

ENVIRONMENTAL SITE ASSESSMENT

5813 Shellmound Street, Emeryville, California

(Sherwin Williams site,
next door to Good Guys)

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March 16, 1995

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Volume 1 - Text, Tables and Figures

Prepared for:

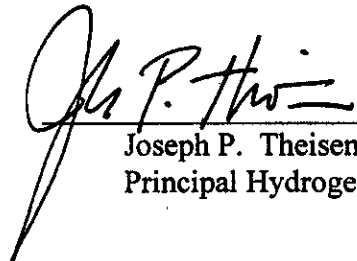
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To the best of our knowledge, the data and information contained herein are true and accurate, and satisfy the scope of work prescribed by the client for the project. The data, findings, recommendations, specifications, and professional opinions herein were prepared solely for the use of the client in accordance with generally accepted professional engineering, geologic, and environmental consulting practice, as applicable. Cambria makes no other warranty, either expressed or implied.



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Volume 1 - Text, Tables and Figures

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1. INTRODUCTION

Cambria Environmental Technology, Inc. (Cambria) was retained by Crosby, Heafey, Roach and May (Crosby, Heafey) in September 1994 to provide technical assistance related to possible soil and ground water contamination on/or adjacent to a property currently owned by Mr. F.P. Lathrop at 5813 - 15 Shellmound Street in Emeryville (the "Lathrop Property") (Figure 1). Cambria's initial objective for the project was to investigate whether a former gasoline Underground Storage Tank (UST) on the Lathrop Property contributed hydrocarbons to the soil or ground water beneath an adjacent property currently owned by the Croley and Herring Investment Group at 5800 Christie Street in Emeryville (the "Croley Property"). In the course of investigating the Lathrop tank, Cambria encountered compounds in soil that exhibited characteristics inconsistent with either hydrocarbons or Volatile Organic Compounds (VOCs), the only compounds previously detected on the Croley site. Therefore, Crosby, Heafey subsequently requested that Cambria expand the investigation to characterize the newly encountered compounds. The project background, Cambria's specific objectives and scope of work for our site history and subsurface investigations and the investigation results are summarized below.

2. SITE HISTORY

Historical information pertaining to possible chemical releases at the 5800 Christie and 5813-15 Shellmound Street sites is summarized below. The following information is summarized from:

- Interviews with Mr. Ad Kennon, a former employee of the F.P. Lathrop Construction Company, the initial site tenant¹,
- Reviews of geotechnical and environmental reports prepared by consultants working on the Lathrop and Croley properties and other nearby sites, and
- Reviews of historic aerial photographs and insurance records.

2.1 5813-15 Shellmound- (Lathrop Property)

Property Purchase and Development: This property was purchased by Mr. F.P. Lathrop from the Fiberboard Corporation in the late 1960s. Mr. Lathrop erected a 13,420 square foot (sq ft) single story, reinforced concrete tilt-up commercial building (the structure that presently occupies the site) on the eastern portion of the property in 1971, and a concrete parking surface over the western portion. The parking area appears to have been placed in a single continuous pour, and currently drains to a single 3 ft by 3 ft storm drain located in the south central portion of the lot. A copy of a geologic log included in a geotechnical soils investigation report prepared prior

¹

The interview was conducted by Ms. S.B. Bowden of Crosby, Heafey. Pertinent information from the interview was then communicated to Cambria for inclusion in this report.

to the building's construction notes that soils between 4 to 10 ft depth were "oil impregnated". Boring No. 1, drilled near the center of the Lathrop building, was the only one that noted the presence of the oil.

Property Use: The property was leased from May 1, 1972 to April 30, 1987 by the F.P. Lathrop Construction Company for use as a construction yard and associated storage and office facilities. The concrete yard area was secured from the street with a fence and was used for parking and for storage of construction materials. According to a Hazardous Substance Storage Statement filed by F.P. Lathrop Construction Co. in 1985, a regular gasoline UST was installed at the northwest corner of the concrete pad in about 1978, presumably to supply fuel for construction vehicles and equipment. Although this form indicates that the tank had a 3,000 gallon capacity, other records indicate it had a 2,000 gallon capacity.

1989 Tank Removal: The gasoline UST was removed by KTW Associates of Fremont, CA on October 26, 1989. The tank was in sound condition upon its removal and two native soil samples collected from the excavation sidewalls contained no detectable total petroleum hydrocarbons as gasoline (TPH-g) or benzene, ethylbenzene, toluene and xylenes (BETX). However, hydrocarbon odors were noted in the excavation backfill and a sample collected from a stockpile of the backfill contained 280 parts per billion (ppb) xylenes and 23 parts per million (ppm) TPH-g. In addition, a sample of water that apparently flowed into the open excavation from a broken sanitary sewer contained several hundred ppb toluene and xylenes and 2.8 ppm TPH-g. Since the analytic results indicated that the soil samples collected beneath the tanks were clean, KTW backfilled the excavation and resurfaced with concrete.

2.2 5800 Christie Street - (Croley Property)

Development History: This property was developed in about 1968 when a commercial/light industrial building was constructed on the southern portion of the lot. With the exception of a narrow unpaved alley along the eastern property line (bordering the Lathrop Property), the entire lot was covered by the site building or by asphalt or concrete. The Croley and Herring Investment Company (Croley and Herring) apparently purchased the property from Milligan Spika Company in 1980. A variety of businesses have occupied the property since its construction, with Fisher Berkeley, a manufacturer of electronics equipment, occupying the southern portion of the building immediately after it was constructed. The building was renovated in 1989 and is currently leased to The Good Guys electronic retail chain.

Site Investigation and Remediation: An environmental investigation of the property performed by Robert Gils and Associates in October 1988 encountered VOCs, gasoline range hydrocarbons and/or BETX in 14 of 18 analyzed soil samples. Although the highest concentrations were detected in samples collected from the alley separating the site from the Lathrop Property (including gasoline range hydrocarbons at about 3 to 5 ppm in samples collected along the northeast property line), low contaminant concentrations (principally toluene and trichloroethylene (TCE)) were also detected in samples from near the northern and southern portions of the property.

A follow-up site assessment, consisting of additional soil sample collection and analysis, and remediation feasibility studies were performed in April 1989 by McLaren Environmental Engineering. The nine soil samples collected during this investigation contained low concentrations of toluene (maximum of 160 ppb) and methylene chloride (maximum of 130 ppb), and only one of the three wells installed contained dissolved VOCs (9 ppb each 1,1 Dichloroethane (DCA) and 1,2 Dichloroethylene (DCE)). McLaren also installed and sampled a ground water extraction well at this time. The water sample contained low VOC and aromatic hydrocarbon concentrations. Samples from the Croley wells have been collected periodically since 1989, and a soil vapor extraction system (perhaps augmented by an electrolysis system) was operated at the Croley property. On November 1, 1993 Environment and Technology Services, the site ground water monitoring and remediation contractor, applied for permanent closure of the site remediation system. Based on the site conditions outlined in a February 7, 1994 quarterly monitoring report, the Alameda County Department of Environmental Health (ACDEH) authorized a reduction in sampling frequency for site wells, but did not grant full site closure because the concentrations of aromatic hydrocarbons remained above acceptable levels.

3. SCOPE OF WORK

The objective of Cambria's investigation was to determine whether the aromatic hydrocarbons remaining in the Croley wells could have originated from releases from the gasoline UST formerly located at the northwest corner of the Lathrop Property. Therefore, Cambria's original scope of work was to:

- Review aerial photographs, insurance records and regulatory agency files pertaining to the Lathrop and other nearby properties;
- Drill 16 soil borings on the Lathrop property in the vicinity of the former Lathrop UST, between the former UST and adjacent to the location of the VOC release on the Croley property, and collect soil and grab ground water samples from the borings;
- Submit selected samples to a certified laboratory for analyses of TPH-g by EPA method 8015, BETX by EPA Method 8020 and halogenated VOC by EPA Method 8010; and
- Review and interpret the investigation results and prepare recommendations for additional work, if any.

Based on field observations made during drilling and on the analytic results for the submitted samples, Cambria recommended that additional borings be drilled to further assess the extent of the compounds detected in the initial round of sampling. Our specific work scope for this second sampling round included:

- Drill 15 additional soil borings on the Lathrop property near the southern portion of the concrete parking area and collect soil samples from the borings,
- Install ground water monitoring wells in three of the borings and develop and sample the wells,

- Measure the ground water depth in the wells and calculate the ground water flow direction at the site,
- Analyze selected soil and ground water samples for TPH as creosote (TPH-cr), motor oil (TPH-mo) and diesel (TPH-d) by EPA method 8015, Polynuclear Aromatic hydrocarbons (PNAs) by EPA Method 8270, halogenated VOCs by EPA method 8010 and selected metals by EPA methods 6010 or 7740, and
- Review and interpret the investigation results and prepare a report of the investigation results.

The results of this work are presented below.

4. SITE BACKGROUND

4.1 Area Hydrogeology

The site is located on the alluvial margin of the East Bay Plain, approximately 1.5 miles west of the Hayward Fault and the East Bay Hills. Shallow sediments in western Emeryville area typically consist of relatively thin surficial clays (Bay Mud), overlying thicker (up to 300 ft) sequences of interbedded gravel, sand, silt and clay layers. These deeper, more permeable sediments typically yield low to moderate quantities. There are apparently no known domestic or municipal supply wells within 3 miles of the site.

The surface topography of the area is generally flat with surface runoff directed westward through storm sewers toward the San Francisco Bay, located about 0.2 miles southwest of the site. The results of several ground water investigations conducted in this portion of Emeryville have shown that ground water generally flows towards the southwest. The ground water depth in western Emeryville typically ranges from 5 to 10 feet below ground surface.

4.2 Area History

The following historical review of the immediate site vicinity is reconstructed from reviewing available fire insurance records, aerial photographs and reports prepared by consultant's conducting investigations of other nearby properties.

Insurance Records: Cambria obtained and reviewed available Sanborn Fire Insurance maps of the site and vicinity. We obtained maps of the area dated 1911, 1951 and 1967. Reduced copies of each of these maps are presented in Appendix A.

The 1911 map shows that buildings associated with the “Paraffine Paint Company” occupied an area extending approximately 0.20 miles north of Powell Street and several hundred feet west of the Southern Pacific railroad tracks that run parallel to the highway. A Union Oil Company of California distribution yard occupies the lot immediately south of Powell Street. The majority of the Paraffine buildings appear to support manufacturing operations, and the extreme northern portion of the facility is used as a “refinery” and contains numerous above ground tanks that are labeled as containing oil.

Based on the information presented in the Sanborn maps it appears that the Paraffine Paint Company engaged in a number of manufacturing operations including paint, linoleum, paper and roofing material manufacture. They maintained a number of above ground storage tanks (AGTs) and the 1911 map shows an area along the north of the former plant that appears to have been a small petroleum refinery. This processing plant appears to have refined crude oil into the raw materials used in the Paraffine Paint Co.’s manufacturing processes².

The 1951 map shows that the Paraffine Paint Company had expanded its operations and now occupied a much larger area that extended westward from the train tracks to the “East Shore Highway” (currently Interstate 80). This map indicates that the area presently occupied by the Lathrop Property was an open space containing “Baled Rags”, probably used in the manufacture of paper products. A superimposition of the 1951 map on a site base map is presented as Figure 2. The southern portion of the open space was possibly used for auto parking. A square 5,000 square foot building, that was apparently used to store “Raw Materials” occupies the northwestern corner of what is now the Croley Property (Figure 2). Numerous process buildings operated by the Paraffine Paint Company occupy the area to the north of the Lathrop and Croley Properties, and a large grouping of AGTs appears about 400 ft to the west. An “Auto Freight Depot” occupies the area immediately to the south, across Powell Street, and the former “Union Oil Co.” facility to the southeast is now used as, among other things, a machine shop.

The 1967 map shows the presence of Christie and Shellmound Streets, and indicates the establishment of both the Croley and Lathrop Properties. The original building on the Croley property is shown, as are three building tenants (service station equipment and electrical supply businesses and an electronic specialty factory). The map shows that many of the industrial facilities to the north have been demolished and that the Fiberboard Paper Products Company now operates the remaining facilities. The buildings across Powell Street have been expanded since the 1951 map and several AGTs are shown on the opposite side of this new building.

²

Investigations of this area carried out by various consultants since 1982 have detected elevated petroleum hydrocarbons and PNAs in soil and ground water in this portion of the former paint company plant. These consultants also indicate that the former paint company used synthetic toluene as a paint medium.

Aerial Photo Review: Cambria further clarified the history of the subject and neighboring properties by reviewing aerial photographs of the site vicinity recorded on the following dates:

April 8, 1992	May 11, 1979	April 20, 1966
June 12, 1990	July 19, 1977	July 25, 1963
October 18, 1989	March 15, 1976	July 7, 1959
March 30, 1988	May 19, 1975	July 3, 1959
May 15, 1985	April 24, 1973	May 3, 1957
April 30, 1985	May 19, 1971	August 14, 1953
June 21, 1983	May 2, 1969	September 16, 1949
June 22, 1981	April 10, 1968	March 24, 1947
September 14, 1979		

The earliest photo reviewed (March 24, 1947) shows that the majority of this portion of Emeryville was used for industrial purposes at this time. The areas immediately west, north and east of the subject property are occupied by numerous small and large warehouse and industrial buildings, apparently all operated by the Paraffine Paint Company. Powell Street borders the subject property immediately to the south, and a bulk fuel storage and distribution business occupies the area on the opposite side of Powell Street. A railroad spur runs along the northern side of the area that is now occupied by Shellmound Street. The area currently occupied by the Lathrop Property is shown as an open, apparently unpaved field. Numerous dark irregular and small white rectangular mounds appear on the open field on all the photos reviewed until 1968, suggesting that the area was used for general storage of materials used in the nearby factories and industrial buildings. The white mounds are probably stacks of the "baled rags" identified on the 1951 Sanborn Fire Insurance map. The August 1953 photo shows several dark linear stacks occupying portions of the Lathrop site, and a square building occupying what is now the northwest corner of the Croley Property. This building is seen in the 1953, 1957 and 1959 photos and appears similar in construction, shape and location to the "Raw Materials Warehouse" identified in the 1951 Sanborn Fire Insurance map.

The photos show that the area presently occupied by the Lathrop Property was used for parking automobiles from 1968 until the building on the Lathrop Property was constructed in 1971. The building on the Croley Property was erected between April 1966 and April 1968, as was the Powell Street overpass that borders both properties to the south.

The photos show that the concrete yard area on the Lathrop Property was used for parking and general storage, probably of construction materials, between 1973 and 1985. During this period the building on the Croley Property appears unchanged, and the area to the north (presently occupied by the Public Market and other commercial buildings) is being developed. The bulk storage facility on the opposite side of Powell Street was apparently demolished in about 1985 to make room for the multi-story hotel (the Day's Inn) that presently occupies this site. The Croley building was apparently remodeled into its current configuration in about 1989.

4.3 Regulatory Database Review

Cambria conducted a review of selected databases maintained by Federal and State regulatory agencies to identify documented hazardous materials releases within one mile of the subject site. The databases were compiled by Vista Environmental Information, Inc. of San Diego, California. A copy of Vista's report is included in Appendix B. The results of the survey are summarized below.

Of 76 sites identified within 1/4 mile of the Lathrop Property, 18 sites appear to lie within about a two block area around the site. The identified sites include the Lathrop site, which appears because of the former UST on the property, and the Croley Property, which appears because of the activities of two former site tenants. Also included are the Public Marketplace property, leaking UST sites apparently owned/operated by Weatherford BMW, British Petroleum (BP), a trucking company and a former trucking company site referenced as the "Nielsen Property".

5. INVESTIGATION PROCEDURES

5.1 Soil Borings

Cambria drilled 31 soil borings in the Lathrop Property parking area to determine the subsurface distribution of hydrocarbons, VOCs, PNAs and metals. The methodology used for the October and December 1994 subsurface investigations is summarized below. Laboratory analytic reports are included in Appendix C and soil boring logs are presented in Appendix D. Cambria's standard operating procedures for soil borings are presented in Appendix E.

Permits:	Alameda County Flood Control and Water Conservation District (Zone 7) permit number 94774 was obtained for the soil borings and well installations.
Drilling Dates:	September 22 and December 7 to 9, 1994.
Number of Borings:	31 (three converted into ground water monitoring wells).
Drilling Locations:	All borings were drilled in the concrete parking lot of 5813-15 Shellmound Street. Borings SB-A to SB-P (drilled in September) were located in the vicinity of the former Lathrop UST, between the former UST and well EW-1 drilled near the location of the VOC release on the Croley property. Borings SB-Q to SB-Y2 were drilled in the southern portion of the parking area to define the extent of released compounds detected in the earlier borings.
Drilling Method:	All the borings were drilled using 7-inch diameter hollow-stem augers.
Boring Depths:	5.5 to 19 ft below grade.

Matrices Sampled: Soil samples from all borings were collected at a maximum of 5 ft intervals and grab ground water samples were collected from 10 borings.

Soil Analyses: Selected soil and grab ground water samples were analyzed for:

- Total Petroleum Hydrocarbons as Gasoline (TPH-g) by modified EPA Method 8015,
- Benzene, ethylbenzene, toluene and xylenes (BETX) by EPA Method 8020.
- TPH as Creosote (TPH-cr) by modified EPA Method 8015,
- TPH as Motor Oil (TPH-mo) by modified EPA Method 8015
- Volatile Organic Compounds (VOCs) by EPA Method 8010
- Semi Volatile Organic Compounds including Polynuclear Aromatic Hydrocarbons (PNAs) by EPA Method 8270, and
- Selected metals by EPA Methods 6010 and 7060.

Borehole Sealing: Each of the borings was sealed to ground surface with a portland cement grout.

Waste Containment: Soil cuttings generated during decontamination procedures were temporarily stored in sealed, labeled, D.O.T. approved 55-gallon steel drums until they were removed for disposal.

Waste Disposal: The approximate 3 cubic yards (eleven 55-gallon drums) of soil cuttings generated during both drilling episodes was transported off of the site on December 21, 1994 by Erickson, Inc. for temporary storage at their TSD facility in Martinez, California. Erickson transported the soil to the Chemical Waste Management (CWM) disposal facility in Kettleman Hills, California for disposal in a Secure Landfill as Class I RCRA waste. The disposal is documented on State Hazardous Waste Manifest Number 92812986 and CWM Profile Number BS7386.

5.2 Ground Water Monitoring Wells

Cambria installed three ground water monitoring wells on the Lathrop Property to determine onsite ground water quality and flow direction. Wells C-1 and C-2 were installed along the western Lathrop property line to monitor water quality adjacent to the documented area where VOCs were released on the Croley Property and near where the highest apparent soil contamination was observed on the Lathrop Property. Well C-3 was installed along the eastern edge of the concrete parking area for triangulation purposes and to evaluate water quality near the center of the Lathrop site.

Well Materials: All three wells were constructed using two-inch diameter, 0.010-inch slotted Schedule 40 PVC well screen and well casing.

- Screened Interval:** Ground water was first encountered in C-1 at about 8 ft depth, therefore, this well was screened between 5 and 18 ft depth. Water was encountered at about 5 ft depth in C-2 and C-3, and these wells were screened from 5 to 15 ft depth (Appendix D).
- Development Method:** Wells were developed by pumping at least 10 well volumes using a pneumatic pump.
- Ground Water Analyses:** Ground water samples from the borings and wells were analyzed for:
- Total Petroleum Hydrocarbons as Gasoline (TPH-g) by modified EPA Method 8015,
 - Benzene, ethylbenzene, toluene and xylenes (BETX) by EPA Method 8020.
 - TPH as Creosote (TPH-cr) by modified EPA Method 8015,
 - TPH as Motor Oil (TPH-mo) by modified EPA Method 8015
 - Volatile Organic Compounds (VOCs) by EPA Method 8010
 - Semi Volatile Organic Compounds including Polynuclear Aromatic Hydrocarbons (PNAs) by EPA Method 8270, and
 - Selected metals by EPA Methods 6010 and 7060.
 - TPHg by modified EPA Method 8015,
- Gradient and Flow Direction:** Ground water flows towards the south-southwest at about 0.01ft/ft (Figure 4).
- Waste Containment:** Purge water from the wells and steam clean rinseate were stored onsite in sealed, labelled, D.O.T. approved 55-gallon drums pending disposal.
- Waste Disposal:** The water is not considered a RCRA waste and is scheduled for transport and recycling in the near future.

6. INVESTIGATION RESULTS

6.1 Site Hydrogeology and Drilling Observations

The site is generally underlain by 1 to 8 ft of highly variable fill, often containing miscellaneous debris such as brick, wood and blackish, slag-like materials. The natural materials in the fill consisted of heterogenous mixtures of clay, silt and gravel. The three deeper borings used to install the monitoring wells encountered interbedded layers of silty clay, sandy gravel, silty sand and sandy clay to the deepest depths explored. Ground water was generally encountered between 4 and 6 ft depth. Calculation of the water table elevation (measured to an arbitrary onsite datum of 100.00 ft) using water level measurements recorded on December 16, 1994 suggests that ground water beneath the Lathrop Property flows towards the south-southwest at about 0.01ft/ft (Figure 4). This flow direction is consistent with ground water conditions observed at other nearby sites.

Observation of soil and water samples retrieved during drilling suggest that several areas beneath the concrete parking area contain high concentrations of black, odorous materials. An odorous, black slag-like material was noted in borings SB-O and SB-N. A strong chemical odor was noted in several borings drilled near the southwest corner of the property. A thick, odorous, tar-like substance was observed in the boring for well C-3, SB-V and SB-W. The odors were noted by field personnel to smell generally like “mothballs”.

6.2 Distribution of Released Compounds in Soil

Cambria performed chemical analysis on soil samples as follows:

<i>Analysis</i>	<i>Number Performed</i>	<i>Number of Positive Results</i>	<i>Highest Concentration Detected</i>	<i>Location Sampled</i>
TPH as gasoline	28	19	2,600 ppm	SB-N at 10.5 ft.
TPH as creosote	45	15	240,000 ppm	SB-W at 4.0 ft.
TPH as motor oil	45	18	87,000 ppm	SB-X2 at 5.5 ft.
Aromatic hydrocarbons (BETX)	28	17	B: 18 ppm E: 13 ppm T: 7.3 ppm X: 14 ppm	SB-N at 10.5 ft. SB-P at 11.7 ft. SB-N at 10.5 ft. SB-N at 10.5 ft.
Volatile Organic Compounds (VOCs)	26	12	TCE: 6.2 ppm VC: 3.2 ppm 1,1 DCA: 2.3 ppm	SB-G at 3.0 ft. SB-H at 5.0 ft. SB-G at 3.0 ft.
SemiVolatile Organic Compounds (SVOCs)	11	5	Naphthalene: 5700 ppm Phenanthrene: 3500 ppm Pyrene: 2600 ppm	C-3 at 5.5 ft. C-3 at 5.5 ft. C-3 at 5.5 ft.
Metals	4	3	Copper: 1700 ppm Zinc: 590 ppm Barium: 550 ppm	C-3 at 5.5 ft. SB-T at 5.5 ft. C-3 at 5.5 ft.

The distribution of several key indicator compounds is illustrated in Figures 5 to 11, which contour the maximum analyte concentration detected between the depth interval indicated. The analytic data for soil samples are summarized below.

- BETX, and specifically benzene, is not found near the former Lathrop gasoline tanks. Rather, the highest benzene concentrations on the Lathrop Property are located near the southwestern

corner of the property. Figure 5 shows the approximate distribution of benzene on the Lathrop Property. This figure indicates that benzene probably also occurs beneath the southeast corner of the Croley Property.

- Toluene in soil is widely distributed on the Croley Property, with highest concentrations located in the alleyway between the Croley and Lathrop Properties. The approximate distribution of toluene in shallow soil is illustrated in Figure 6.
- VOCs were present in highest concentration in the alley separating the two properties, with concentrations decreasing eastward towards onto the Lathrop Property. Figure 7 illustrates the distribution of Trichloroethylene (TCE) in soils between 2 to 7 ft depth.
- TPH as creosote (TPH-cr) is found at highest concentrations at the southwest corner of the Lathrop Property (Figure 8). The highest TPH-cr concentration, 240,000 ppm in the 4.0 ft depth sample from SB-W, was detected at the extreme southwestern corner of the property. TPH-cr is also present at the southwestern corner in deeper soils, but at lower concentration (Figure 9).
- TPH as motor oil (TPH-mo) in shallow soil is present in two distinct areas. Figure 10 indicates that it is concentrated near the southwest corner and at the east-central portion of the Lathrop Property. The highest concentration detected, 87,000 ppm, was detected in sample SB-X2, near the eastern edge of the parking area. TPH-mo, as shown in Figure 11, is also present in deeper soils, but appears at highest concentration between the two distinct shallower source areas.
- Polynuclear Aromatic Hydrocarbons (PNAs) were consistently detected in four of the eight samples analyzed, and the highest concentrations were detected in borings along the Lathrop/Croley property line. In general, naphthalene, phenanthrene and pyrene were the individual PNAs detected at the highest concentrations.
- Of the two samples analyzed for metals, none of the detected metals concentrations exceeded California Department of Toxic Substances Control (DTSC) Total Threshold Limit Concentrations (TTLCs).

6.3 Distribution of Released Compounds in Ground Water

Cambria performed chemical analysis on grab ground water and monitoring well samples as indicated below:

<i>Analysis</i>	<i>Number Performed</i>		<i>Number of Positive Results</i>	<i>Highest Concentration Detected (ppb)</i>	<i>Location Sampled</i>
	<i>Grab</i>	<i>Well</i>			
TPH as gasoline	10	3	11	40,000	SB-H
TPH as creosote	0	3	1	17	C-3

TPH as motor oil	0	0	--	--	--
Aromatic hydrocarbons (BETX)	10	3	9	B: 8,100 E: 550 T: 6,500 X: 570	SB-N SB-N SB-G SB-N
Volatile Organic Compounds (VOCs)	8	3	3	TCE: 640 VC: 430 1,1 DCA: 1,300	SB-G SB-H SB-H
SemiVolatile Organic Compounds (SVOCs)	0	3	1	Naphthalene: 11,000 Phenanthrene: 260 Pyrene: 61	C-3 C-3 C-3
Metals	0	2	1	Nickel: 120	C-3

The analytic data for ground water samples collected from open boreholes³ and from monitoring wells are summarized as follows:

- Benzene dissolved in ground water appears restricted to the southwestern corner of the Lathrop Property, as indicated by the analytic results for grab ground water samples. Since the samples collected along the property line contain among the highest detected concentrations, it is likely that elevated benzene concentrations are also present on the adjacent property. Figure 12 illustrates the approximate distribution of benzene in ground water.
- No benzene was detected in any of the grab water samples collected immediately adjacent to the former Lathrop UST.
- Toluene, a compound widely distributed in soil samples from the Croley Property, is present in 7 of the 10 grab ground water samples collected on the Lathrop Property, with the highest concentrations in the samples from borings SB-G and SB-H.
- TPH-g in ground water is highest in borings drilled near the western Lathrop Property line, as indicated by grab ground water samples. Low TPH-g concentrations were also detected in grab samples collected from two borings drilled near the former Lathrop UST. However, it is

³ It is important to note that analytic results for water samples collected from open boreholes (often referred to as "grab" water samples) are often significantly higher than those for water samples collected from properly developed ground water monitoring wells due to the high suspended solid content of most grab water samples.

important to note that, because of the widespread presence of an aromatic-rich, non-gasoline range hydrocarbon beneath both the Lathrop and Croley Properties, the positive TPH-g results are probably caused by the presence of compounds other than gasoline.

- VOC concentrations in ground water are highest in the grab samples collected from borings SB-G and SB-H, drilled immediately adjacent to the western property line. However, no VOCs were detected in any of the samples collected from the monitoring wells.
- The well C-3 sample contained dissolved PNAs, at a maximum of 11,000 ppb Naphthalene.
- None of the samples collected from well C-1 and C-2 contained detectable concentrations of any of the analyzed compounds. The samples from well MW-3, installed along the western Lathrop property line, contained varying concentrations of TPH-cr, TPH-g, BETX, hydrocarbons and PNAs. The only metal detected in the water samples collected from this well was nickel, at 0.12 ppm.

7. CONCLUSIONS

Based on the results of the September through December 1994 subsurface investigation at the Lathrop Property, and on a review of the results of the site investigation data collected during previous investigations of the adjacent Croley Property, we conclude the following:

- The observations made during the 1989 removal of the Lathrop UST, the clean analytic results for the Lathrop tank removal sampling, and the results of the soil and ground water sampling conducted recently by Cambria indicate that the former Lathrop tank did not release significant quantities of hydrocarbons to the site soil or ground water. The sampling results suggest that the TPH-g, and BETX detected along the Lathrop/Croley property line originated from a source other than the Lathrop tank. This conclusion is also supported by the analytic results for the grab ground water samples collected near the former tank.
- The VOC analytic results for soil samples collected on the Lathrop Property adjacent to the Croley VOC release point indicate that VOCs from the Croley site have impacted soil beneath the Lathrop Property. Analytic results for grab ground water samples also support this conclusion.
- The nature and distribution of PNAs and TPH characterized as creosote (TPH-cr) and motor oil (TPH-mo) in soil beneath the Lathrop Property suggest that these compounds could have originated on the Lathrop Property. However, the area where the compounds are detected has been entirely covered with concrete since 1972, soon after when Mr. F.P. Lathrop purchased the property. In addition, there has been no known onsite use of these compounds during Mr. Lathrop's ownership. This absence of recent PNA or heavy hydrocarbon sources suggests that the compounds were released to the soil beneath the Lathrop Property at some earlier date. Based on the data collected it is possible that adjacent properties were also impacted by historical releases of these compounds. This conclusion is supported by the apparent presence of "oil-impregnated" soil in one of the geotechnical borings drilled near the center of the Lathrop

building prior to its construction. The former use of the Lathrop Property as a storage area for the Paraffine Paint Company, which refined crude oil into lighter fractions and also used large quantities of various chemicals including heavy crude oil distillates in its processes, is a far more likely source of the detected compounds.

- The high molecular weight, low solubility and low mobility of the heavier hydrocarbons and PNAs makes it unlikely that these compounds originated from an offsite source. The relatively high PNA and TPH-mo analytic results detected in the southwest corner of the Lathrop Property indicate a possible source in this area.
- Analytic results for all metals analyses conducted during the investigation were below DTSC TTLs.

8. REFERENCES

The histories of the Croley and Lathrop properties presented in this report were based on a review of only those reports and documents specifically identified below.

Letter from Brian P. Oliva of the ACDEH to Mr. Richard Herring, owner of the 5800 Christy property, addressing site remediation goals; February 22, 1994;

Quarterly Groundwater Monitoring Report; February 7, 1994; consultant's letter report summarizing 4th quarter 1993 water quality data; prepared by ETS, Inc, of San Francisco, California.

Letter from Mr. Walter W. Loo, President of ETS, Inc, consultant for owner of 5800 Christie Street property, to Mr. Brian Oliva of the ACDEH, petitioning for site closure; November 1, 1993.

Soil Vapor Extraction System Final Closure Report, August 29, 1992; site remediation system installation/operation report, prepared by ETS, Inc,

Tank Removal Report; November 15, 1989; consultant's report prepared by KTW and Associates;

Soil/Groundwater Mitigation and Closure, 5800 Christie Street, Emeryville, California; May 22, 1989; consultant's report prepared by McLaren Environmental Engineering of Alameda, California.

Quarterly Groundwater Monitoring Report; March 22, 1989, consultant's letter report summarizing 4th quarter 1989 water quality data; prepared by AWD, Inc, of South San Francisco, California.

Assessment, 5800 Christie Street, Emeryville, California; January 20, 1989, consultant's report prepared by Robert E. Gils & Associates, of San Francisco, California.

Hazardous Substance Storage Statement, January 1, 1985; State Water Resource Control Board compliance document signed by Mr. Roy A. Van Pelt, Vice President of F.P. Lathrop Construction Company.

Standard Lease Form; May 24, 1972; Lease between F.P. Lathrop, property owner, and F.P. Lathrop Construction Company, lessee.

Soil Investigation for the Proposed Lathrop - Shellmound Tilt-up Warehouse, Shellmound near Christie, Emeryville, California; July 14, 1971; consultant's report prepared by Woodward - Lundgren & Associates, of Oakland, California.

9. LIMITATIONS AND CERTIFICATIONS

This report was prepared for the sole use of Crosby, Heafey, Roach and May, of Oakland, California. Cambria is not responsible for the interpretation of this report by others.

The conclusions and recommendations presented above are based on a limited work scope specified by the client for this project. As such, Cambria does not warrant that the subject property is free of soil, groundwater, or other contamination, or that all existing or potential contaminated areas or areas of non-compliance with applicable environmental regulations have been identified.

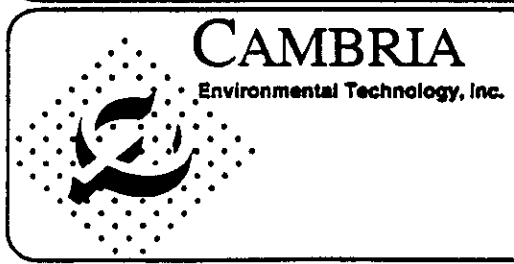
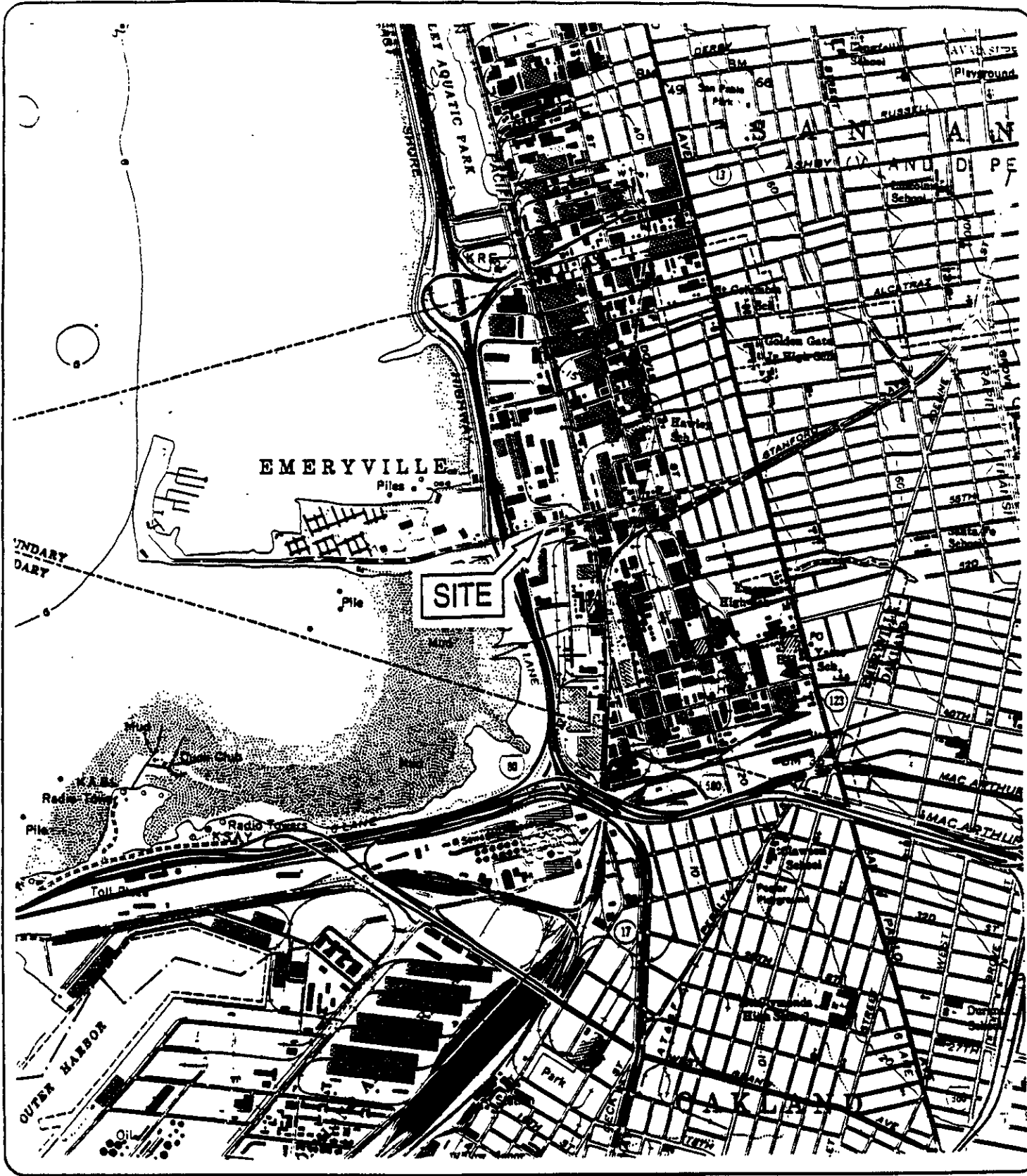
No opinions, interpretations, recommendations or other statements included in this document should be understood to be legal opinions.

The scope, emphasis, level of detail, and findings of this assessment are specific to the work scope and parties for which this document was originally prepared. No other use, meaning, interpretation, or reliance on the assessment should be made or understood.

The information, data estimates, opinions and other references used in the preparation of this assessment were obtained by Cambria from sources considered reliable and believed to be true and correct. However, Cambria has made no independent investigation of the source information and assumes no responsibility for the accuracy of such items.

Any sketch appearing in or attached to this report, or any statement of dimensions, capacities, quantities, or distances are approximate. They are included to assist the reader in visualizing the property, and are not necessarily based on surveys or measurements made by Cambria.

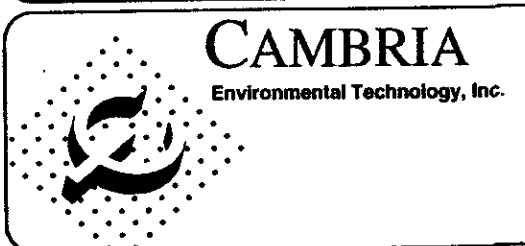
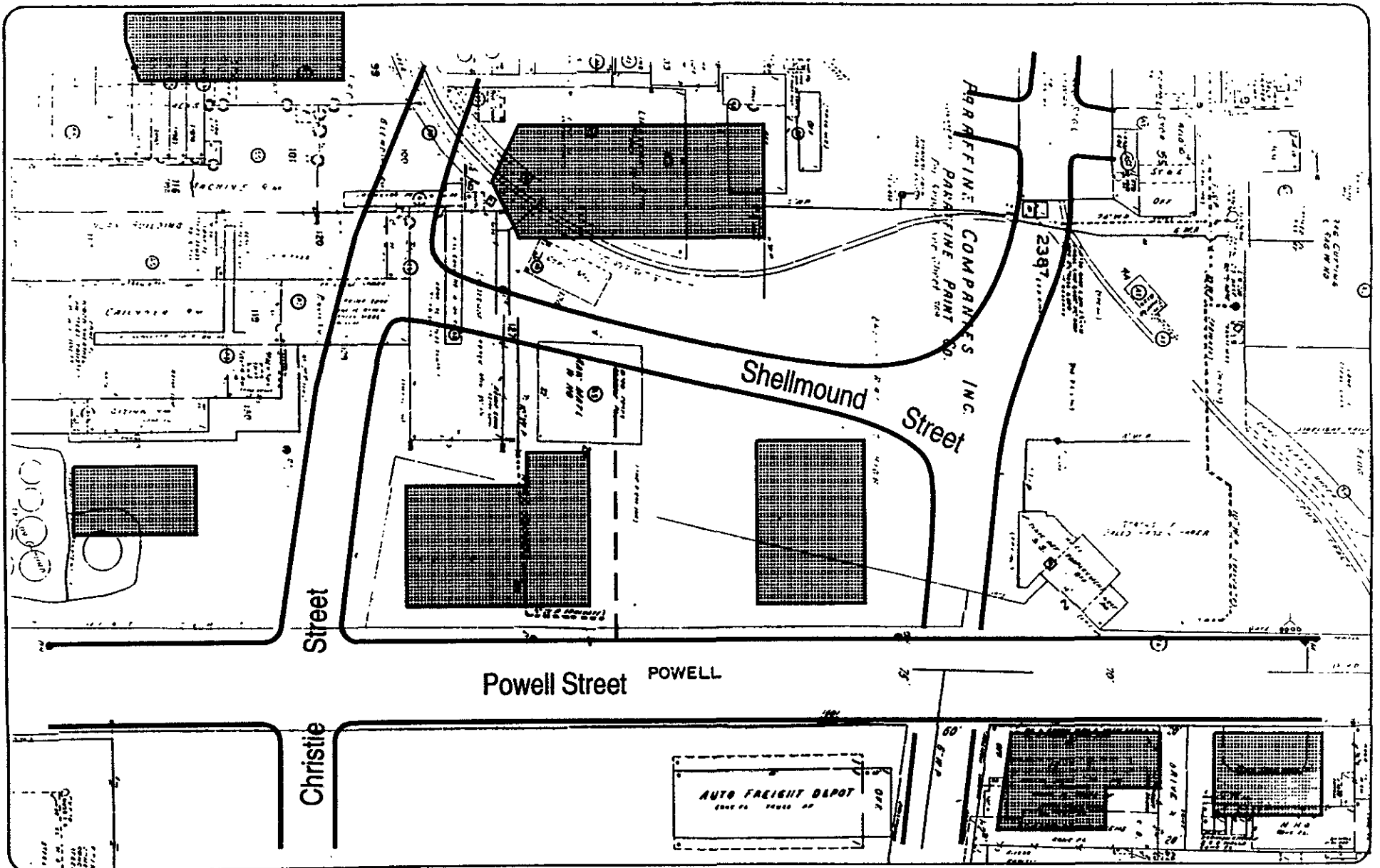
FIGURES



Site Location

5813-15 Shellmound Street
Emeryville, California

FIGURE
1



CAMBRIA
Environmental Technology, Inc.

Location of Structures Shown on 1951 Sanborn Map

5813-15 Shellmound Street
Emeryville, California

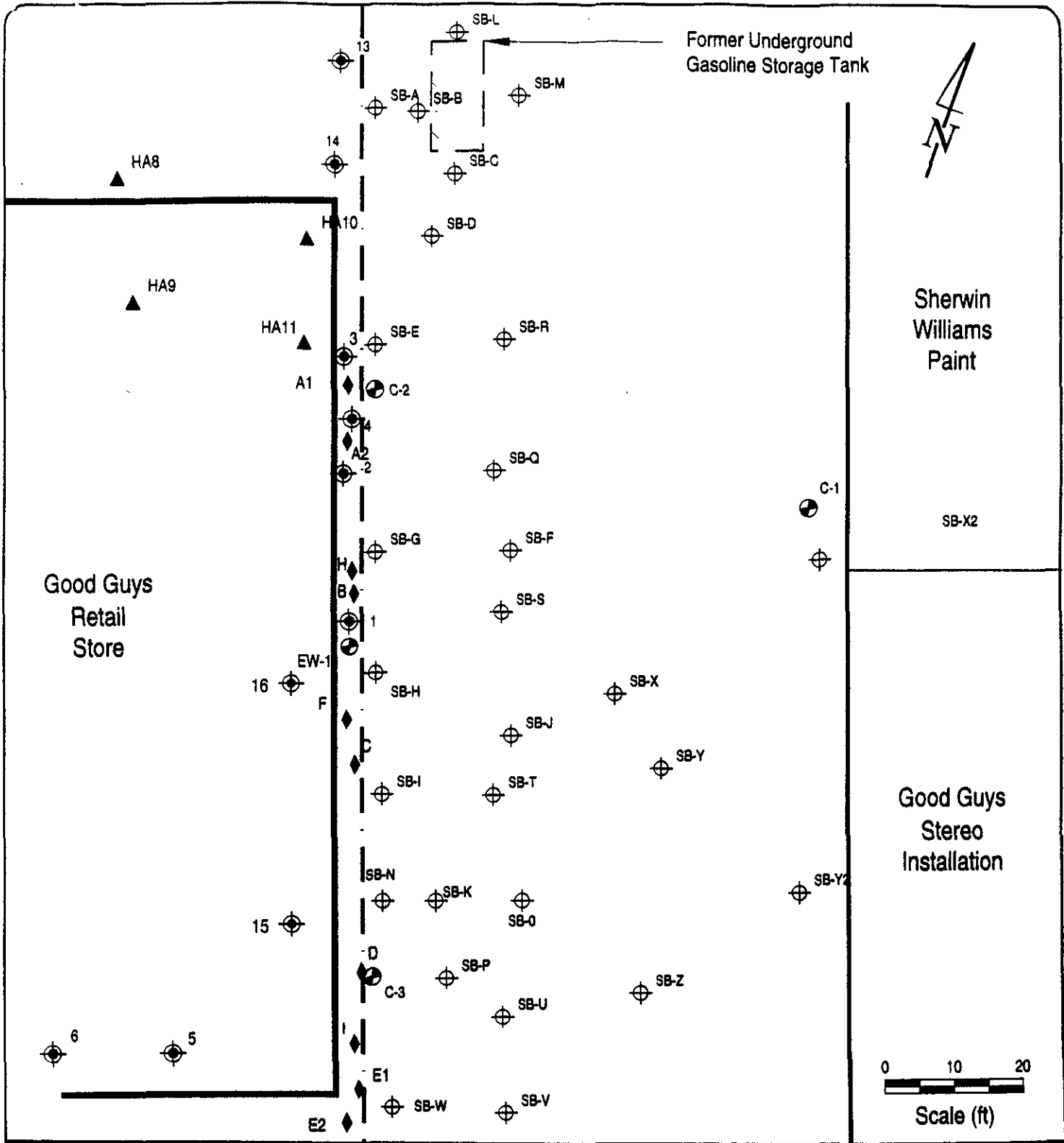
Explanation

Existing Building (1995)



FIGURE

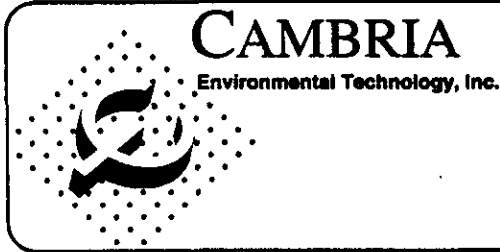
2



Powell Street

Overpass

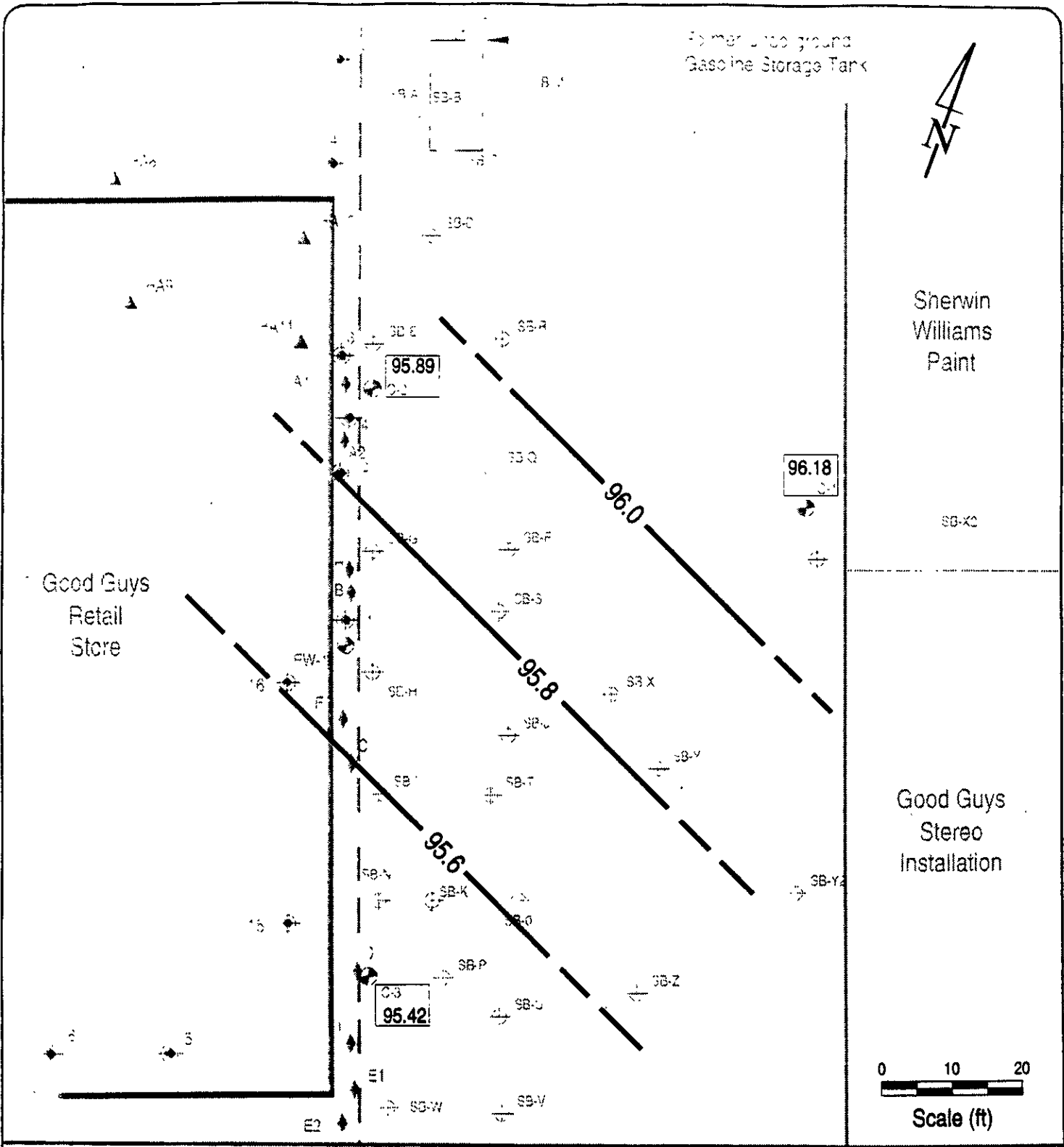
0:\PROJECT\CROSS\EMERYVILLE\FIGURE-2A.DWG



EXPLANATION	
E1 ◆	McLaren/ETS Soil Samples; 89/91
HA9 ▲	McLaren Soil Samples; 1989
5 ⊙	Gils Associates Boring; 10/88
SB-K ⊕	Cambria Boring; 9/94 and 12/94
C-3 ⊕	Cambria Monitoring Well; 12/94
EW-1 ⊕	McLaren Extraction Well; 1989

Soil Boring and Monitoring Well Locations
Revised 11/1/95
 5813-15 Shellmound Street
 Emeryville, California

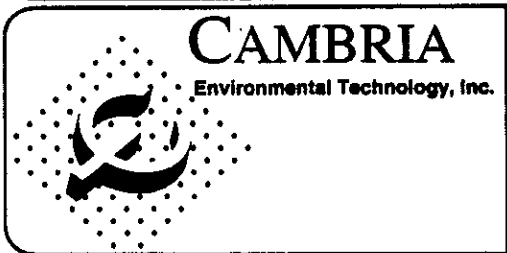
FIGURE
3



Powell Street

Overpass

D:\PROJECT\CROSSBY\EMERYVILLE\FIGURE-2A.DWG

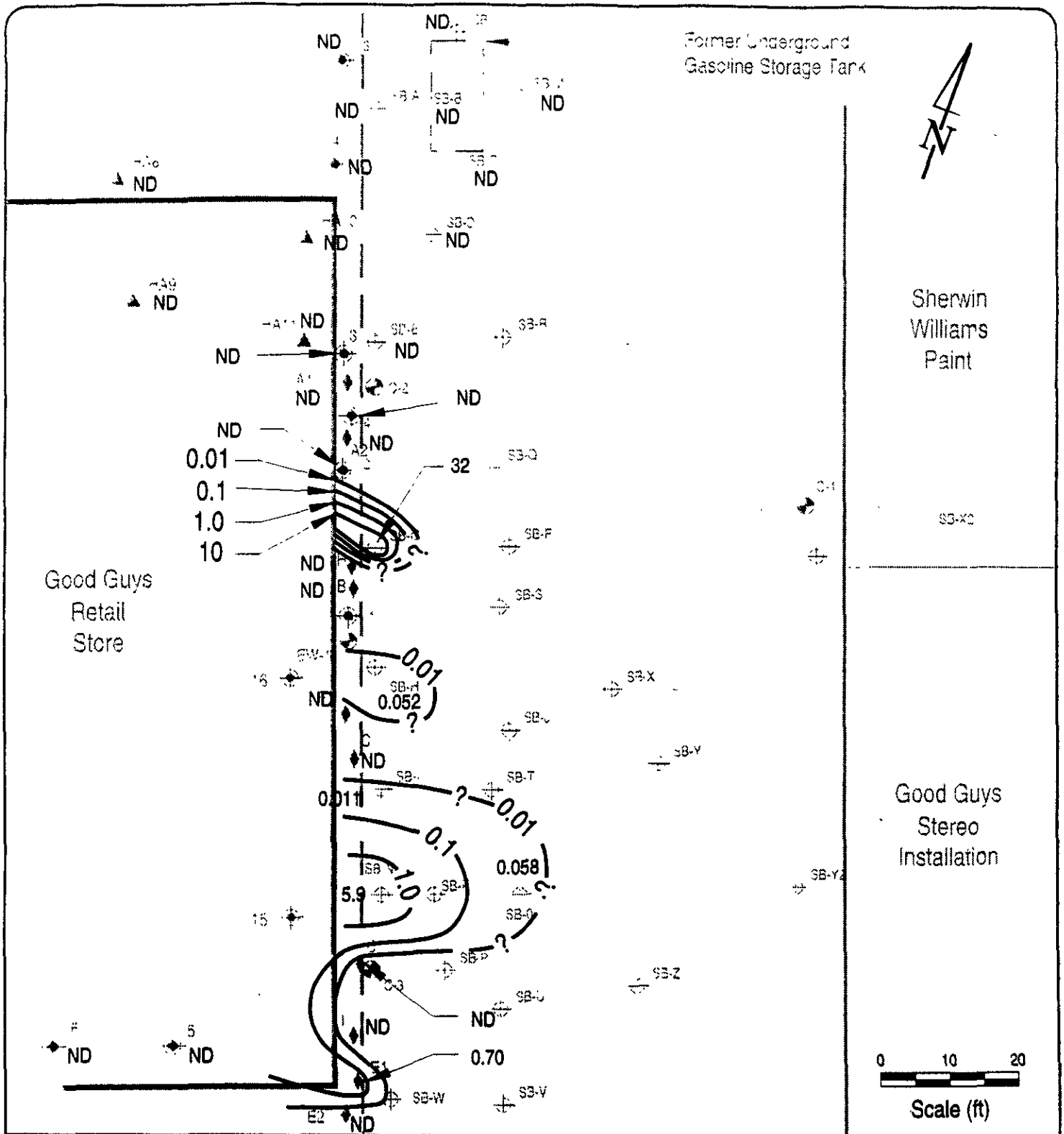


EXPLANATION	
XX.XX	Ground Water Elevation (Arbitrary 100.00 ft. Onsite Datum)
	Water Level Contour

Ground Water Elevations
December 16, 1994

5813-15 Shellmound Street
Emeryville, California


FIGURE
4



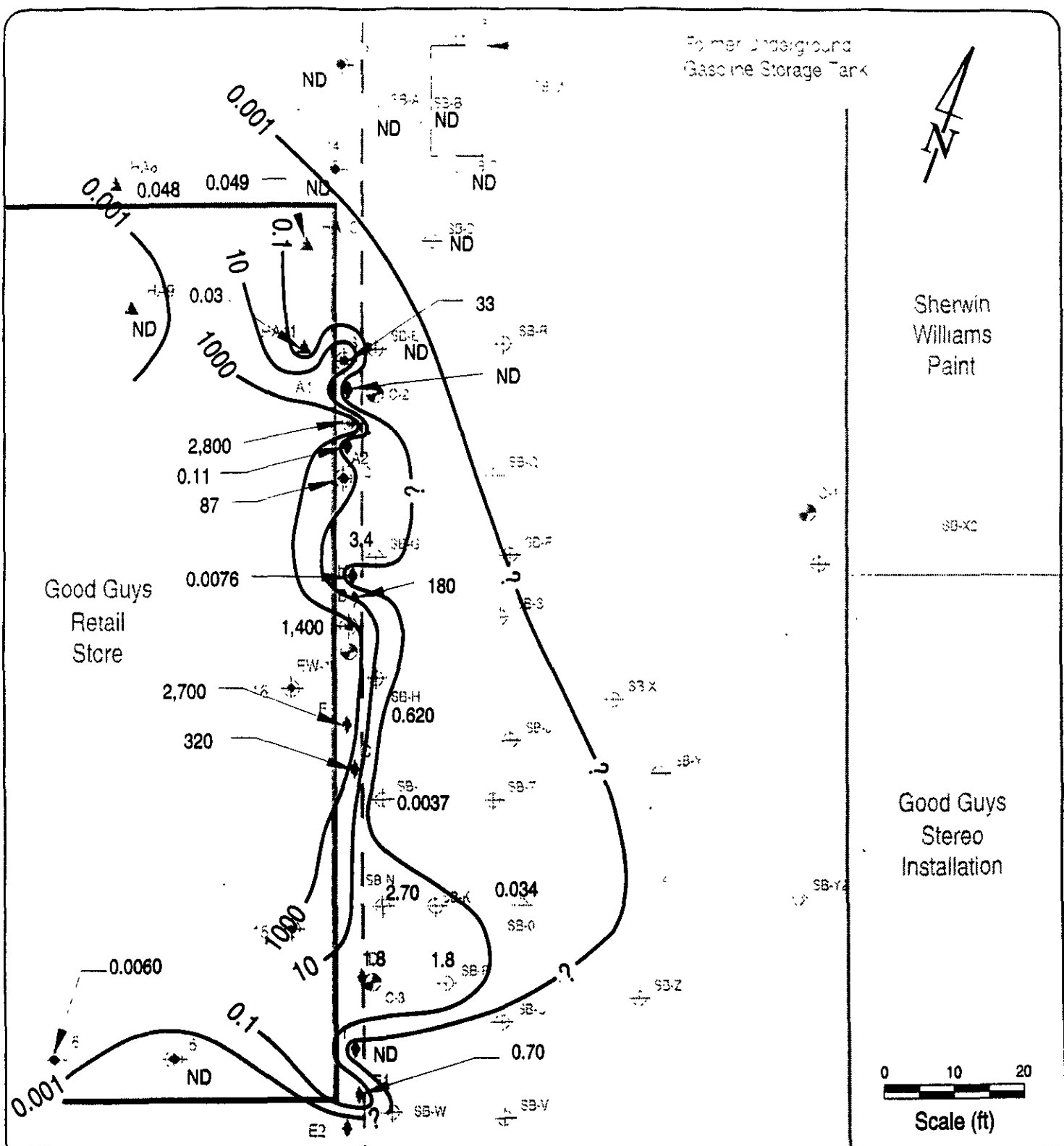
Powell Street:

Overpass

D:\PROJECT\CROSSBY\EMERYVILLE\FIGURE-2A.DWG

 <p>CAMBRIA Environmental Technology, Inc.</p>	<p>EXPLANATION</p> <p>x.xx Concentration in parts per million (mg/kg)</p> <p>— Concentration contour</p>	<p>Benzene Concentrations in Soil at 2 to 7 ft Depth</p> <p>5813-15 Shellmound Street Emeryville, California</p>	<p>FIGURE</p> <p>5</p>
--	---	---	--------------------------------------

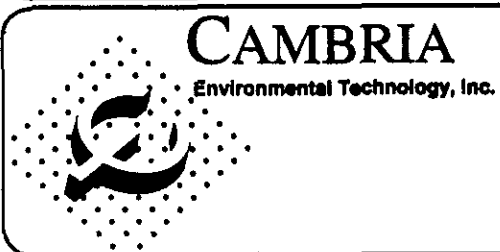
Former Underground Gasoline Storage Tank



Powell Street

Overpass

D:\PROJECT\CROSSBY\EMERYVILLE\FIGURE 2A.DWG



EXPLANATION	
x.xx	Concentration in parts per million (mg/kg)
—	Concentration contour

Toluene Concentrations in Soil
at 2 to 7 ft Depth

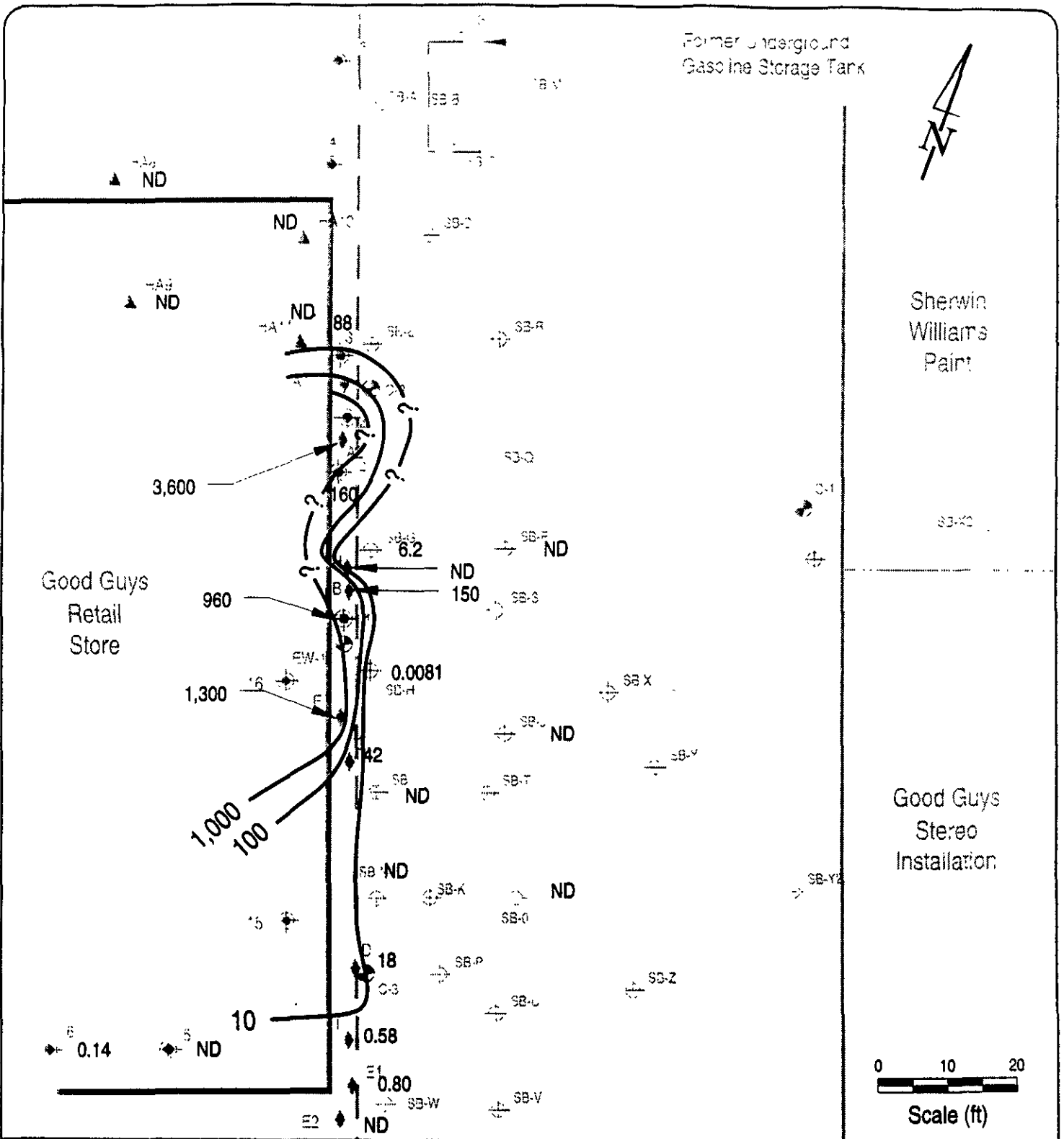
(R)

5813-15 Shellmound Street
Emeryville, California

FIGURE

6

Former Underground Gasoline Storage Tank



Powell Street

Overpass

D:\PROJECT\CROSSBY\EMERYVILLE\FIGURE-2A.DWG



EXPLANATION

- x.xx Concentration in parts per million
- Concentration contour

TCE Concentrations in Soil
at 2 to 7 ft Depth

(R)
5813-15 Shellmound Street
Emeryville, California

FIGURE

7

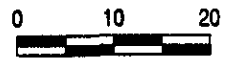
Former Underground Gasoline Storage Tank



Sherwin Williams Paint

SB-XC

Good Guys Stereo Installation



Scale (ft)

Good Guys Retail Store

Powell Street

Overpass

D:\PROJECT\CROSBY\EMERYVILLE\FIGURE-2A.DWG

CAMBRIA
Environmental Technology, Inc.

EXPLANATION

- x.xx Concentration in parts per million
- Concentration contour

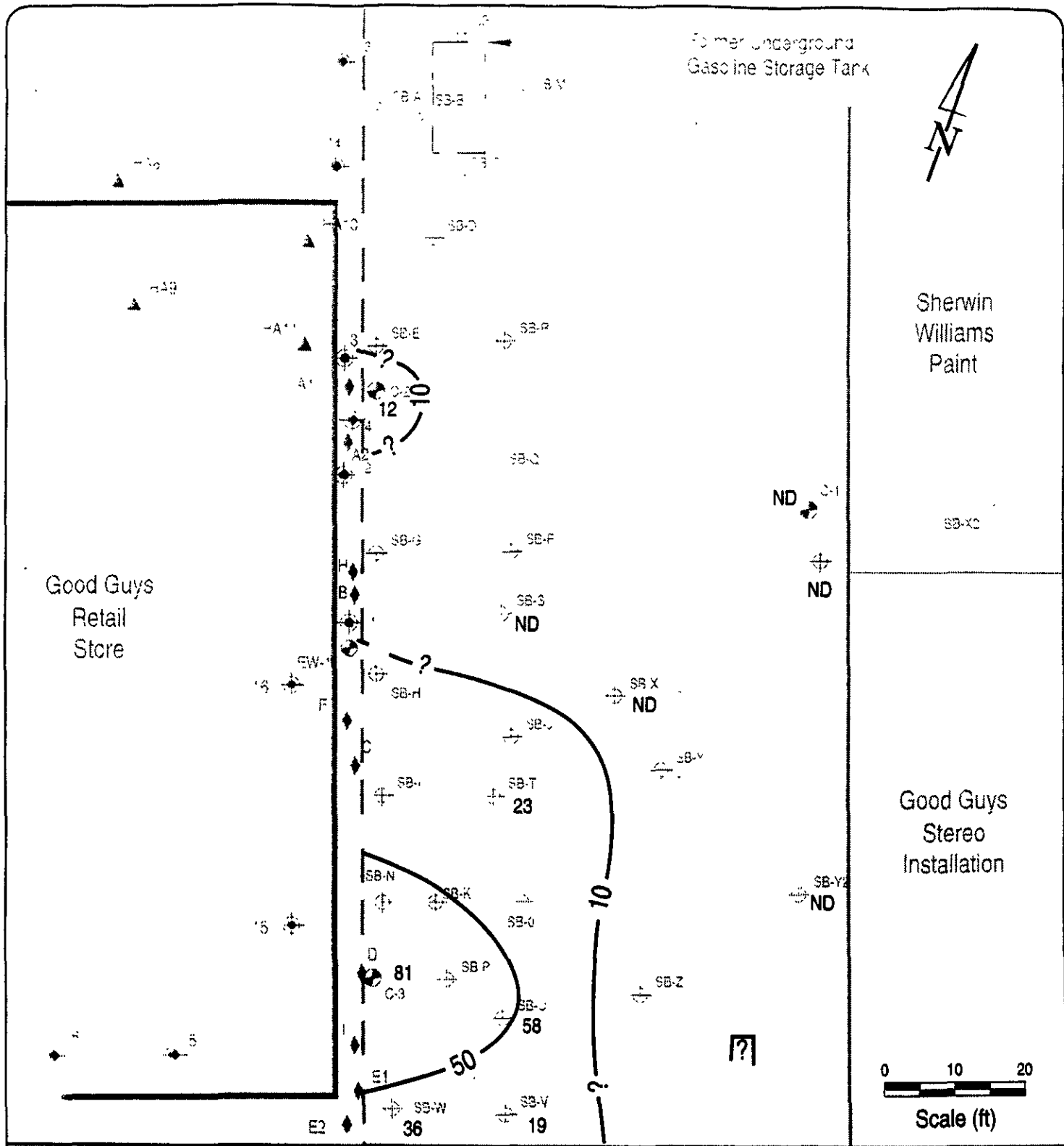
TPH as Creosote in Soil
at 2 to 7 ft Depth

5813-15 Shellmound Street
Emeryville, California

FIGURE

8

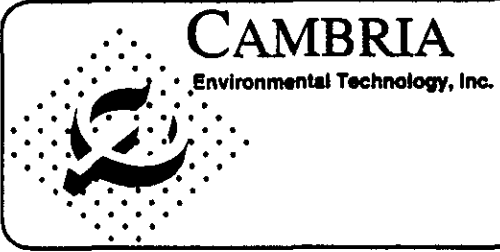




Powell Street

Overpass

D:\PROJECT\CROSSBY\EMERYVILLE\FIGURE-2\DWG



CAMBRIA
Environmental Technology, Inc.

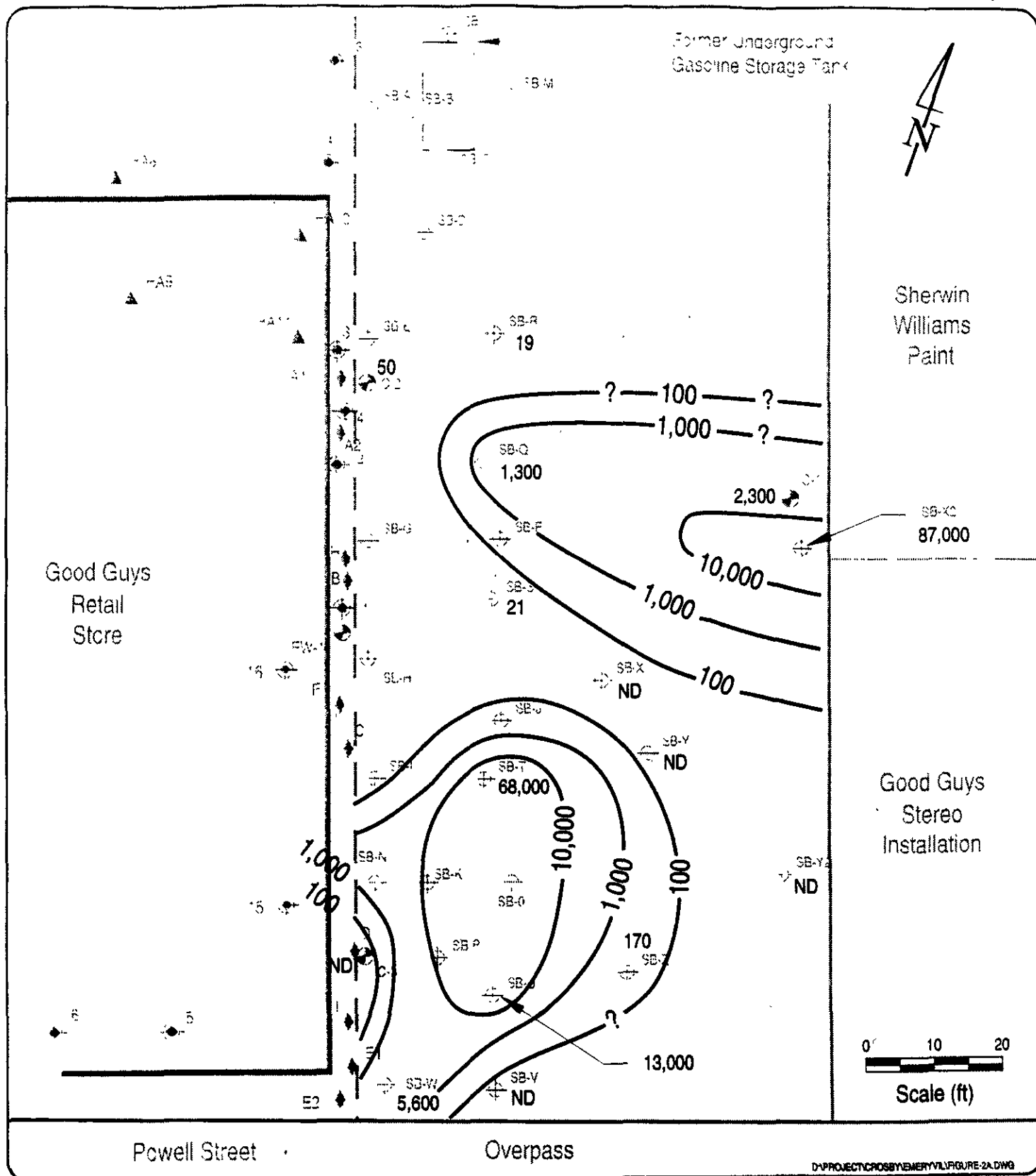
EXPLANATION

- x.xx Concentration in parts per million
- Concentration contour


TPH as Creosote in Soil
at 8 to 12 ft Depth
81
5813-15 Shellmound Street
Emeryville, California

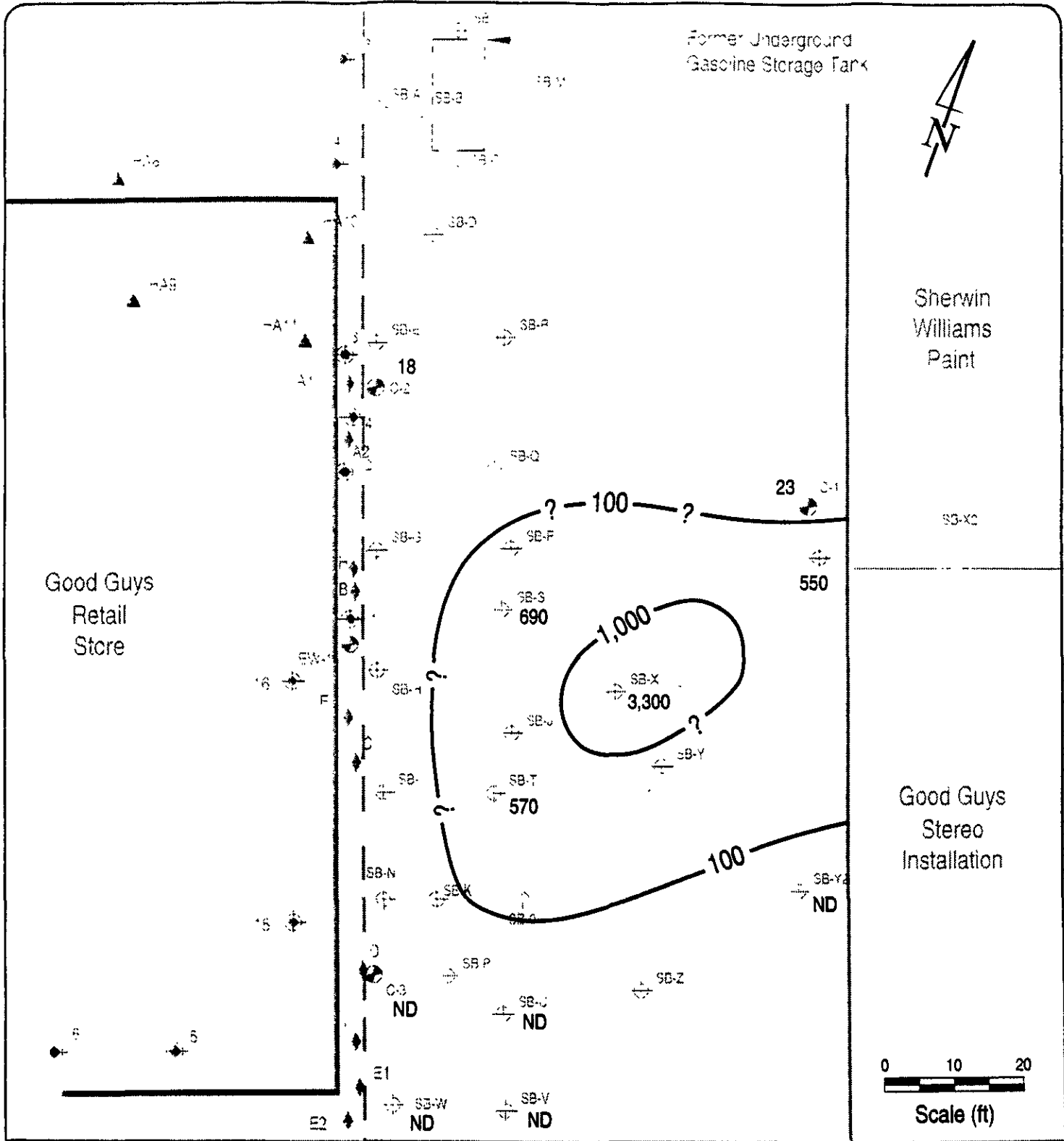
FIGURE

9



D:\PROJECT\CROSSBY\EMERYVILLE\FIGURE-2A.DWG

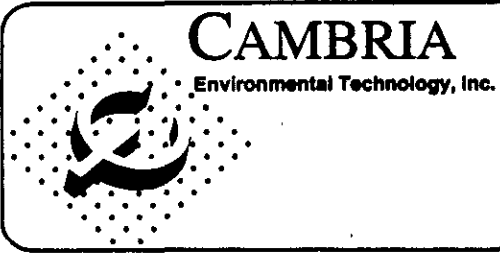
 <p>CAMBRIA Environmental Technology, Inc.</p>	EXPLANATION		FIGURE 10
	x.xx Concentration in parts per million — Concentration contour	TPH as Motor Oil in Soil at 2 to 7 Ft. Depth 5813-15 Shellmound Street Emeryville, California	



Powell Street

Overpass

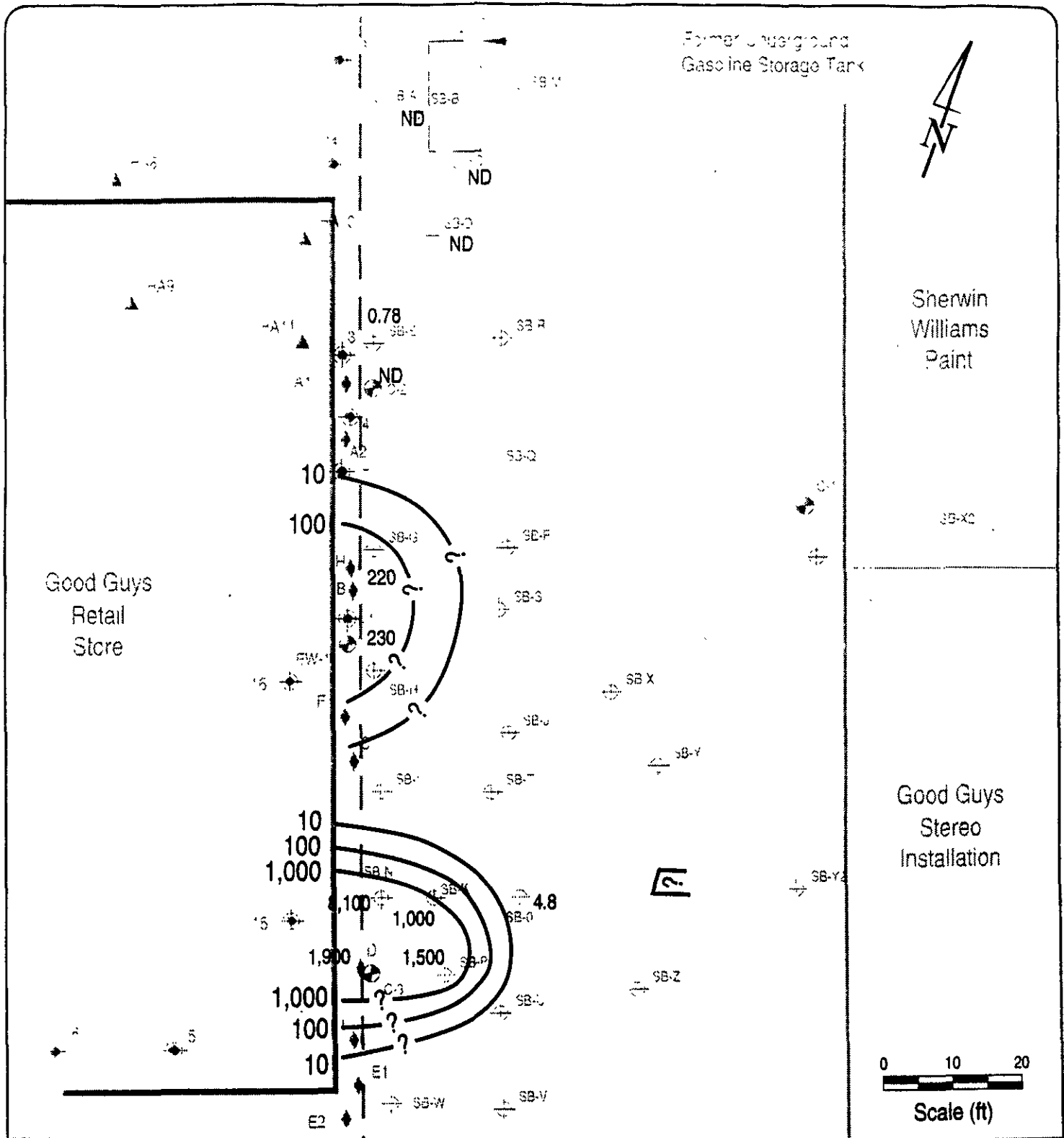
D:\PROJECT\CROSSBY\EMERYVILLE\FIGURE-2A.DWG



EXPLANATION	
x.xx	Concentration in parts per million
—	Concentration contour

TPH as Motor Oil in Soil
8 to 12 Ft. Depth
②
5813-15 Shellmound Street
Emeryville, California

FIGURE
11



Powell Street

Overpass

D:\PROJECT\CROSSBY\EMERYVILLE\FIGURE-2A.DWG



EXPLANATION

- x.xx Concentration in parts per billion (ug/l)
- Concentration contour

Benzene in Ground Water
(Includes grab water samples)

(R)
5813-15 Shellmound Street
Emeryville, California

FIGURE

12

TABLES

Revised 11/1/95 JMT

CAMBRIA

Table 1. Soil Analytic Data for Hydrocarbons- Lathrop Investigation, Emeryville, California

Sample ID	Date Sampled	Sample Depth (ft)	TPHc	TPHd	TPHmo	TPHg	Benzene	Toluene	Ethyl benzene	Xylenes
(Concentration in mg/kg or parts per million)										
LATHROP (5813-5815 Shellmound)										
Tank Excavation Samples										
1512	10/26/89	~4	--	--	--	nd	nd	nd	nd	nd
1521	10/26/89	~4	--	--	--	nd	nd	nd	nd	nd
1533-Comp	10/26/89	NA	--	--	--	23	nd	nd	nd	0.28
Cambria Borings (September 1994)										
SB-A	09/22/94	5.0	--	--	--	nd	nd	nd	nd	nd
SB-A	09/22/94	11.7	--	--	--	nd	nd	nd	nd	nd
SB-B	09/22/94	6.0	--	--	--	1.0	nd	nd	nd	nd
SB-B	09/22/94	11.7	--	--	--	nd	nd	nd	nd	nd
SB-C	09/22/94	5.0	--	--	--	nd	nd	nd	nd	nd
SB-C	09/22/94	11.7	--	--	--	1.1	nd	nd	nd	nd
SB-D	09/22/94	5.0	--	--	--	nd	nd	nd	nd	nd
SB-E	09/22/94	5.0	--	--	--	nd	nd	nd	nd	nd
SB-F	09/22/94	5.0	--	--	--	--	--	--	--	--
SB-G	09/22/94	3.0	--	--	--	nd	32	0.69	4.4	nd
SB-G	09/22/94	5.0	--	--	--	21	0.15	3.4	0.13	1.2
SB-G	09/22/94	11.7	--	--	--	--	--	--	--	--
SB-H	09/22/94	3.0	--	--	--	nd	nd	0.620	0.016	0.180
SB-H	09/22/94	5.0	--	--	--	15	0.052	0.066	9.8	0.380
SB-H	09/22/94	11.7	--	--	--	1.1	0.012	0.650	nd	0.010
SB-I	09/22/94	5.0	--	--	--	nd	0.011	0.0037	nd	nd
SB-J	09/22/94	5.0	--	--	--	--	--	--	--	--
SB-N	09/22/94	3.0	--	--	--	--	--	--	--	--
SB-N	09/22/94	5.0	--	--	--	1,700	5.9	2.7	10	9.8

(R)

CAMBRIA

Table 1. Soil Analytic Data for Hydrocarbons- Lathrop Investigation, Emeryville, California

Sample ID	Date Sampled	Sample Depth (ft)	TPHcr	TPHd	TPHmo	TPHg	Benzene	Toluene	Ethyl benzene	Xylenes
(Concentration in mg/kg or parts per million)										
SB-N	09/22/94	10.5	--	--	--	2,600	18	7.3	12	14
SB-N	09/22/94	11.7	--	--	--	--	--	--	--	--
SB-O	09/22/94	5.0	--	--	--	23	0.058	0.034	0.170	0.230
SB-O	09/22/94	11.7	--	--	--	--	--	--	--	--
SB-P	09/22/94	11.7	--	--	--	2,300	17	1.8	13	10
Cambria Borings (December 1994)										
SB-Q	12/07/94	3.5	nd	nd	1,300	--	--	--	--	--
SB-Q	12/07/94	5.5	nd	8.8	26	--	--	--	--	--
SB-R	12/07/94	5.5	nd	9.6	19	--	--	--	--	--
SB-S	12/07/94	5.5	nd	7.1	21	--	--	--	--	--
SB-S	12/07/94	11	nd	nd	690	--	--	--	--	--
SB-T	12/07/94	3.5	11,000	nd	nd	--	--	--	--	--
SB-T	12/07/94	5.5	25,000	nd	68,000	--	--	--	--	--
SB-T	12/07/94	9.0	nd	nd	570	--	--	--	--	--
SB-T	12/07/94	11.0	23	nd	nd	--	--	--	--	--
SB-U	12/07/94	6.0	5,200	nd	13,000	--	--	--	--	--
SB-U	12/07/94	11.0	58	nd	nd	--	--	--	--	--
SB-V	12/07/94	4.0	42,000	nd	nd	--	--	--	--	--
SB-V	12/07/94	11.0	19	nd	nd	--	--	--	--	--
SB-W	12/07/94	4.0	240,000	nd	nd	--	--	--	--	--
SB-W	12/07/94	6.0	nd	3,900	5,600	--	--	--	--	--
SB-W	12/07/94	11.0	36	nd	nd	--	--	--	--	--
SB-X	12/08/94	5.5	nd	nd	nd	--	--	--	--	--
SB-X	12/08/94	8.5	nd	1,300	3,300	--	--	--	--	--
SB-X2	12/08/94	3.5	nd	nd	67	--	--	--	--	--
SB-X2	12/08/94	5.5	nd	nd	87,000	--	--	--	--	--
SB-X2	12/08/94	9.0	nd	nd	nd	--	--	--	--	--
SB-X2	12/08/94	11.0	nd	150	550	--	--	--	--	--

(R)

CAMBRIA

Table 1. Soil Analytic Data for Hydrocarbons- Lathrop Investigation, Emeryville, California

Sample ID	Date Sampled	Sample Depth (ft)	TPHcr	TPHd	TPHmo	TPHg	Benzene	Toluene	Ethyl benzene	Xylenes
(Concentration in mg/kg or parts per million)										
SB-Y	12/08/94	3.5	40,000	nd	nd	--	--	--	--	--
SB-Y	12/08/94	5.5	nd	nd	nd	--	--	--	--	--
SB-Y2	12/08/94	4.0	nd	nd	nd	--	--	--	--	--
SB-Y2	12/08/94	6.0	nd	nd	nd	--	--	--	--	--
SB-Y2	12/08/94	9.0	nd	nd	nd	--	--	--	--	--
SB-Y2	12/08/94	11.0	nd	nd	nd	--	--	--	--	--
SB-Z	12/08/94	3.5	nd	nd	170	--	--	--	--	--
SB-Z	12/08/94	6.0	nd	nd	nd	--	--	--	--	--
C-1	12/09/94	5.5	nd	nd	2,300	--	--	--	--	--
C-1	12/09/94	8.5	nd	nd	23	--	--	--	--	--
C-1	12/09/94	13.5	nd	nd	nd	--	--	--	--	--
C-1	12/09/94	18.5	nd	nd	nd	--	--	--	--	--
C-2	12/09/94	3.5	nd	nd	nd	--	--	--	--	--
C-2	12/09/94	5.5	nd	31	50	--	--	--	--	--
C-2	12/09/94	8.5	nd	7.9	18	--	--	--	--	--
C-2	12/09/94	11.0	12	2.30	nd	--	--	--	--	--
C-2	12/09/94	15.0	nd	--	--	--	--	--	--	--
C-3	12/09/94	3.5	3,700	nd	nd	--	--	--	--	--
C-3	12/09/94	5.5	19,000	nd	nd	--	--	--	--	--
C-3	12/09/94	8.5	62,000	nd	nd	--	--	--	--	--
C-3	12/09/94	11.0	14	nd	nd	--	--	--	--	--
C-3	12/09/94	14.0	nd	nd	nd	--	--	--	--	--
C-3	12/09/94	15.0	81.00	--	--	--	--	--	--	--
COLEY AND HERRING INVESTMENT (5800 Christie Street)										
Borings by Gils Associates										
1 (9665)	12/28/88	4.0	--	--	--	--	nd	1,400	3	8.4
1 (9666)	12/28/88	6.0	--	--	--	--	nd	26	nd	nd

(R)

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Table 1. Soil Analytic Data for Hydrocarbons- Lathrop Investigation, Emeryville, California

Sample ID	Date Sampled	Sample Depth (ft)	TPHcr	TPHd	TPHmo	TPHg	Benzene	Toluene	Ethyl benzene	Xylenes
(Concentration in mg/kg or parts per million)										
2 (9668)	12/28/88	7.0	--	--	--	--	nd	87	nd	nd
2 (9667)	12/28/88	12.0	--	--	--	35	nd	56	nd	nd
3 (9669)	12/28/88	5.0	--	--	--	--	nd	33	nd	nd
3 (9670)	12/28/88	12.0	--	--	--	1.4	nd	0.81	nd	nd
4 (9653)	10/12/88	2.4	--	--	--	--	nd	2800	28	42
5 (9661)	10/12/88	3.4	--	--	--	--	nd	nd	nd	nd
6 (9660)	10/12/88	3.0	--	--	--	--	nd	0.0060	nd	0.0049
7 (9658)	10/12/88	3.0	--	--	--	--	nd	nd	nd	nd
8 (9659)	10/12/88	3.3	--	--	--	--	nd	nd	nd	nd
9 (9655)	10/12/88	2.0	--	--	--	--	nd	0.0032	nd	nd
10 (9656)	10/12/88	6.3	--	--	--	--	nd	0.0040	nd	nd
11 (9654)	10/12/88	4.0	--	--	--	--	nd	0.0055	nd	nd
12 (9657)	10/12/88	2.0	--	--	--	--	nd	0.0028	nd	nd
13 (9663)	10/27/88	6.0	--	--	--	nd	nd	nd	nd	nd
13 (9664)	10/27/88	11.0	--	--	--	3	nd	nd	nd	nd
14 (9662)	10/27/88	11.0	--	--	--	5	nd	nd	nd	0.057
McLaren Foundation Excavation Samples										
HA-1	04/14/89	2.3	--	--	--	--	nd	0.019	nd	nd
HA-4	04/14/89	2.0	--	--	--	--	nd	0.16	nd	nd
HA-5	04/14/89	2.7	--	--	--	--	nd	0.80	nd	nd
HA-6	04/14/89	3.5	--	--	--	--	nd	0.12	nd	nd
HA-7	04/14/89	3.5	--	--	--	--	nd	0.072	nd	nd
HA-8	04/14/89	3.5	--	--	--	--	nd	0.048	nd	nd
HA-9	04/14/89	3.5	--	--	--	--	nd	nd	nd	nd
HA-10	04/14/89	3.5	--	--	--	--	nd	0.049	nd	nd
HA-11	04/14/89	2.5	--	--	--	--	nd	0.030	nd	nd
McLaren Excavation Wall Samples										

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Table 1. Soil Analytic Data for Hydrocarbons- Lathrop Investigation, Emeryville, California

Sample ID	Date Sampled	Sample Depth (ft)	TPHcr	TPHd	TPHmo	TPHg	Benzene	Toluene	Ethyl benzene	Xylenes
(Concentration in mg/kg or parts per million)										
A1	1989	5.0	--	--	--	--	nd	nd	nd	nd
A2	1989	5.0	--	--	--	--	nd	0.11	nd	nd
B	1989	5.0	--	--	--	--	nd	180	3.8	28
C	1989	5.0	--	--	--	--	nd	320	9.3	48
D	1989	5.0	--	--	--	--	nd	1.8	nd	nd
E1	1989	5.0	--	--	--	--	0.70	0.70	0.60	1.1
E2	1989	5.0	--	--	--	--	nd	nd	nd	nd
F	1989	5.0	--	--	--	--	nd	2,700	14	35
ETS Confirmation Borings After SVE										
G	12/03/91	3-5	--	--	--	nd	nd	nd	nd	nd
H	12/03/91	3-5	--	--	--	1.5	nd	0.076	0.0062	0.10
I	12/03/91	3-5	--	--	--	nd	nd	nd	nd	nd
Abbreviations										
TPHcr = Total petroleum hydrocarbons as creosote by EPA Method 5020, 5030 or by modified EPA Method 8015										
TPHd = Total petroleum hydrocarbons as diesel by EPA Method 5020, 5030 or by modified EPA Method 8015										
TPmo = Total petroleum hydrocarbons as motor oil by EPA Method 5020, 5030 or by modified EPA Method 8015										
TPHg = Total petroleum hydrocarbons as gasoline by EPA Method 5020, 5030 or by modified EPA Method 8015										
BTEX = BTEX compounds by EPA Method 601/8240 unless 8020/5030 performed also.										
-- = Constituent not analyzed										
nd = Not detected, or no limit given by previous consultant										

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Table 2. Soil Analytic Data for Volatile Organic Compounds (VOCs)
- Lathrop Investigation, Emeryville, California

Sample ID	Date Sampled	Sample Depth (ft)	VC	1,1 DCA	1,2 DCE	MC	1,2 DCA	1,1,1 TCA	TCE	PCE	carbon tet	Comments
(Concentration in mg/kg or parts per million)												
LATHROP (5813-5815 Shellmound)												
Cambria Borings												
SB-A	09/22/94	5.0	--	--	--	--	--	--	--	--	--	
SB-A	09/22/94	11.7	nd	nd	nd	nd	nd	nd	nd	nd	nd	a
SB-B	09/22/94	6.0	--	--	--	--	--	--	--	--	--	
SB-B	09/22/94	11.7	--	--	--	--	--	--	--	--	--	
SB-C	09/22/94	5.0	--	--	--	--	--	--	--	--	--	
SB-C	09/22/94	11.7	nd	nd	nd	nd	nd	nd	nd	nd	nd	
SB-D	09/22/94	5.0	--	--	--	--	--	--	--	--	--	
SB-E	09/22/94	5.0	--	--	--	--	--	--	--	--	--	
SB-F	09/22/94	5.0	nd	nd	nd	nd	nd	nd	nd	nd	nd	
SB-G	09/22/94	3.0	0.12	2.3	0.014	0.051	0.014	0.036	6.2	nd	nd	
SB-G	09/22/94	5.0	0.034	0.35	nd	nd	nd	nd	0.042	nd	nd	
SB-G	09/22/94	11.7	nd	0.0062	nd	0.059	nd	nd	nd	nd	nd	
SB-H	09/22/94	3.0	nd	0.19	nd	nd	nd	nd	nd	nd	nd	
SB-H	09/22/94	5.0	3.2	1.6	0.025	0.056	0.039	nd	0.0081	nd	nd	0.067 chloroethane
SB-H	09/22/94	11.7	2.3	0.66	0.059	nd	nd	nd	nd	nd	nd	0.010 bromoform
SB-I	09/22/94	5.0	nd	0.0062	nd	nd	nd	nd	nd	nd	nd	0.0066 bromomethane
SB-J	09/22/94	5.0	nd	nd	nd	nd	nd	nd	nd	nd	nd	
SB-N	09/22/94	3.0	nd	nd	nd	nd	nd	nd	nd	nd	nd	
SB-N	09/22/94	5.0	0.25	0.043	nd	0.20	0.02	0.016	nd	nd	nd	0.027 chloroform
SB-N	09/22/94	10.5	nd	nd	nd	nd	nd	nd	nd	nd	nd	
SB-N	09/22/94	11.7	nd	nd	nd	nd	nd	nd	nd	nd	nd	

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Table 2. Soil Analytic Data for Volatile Organic Compounds (VOCs)
- Lathrop Investigation, Emeryville, California

Sample ID	Date Sampled	Sample Depth (ft)	VC	1,1 DCA	1,2 DCE	MC	1,2 DCA	1,1,1 TCA	TCE	PCE	carbon tet	Comments
(Concentration in mg/kg or parts per million)												
Cambria Borings, cont...												
SB-O	09/22/94	5.0	nd	nd	nd	nd	nd	nd	nd	nd	nd	
SB-O	09/22/94	11.7	nd	nd	nd	nd	nd	nd	nd	nd	nd	
SB-P	09/22/94	11.7	nd	nd	nd	nd	nd	nd	nd	nd	nd	
CROLEY AND HERRING INVESTMENT (5800 Christie Street)												
Borings by Gils Associates												
1 (9665)	12/28/88	4	nd	nd	nd	nd	nd	190	960	nd	23	
1 (9666)	12/28/88	6	nd	nd	nd	nd	nd	3.7	19	nd	nd	
2 (9668)	12/28/88	7	nd	4.2	nd	nd	nd	76	160	nd	12	
2 (9667)	12/28/88	12	nd	nd	nd	nd	nd	69	93	nd	11	
3 (9669)	12/28/88	5	nd	nd	nd	nd	nd	7.3	88	nd	nd	
3 (9670)	12/28/88	12	nd	nd	nd	nd	nd	0.49	2.9	nd	nd	
4 (9653)	10/12/88	2.4	nd	nd	nd	nd	nd	280	3600	nd	27	
5 (9661)	10/12/88	3.4	nd	nd	nd	nd	nd	nd	nd	nd	nd	
6 (9660)	10/12/88	3	nd	0.0076	0.059	nd	nd	0.077	0.14	0.034	nd	
7 (9658)	10/12/88	3	nd	nd	nd	nd	nd	nd	nd	nd	nd	
8 (9659)	10/12/88	3.3	nd	nd	nd	nd	nd	nd	nd	nd	nd	
9 (9655)	10/12/88	2	nd	nd	nd	0.0025	nd	nd	0.012	0.012	nd	
10 (9656)	10/12/88	6.3	nd	nd	nd	nd	nd	0.0036	0.0091	nd	nd	
11 (9654)	10/12/88	4	nd	nd	nd	nd	nd	nd	0.0086	nd	nd	
12 (9657)	10/12/88	2	nd	nd	nd	nd	nd	nd	0.0078	nd	nd	
13 (9663)	10/27/88	6	--	--	--	--	--	--	--	--	--	
13 (9664)	10/27/88	11	--	--	--	--	--	--	--	--	--	
14 (9662)	10/27/88	11	--	--	--	--	--	--	--	--	--	

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Table 2. Soil Analytic Data for Volatile Organic Compounds (VOCs)
- Lathrop Investigation, Emeryville, California

Sample ID	Date Sampled	Sample Depth (ft)	VC	1,1 DCA	1,2 DCE	MC	1,2 DCA	1,1,1 TCA	TCE	PCE	carbon tet	Comments
(Concentration in mg/kg or parts per million)												
McLaren Foundation Excavation Samples												
HA-1	04/14/89	2.25	nd	nd	nd	0.067	nd	nd	nd	nd	nd	
HA-4	04/14/89	2	nd	nd	nd	0.13	nd	nd	nd	nd	nd	
HA-5	04/14/89	2.7	nd	nd	nd	nd	nd	nd	nd	nd	nd	
HA-6	04/14/89	3.5	nd	nd	nd	0.13	nd	nd	nd	nd	nd	
HA-7	04/14/89	3.5	nd	nd	nd	nd	nd	nd	nd	nd	nd	
HA-8	04/14/89	3.5	nd	nd	nd	nd	nd	nd	nd	nd	nd	b
HA-9	04/14/89	3.5	nd	nd	nd	nd	nd	nd	nd	nd	nd	c
HA-10	04/14/89	3.5	nd	nd	nd	nd	nd	nd	nd	nd	nd	d
HA-11	04/14/89	2.5	nd	nd	nd	nd	nd	nd	nd	nd	nd	e
												f
McLaren Excavation Wall Samples												
A1	1989	5	nd	nd	nd	0.18	nd	nd	0.019	?	?	
A2	1989	5	nd	nd	0.12	nd	nd	nd	0.10	?	?	0.011 freon
B	1989	5	nd	nd	nd	nd	nd	nd	0.10	?	?	
C	1989	5	nd	nd	nd	nd	nd	130	150	?	?	
D	1989	5	nd	nd	nd	nd	nd	23	42	?	?	
E1	1989	5	nd	nd	nd	nd	nd	1.0	18	?	?	
E2	1989	5	nd	nd	nd	nd	nd	0.50	0.80	?	?	
F	1989	5	nd	nd	nd	nd	nd	nd	nd	?	?	
								280	1,300	?	?	18 chlorobenzene

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Table 2. Soil Analytic Data for Volatile Organic Compounds (VOCs)
- Lathrop Investigation, Emeryville, California

Sample ID	Date Sampled	Sample Depth (ft)	VC	1,1 DCA	1,2 DCE	MC	1,2 DCA	1,1,1 TCA	TCE	PCE	carbon tet	Comments
(Concentration in mg/kg or parts per million)												
ETS Confirmation Borings After SVE												
G	12/03/91	3-5	nd	nd	nd	nd	nd	nd	nd	?	?	
H	12/03/91	3-5	nd	nd	nd	nd	nd	nd	nd	?	?	g
I	12/03/91	3-5	nd	nd	nd	nd	nd	0.420	0.580	?	?	h

Abbreviations

TPHg = Total petroleum hydrocarbons as gasoline by EPA Method 5020, 5030 or by modified EPA Method 8015

BTEX = BTEX compounds by EPA Method 601/8240 unless 8020/5030 performed also.

--- = Constituent not analyzed

nd = Not detected, or no limit given by previous consultant

VC= Vinyl chloride by EPA Method 8010 or 8240.

1,1 DCA = 1,1 dichloroethane by EPA Method 8010 or 8240.

1,2 DCE = Trans 1,2 dichloroethene by EPA Method 8010 or 8240.

MC= methylene chloride by EPA Method 8010 or 8240.

1,2 DCA = 1,2 dichloroethane by EPA Method 8010 or 8240.

1,1,1 TCA = 1,1,1 trichloroethane by EPA Method 8010 or 8240.

TCE = Trichloroethene by EPA Method 8010 or 8240.

PCE = Tetrachloroethene by EPA Method 8010 or 8240.

? = Data unavailable.

Comments

a = 0.021 chloroform and 0.0072 bromodichloromethane

b = methylene chloride and freon detected at 0.11 and 0.014 ppm, respectively, which were less than the raised reporting limit.

c = methylene chloride was detected at 0.073 ppm which was less than the raised reporting limit.

d = methylene chloride and toluene present at 0.063 ppm and 0.0070 ppm, respectively, which were less than the raised reporting limit.

e = methylene chloride was present at 0.071 ppm which was less than the raised reporting limit.

f = methylene chloride was detected at 0.043 ppm which was less than the raised reporting limit.

g = chloroform and cis-1, 2 - dichloroethene were detected at 0.040 ppm and 0.033 ppm, respectively.

h = 0.017 ppm and cis-1,2 - dichloroethene detected.

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Table 3. Soil Analytic Data for Polynucleararomatics (PNAs)
- Lathrop Investigation, Emeryville, California

Sample ID	Date Sampled	Sample Depth (ft)	Acenap-h-thene	Acenaph-thylene	Anthra-cene	Benzo-(a)an-thracene	Benzo-(b)fluor-anthene	Benzo-(k)fluor-anthene	Benzo-(a)pyrene	Benzo-(g,h,i)perylene	Chrysene	Fluor-anthene	Flourene	Indeno-(1,2,3-cd)pyrene	2-Methyl-naphtha-lene	Naphtha-lene	Phenan-threne	Pyrene
(Concentration in mg/kg or parts per million)																		
LATHROP (5813-5815 Shellmound)																		
Cambria, October 1994																		
SB-G	09/22/94	5.0	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
SB-N	09/22/94	10.5	380	2,100	960	1,100	nd	nd	1,100	880	870	500	880	650	740	5,900	3,800	2,800
Cambria, December 1994																		
SB-T	12/07/94	5.5	720	nd	250	190	140	120	210	130	290	890	250	110*	170	1,400	1,600	1
SB-X2	12/08/94	5.5	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
C-2	12/09/94	5.5	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
C-3	12/07/94	5.5	nd	1,500	640	540	390	480	810	700	760	2,400	580	500	540	5,700	3,500	2,600
C-3	12/07/94	14.0	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
C-3	12/07/94	15.0	640	1,700	980	920	700	820	1,300	1,200	1,300	3,600	0,850	0,880	0,530	4,400	5,300	4,100

Abbreviations

nd = Not detected, or no limit given by previous consultant.

* = Lab estimated value.

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Table 4. Soil Analytic Data for Metals
- Lathrop Investigation, Emeryville, California

Sample ID	Date Sampled	Sample Depth (ft)	Arsenic	Barium	Chromium	Cobalt	Copper	Lead	Mercury	Nickel	Tin	Vanadium	Zinc
LATHROP (5813-5815 Shellmound)													
Cambria, December 1994													
SB-T	12/07/94	5.5	1.1	170	44	9.0	47	94	0.9	51	18	31	590
C-3	12/07/94	5.5	5.3	550	17	4.6	1,700	400	nd	41	nd	20	370
DTSC	--	--	500	1,000	500	8,000	2,500	1,000	20	2,000	nc	2,400	5,000
TTLIC													

Abbreviations
nd = Not detected, or no limit given by previous consultant
DTSC = Department of toxic Substance Control
TTLIC = Total Limit Threshold Concentration
nc = None established

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Table 5. Ground Water Elevation and Analytic Data for Hydrocarbons and Volatile Organic Compounds (VOCs)
- Lathrop Investigation, Emeryville, California

Well ID	Date	Well Elev. (ft)	GW Depth (ft)	GW Elev. (ft)	TPHcr	TPHg	B	T	E	X	VC	1,1 DCE	1,1 DCA	1,2 DCE	1,2 DCA	1,1,1 TCA	TCE	CA	Notes
(Concentration in ug/l or parts per billion)																			
CROLEY AND HERRING INVESTMENT (5800 Christie Street)																			
MW-1	4/25/94				--	--	nd	nd	nd	nd	nd	nd	9	9	nd	nd	nd	nd	
MW-2	4/25/89	7.42			--	--	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	
	2/20/90		4.26	3.16	--	nd	nd	0.6	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	
MW-3	4/25/89	6.42			--	--	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	
	2/20/90		5.42	1.00	--	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	
MW-4	7/13/94				--	nd	800	280	270	300	nd	nd	nd	nd	nd	nd	nd	nd	
	10/8/93				--	2,200*	290	220	120	200	nd	nd	nd	nd	55	5	nd	nd	
	1/19/94				--	350	210	25	35	37	nd	nd	nd	nd	nd	nd	nd	nd	
EW-1	5/8/89	8.62			--	--	nd	190	nd	170	nd	78	nd	nd	nd	nd	640	nd	
	11/6/89		6.15	2.47	--	740	180	39	0.8	67	29	2.3	34	350	4.8	26	740	nd	
	2/20/90		5.93	2.69	--	12,000	1,300	3,600	7.1	47	nd	14	460	2,500	34	550	1,100	29	14 MC
	5/31/90		5.86	2.76	--	24,000	56	6,100	17	140	2,600	69	1,900	110	33	1,200	830	94	40 MC
	9/7/90		6.30	2.32	--	25,000	1,100	800	nd	42	1,700	36	1,300	2,400	53	510	490	150	22 MC
	12/4/90		7.39	2.23	--	7,400	180	3,200	nd	nd	230	nd	460	1,500	nd	72	1,500	nd	
	4/6/91		6.02	2.60	--	51,000	3,000	12,000	nd	nd	900	nd	1,800	3,700	nd	2,900	1,300	nd	
	7/3/91		6.20	2.42	--	23,000	650	8,700	nd	nd	1,990	nd	2,000	2,000	nd	200	130	170	
	10/12/91		6.50	2.12	--	39,000	nd	1,300	nd	nd	170	nd	630	620	120	470	730	54	
	1/8/92		6.20	2.42	--	nd	nd	580	nd	nd	480	nd	420	1,520	250	89	1,700	nd	
	4/8/92		--	--	--	12,000	4,000	nd	nd	nd	nd	nd	1,300	nd	2,700	nd	2,800	nd	
	7/15/92		6.10	2.52	--	100,00	nd	4,700	nd	nd	150	nd	600	600	110	420	680	nd	
	10/19/92		6.10	2.52	--	26,000	nd	12,500	nd	nd	nd	4,800	nd	nd	nd	nd	270	nd	
	1/11/93		5.50	3.12	--	20,000	nd	7,500	nd	75	nd	nd	nd	nd	nd	nd	23	nd	42 PCE
	3/29/93		5.95	2.67	--	15,000	nd	12,000	nd	nd	nd	500	nd	nd	nd	nd	2,000	nd	
	7/7/93		6.20	2.42	--	40,000	nd	3,600	nd	nd	nd	nd	1,700	nd	nd	nd	nd	nd	
	10/8/93		6.25	2.37	--	12,000	nd	11,000	nd	81	nd	nd	1,600	nd	nd	210	nd	nd	
	1/19/94		6.30	2.32	--	5,000	22	4,300	12	70	nd	nd	nd	nd	nd	nd	nd	nd	



Table 5. Ground Water Elevation and Analytic Data for Hydrocarbons and Volatile Organic Compounds (VOCs)
- Lathrop Investigation, Emeryville, California

Well ID	Date	Well Elev. (ft)	GW Depth (ft)	GW Elev. (ft)	TPHcr	TPHg	B	T	E	X	VC	1,1 DCE	1,1 DCA	1,2 DCE	1,2 DCA	1,1,1 TCA	TCE	CA	Notes
(Concentration in ug/l or parts per billion)																			
LATHROP PROPERTY																			
Cambria Monitoring Well Samples																			
C-1	12/16/94	100.0	3.82	96.18	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	
C-2	12/16/94	99.22	3.33	95.89	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	
C-3	12/16/94	99.24	3.82	95.42	5,100	17,000	1,900	120	5.1	250	nd	nd	nd	nd	nd	nd	nd	nd	
Sewer Water Entering Excavation																			
1,500	10/26/89				--	2,800	32	240	61	400	--	--	--	--	--	--	--	--	
Cambria Boring Grab Samples																			
SB-B	9/22/94				--	49	nd	nd	nd	nd	--	--	--	--	--	--	--	--	
SB-C	9/22/94				--	31	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	1.7 CF, a
SB-D	9/22/94				--	19	nd	2.1	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	0.8 CF
SB-E	9/22/94				--	38	0.78	1.2	nd	1.0	1.8	nd	nd	nd	nd	nd	nd	nd	0.7 CF
SB-G	9/22/94				--	12,000	220	6,500	78	350	190	4.0	440	22	3.6	15	640	nd	1.9 TCA,
SB-H	9/22/94				--	40,000	230	5,200	110	300	430	1.0	1,300	24	9.7	35	82	nd	0.6 TCA,
SB-K	9/22/94				--	13,000	1,000	nd	140	nd	--	--	--	--	--	--	--	--	d
SB-N	9/22/94				--	38,000	8,100	1,500	550	570	nd	nd	nd	nd	nd	nd	nd	nd	
SB-O	9/22/94				--	1,500	4.8	1.0	7.3	10	nd	nd	nd	nd	nd	nd	nd	nd	
SB-P	9/22/94				--	21,000	1,500	150	260	nd	nd	nd	54	nd	nd	nd	nd	nd	d
DTSC MCLs or State Action					--	NE	1	100	680	1,750	--	--	--	--	--	--	--	--	

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Table 5. Ground Water Elevation and Analytic Data for Hydrocarbons and Volatile Organic Compounds (VOCs)
- Lathrop Investigation, Emeryville, California

Well ID	Date	Well Elev. (ft)	GW Depth (ft)	GW Elev. (ft)	TPHcr	TPHg	B	T	E	X	VC	1,1 DCE	1,1 DCA	1,2 DCE	1,2 DCA	1,1,1 TCA	TCE	CA	Notes
---------	------	-----------------	---------------	---------------	-------	------	---	---	---	---	----	---------	---------	---------	---------	-----------	-----	----	-------

(Concentration in ug/l or parts per billion)

Abbreviations

Well Elevation = Top of casing elevation with respect to onsite benchmark
 GW = Ground water
 LPH = Liquid-phase hydrocarbons; calculated ground water elevation corrected for LPH by the relation:
 Ground Water Elevation = Well Elevation - Depth to Water + 0.8 LPH
 TPHg = Total petroleum hydrocarbons as gasoline by modified EPA Method 8015
 B = Benzene by EPA Method 8020
 E = Ethylbenzene by EPA Method 8020
 T = Toluene by EPA Method 8020
 X = Xylenes by EPA Method 8020
 nd = Not detected, detection limit not reported by consultant
 DTSC MCLs = Department of Toxic Substances Control maximum contaminant level for drinking water
 NE = Not established
 VC = Vinyl chloride
 1,1 DCE = 1,1 dichloroethene
 1,1 DCA = 1,1 dichloroethane
 1,2 DCE = Trans 1,2 dichloroethene
 1,1,1 TCA = 1,1,1 trichloroethane
 TCA = 1,1,2 trichloroethane
 TCE = Trichloroethene
 CA = Chloroethane
 CF = Chloroform
 PCE = Tetrachloroethene
 -- = Constituent not analyzed.

Notes

a = 0.7 ppm BDCA
 b = 2,400 cis-1,2 - dichloroethane, 0.5 tetrachloroethene, 1.9 1,1,2 - trichloroethane.
 c = 830 ppm cis- 1,2 - dichloroethene.
 d = the positive result has an atypical pattern for gasoline analysis.
 * = BTEX do not match gasoline pattern.

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Table 6. Ground Water Analytic Data for Polynucleararomatics (PNAs)
- Lathrop Investigation, Emeryville, California

Sample ID and Depth (ft)	Date Sampled	Acenaph-thene	Acenaph-thylene	Anthra-cene	Benzo-(a)anthra-cene	Benzo-(a)pyrene	Benzo-(g,h,i)perylene	Chrysene	Fluor-anthene	Flourene	2-Methyl-naphtha-lene	Naphtha-lene	Phenan-threne	Pyrene
(Concentrations in ug/l or parts per billion)														
LATHROP PROPERTY														
Cambria Monitoring Well Samples														
C-1	12/16/94	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
C-2	12/16/94	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
C-3	12/16/94	150	780	37	7.2*	8.5*	7.3*	20	50	110	490	11,000	260	61

Abbreviations

nd = Not detected, or no limit given by previous consultant

* = Lab estimated value.

(R)

CAMBRIA

Table 7. Ground Water Analytic Data for Metals
- Lathrop Investigation, Emeryville, California

Well ID	Date	Cadmium	Chromium	Lead	Nickel	Tin	Vanadium	Zinc
(Concentration in mg/kg or parts per million)								
LATHROP (5813-5815 Shelimound)								
Cambria, December 1994								
C-1	12/16/94	nd	nd	nd	nd	nd	nd	nd
C-2	12/16/94	na	na	na	na	na	na	na
C-3	12/16/94	nd	nd	nd	0.12	nd	nd	nd

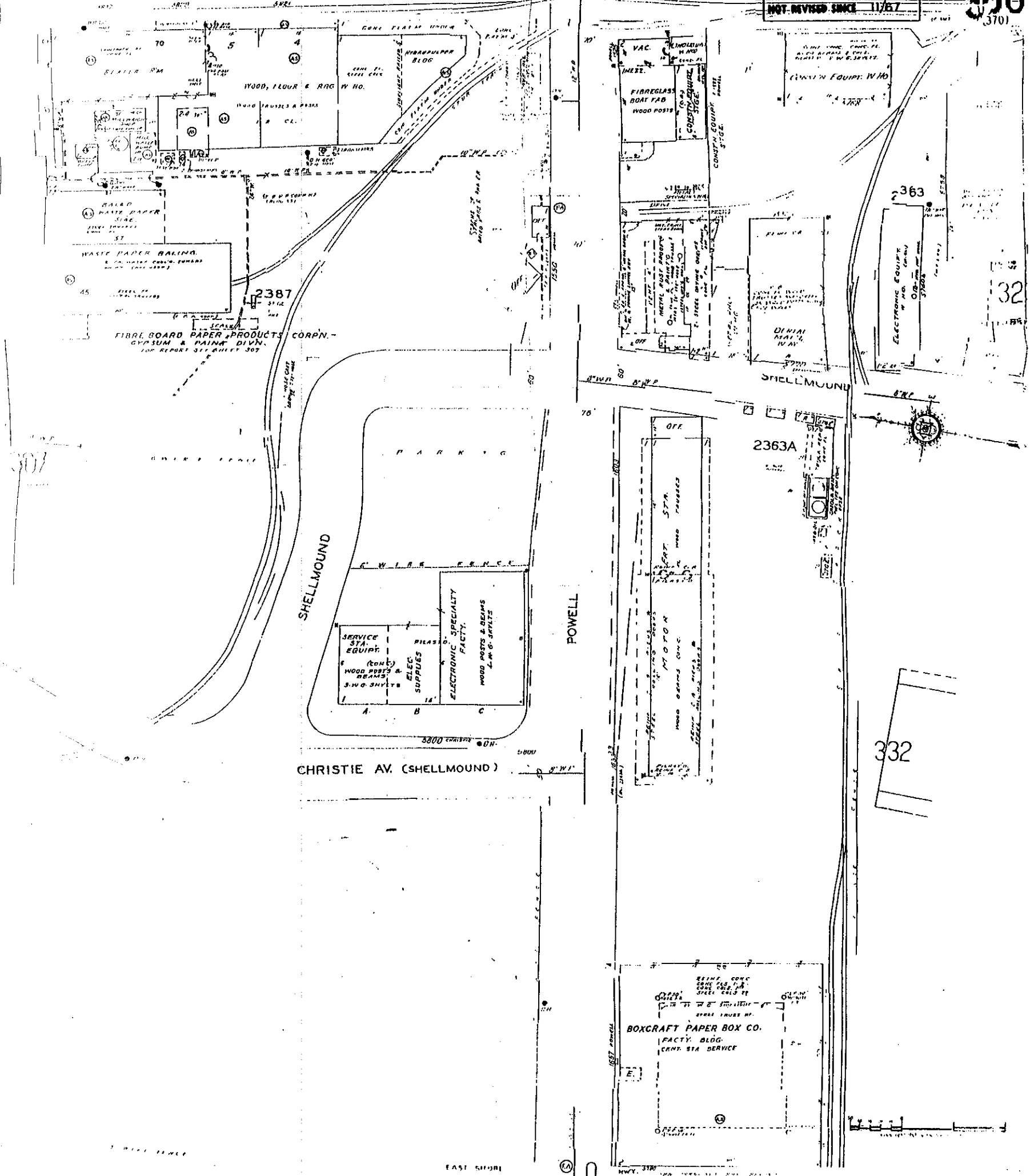
Abbreviations

nd - Not detected, or no limit given by previous consultant

na = Not analyzed

APPENDIX A

Sanborn Maps



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1167
 (YEAR)

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1911
(year)

265

2387

PARAFFINE PRINT CO.

FF
REG. WARE HO.
1000 sq. ft. STUDIOS
PLANNED FLOOR BY GEORGE
THOMAS HUNT

AS
N.N.
MATERIAL DEPT.
CLASS. ROOMS
(FORM. IN STUDIOS)

LL.
REG. WARE HO.
1000 sq. ft. STUDIOS
PLANNED FLOOR BY GEORGE
THOMAS HUNT

G.G.
FACTORY DRIVE

POWELL

UNION OIL CO. CALIFORNIA
DISPOSAL YARD

WESTERN CARBONIC ACID GAS CO.
NOT IN OPERATION. BURNING
NO RECOVERY.

2363

323

262

266

265

OVERLAND AV.

61ST ST.

59TH ST.

265

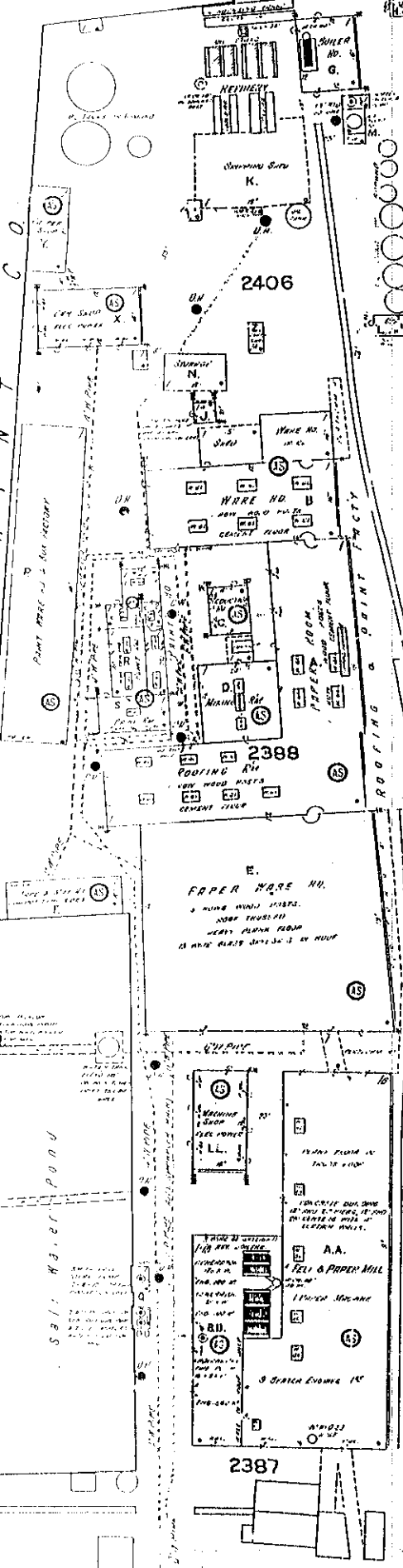
See Map of Berkeley Volume Two

265

EMERYVILLE

PARAFFINE PRINT CO
MILLS OF ROOFING & BUILDING PAPER, PAINT & OIL.

DETAILS AND SPECIFICATIONS OF THE
MILLS OF ROOFING & BUILDING PAPER, PAINT & OIL.
THESE MILLS ARE LOCATED IN THE CITY OF EMERYVILLE,
CALIFORNIA, AND ARE OWNED BY THE PARAFFINE PRINT CO.
THEY ARE DESCRIBED AS FOLLOWS: THE ROOFING MILL
IS A TWO-STORY BUILDING, 100 FEET LONG AND 50 FEET
WIDE, WITH A TOTAL FLOOR AREA OF 5000 SQUARE FEET.
IT IS EQUIPPED WITH THE LATEST MACHINERY FOR THE
MANUFACTURE OF ROOFING PAPER. THE BUILDING PAPER
MILL IS A TWO-STORY BUILDING, 100 FEET LONG AND
50 FEET WIDE, WITH A TOTAL FLOOR AREA OF 5000
SQUARE FEET. IT IS EQUIPPED WITH THE LATEST
MACHINERY FOR THE MANUFACTURE OF BUILDING PAPER.
THE PAINT MILL IS A TWO-STORY BUILDING, 100 FEET
LONG AND 50 FEET WIDE, WITH A TOTAL FLOOR AREA
OF 5000 SQUARE FEET. IT IS EQUIPPED WITH THE
LATEST MACHINERY FOR THE MANUFACTURE OF PAINT.
THE OIL MILL IS A TWO-STORY BUILDING, 100 FEET
LONG AND 50 FEET WIDE, WITH A TOTAL FLOOR AREA
OF 5000 SQUARE FEET. IT IS EQUIPPED WITH THE
LATEST MACHINERY FOR THE MANUFACTURE OF OIL.



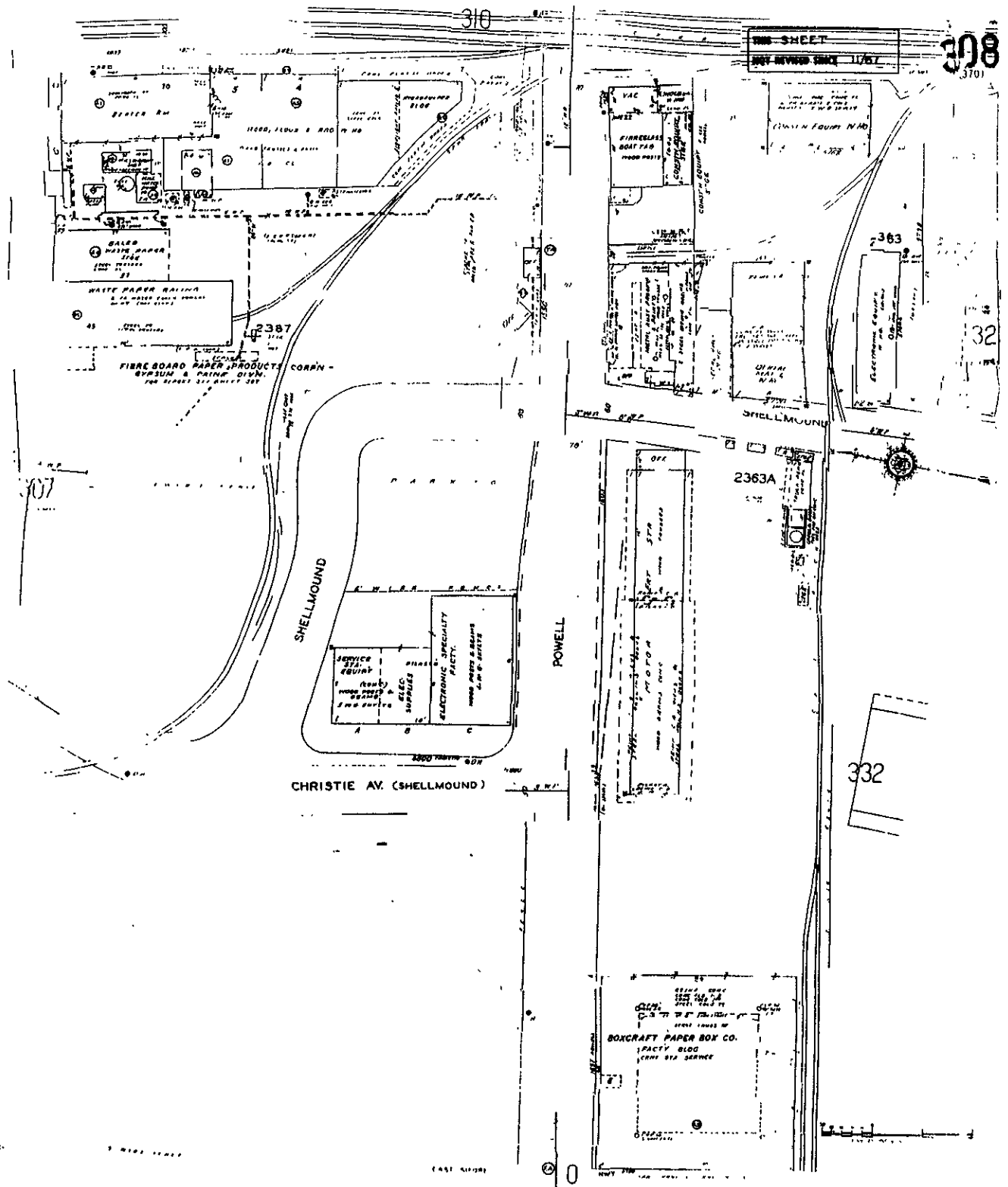
BAY OF SAN FRANCISCO

BAY OF SAN FRANCISCO

31ST ST.

261

Scale of Feet. 0 50 100 150

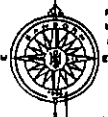


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1163
(1967)

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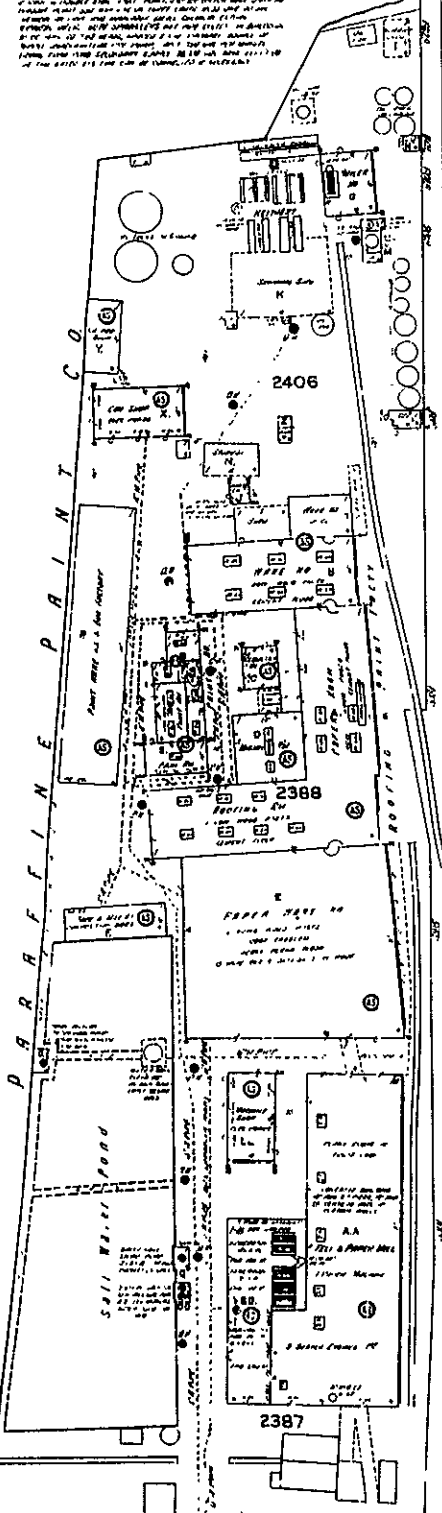


265
MERYVILLE

See Map of Berkeley Volume 742
PARAFFINE PAINT CO
WINS OF ROSSIGNOL & BURNING POWER PAINT & CO

A street map of the city of Berkeley, California, showing the location of the Paraffine Paint Co. and the Wins of Rossignol & Burning Power Paint & Co. The map includes street names, lot numbers, and building footprints. The Paraffine Paint Co. is located on the east side of the map, and the Wins of Rossignol & Burning Power Paint & Co. is located on the west side. The map also shows the Bay of San Francisco to the west and the Overland Ave. to the east.

Bay of San Francisco



OVERLAND AV. 1822-4

262

327 ST

266

Bay of San Francisco

PARAFFINE PAINT CO

POWELL

WESTERN CARBONIC ACID GAS CO

265

2387

N.M. (Paint Shop)

C.C. SEE MAP NO. 1000 IN EXPLANATION

PARAFFINE PAINT CO. SEE MAP NO. 1000 IN EXPLANATION

L.L. SEE MAP NO. 1000 IN EXPLANATION

O.B. (Factory Office)

2363

323

Scale of Feet

NEW SHEET
OCT 1937

2363

WESTERN PIPE
& SUPPLY CO.

32

SHELLMOUND

POWELL

THE PARAFFINE COMPANIES INC
PARAFFINE PRINT CO.
See Spec. 100 Sheet 369

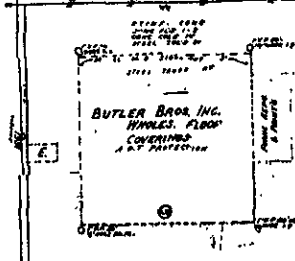
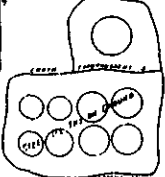
369

CALC. HRA. 2 HIGH

RAV. HOLE
NO. 10

LINBLEUM FAC V
NO. 10 INSPECTION RM

AUTO PARKING



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1951



EAST SHORE

HWY. THE SHORELINE
220' EASING BY BYWAY

APPENDIX B

Area Hazardous Materials Database Search