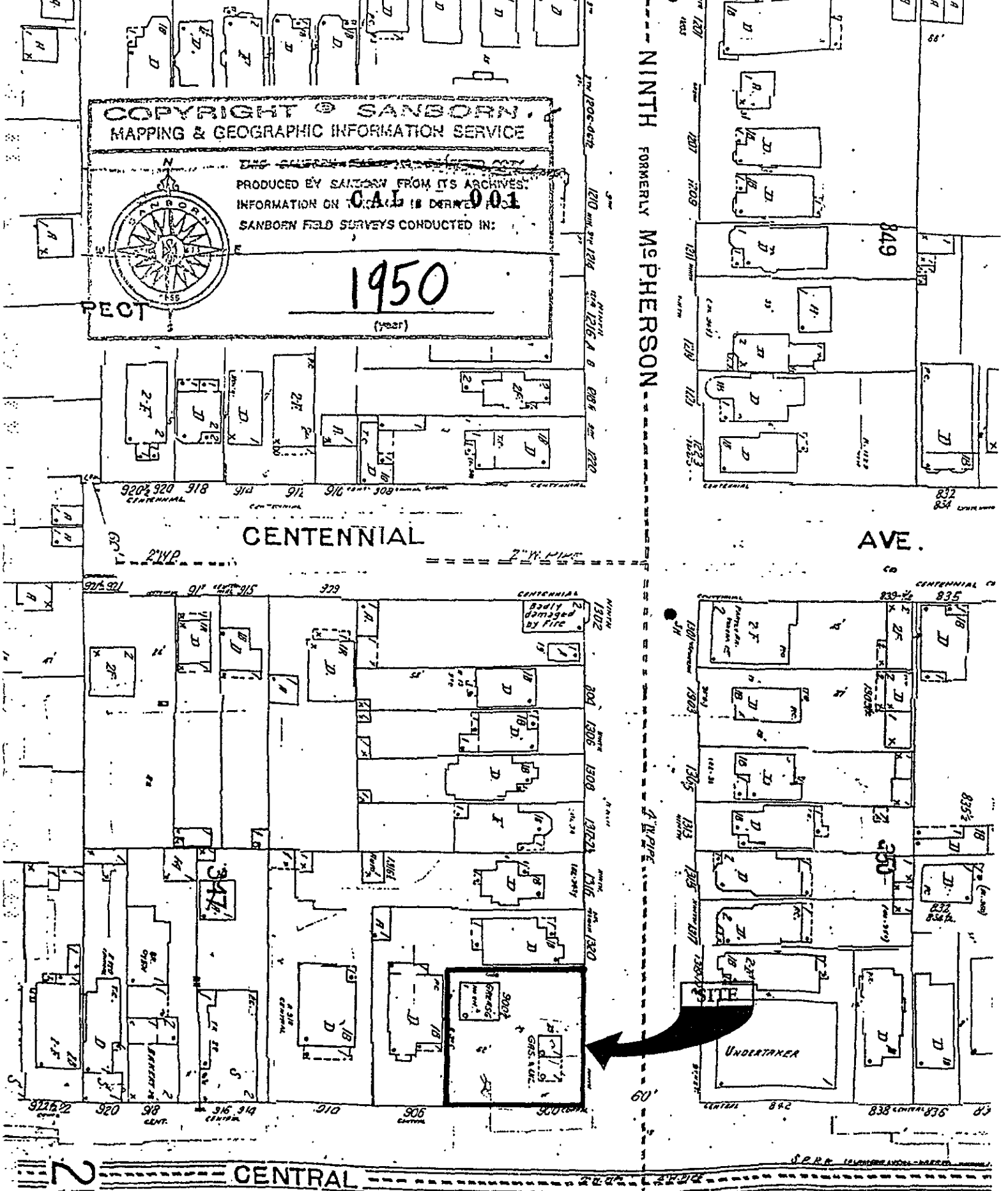
AVE.

CENTENNIAL

CENTRAL

UNDERTAKER

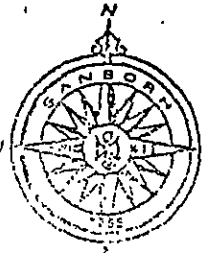
A00221



25

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SANBORN FIELD SURVEYS CONDUCTED IN:



1987  
16

NINTH  
FORMERLY McPHERSON

CENTENNIAL

AVE.

849

350

SHR

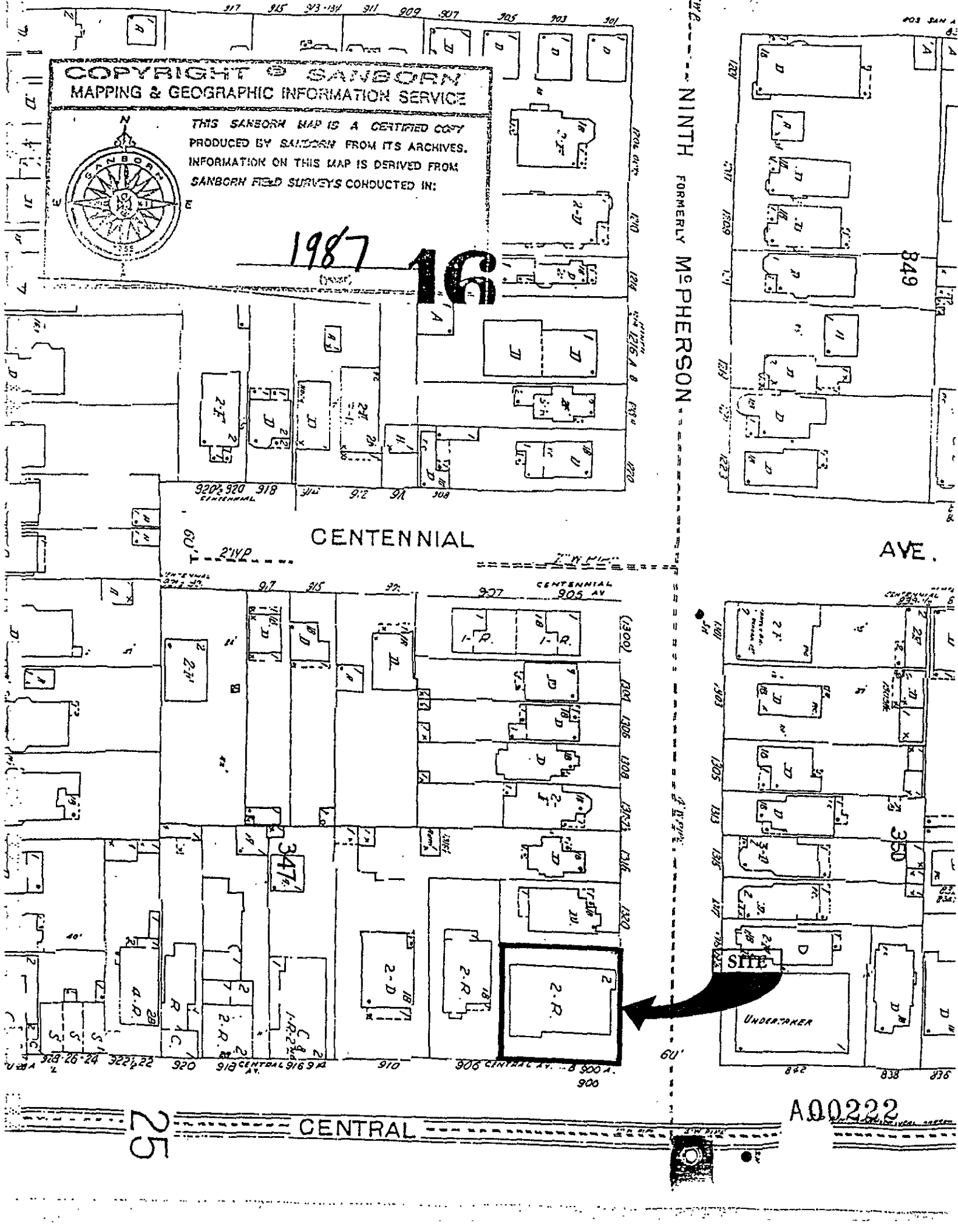
UNDERAKER



A00222

25

CENTRAL



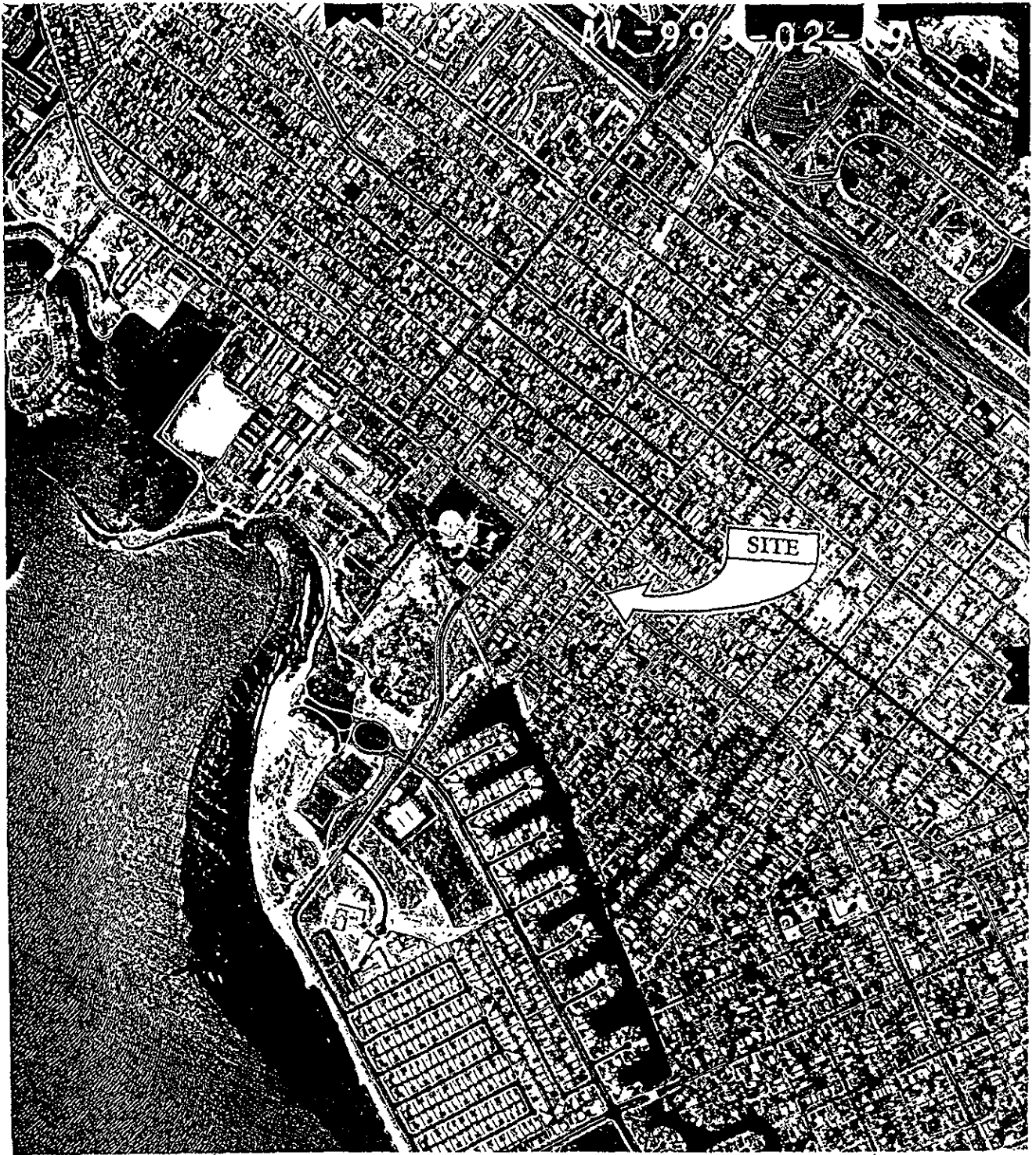


7-3-59  
Scale: 1 : 9,600  
AV-337-05-31

1027-1, 526 88' EB

AERIAL PHOTOGRAPH

A00223



5-19-71  
Scale: 1:12,000  
AV-995-02-09

1027-1, 5/28 BB'EB

AERIAL PHOTOGRAPH

A00224







9-24-75 Removed! 3-550 gal. gasoline tanks  
1-oil storage tank R.

Location 900 Central Ave.

Name Western Oil Gas Co.

Oil Storage Permit WS No. 480

Liquid Gasoline Gallons 1,650

Date Issued Feb. 11, 1931 Gauge \_\_\_\_\_

Installation 3-550 Gallon Tanks Under Sidewalk

Inspected By WK

Remarks Service Station

A00227



ZONING DIST.   
 CONTRACTOR **ALANDE PRODUCTS**   
 ADDRESS **65 VERONA BL**   
 CITY **SAFETY**   
 State **1/18/65**   
 ARCHITECT   
 ENGINEER

PLAN NO **193A** PERMIT NO. **1248**   
 ADDRESS **North & Central**

**APPLICATION FOR BUILDING PERMIT**  
**CITY OF ALAMEDA**  
 523-4100, Ext. 276

New Const \_\_\_\_\_ Addition \_\_\_\_\_ Alteration \_\_\_\_\_ Repair \_\_\_\_\_  
 Re roof \_\_\_\_\_ Wreck \_\_\_\_\_ Rebrake \_\_\_\_\_ Pest Control \_\_\_\_\_  
 Other \_\_\_\_\_  
 No. of Stories \_\_\_\_\_ Height to Highest Point \_\_\_\_\_  
 Existing Use \_\_\_\_\_

**PLANS SPECIFICATIONS, SURVEYS**

Except for small and inconsequential work applicants shall submit two sets of complete plans. All structures with features requiring engineering knowledge in design and for structures of excessive roof spans shall be accompanied by engineering data including soil bearing tests and such assumptions and calculations as may be required by the Building Department. A survey may be required when conditions warrant and shall be a part of the plans and specifications.

**DESCRIPTION OF WORK**

INSTALL CASE DISPLAY  
 ALL PLASTIC DISPLAY  
 READING "MCHANK" AT  
 CENTRAL

This plan has been checked  
 for compliance with the Ordinance

Proposed Use **IDENTIFICATION SIGN**  
 VALUATION OF WORK **200**  
 including all labor materials, and all lighting, heating, ventilation, water supply plumbing, fire sprinklers, electric wiring, elevator equipment and all features that are affixed or a permanent part of the building.

CITY OF ALAMEDA FEE \$ **1**

NOTICE This permit does NOT INCLUDE any construction within the public right of way

This permit does not cover sidewalks, driveway and house... Obtain an observation permit from the Building Department. Obtain an observation permit from the Building Department. Obtain an observation permit from the Building Department.

I hereby agree to save, indemnify and keep harmless the City of Alameda and its officers, employees and agents against all liabilities, judgments, costs and expenses which may in any wise accrue against the City in consequence of the granting of this permit, or from the use or occupancy of any sidewalk, street, or sub sidewalk or otherwise by virtue thereof, and will in all things strictly comply with the conditions of this permit, and provisions of the Ordinance of the City of Alameda.

OWNER **MCHANK PETROLEUM CORP.**  
 ADDRESS **1-14 65th ST. EMERYVILLE CALIF.**  
 Owner's name must be signed by himself or authorized agent

Indicate the bearing, direction of walls and corners. Show plot plan and foundation details on reverse side of application.

Permission is hereby granted to erect, alter, repair or wreck the building or structure described in this application in accordance with the Building, Zoning and other applicable ordinances of the City of Alameda and to the satisfaction of the Building Inspector.

RECEIVED

DEC 11 1979

Oct. 6

DATE APPLICATION RECEIVED 12/11/79 Building Inspections Dept. CITY OF ALAMEDA NO. 80-6185 PERMIT NO. 80-6185

DATE PERMIT ISSUED 2-27-80 ADDRESS 960 CENTRAL AVE

DESIGN REVIEW 1111 APPLICATION FOR BUILDING PERMIT CITY OF ALAMEDA 527 4100, Ext. 276

CONTRACTOR TRICAK CONST.

ADDRESS 1437 MORTON ST

CITY ALAMEDA

PHONE 5217523

SCALE 1/4" = 1'-0" 5:886

ARCHITECT D. L. THOMPSON

ENGINEER

PLANS, SPECIFICATIONS, SURVEYS

Except for the... and... applicants... structures with... and... structures... engineering... and... A survey... part of the...

DESCRIPTION OF WORK

BUILD 2 STORY DUPLEX ON CORNER OF 9TH ST & CENTRAL AVE. LOT HAS BEEN REZONED AND VARIANCE APPROVED

This plan has been checked for encroachment upon easements.

12/11/79 [Signature]

Approved... Building Official

MARK J. MANNA, Building Official

[Signature]

THIS PERMIT DOES NOT AUTHORIZE... This permit becomes null and void if work is not completed within 120 days

DATE

Alteration Repair

REPAIR

LOCAL LOT

DUPLEX

\$ 80,000

Address 900 CENTRAL AVENUE Building 8

Plan Check \$ 1,800.00 TOTAL \$

INCLUDE any construction within

comply and keep harmless the City of... liability... expenses which may... occur... of the granting of this permit... towards... City County... of the City and County

DAVID L. THOMPSON

ADDRESS 1437 MORTON ST ALAMEDA

[Signature]

5217523

A00230

\*\*\* CITY of ALAMEDA \*\*\*  
Property Inquiry File  
02/13/92

Permit Address: 900 CENTRAL AVE

PERMIT/#	ISSUE DATE	FINAL DATE	CONTRACTOR	JOB	APT
BP-80-0185	02/27/80	/ /	DAVID L. THOMPS	NEW DUPLEX	
BP-85-1453	12/12/85	01/03/86	SUN LIGHT & POW	SOLAR SPACE HTG	B
PP-85-6904	12/12/85	01/03/86	SUN LIGHT & POW	PBG - SOLAR SPACE HTG	B

A00231



NINTH STREET, 1326

CONDOMINIUMS ASSIGNED ADDRESSES OF 900 CENTRAL  
AND 1326 NINTH STREET IN 1980 BY B. HEFFRON.  
(formerly constructed as duplex in 1979 under  
address of 900Central Avenue)

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A00233

**APPENDIX B**  
**SUBSURFACE INVESTIGATION**

The subsurface investigation was performed on April 20, 1994 using a mobile DA-1 drill rig equipped with an 4-inch diameter hydraulically driven steel probe. Due to the hydraulically driven sampling technique, blow counts were not available. A total of three soil borings were drilled at the site. Soil samples were collected from each boring at approximate 5-foot depth intervals. Three soil borings (EB-1 through EB-3) were drilled to depths ranging from 19.0 to 20.0 feet. The soils encountered in the borings were logged using the Unified Soil Classification System (ASTM D-2487). The logs of the borings, as well as a key to the classification of the soil (Figure B-1), are included as part of this appendix.

Prior to use, all sampling equipment was thoroughly cleaned with a tri-sodium phosphate and distilled water solution or steam cleaned. Soil samples were collected in 2.5-inch diameter stainless steel liners using a Modified California drive samplers. Upon collection from the sampler, the ends of the stainless steel liner were covered with aluminum foil and then sealed with a plastic cap at each end. The caps were taped airtight and labeled appropriately. Ground water samples were collected from the borings using a teflon bailer. After collection, the samples were immediately placed in an ice cooled chest for transport to a certified analytical laboratory.

The attached boring logs and related information depict subsurface conditions only at the locations

A00234



indicated and at the particular date designated on the log. Subsurface conditions at other locations may differ from conditions occurring at these boring locations. The passage of time may result in a change in the subsurface conditions due to environmental changes. In addition, any stratification lines on the log represent the approximate boundary between soil types; the transition may be gradual.

A00235

PRIMARY DIVISIONS			SOIL TYPE	LEGEND	SECONDARY DIVISIONS
COARSE GRAINED SOILS MORE THAN HALF OF MATERIAL IS LARGER THAN NO. 200 SIEVE SIZE	GRAVELS MORE THAN HALF OF COARSE FRACTION IS LARGER THAN NO. 4 SIEVE	CLEAN GRAVELS (LESS THAN 5% FINES)	GW		Well graded gravels, gravel-sand mixtures, little or no fines.
			GP		Poorly graded gravels or gravel-sand mixtures, little or no fines.
		GRAVEL WITH FINES	GM		Silty gravels, gravel-sand-silt mixtures, non-plastic fines.
			GC		Clayey gravels, gravel-sand-clay mixtures, plastic fines.
	SANDS MORE THAN HALF OF COARSE FRACTION IS SMALLER THAN NO. 4 SIEVE	CLEAN SANDS (LESS THAN 5% FINES)	SW		Well graded sands, gravelly sands, little or no fines.
			SP		Poorly graded sands or gravelly sands, little or no fines.
		SANDS WITH FINES	SM		Silty sands, sand-silt mixtures, non-plastic fines.
			SC		Clayey sands, sand-clay mixtures, plastic fines.
FINE GRAINED SOILS MORE THAN HALF OF MATERIAL IS SMALLER THAN NO. 200 SIEVE SIZE	SILTS AND CLAYS LIQUID LIMIT IS LESS THAN 50%		ML		Inorganic silts and very fine sands, rock flour, silty or clayey fine sands or clayey silts with slight plasticity.
			CL		Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays.
			OL		Organic silts and organic silty clays of low plasticity.
	SILTS AND CLAYS LIQUID LIMIT IS GREATER THAN 50%		MH		Inorganic silts, micaceous or diatomaceous fine sandy or silty soils, elastic silts.
			CH		Inorganic clays of high plasticity, fat clays.
			OH		Organic clays of medium to high plasticity, organic silts.
HIGHLY ORGANIC SOILS			Pt		Peat and other highly organic soils.

### DEFINITION OF TERMS

SILTS AND CLAY	U.S. STANDARD SERIES SIEVE			CLEAR SQUARE SIEVE OPENINGS			COBBLES	BOULDERS
	200	40	10	4	3/4"	3"		
	SAND			GRAVEL				
	FINE	MEDIUM	COARSE	FINE	COARSE			

### GRAIN SIZES



### SAMPLERS

SAND AND GRAVEL	BLOWS/FOOT*
VERY LOOSE	0 - 4
LOOSE	4 - 10
MEDIUM DENSE	10 - 30
DENSE	30 - 50
VERY DENSE	OVER 50

### RELATIVE DENSITY

SILTS AND CLAYS	STRENGTH ‡	BLOWS/FOOT*
VERY SOFT	0 - 1/4	0 - 2
SOFT	1/4 - 1/2	2 - 4
MEDIUM STIFF	1/2 - 1	4 - 8
STIFF	1 - 2	8 - 16
VERY STIFF	2 - 4	16 - 32
HARD	OVER 4	OVER 32

### CONSISTENCY

- \* Number of blows of 140 pound hammer falling 30 inches to drive a 2 inch O.D. (1-3/8 inch I.D.) split spoon (ASTM D-1586).
- ‡ Unconfined compressive strength in tons/sq. ft. as determined by laboratory testing or approximated by the standard penetration test (ASTM D-1586), pocket penetrometer, torvane, or visual observation.

### KEY TO EXPLORATORY BORING LOGS Unified Soil Classification System (ASTM D - 2487)

CENTRAL & 9TH STREET  
Alameda, California

A00236

DRILL RIG: DA-1

SURFACE ELEVATION: --

LOGGED BY: BB

DEPTH TO GROUND WATER: 18.5 feet

BORING DIAMETER: 4 inches

DATE DRILLED: 4/20/94

DESCRIPTION AND REMARKS	SYMBOL	LEGEND	CONSISTENCY	SOIL TYPE	DEPTH (FEET)	SAMPLER	WATER CONTENT (%)	PENETRATION RESISTANCE (BLOWS/FT)	SHEAR STRENGTH BY TORVANE (KSF)	ORGANIC VAPOR METER (ppm)
SILTY SAND, Brown, moist, fine to medium sand (fill)	A <sub>f</sub>		Loose	SM	0 - 5					
↑ FILL										
SANDY SILT, yellow-brown, moist, fine to medium grained sand	B		Loose	SM	5 - 20					
Color change to green-gray, and petroleum odor between 10 and 20 feet					10					
Petroleum odor increases at 18 to 18.5 feet					15					
Saturated at approximately at 19 feet					19					
Bottom of Boring = 20.0 feet.					20					
NOTE: The stratification lines represent the approximate boundary between the soil types. The transition may be gradual.					25					
					30					

▽ Final

▽ Initial

1027-1, 5/12 BB'EB

EXPLORATORY BORING LOG - EB-1

CENTRAL & 9TH STREET  
Alameda, California

A00237

**LOWNEY ASSOCIATES**  
Environmental/Geotechnical/Engineering Services

EB-1  
1027-1, June 1994

DRILL RIG: DA-1

SURFACE ELEVATION: --

LOGGED BY: BB

DEPTH TO GROUND WATER: 18 feet

BORING DIAMETER: 4 inches

DATE DRILLED: 4/20/94

DESCRIPTION AND REMARKS	SYMBOL	LEGEND	CONSISTENCY	SOIL TYPE	DEPTH (FEET)	SAMPLER	WATER CONTENT (%)	PENETRATION RESISTANCE (BLOWS/FT)	SHEAR STRENGTH BY TORVANE (KSF)	ORGANIC VAPOR METER (ppm)
SILTY SAND, Brown, moist, fine to medium sand (fill)	A <sub>f</sub>		Loose	SM						
↑ FILL										
SANDY SILT, yellow-brown, moist, fine grained sand	B		Loose	SM	5					
					10					
					15					
Saturated at approximately 18 feet										
					20					
Bottom of Boring = 20.0 feet.					25					
					30					
NOTE: The stratification lines represent the approximate boundary between the soil types. The transition may be gradual.										

▽ Final

▽ Initial

1027-1, 5/12 BB\*EB

EXPLORATORY BORING LOG - EB-2

CENTRAL & 9TH STREET  
Alameda, California

A00238

**LOVNEY ASSOCIATES**  
Environmental/Geotechnical/Engineering Services

EB-2  
1027-1, June 1994

DRILL RIG: DA-1

SURFACE ELEVATION: -

LOGGED BY: BB

DEPTH TO GROUND WATER: 16 feet

BORING DIAMETER: 4 inches

DATE DRILLED: 4/20/94

DESCRIPTION AND REMARKS	SYMBOL	LEGEND	CONSISTENCY	SOIL TYPE	DEPTH (FEET)	SAMPLER	WATER CONTENT (%)	PENETRATION RESISTANCE (BLOWS/FT)	SHEAR STRENGTH BY TORVANE (KSF)	ORGANIC VAPOR METER (ppm)
SILTY SAND, Brown, moist, fine to medium sand (fill)	A <sub>f</sub>		Loose	SM	0 - 5					
↑ FILL										
SANDY SILT, yellow-brown, moist, fine grained sand	B		Loose	SM	5 - 19.0					
Saturated at approximately 16 feet					16					
Bottom of Boring = 19.0 feet.					19.0					
NOTE: The stratification lines represent the approximate boundary between the soil types. The transition may be gradual.					20 - 30					

▼ Final

▼ Initial

1027-1, 5/12 BB\*EB

EXPLORATORY BORING LOG - EB-3

CENTRAL & 9TH STREET  
Alameda, California

A00239

**LOWNEY ASSOCIATES**  
Environmental/Geotechnical/Engineering Services

EB-3  
1027-1, June 1994

**APPENDIX C**  
**ANALYTICAL RESULTS**

The refrigerated ground water and soil samples were delivered to Coast to Coast of San Jose, California. Chain of custody documentation was maintained for all samples. Attached are copies of the laboratory reports and the chain of custody forms. Coast to Coast Analytical Services is certified by the State of California as a Hazardous Waste Testing Laboratory and as an Approved Water and Wastewater Laboratory.

A00240



# COAST-TO-COAST ANALYTICAL SERVICES, INC.

EXCELLENCE  
IN ANALYSIS

NorCal Division (San Jose Laboratory)  
2059 Junction Ave.

San Jose, CA 95131  
(408) 955-9077

CLIENT: Peter Langtry  
Lowney Associates  
405 Clyde Avenue  
Mountain View, CA 94043

Lab Number : JK-1278-1  
Project : 1027-1, Central & 9th  
Analyzed : 04/27/94  
Analyzed by: CB  
Method : EPA 8020/8015M

## REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE RECEIVED	
EB1-3, 14.5 to 15.0	Soil	Bridget Baxter	04/20/94	04/21/94
CONSTITUENT	(CAS RN)	*PQL mg/Kg	RESULT mg/Kg	NOTE
BTEX + TPH (Gasoline)				1,2
Benzene		0.03	0.4	
Toluene		0.03	0.5	
Ethylbenzene		0.03	0.9	
Xylenes		0.03	5.2	
Total Petroleum Hydrocarbons (Gasoline)		5.	95.	
Percent Surrogate Recovery			790.	

San Jose Lab Certifications: CAELAP #1204

\*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)

- (1) EXTRACTED by EPA 5030 (purge-and-trap)
- (2) Surrogate recovery is outside control limit due to hydrocarbon interference.

MAY 2 1994

04/28/94  
GC2-427B318  
DT/et/cb  
S-B-042294

Respectfully submitted,  
COAST-TO-COAST ANALYTICAL SERVICES, INC.

  
Dudley Torres  
Organics Manager

A00241



# COAST-TO-COAST ANALYTICAL SERVICES, INC.

EXCELLENCE  
IN ANALYSIS

NorCal Division (San Jose Laboratory)  
2059 Junction Ave.

San Jose, CA 95131  
(408) 955-9077

CLIENT: Peter Langtry  
Lowney Associates  
405 Clyde Avenue  
Mountain View, CA 94043

Lab Number : JK-1278-2  
Project : 1027-1, Central & 9th  
Analyzed : 04/27/94  
Analyzed by: CB  
Method : EPA 8020/8015M

## REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE RECEIVED		
EB2-4, 16.5 to 17.0	Soil	Bridget Baxter	04/20/94	04/21/94	
CONSTITUENT	(CAS RN)	*PQL mg/Kg	RESULT mg/Kg	NOTE	
BTEX + TPH (Gasoline)					1
Benzene		0.005	ND		
Toluene		0.005	ND		
Ethylbenzene		0.005	ND		
Xylenes		0.005	ND		
Total Petroleum Hydrocarbons (Gasoline)		1.	ND		
Percent Surrogate Recovery			71.		

San Jose Lab Certifications: CAELAP #1204


\*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)

(1) EXTRACTED by EPA 5030 (purge-and-trap)

MAY 2 1994

04/28/94  
GC2-427B319  
DT/et/cb  
S-B-042294

Respectfully submitted,  
COAST-TO-COAST ANALYTICAL SERVICES, INC.

  
Dudley Torres  
Organics Manager

A00242





# COAST-TO-COAST ANALYTICAL SERVICES, INC.

EXCELLENCE  
IN ANALYSIS

NorCal Division (San Jose Laboratory)  
2059 Junction Ave.

San Jose, CA 95131  
(408) 955-9077

CLIENT: Peter Langtry  
Lowney Associates  
405 Clyde Avenue  
Mountain View, CA 94043

Lab Number : JK-1278-3  
Project : 1027-1, Central & 9th  
Analyzed : 04/27/94  
Analyzed by: CB  
Method : EPA 8020/8015M

## REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE RECEIVED	
EB3-2, 14.5 to 15.0	Soil	Bridget Baxter	04/20/94	04/21/94
CONSTITUENT	(CAS RN)	*PQL mg/Kg	RESULT mg/Kg	NOTE
BTEX + TPH (Gasoline)				
Benzene		0.005	ND	1
Toluene		0.005	ND	
Ethylbenzene		0.005	ND	
Xylenes		0.005	ND	
Total Petroleum Hydrocarbons (Gasoline)		1.	ND	
Percent Surrogate Recovery			69.	

San Jose Lab Certifications: CAELAP #1204

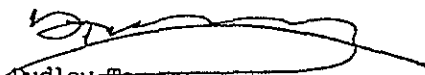
\*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)

(1) EXTRACTED by EPA 5030 (purge-and-trap)

MAY 2 1994

04/28/94  
GC2-427B320  
DT/et/cb  
S-B-042294

Respectfully submitted,  
COAST-TO-COAST ANALYTICAL SERVICES, INC.

  
Dudley Torres  
Organics Manager

A00243



EXCELLENCE  
IN ANALYSIS

# COAST-TO-COAST ANALYTICAL SERVICES, INC.

NorCal Division (San Jose Laboratory)  
2059 Junction Ave.

San Jose, CA 95131  
(408) 955-9077

CLIENT: Peter Langtry  
Lowney Associates  
405 Clyde Avenue  
Mountain View, CA 94043

Lab Number : JK-1278-1  
Project : 1027-1, Central & 9th  
Analyzed : 04/25/94  
Analyzed by: CB  
Method : EPA 8015M

## REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE RECEIVED	
EB1-3, 14.5 to 15.0	Soil	Bridget Baxter	04/20/94	04/21/94
CONSTITUENT	(CAS RN)	*PQL mg/Kg	RESULT mg/Kg	NOTE
TOTAL PETROLEUM HYDROCARBONS				1,2
Total Petroleum Hydrocarbons (C6 - C15)		5.	39.	
Total Petroleum Hydrocarbons (Motor Oil)		10.	ND	

San Jose Lab Certifications: CAELAP #1204

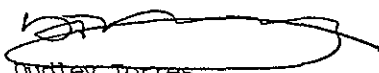
\*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)

- (1) Sample Preparation on 04/22/94 by MP
- (2) TPH is quantitated using diesel.

MAY 2 1994

04/27/94  
ECD2-425A016  
DT/et/sab  
DSL042294B

Respectfully submitted,  
COAST-TO-COAST ANALYTICAL SERVICES, INC.

  
Dudley Torres  
Organics Manager

A00244



# COAST-TO-COAST ANALYTICAL SERVICES, INC.

EXCELLENCE  
IN ANALYSIS

NorCal Division (San Jose Laboratory)  
2059 Junction Ave.

San Jose, CA 95131  
(408) 955-9077

CLIENT: Peter Langtry  
Lowney Associates  
405 Clyde Avenue  
Mountain View, CA 94043

Lab Number : JK-1278-2  
Project : 1027-1, Central & 9th  
Analyzed : 04/25/94  
Analyzed by: CB  
Method : EPA 8015M

## REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE RECEIVED	
EB2-4, 16.5 to 17.0	Soil	Bridget Baxter	04/20/94	04/21/94
CONSTITUENT	(CAS RN)	*PQL mg/Kg	RESULT mg/Kg	NOTE
TOTAL PETROLEUM HYDROCARBONS				1
Total Petroleum Hydrocarbons (Diesel)		5.	ND	
Total Petroleum Hydrocarbons (Motor Oil)		10.	ND	

San Jose Lab Certifications: CAELAP #1204


\*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)

(1) Sample Preparation on 04/22/94 by MP

MAY 2 1994

04/27/94  
ECD2-425A020  
DT/et/sab  
DSL042294B

Respectfully submitted,  
COAST-TO-COAST ANALYTICAL SERVICES, INC.

  
Dudley Torres  
Organics Manager

A00245



# COAST-TO-COAST ANALYTICAL SERVICES, INC.

EXCELLENCE  
IN ANALYSIS

NorCal Division (San Jose Laboratory)  
2059 Junction Ave.

San Jose, CA 95131  
(408) 955-9077

CLIENT: Peter Langtry  
Lowney Associates  
405 Clyde Avenue  
Mountain View, CA 94043

Lab Number : JK-1278-3  
Project : 1027-1, Central & 9th  
Analyzed : 04/25/94  
Analyzed by: CB  
Method : EPA 8015M

## REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE RECEIVED		
EB3-2, 14.5 to 15.0	Soil	Bridget Baxter	04/20/94	04/21/94	
CONSTITUENT	(CAS RN)	*PQL mg/Kg	RESULT mg/Kg	NOTE	
TOTAL PETROLEUM HYDROCARBONS					
Total Petroleum Hydrocarbons (Diesel)		5.	ND	1	
Total Petroleum Hydrocarbons (Motor Oil)		10.	ND		

San Jose Lab Certifications: CAELAP #1204

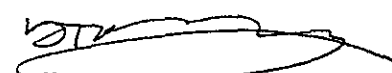
\*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)

(1) Sample Preparation on 04/22/94 by MP

MAY 2 1994

04/27/94  
ECD2-425A021  
DT/et/sab  
DSL042294B

Respectfully submitted,  
COAST-TO-COAST ANALYTICAL SERVICES, INC.

  
Dudley Torres  
Organics Manager

A00246



# COAST-TO-COAST ANALYTICAL SERVICES, INC.

EXCELLENCE  
IN ANALYSIS

NorCal Division (San Jose Laboratory)  
2059 Junction Ave.

San Jose, CA 95131  
(408) 955-9077

CLIENT: Peter Langtry  
Lowney Associates  
405 Clyde Avenue  
Mountain View, CA 94043

Lab Number : JK-1278-3  
Project : 1027-1, Central & 9th  
Analyzed : 04/26/94  
Analyzed by: LB  
Method : EPA 8010

## REPORT OF ANALYTICAL RESULTS

Page 1 of 2

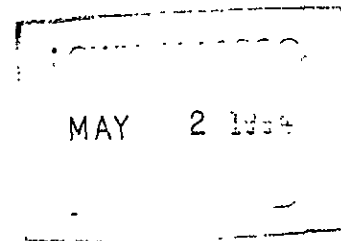
SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE RECEIVED		
EB3-2, 14.5 to 15.0	Soil	Bridget Baxter	04/20/94	04/21/94	
CONSTITUENT	(CAS RN)	*PQL µg/Kg	RESULT µg/Kg	NOTE	
PURGEABLE HALOCARBONS					1
Benzyl chloride	(100447)	10.	ND		
Bromobenzene	(108861)	5.	ND		
Bromodichloromethane	(75274)	5.	ND		
Bromofom	(75252)	5.	ND		
Bromomethane	(74839)	5.	ND		
Carbon Tetrachloride	(56235)	5.	ND		
Chlorobenzene	(108907)	5.	ND		
Chloroethane	(75003)	5.	ND		
2-Chloroethyl Vinyl Ether	(110758)	5.	ND		
Chloroform	(67663)	5.	ND		
Chloromethane	(74873)	5.	ND		
Dibromochloromethane	(124481)	5.	ND		
Dibromomethane	(74953)	5.	ND		
1,2-Dichlorobenzene	(95501)	5.	ND		
1,3-Dichlorobenzene	(541731)	5.	ND		
1,4-Dichlorobenzene	(106467)	5.	ND		
Dichlorodifluoromethane (F12)	(75718)	5.	ND		
1,1-Dichloroethane	(75343)	5.	ND		

San Jose Lab Certifications: CAELAP #1204

\*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)

(1) EXTRACTED by EPA 5030 (purge-and-trap)

04/28/94  
ELCD/422A209  
DT/et/mt  
S-A-042294



A00247



# COAST-TO-COAST ANALYTICAL SERVICES, INC.

EXCELLENCE  
IN ANALYSIS

NorCal Division (San Jose Laboratory)  
2059 Junction Ave.

San Jose, CA 95131  
(408) 955-9077

CLIENT: Peter Langtry  
Lowney Associates  
405 Clyde Avenue  
Mountain View, CA 94043

Lab Number : JK-1278-3  
Project : 1027-1, Central & 9th  
Analyzed : 04/26/94  
Analyzed by: LB  
Method : EPA 8010

## REPORT OF ANALYTICAL RESULTS

Page 2 of 2


SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE RECEIVED		
EB3-2, 14.5 to 15.0	Soil	Bridget Baxter	04/20/94	04/21/94	
CONSTITUENT	(CAS RN)	*PQL µg/Kg	RESULT µg/Kg	NOTE	
1,2-Dichloroethane	(107062)	5.	ND		
1,1-Dichloroethene	(75354)	5.	ND		
cis-1,2-Dichloroethene	(156592)	5.	ND		
trans-1,2-Dichloroethene	(156605)	5.	ND		
Dichloromethane (Methylene chloride)	(75092)	50.	ND		
1,2-Dichloropropane	(78875)	5.	ND		
cis-1,3-Dichloropropene	(10061015)	5.	ND		
trans-1,3-Dichloropropene	(10061026)	5.	ND		
1,1,2,2-Tetrachloroethane	(79345)	5.	ND		
1,1,1,2-Tetrachloroethane	(630206)	5.	ND		
Tetrachloroethene	(127184)	5.	ND		
1,1,1-Trichloroethane	(71556)	5.	ND		
1,1,2-Trichloroethane	(79005)	5.	ND		
Trichloroethene	(79016)	5.	ND		
Trichlorofluoromethane	(75694)	5.	ND		
1,2,3-Trichloropropane	(96184)	5.	ND		
Vinyl Chloride	(75014)	5.	ND		
Bromochloromethane (% Surrogate Recovery #1)			77.		
2-Bromo-1-Chloropropane (% Surrogate Recovery #2)			53.		
1,4-Dichlorobutane (% Surrogate Recovery #3)			54.		

San Jose Lab Certifications: CAELAP #1204

\*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)

04/28/94  
ELCD/422A209  
DT/et/mt  
S-A-042294

Respectfully submitted,  
COAST-TO-COAST ANALYTICAL SERVICES, INC.

  
Dudley Torres  
Organics Manager

MAY 2 1994

A00248



# COAST-TO-COAST ANALYTICAL SERVICES, INC.

EXCELLENCE  
IN ANALYSIS

NorCal Division (San Jose Laboratory)  
2059 Junction Ave.

San Jose, CA 95131  
(408) 955-9077

CLIENT: Peter Langtry  
Lowney Associates  
405 Clyde Avenue  
Mountain View, CA 94043

Lab Number : JK-1278-3  
Project : 1027-1, Central & 9th

## REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED	
EB3-2, 14.5 to 15.0	Soil	Bridget Baxter		04/20/94	04/21/94
CONSTITUENT	*PQL	RESULT	UNITS	METHOD	ANALYZED BY NOTES
Oil and Grease (Std Methods 5520-F)	10.	31.	mg/Kg	SM5520C&F	04/26/94 MT

San Jose Lab Certifications: CAELAP #1204

\*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)

MAY 2 1994

04/28/94

NG/nfg/mt  
SOX940426A

Respectfully submitted,  
COAST-TO-COAST ANALYTICAL SERVICES, INC.

*Nick J. Gaone*

Nick Gaone  
Inorganics Manager

A00249

# LOWNEY ASSOCIATES CHAIN OF CUSTODY RECORD

JOB NO. 1027-1		PROJECT NAME/LOCATION Central & 9th		NO. OF CON- TAINERS	ANALYSIS REQUIRED						SHIP TO:		
SAMPLER(S): (Signature) <i>Bridget A. Baxter</i>					TPHA w/ BTEX (w/15) (P20)	TPHA (8015) (Medial)	Total Petroleum Oil (320) (P)	VOLCS SOLO	/	/	/	LOWNEY ASSOCIATES 405 Clyde Avenue Mountain View, CA 94043 415-967-2365 415-967-2785 (FAX)	
DATE	TIME	SAMPLE DESCRIPTION										REMARKS	
4/21/94	10:00am	EB1-1 5.0 to 5.5 Soil		55 tube							HOLD JK1278 -4		
		EB1-2 9.5 to 10.0 Soil									HOLD -5		
		EB1-3 14.5 to 15.0 Soil			X	X					1-week TAT -1		
		EB1-4 18.0 to 18.5 Soil									HOLD -6		
		EB2-1 8.0 to 8.5 soil									HOLD -7		
		EB2-2 10.5 to 11.0 soil									HOLD -8		
		EB2-3 14.5 to 15.0 soil									HOLD -9		
		EB2-4 16.5 to 17.0 soil			X	X					1-week TAT -2		
		EB3-1 8.0 to 8.5 soil		✓	X	X	X	X			HOLD -10		
		EB3-2 14.5 to 15.0 soil		✓	X	X	X	X			1-week TAT -3		
		EB1 water		3	X	X					2 week TAT JK1279-1		
		EB2 water		3	X	X					2 week TAT -2		
		EB3 water		6	X	X	X	X			2 week TAT -3		
		NOTHING FOLLOWS											
Relinquished by: (Signature) <i>Bridget A. Baxter</i>		Date 4/21/94	Time 10:00	Received by: (Signature) <i>[Signature]</i>		Date 4/21/94	Time 3:25pm	Relinquished by: (Signature) <i>[Signature]</i>		Date 4/21/94	Time 4:54pm	Received by: (Signature)	
Laboratory of Record:		Date 4/21/94	Time 16:50	Received for Laboratory By: (Signature) <i>[Signature]</i>		Date 4/21/94	Time 16:50	Remarks: Temp. of cooler upon receipt: 62°F. cool, intact					

A00253





# COAST-TO-COAST ANALYTICAL SERVICES, INC.

EXCELLENCE  
IN ANALYSIS

NorCal Division (San Jose Laboratory)  
2059 Junction Ave.

San Jose, CA 95131  
(408) 955-9077

CLIENT: Peter Langtry  
Lowney Associates  
405 Clyde Avenue  
Mountain View, CA 94043

Lab Number : JK-1390-1  
Project : 1027-1, Central & 9th  
Analyzed : 05/09/94  
Analyzed by: ON  
Method : As Listed

## REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED	RECEIVED
EB1-3 14.5 to 15.0 (JK1278-1)	Soil	Bridget Baxter	04/21/94 1000	04/21/94
CONSTITUENT	(CAS RN)	*PQL µg/L	RESULT µg/L	NOTE
Fuel Fingerprint Analysis by TCLP				1,2
Benzene	(71432)	3.	9.	
Toluene	(108883)	3.	170.	
Ethylbenzene	(100414)	3.	72.	
Xylenes	(1330207)	3.	520.	
1,2-Dichloroethane	(107062)	3.	ND	
Ethylene Dibromide	(106934)	3.	ND	
Total Petroleum Hydrocarbons (Gasoline)		300.	4300.	
Total Petroleum Hydrocarbons (Diesel 2)		300.	ND	

San Jose Lab Certifications: CAELAP #1204

\*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)

(1) ANALYZED by CAL DHS DRAFT TPH (modified) and EPA 8240 (GC/MS)

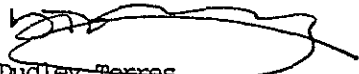
(2) EXTRACTED by EPA 5030 (purge-and-trap)

5/10/94  
MSD1/2AP35A

LOWNEY ASSOC.  
MAY 12 1994  
RECEIVED

05/10/94  
MSD1/2AP35A  
DT/et/on  
MSDI-050994

Respectfully submitted,  
COAST-TO-COAST ANALYTICAL SERVICES, INC.

  
Dudley Torres  
Organics Manager

A00251

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IN ANALYSIS

# COAST-TO-COAST ANALYTICAL SERVICES, INC.

NorCal Division (San Jose Laboratory)  
2059 Junction Ave.

San Jose, CA 95131  
(408) 955-9077

QC Batch ID: MSD1-050994

CLIENT: Coast-to-Coast Analytical Services, Inc.

Analyzed : 05/09/94  
Analyzed by: ON  
Method : As Listed

## METHOD BLANK REPORT OF ANALYTICAL RESULTS

Page 1 of 1

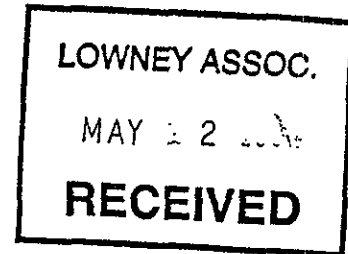
SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE RECEIVED		
METHOD BLANK	Solid				
CONSTITUENT	(CAS RN)	*PQL µg/L	RESULT µg/L	NOTE	
Fuel Fingerprint Analysis by TCLP				1,2	
Benzene	(71432)	3.	ND		
Toluene	(108883)	3.	ND		
Ethylbenzene	(100414)	3.	ND		
Xylenes	(1330207)	3.	ND		
1,2-Dichloroethane	(107062)	3.	ND		
Ethylene Dibromide	(106934)	3.	ND		
Total Petroleum Hydrocarbons (Gasoline)		300.	ND		
Total Petroleum Hydrocarbons (Diesel 2)		300.	ND		

San Jose Lab Certifications: CAELAP #1204

\*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)

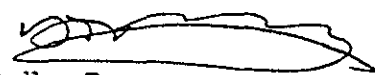
(1) ANALYZED by CAL DHS DRAFT TPH (modified) and EPA 8240 (GC/MS)

(2) EXTRACTED by EPA 5030 (purge-and-trap)



05/10/94  
MSD1/2AP34A  
DT/et/on  
JK1390-1

Respectfully submitted,  
COAST-TO-COAST ANALYTICAL SERVICES, INC.

  
Dudley Torres  
Organics Manager

A00252

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EXCELLENCE  
IN ANALYSIS

NorCal Division (San Jose Laboratory)  
2059 Junction Ave.

San Jose, CA 95131  
(408) 955-9077

CLIENT: Coast-to-Coast Analytical Services, Inc.

QC Batch ID: MSD1-050994

Analyzed : 05/09/94  
Analyzed by: ON  
Method : As Listed

## QC SPIKE REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE RECEIVED			
QC SPIKE	Solid					
CONSTITUENT		*PQL µg/L	SPIKE AMOUNT	RESULT µg/L	%REC	NOTE
Fuel Fingerprint Analysis by TCLP						1,2
Benzene		3.	50.	47.	94.	
Toluene		3.	50.	47.	94.	
Ethylbenzene		3.	50.	54.	108.	
Xylenes		3.	50.	49.	98.	
1,2-Dichloroethane		3.	50.	45.	90.	
Ethylene Dibromide		3.	50.	48.	96.	
Total Petroleum Hydrocarbons (Gasoline)		300.	1300.	1200.	92.	

San Jose Lab Certifications: CAELAP #1204

\*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)

(1) ANALYZED by CAL DHS DRAFT TPH (modified) and EPA 8240 (GC/MS)

(2) EXTRACTED by EPA 5030 (purge-and-trap)

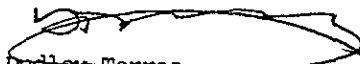
LOWNEY ASSOC.

MAY 12 1994

RECEIVED

05/10/94  
MSD1/2AP37A/40A  
DT/et/on  
JK1390-1

Respectfully submitted,  
COAST-TO-COAST ANALYTICAL SERVICES, INC.

  
Dudley Torres  
Organics Manager

A00253

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# COAST-TO-COAST ANALYTICAL SERVICES, INC.

EXCELLENCE  
IN ANALYSIS

NorCal Division (San Jose Laboratory)  
2059 Junction Ave.

San Jose, CA 95131  
(408) 955-9077

QC Batch ID: MSD1-050994

CLIENT: Coast-to-Coast Analytical Services, Inc.

Analyzed : 05/09/94  
Analyzed by: ON  
Method : As Listed

## QC SPIKE REPORT OF ANALYTICAL RESULTS

Page 1 of 1

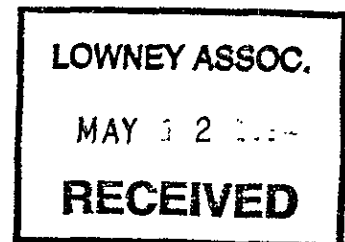
SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED		
QC SPIKE DUPLICATE	Solid					
CONSTITUENT	*PQL µg/L	SPIKE AMOUNT	RESULT µg/L	%REC	%DIFF	NOTE
Fuel Fingerprint Analysis by TCLP						
Benzene	3.	50.	50.	100.	6.2	1,2
Toluene	3.	50.	49.	98.	4.2	
Ethylbenzene	3.	50.	57.	114.	5.4	
Xylenes	3.	50.	55.	110.	12.	
1,2-Dichloroethane	3.	50.	45.	90.	0.	
Ethylene Dibromide	3.	50.	48.	96.	0.	
Total Petroleum Hydrocarbons (Gasoline)	300.	1300.	1200.	92.	0.	

San Jose Lab Certifications: CAELAP #1204

\*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)


(1) ANALYZED by CAL DHS DRAFT TPH (modified) and EPA 8240 (GC/MS)

(2) EXTRACTED by EPA 5030 (purge-and-trap)



05/10/94  
MSD1-2AP38A/41A  
DT/et/on  
JK1390-1

Respectfully submitted,  
COAST-TO-COAST ANALYTICAL SERVICES, INC.

  
Dudley Torres  
Organics Manager

A00254

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LOWNEY ASSOCIATES  
CHAIN OF CUSTODY RECORD

JOB NO.		PROJECT NAME/LOCATION		NO. OF CONTAINERS	ANALYSIS REQUIRED						SHIP TO:		
DATE		TIME			SAMPLE DESCRIPTION		REMARKS						
1027-1		Central 9th			<div style="border: 1px solid black; padding: 5px; transform: rotate(-45deg); display: inline-block;">             THIS MATERIAL IS TO BE ANALYZED AT THE FOLLOWING LABORATORY:           </div>						LOWNEY ASSOCIATES 405 Clyde Avenue Mountain View, CA 94043 415-967-2365 415-967-2785 (FAX)		
SAMPLER(S): (Signature) <i>Bridget A. Baxter</i>													
4/21/94		10:00am			EB1-1 5.0 to 5.5 Soil		Soil		50		HOLD OK1278-4		
					EB1-2 9.5 to 10.0 Soil		Soil		1		HOLD		
					EB1-3 14.5 to 15.0 Soil		Soil		1		1-week TAT -1 OK1390-1		
					EB1-4 18.0 to 18.5 Soil		Soil		1		HOLD -6		
					EB2-1 8.0 to 8.5 Soil		Soil		1		HOLD -7		
					EB2-2 10.5 to 11.0 Soil		Soil		1		HOLD -8		
					EB2-3 14.5 to 15.0 Soil		Soil		1		HOLD -9		
					EB2-4 16.5 to 17.0 Soil		Soil		1		1-week TAT -2		
					EB3-1 8.0 to 8.5 Soil		Soil		1		HOLD -10		
					EB3-2 14.5 to 15.0 Soil		Soil		1		1-week TAT -3		
					EB1 water		Water		1		2 weeks TAT OK1279-1		
					EB2 water		Water		1		2 week TAT -2		
✓		✓			EB3 water		Water		1		2 week TAT -3		
NOTHING FOLLOWS				<div style="border: 1px solid black; padding: 5px;">             4/29/94: Added TLP-FF (Gas &amp; Diesel) to -1 NTAT OK1390 -SP           </div>									
Relinquished by: (Signature) <i>Bridget A. Baxter</i>		Date 4/21/94		Time 10:00am		Received By: (Signature) <i>[Signature]</i>		Date 4/21/94		Time 11:00am		Received By: (Signature) <i>[Signature]</i>	
Laboratory of Record: A00255		Date 4/21/94		Time 10:50		Received for Laboratory By: (Signature) <i>[Signature]</i>		Date 4/21/94		Time 10:50		Remarks soil, water	



# COAST-TO-COAST ANALYTICAL SERVICES, INC.

EXCELLENCE  
IN ANALYSIS

NorCal Division (San Jose Laboratory)  
2059 Junction Ave.

San Jose, CA 95131  
(408) 955-9077

CLIENT: Peter Langtry  
Lowney Associates  
405 Clyde Avenue  
Mountain View, CA 94043

Lab Number : JK-1279-1  
Project : 1027-1, Central & 9th  
Analyzed : 05/02/94  
Analyzed by: TN  
Method : EPA 8015M

## REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE RECEIVED		
EB1	Aqueous	Bridget Baxter	04/20/94	04/21/94	
CONSTITUENT	(CAS RN)	*PQL µg/L	RESULT µg/L	NOTE	
TOTAL PETROLEUM HYDROCARBONS				1,2	
Total Petroleum Hydrocarbons ( C5-C20)		500.	16000.		
Total Petroleum Hydrocarbons (Motor Oil)		1000.	ND		

San Jose Lab Certifications: CAELAP #1204

\*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)

- (1) Sample Preparation on 04/27/94 by MP
- (2) TPH is quantitated against diesel.

**LOWNEY ASSOC.**  
 MAY 12 1994  
**RECEIVED**

05/02/94  
ECD2-502C008  
DT/et/ahz/ttn  
DSLO42794A

Respectfully submitted,  
COAST-TO-COAST ANALYTICAL SERVICES, INC.

Dudley Torres  
Organics Manager

A00256

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EXCELLENCE  
IN ANALYSIS

NorCal Division (San Jose Laboratory)  
2059 Junction Ave.

San Jose, CA 95131  
(408) 955-9077

CLIENT: Peter Langtry  
Lowney Associates  
405 Clyde Avenue  
Mountain View, CA 94043

Lab Number : JK-1279-2  
Project : 1027-1, Central & 9th  
Analyzed : 04/30/94  
Analyzed by: TN  
Method : EPA 8015M

## REPORT OF ANALYTICAL RESULTS

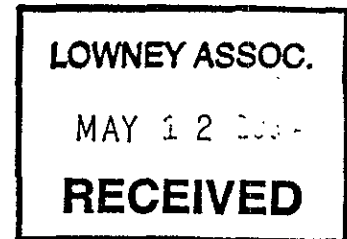
Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE RECEIVED		
EB2	Aqueous	Bridget Baxter	04/20/94	04/21/94	
CONSTITUENT	(CAS RN)	*PQL µg/L	RESULT µg/L	NOTE	
TOTAL PETROLEUM HYDROCARBONS					
Total Petroleum Hydrocarbons (Diesel)		50.	ND	1	
Total Petroleum Hydrocarbons (Motor Oil)		100.	720.		

San Jose Lab Certifications: CAELAP #1204

\*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)

(1) Sample Preparation on 04/27/94 by MP



05/03/94  
ECD2-429C028  
DT/et/ahz  
DSL042794A

Respectfully submitted,  
COAST-TO-COAST ANALYTICAL SERVICES, INC.

Dudley Torres  
Organics Manager

A00257

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# COAST-TO-COAST ANALYTICAL SERVICES, INC.

EXCELLENCE  
IN ANALYSIS

NorCal Division (San Jose Laboratory)  
2059 Junction Ave.

San Jose, CA 95131  
(408) 955-9077

CLIENT: Peter Langtry  
Lowney Associates  
405 Clyde Avenue  
Mountain View, CA 94043

Lab Number : JK-1279-3  
Project : 1027-1, Central & 9th  
Analyzed : 04/30/94  
Analyzed by: TN  
Method : EPA 8015M

## REPORT OF ANALYTICAL RESULTS

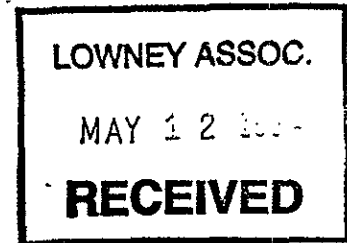
Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE RECEIVED		
EB3	Aqueous	Bridget Baxter	04/20/94	04/21/94	
CONSTITUENT	(CAS RN)	*PQL µg/L	RESULT µg/L	NOTE	
TOTAL PETROLEUM HYDROCARBONS				1	
Total Petroleum Hydrocarbons (Diesel)		50.	ND		
Total Petroleum Hydrocarbons (Motor Oil)		100.	820.		

San Jose Lab Certifications: CAELAP #1204

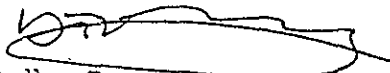
\*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)

(1) Sample Preparation on 04/27/94 by MP



05/03/94  
ECD2-429C030  
DT/et/ahz  
DSL042794A

Respectfully submitted,  
COAST-TO-COAST ANALYTICAL SERVICES, INC.

  
Dudley Torres  
Organics Manager

A00258

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# COAST-TO-COAST ANALYTICAL SERVICES, INC.

EXCELLENCE  
IN ANALYSIS

NorCal Division (San Jose Laboratory)  
2059 Junction Ave.

San Jose, CA 95131  
(408) 955-9077

CLIENT: Peter Langtry  
Lowney Associates  
405 Clyde Avenue  
Mountain View, CA 94043

Lab Number : JK-1279-1  
Project : 1027-1, Central & 9th  
Analyzed : 05/02/94  
Analyzed by: LD  
Method : EPA 8020/8015M

## REPORT OF ANALYTICAL RESULTS

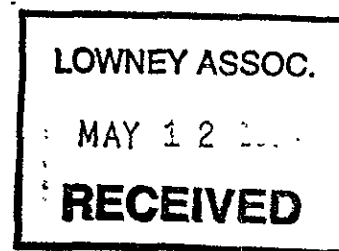
Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED	
EB1	Aqueous	Bridget Baxter		04/20/94	04/21/94
CONSTITUENT	(CAS RN)	*PQL µg/L	RESULT µg/L	NOTE	
BTEX + TPH (Gasoline)				1	
Benzene		300.	2200.		
Toluene		300.	8800.		
Ethylbenzene		300.	2500.		
Xylenes		300.	16000.		
Total Petroleum Hydrocarbons (Gasoline)		30000.	76000.		
Percent Surrogate Recovery			113.		

San Jose Lab Certifications: CAELAP #1204

\*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)

(1) EXTRACTED by EPA 5030 (purge-and-trap)



05/02/94  
GC#2\502B310  
DT/et/jst  
W-BTX-050294

Respectfully submitted,  
COAST-TO-COAST ANALYTICAL SERVICES, INC.

Dudley Torres  
Organics Manager

A00259



# COAST-TO-COAST ANALYTICAL SERVICES, INC.

EXCELLENCE  
IN ANALYSIS

NorCal Division (San Jose Laboratory)  
2059 Junction Ave.

San Jose, CA 95131  
(408) 955-9077

CLIENT: Peter Langtry  
Lowney Associates  
405 Clyde Avenue  
Mountain View, CA 94043

Lab Number : JK-1279-2  
Project : 1027-1, Central & 9th  
Analyzed : 04/30/94  
Analyzed by: LD  
Method : EPA 8020/8015M

## REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE RECEIVED	
EB2	Aqueous	Bridget Baxter	04/20/94	04/21/94
CONSTITUENT	(CAS RN)	*PQL µg/L	RESULT µg/L	NOTE
BTEX + TPH (Gasoline)				1
Benzene		0.5	ND	
Toluene		0.5	ND	
Ethylbenzene		0.5	ND	
Xylenes		0.5	ND	
Total Petroleum Hydrocarbons (Gasoline)		50.	ND	
Percent Surrogate Recovery			108.	

San Jose Lab Certifications: CAELAP #1204

\*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)  
(1) EXTRACTED by EPA 5030 (purge-and-trap)

LOWNEY ASSOC.

MAY 12 1994

**RECEIVED**

05/02/94  
GC#2\429B322  
DT/et/jst  
W-BTX-042994

Respectfully submitted,  
COAST-TO-COAST ANALYTICAL SERVICES, INC.

Dudley Torres  
Organics Manager

A00260



# COAST-TO-COAST ANALYTICAL SERVICES, INC.

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IN ANALYSIS

NorCal Division (San Jose Laboratory)  
2059 Junction Ave.

San Jose, CA 95131  
(408) 955-9077

CLIENT: Peter Langtry  
Lowney Associates  
405 Clyde Avenue  
Mountain View, CA 94043

Lab Number : JK-1279-3  
Project : 1027-1, Central & 9th  
Analyzed : 04/30/94  
Analyzed by: LD  
Method : EPA 8020/8015M

## REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED	
EB3	Aqueous	Bridget Baxter		04/20/94	04/21/94
CONSTITUENT	(CAS RN)	*PQL µg/L	RESULT µg/L	NOTE	
BTEX + TPH (Gasoline)				1	
Benzene		0.5	ND		
Toluene		0.5	ND		
Ethylbenzene		0.5	ND		
Xylenes		0.5	ND		
Total Petroleum Hydrocarbons (Gasoline)		50.	ND		
Percent Surrogate Recovery			104.		

San Jose Lab Certifications: CAELAP #1204

\*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)  
(1) EXTRACTED by EPA 5030 (purge-and-trap)

LOWNEY ASSOC.
MAY 12 1994
RECEIVED

05/02/94  
GC#2\429B321  
DT/et/jst  
W-BTX-042994

Respectfully submitted,  
COAST-TO-COAST ANALYTICAL SERVICES, INC.

Dudley Torres  
Organics Manager

A00261



# COAST-TO-COAST ANALYTICAL SERVICES, INC.

EXCELLENCE  
IN ANALYSIS

NorCal Division (San Jose Laboratory)  
2059 Junction Ave.

San Jose, CA 95131  
(408) 955-9077

CLIENT: Peter Langtry  
Lowney Associates  
405 Clyde Avenue  
Mountain View, CA 94043

Lab Number : JK-1279-3  
Project : 1027-1, Central & 9th  
Analyzed : 05/02/94  
Analyzed by: CB  
Method : EPA 601

## REPORT OF ANALYTICAL RESULTS

Page 1 of 2

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE RECEIVED	
EB3	Aqueous	Bridget Baxter	04/20/94	04/21/94
CONSTITUENT	(CAS RN)	*PQL µg/L	RESULT µg/L	NOTE
PURGEABLE HALOCARBONS				1
Benzyl chloride	(100447)	1.	ND	
Bromobenzene	(108861)	0.5	ND	
Bromodichloromethane	(75274)	0.5	ND	
Bromoform	(75252)	0.5	ND	
Bromomethane	(74839)	0.5	ND	
Carbon Tetrachloride	(56235)	0.5	ND	
Chlorobenzene	(108907)	0.5	ND	
Chloroethane	(75003)	0.5	ND	
2-Chloroethyl Vinyl Ether	(110758)	0.5	ND	
Chloroform	(67663)	0.5	ND	
Chloromethane	(74873)	0.5	ND	
Dibromochloromethane	(124481)	0.5	ND	
Dibromomethane	(74953)	0.5	ND	
1,2-Dichlorobenzene	(95501)	0.5	ND	
1,3-Dichlorobenzene	(541731)	0.5	ND	
1,4-Dichlorobenzene	(106467)	0.5	ND	
Dichlorodifluoromethane (F12)	(75718)	0.5	ND	
1,1-Dichloroethane	(75343)	0.5	ND	

San Jose Lab Certifications: CAELAP #1204

\*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)

(1) EXTRACTED by EPA 5030 (purge-and-trap)

05/05/94  
ELCD\502A218  
DT/et/jst/mt  
W-601-050294

LOWNEY ASSC

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CLIENT: Peter Langtry  
Lowney Associates  
405 Clyde Avenue  
Mountain View, CA 94043

Lab Number : JK-1279-3  
Project : 1027-1, Central & 9th  
Analyzed : 05/02/94  
Analyzed by: CB  
Method : EPA 601

## REPORT OF ANALYTICAL RESULTS

Page 2 of 2

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE RECEIVED		
EB3	Aqueous	Bridget Baxter	04/20/94	04/21/94	
CONSTITUENT	(CAS RN)	*PQL µg/L	RESULT µg/L	NOTE	
1,2-Dichloroethane	(107062)	0.5	ND		
1,1-Dichloroethene	(75354)	0.5	ND		
cis-1,2-Dichloroethene	(156592)	0.5	ND		
trans-1,2-Dichloroethene	(156605)	0.5	ND		
Dichloromethane (Methylene chloride)	(75092)	5.	ND		
1,2-Dichloropropane	(78875)	0.5	ND		
cis-1,3-Dichloropropene	(10061015)	0.5	ND		
trans-1,3-Dichloropropene	(10061026)	0.5	ND		
1,1,2,2-Tetrachloroethane	(79345)	0.5	ND		
1,1,1,2-Tetrachloroethane	(630206)	0.5	ND		
Tetrachloroethene	(127184)	0.5	ND		
1,1,1-Trichloroethane	(71556)	0.5	ND		
1,1,2-Trichloroethane	(79005)	0.5	ND		
Trichloroethene	(79016)	0.5	ND		
Trichlorofluoromethane	(75694)	0.5	ND		
1,2,3-Trichloropropane	(96184)	0.5	ND		
Vinyl Chloride	(75014)	0.5	ND		
Bromochloromethane (% Surrogate Recovery #1)			82.		
2-Bromo-1-Chloropropane (% Surrogate Recovery #2)			119.		
1,4-Dichlorobutane (% Surrogate Recovery #3)			89.		

LOWNEY ASSOC.  
MAY 12 1994  
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San Jose Lab Certifications: CAELAP #1204

\*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)

05/05/94  
ELCD\502A218  
DT/et./jst/mt  
W-60T-050294

Respectfully submitted,  
COAST-TO-COAST ANALYTICAL SERVICES, INC.

Dudley Torres  
Organics Manager

A00263

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CLIENT: Peter Langtry  
Lowney Associates  
405 Clyde Avenue  
Mountain View, CA 94043

Lab Number : JK-1279-3  
Project : 1027-1, Central & 9th

## REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE RECEIVED				
EB3	Aqueous	Bridget Baxter	04/20/94	04/21/94			
CONSTITUENT	*PQL	RESULT	UNITS	METHOD	ANALYZED	BY	NOTES
Oil and Grease (Std Methods 5520-F)	0.5	ND	mg/L	SM5520C&F	05/02/94	MT	

San Jose Lab Certifications: CAELAP #1204

\*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)

LOWNEY ASSOC.  
MAY 2 1994  
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05/06/94

NG/sab/mt  
ORIR940502A

Respectfully submitted,  
COAST-TO-COAST ANALYTICAL SERVICES, INC.

for *Sean Blawell*  
Nick Gaone  
Inorganics Manager

A00264

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9-24-75 Removed! 3-550 gal. gasoline tanks  
1- oil storage tank R.

Location 900 Central Ave.

Name Western Oil Gas Co.

Oil Storage Permit WS No. 480

Liquid Gasoline Gallons 1,650

Date Issued Feb. 11, 1931 Gauge

Installation 3-550 Gallon Tanks Under Sidewalk

Inspected By WK

Remarks Service Station

A00142