

**Summary of
Contamination Characterization
and
Sampling Plan for
Delineation of
Soil and Ground Water Constituents**

**1362 and 1384 Ruus Lane
Hayward, California**

CERTIFIED Project S40109

June 22, 1994

**Prepared on Behalf of:
Warmington Homes**

Prepared for:

**City of Hayward
County of Alameda
California Regional Water Quality Control Board**

TABLE OF CONTENTS

<u>Section</u>	<u>Page</u>
INTRODUCTION	1
CONTACTS	2
SITE HISTORY	3
OBJECTIVES	4
SITE DESCRIPTION	5
EVALUATION OF AVAILABLE CHEMICAL CHARACTERIZATION OF SOIL	5
EVALUATION OF AVAILABLE CHEMICAL CHARACTERIZATION OF GROUND WATER	7
SAMPLING PLAN	7

Attachments

- #1 Proposed Sampling Plan
- #2 Selected Bibliography



TO: Mr. Hugh Murphy, City of Hayward
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Environmental Health
Mr. Eddy P. So, P.E., California Regional Water
Quality Control Board

FROM: M. Papineau, CERTIFIED *MP*

DATE: June 22, 1994

SUBJECT: Summary of Site Contamination Characterization and
Sampling Plan for Delineation of Soil and Ground
Water Constituents at 1362 and 1384 Ruus Lane in
Hayward, California

INTRODUCTION

This report summarizes the results of available chemical characterization work completed through March 22, 1994 at 1384 and 1362 Ruus Lane, Hayward (the "Site"). A Sampling Plan is attached hereto as Attachment #1 which recommends additional sampling and analysis to characterize the chemical quality of soil and ground water and to delineate the vertical and lateral extent of any hazardous constituents found therein.

Site Location. The Site consists of two, contiguous, rectangular parcels, with a total land area of 4.47 acres. The Hohener parcel (APN 464-100-1-4) of 2.26 acres at 1384 Ruus Lane and the Tallyn parcel (APN 464-100-1-12) of 2.21 acres at 1362 Ruus Lane are in the U.S.G.S. California, 7.5-Minute, Newark Quadrangle. The parcels are located east of I-880, north of Industrial Parkway West, on the south side of Ruus Lane between Stratford Road and Sims Court (see Figures 1, 2, and 3).

Background. According to CERTIFIED's review of files at the City of Hayward, junk and containerized hazardous waste have been removed from the Hohener parcel for proper disposal, but soil has not been excavated or disposed from either parcel. This was confirmed by telephone contact with Mr. Glen Martinez of the City of Hayward Community Preservation Office. Items disposed from 1384 Ruus Lane consisted of specific equipment, containerized waste, and other dry items specified herein.

Soil chemistry testing has been performed on both parcels, Hohener at 1384 Ruus Lane and Tallyn at 1362 Ruus Lane. A total of approximately 20 near-surface soil samples have been collected and analyzed, 15 samples from the Hohener parcel and 5 samples

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from the Tallyn parcel. Test parameters have included petroleum oil and grease (EPA Methods 8015 or 418.1); diesel, kerosene and gasoline (EPA Method 8015/8020); chlorinated pesticides and polychlorinated biphenyls (EPA Method 8080); metals including lead; industrial solvents (EPA Method 8015); and halogenated volatile organics (EPA Method 8010). Available near-surface soil test data are summarized in Tables 1 and 2, and CERTIFIED's interpretation of the data is provided on pages 5, 6, and 7.

To characterize the chemical quality of ground water, four borings (B-1A, B-2A, B-3A, and B-4A) were drilled by Essenes Environmental to a depth of 12 feet below grade surface (bgs) and were completed as temporary screened borings, to enable collection of grab ground water samples. The apparent reason was to test for potential migration of contaminants off-Site onto the adjoining Rassier property. No detectable fuels, kerosene, motor oil, halogenated volatile organics, or aromatic constituents of fuels were detected in the grab samples.

CONTACTS

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SITE HISTORY

The following historical account is excerpted from the below-listed sources and others referenced in Attachment #2:

CERTIFIED, "Phase One Environmental Site Assessment 1362 and 1384 Ruus Lane, Hayward, California" (February 17, 1994)

Balch Enterprises, Inc. letter dated February 9, 1993

The Site in 1947 was part of a farm. By 1968, a long, north-south, unpaved road ending in a cul-de-sac on the Site appeared to have stored equipment and vehicles around it. The diameter of this storage area is approximately 200 feet, large enough to overlap both the Tallyn and Hohener parcels (combined east-west width of 260 feet).

Jacob Hohener owned 16 acres on Ruus Lane until 1975, at which time he sold the 2 acre parcel to Tallyn and another 12 acres north of the Site to Rassier for Georgian Mobile Home Park. Jacob and son Jack used the Hohener parcel for storing farm equipment, trucks, and grading equipment, legal storage under a valid use permit. In 1988, Jack Hohener rented the rear of the Hohener parcel to Nick Tesse for truck and trailer storage.

By 1989, Nick Tesse had added roofing timbers, tires, unusable equipment (i.e., junk). The extent of the storage area turned junk pile may have expanded to overlap what is now the Rassier parcel to the west (TRC Environmental, June 4, 1991).

Based upon CERTIFIED's review of available correspondence (see Attachment #2), the Hohener parcel may have had storage of the following hazardous materials or waste:

Waste oil	Diesel and gasoline
Motor oil	Shellac
Hydraulic fluid	Paint thinner
Mineral oil	Paint stripper (methyl ethyl ketone)
Kerosene	Paint pigments

Between 1989 and 1992, planning the removal of junk items from the Hohener parcel and actual removal of these items for proper disposal were completed. A letter from the Alameda County Department of Environmental Health, dated February 1, 1993, confirms the removal of junk and elimination of immediate health threat. The county letter also requests further ground water and soil investigation of the Hohener parcel. CERTIFIED believes that satisfaction of the County's request was an objective of the report entitled "Subsurface Investigation of Hohener Property at 1384 Ruus Lane, Hayward (Essenes Environmental, Inc., March 1, 1993).

CERTIFIED believes that the Tallyn parcel was once part of agricultural use in the area. Later, in 1975, Jacob Hohener apparently sold the two acres to Tallyn, from Hohener's 16 acre total holding. G.B. Tallyn has operated a portable toilet business at 1356-62 Ruus Lane. A City of Hayward Fire Department Memorandum notes that formaldehyde was stored on Site in 55-gallon drums (Hayward, City of, January 21, 1992). Review of the current 1993 Hazardous Materials Management Plan for A-1 Sanitation indicates that a substitute non-formaldehyde chemical is now used in place of formaldehyde.

There is no record of underground storage tanks on either parcel, for home heating or farm implement fuel.

OBJECTIVES

Objectives of the Summary and Sampling Plan provided herein are 1) to characterize chemical quality of soil and ground water and 2) delineate vertical and lateral extent of contamination, if any. Data are sought to enable evaluation the appropriateness of alternative remediation strategies, if warranted, or no action.

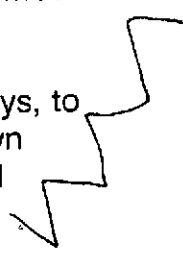
Available documents specified herein were reviewed by CERTIFIED first to evaluate the gaps in the data, and second to reconcile the nature and extent of additional data that is needed to complete the Site contaminant characterization and delineation.

The City of Hayward, Alameda County Department of Environmental Health, and California Regional Water Quality Control Board may rely upon this summary and proposed Sampling Plan by CERTIFIED for their consideration of chemical characterization and assessment of the problem.

SITE DESCRIPTION

The Site consists of two parcels (APN 464-100-1-4 and 464-100-1-12) in Hayward, east of Interstate 880, north of Industrial Parkway West, on the south side of Ruus Lane between Sims Court and Stratford Road. The Site is flat. The parcel at 1356-62 Ruus Lane (APN 464-100-1-12) is currently used by A-1 Sanitation. The other parcel at 1384 Ruus Lane (APN 464-100-1-4) is vacant.

Ward Creek is to the west. Ground water encountered on Site at 10 to 11 feet bgs on February 17, 1993 (Essenes Environmental, Inc., March 1, 1993) flows west southwest toward Ward Creek. *away from site*

Surface soils were logged to consist of brown or black sandy or gravelly, silty clays, to a depth of three feet. From 3 feet to 10 feet bgs, soil types were logged as brown silty clays. Clayey sands and clayey silty sands were logged from 10 feet to total depth of boring at 11.5 feet bgs (Essenes Environmental, Inc., March 1, 1993). 

The surface of 1384 Ruus Lane (Hohener) was observed by CERTIFIED to be uneven with large deep ruts. It is unpaved and weed covered. The parcel at 1356-62 Ruus Lane (Tallyn) is covered with chemical toilets and hard packed soil or crushed rock.

Warmington Homes plans to develop the Site with single-family detached houses.

EVALUATION OF AVAILABLE CHEMICAL CHARACTERIZATION OF SOIL

Previous soil chemistry characterization in 1993 and 1994 appears to provide both sampling/testing of targeted "hot spots" and random locations. Sampling Plans and Sampling rationale were not available for review; therefore, CERTIFIED has reasoned the most likely sampling rationale based upon inspection of sampling location maps and annotations thereto. The sampling rationale is provided in Tables 1R and 2R. Figure 4 illustrates the sampling locations. Figure 5 illustrates the known area of petroleum-affected soil.

According to CERTIFIED's inspection of available test results, near-surface soil contains 50 ± 34 parts per million (ppm) as petroleum oil (EPA Method 418.1 and 8015). Six of the seventeen total test results for oil were above 50 ppm (71, 93, 140, 140, 230, and 230 ppm). Four of these were results for samples (1, 6, 7, and B-1) collected from the south end of the Site at the shared property line between the Tallyn and Hohener parcels.

Lead levels are less than 1000 ppm, the California Total Threshold Limit Concentration (TTLC). Lead levels at certain locations are elevated above the Site's background, expressed here as the median level of 22 ppm, noticeably at sample locations S-1H (330 ppm), 6 (70 ppm), and B-1 (140 ppm). These sample locations coincide with the locations of petroleum oil above 50 ppm in and around the former junk pile. None of the other CAM seventeen metals approaches the California TTLC. *had some lead + waste oil on concrete*

The Site's soil does not appear to have any detectable concentration of gasoline fuel. Detectable diesel concentrations are less than 10 ppm. One peak which eluted in the diesel range was quantified by the laboratory as diesel at 60 ppm (in sample B-6). Sample B-6 also was tested for petroleum oil and was found to contain 230 ppm.

The Site's soil does not appear to have any actionable pesticide residue, PCBs, or aromatic or halogenated volatile organics.

Quality Assurance. CERTIFIED has considered the quality of the available soil test data. Samples appear to have been collected and preserved using accepted methods. Sample Chains-of-Custody are provided with the lab results. Soil samples collected from 11 to 11.5 feet bgs were apparently in ground water; therefore, CERTIFIED has not relied upon or summarized the particular test results of four soil samples (B-1A-11.5, B-2A-11.5, B-3A-11.5, and B-4A-11.5).

Data Gaps. Test results are not available for mineral oil, hydraulic fluid, shellac, or paint thinner, chemicals recorded to have been used or stored on the Hohener parcel. The eastern lateral limit of petroleum-affected soil on the Tallyn parcel is not delineated, and the depth of petroleum oil below 1.5 feet is not delineated. The central portion of the Tallyn parcel has not been characterized.

EVALUATION OF AVAILABLE CHEMICAL CHARACTERIZATION OF GROUND WATER

Grab water samples were collected from temporary screened borings (B-1A, B-2A, B-3A, and B-4A). The borings were completed with temporary well casings and samples were collected with Teflon bailers (Essenes Environmental, March 1, 1993). Fuel, motor oil, kerosene, aromatic and halogenated volatile organics were not detected in any of the four ground water samples.

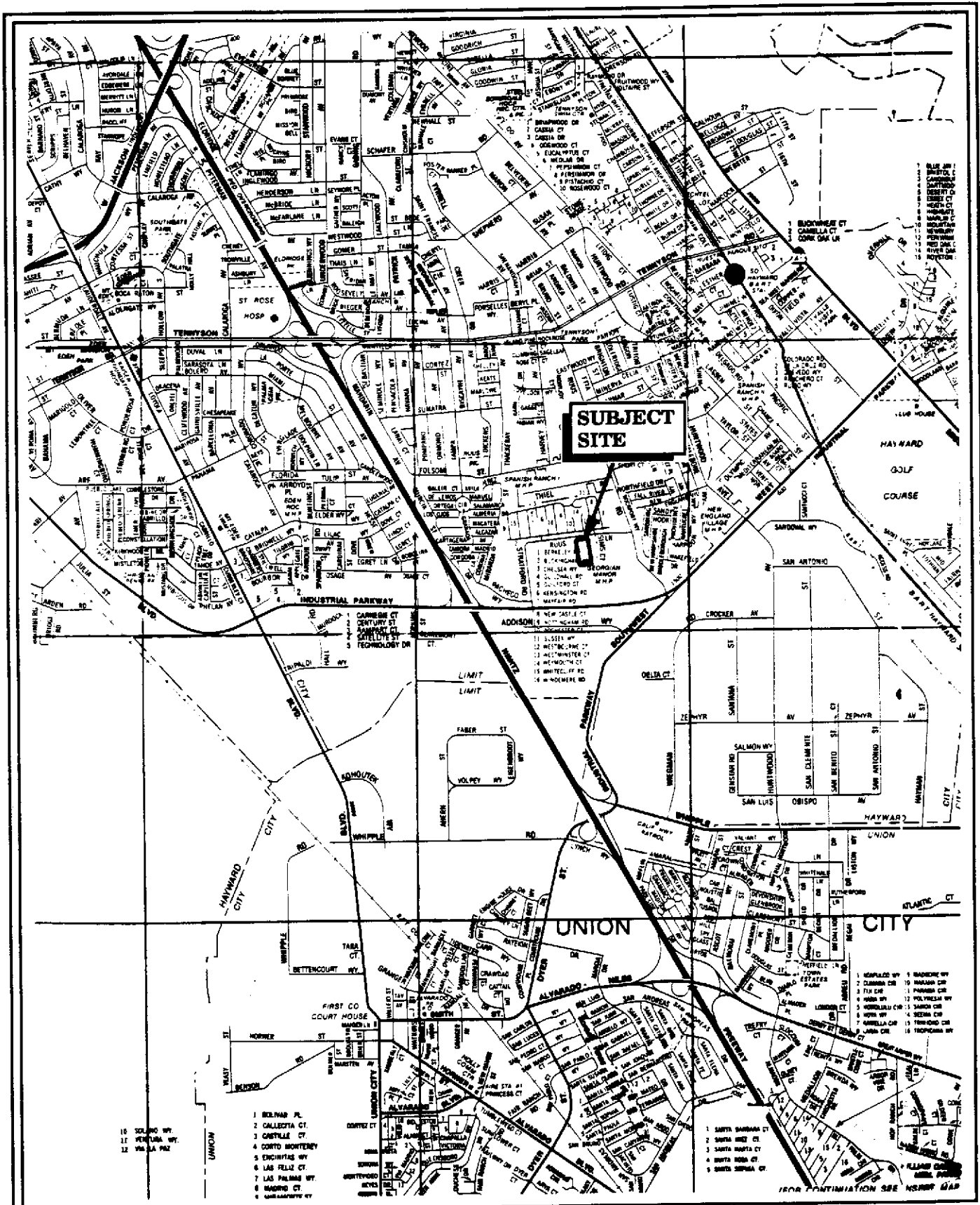
Quality Assurance. There is no record regarding sand filter pack, purging, or time series or sample water conditions (temperature, pH, electrical conductivity, or turbidity). Ground water samples collected for metals analysis may or may not have been filtered in the field. Sample Chains-of-Custody are provided with the lab results.

Data Gaps. Test results are not available for mineral oil, hydraulic fluid, shellac, or paint thinner, chemicals recorded to have been used or stored on the Hohener parcel. Formaldehyde has not been tested. Formaldehyde was used previously in the chemical toilets.

SAMPLING PLAN

CERTIFIED presents its proposed Sampling Plan in Attachment #1. Information will be used to complete the Site Contaminant Characterization and delineate the vertical and lateral extent of known petroleum-affected soil. Data are sought to enable evaluation the appropriateness of alternative remediation strategies, if warranted, or no action.

Warmington Homes has expressed its specific interest in soil scraping and on-Site reuse alternatives including covering the petroleum-affected soil with proposed road base and asphalt. Leaching potential can be characterized for petroleum oil and lead to enable evaluation of this specific on-Site reuse alternative.



SUBJECT SITE

- 1 BELNAP PL.
- 2 CALLETA CT.
- 3 COSTLE CT.
- 4 CONTO MONTREY
- 5 ENCINITAS WY.
- 6 LAS FELIX CT.
- 7 LAS PALMAS WY.
- 8 MADRID CT.
- 9 SAN ANTONIO CT.

- 1 SANTA BARBARA CT.
- 2 SANTA ROSA CT.
- 3 SANTA ROSA CT.
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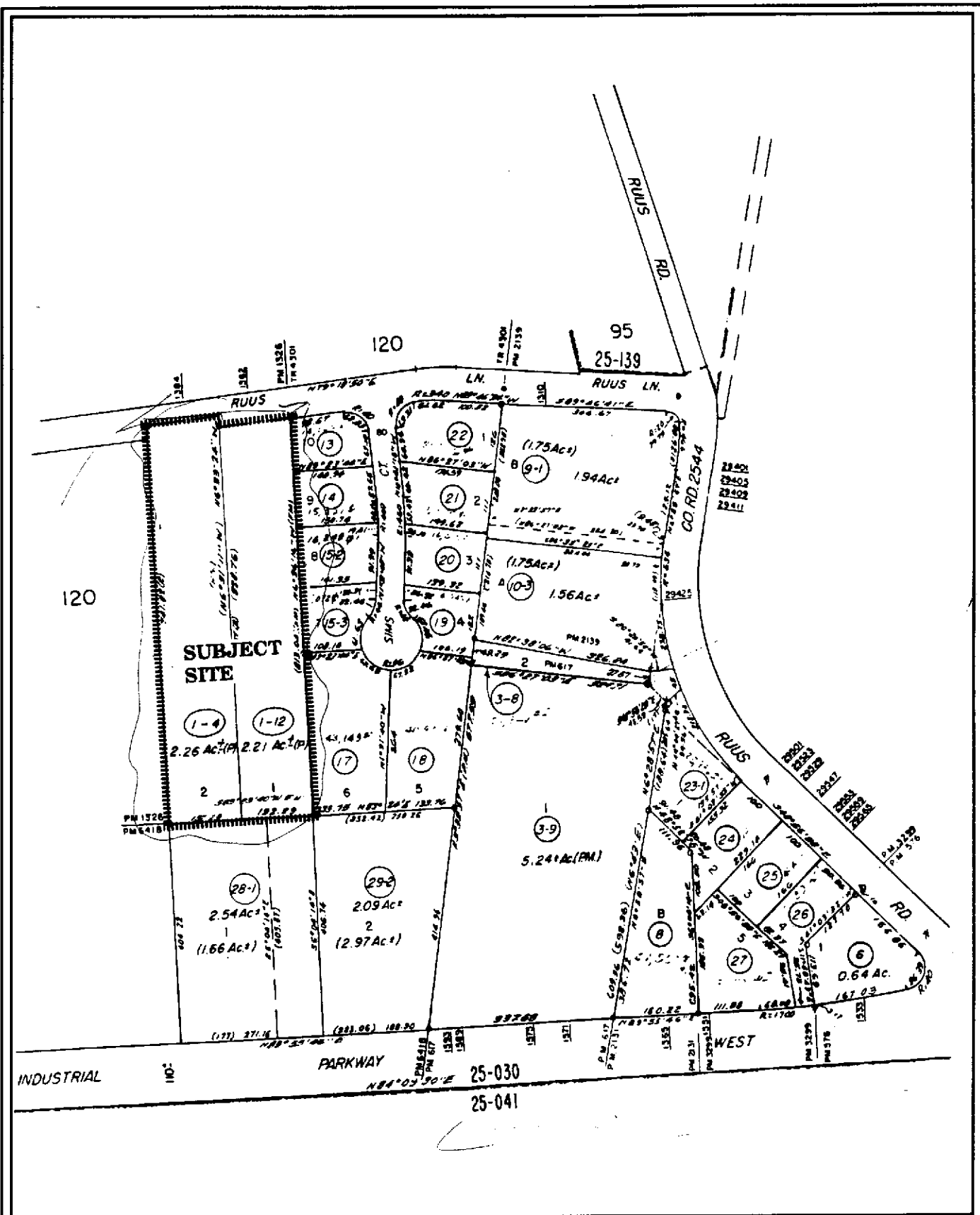

 Scale: 1" = 2400'

FIGURE 1.
LOCAL SITE MAP

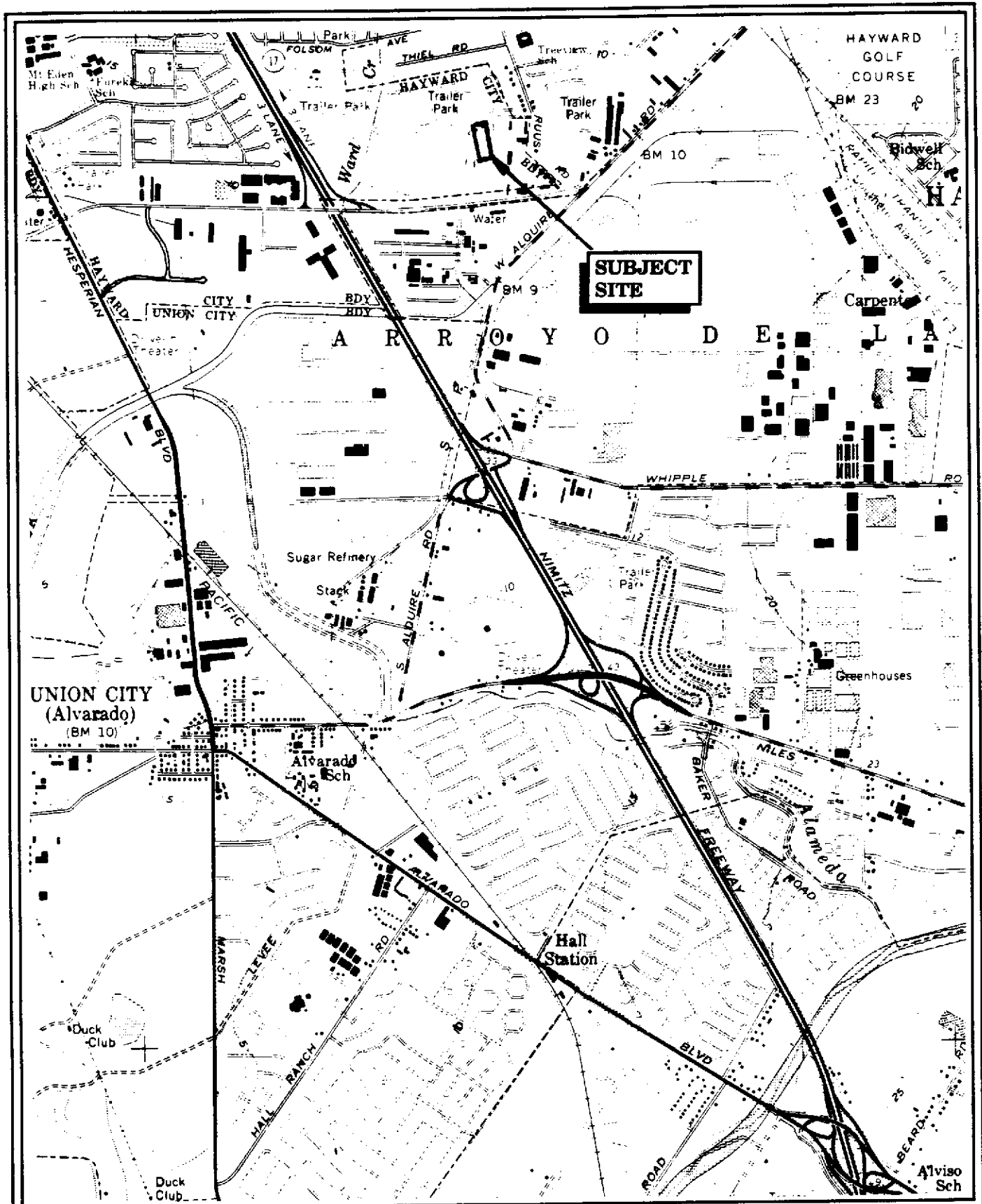


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No Scale

FIGURE 2.
ASSESSOR PARCEL MAP

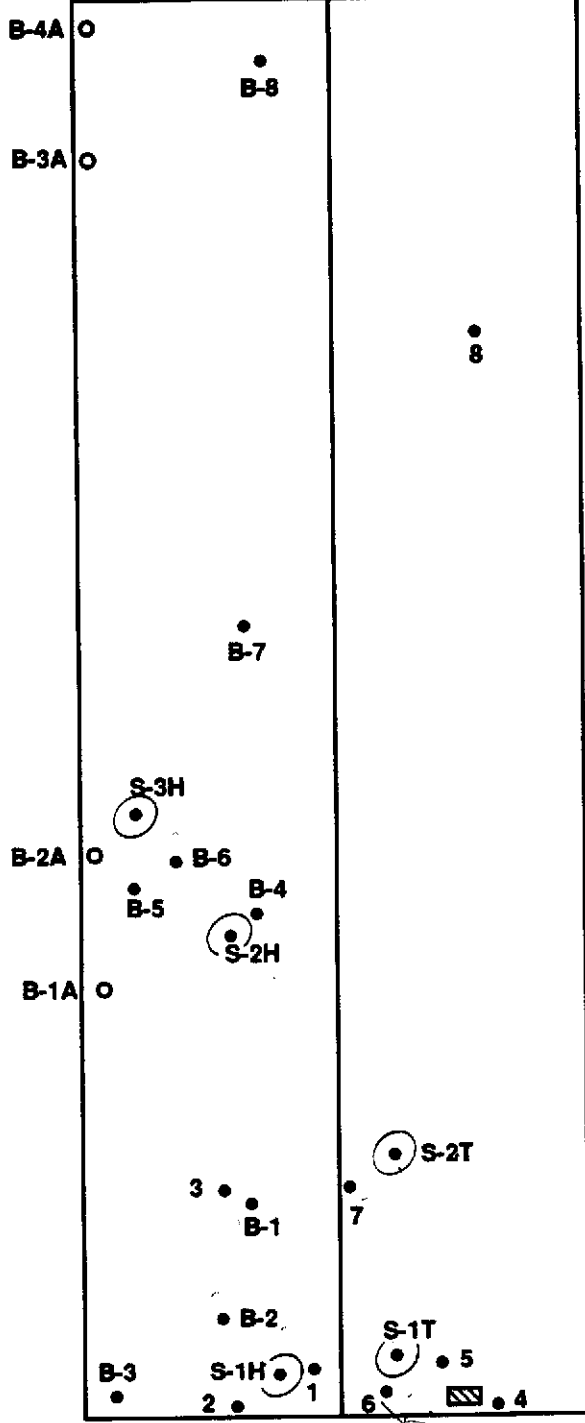



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Scale: 1" = 2000'

**FIGURE 3.
TOPOGRAPHIC MAP**

Ruus Lane



KEY

- Previous grab groundwater sampling location
- Previous soil and grab groundwater sampling *7/10*
- ⊙ Previous soil sampling approximate location
- ▨ Concrete tank pad

Note: Site structures and storage areas are not shown.

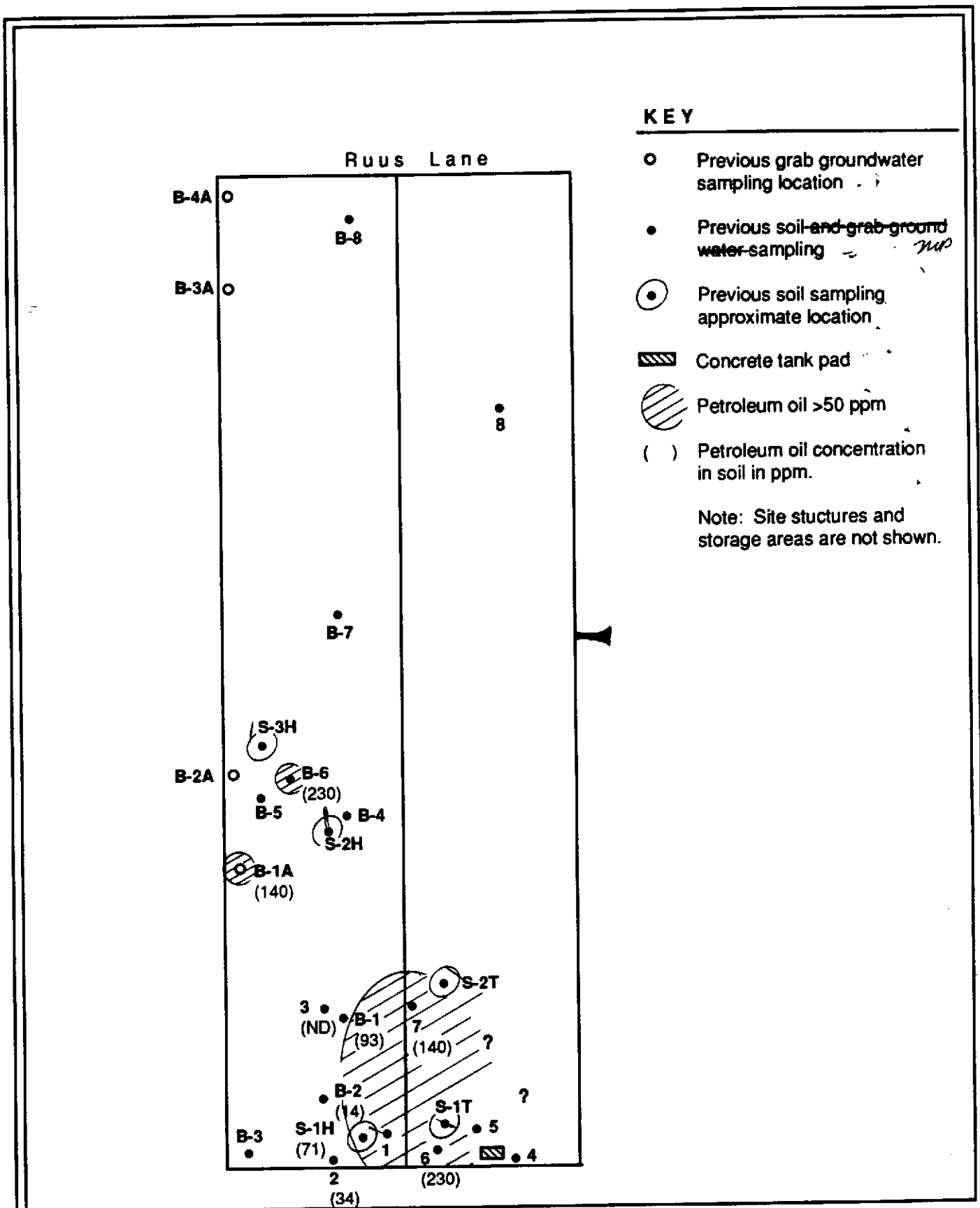


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Scale: 1" = 100'

FIGURE 4.
PREVIOUS SAMPLING
LOCATIONS



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Scale: 1" = 100'

**FIGURE 5.
 KNOWN AREA OF
 PETROLEUM AFFECTED
 SOIL**

TABLE 1. SUMMARY OF CHEMICAL CHARACTERIZATION OF NEAR-SURFACE SOIL AT 1362 RUUS LANE, HAYWARD, CALIFORNIA

(Results in Parts Per Million)

SAMPLE I.D.	DEPTH-- Feet BGS	TEST PARAMETER				
		Petroleum EPA 418.1	Lead	Chl. Pest. EPA 8080	Fuels EPA 8015	Vol. Halo. EPA 8010
S-1T	0-0.5 (a)	NT	36	0.08 (Chlordane)	ND (b)	ND
S-2T	0-0.5 (a)	NT	27	ND	ND (b)	ND
4	1-1.5	NT	NT	ND (0.1)	NT	NT
5	1-1.5	NT	NT	ND (0.1)	ND (c)	NT
6	1-1.5	230	70	NT	NT	NT
7	1-1.5	140	43	NT	NT	NT
8	1-1.5	NT	NT	ND (0.01)	ND (c)	NT
Average		n/s	n/s	n/s	n/s	n/s
95 % Confidence Interval		n/s	n/s	n/s	n/s	n/s
Median		n/s	n/s	n/s	n/s	n/s
Maximum		230	70	0.08 (Chlordane)	ND	ND
Sample Size (N)		2	4	5	4	2

n/s = Not sufficient data to report or sampling was designed to determine maximum concentrations at suspected "hot spots"

ND = Not detected at or above the stated detection limit

NT = Sample not tested for the stated test parameter

(a) Sample depth reported as "surface"

(b) Sample tested for gasoline, diesel, and aromatics.

(c) Sample tested for industrial solvents.

SOURCES: Essenes Environmental, Inc., June 1, 1992

Certified Engineering & Testing Company, Inc., March 22, 1994

TABLE 1R. SAMPLING RATIONALE FOR CHEMICAL CHARACTERIZATION OF NEAR-SURFACE SOIL AT 1362 RUUS LANE, HAYWARD, CALIFORNIA

Sample I.D.	Location	Apparent Rationale
S-1T	Southwest corner near green soil staining	To test soil around stain
S-2T	Chemical toilet wash out	To test soil around wash out area
4	Next to (east side) tank pad	To test soil next to tank pad
5	Next to (west side) tank pad	To test soil next to tank pad
6	Southwest corner of site	To test soil in historic area of former vehicle storage
7	Southwest corner of site	To test soil in historic area of former vehicle storage
8	Next to garage in vicinity of acetylene welding area	To test specific work area

TABLE 2. SUMMARY OF CHEMICAL CHARACTERIZATION OF NEAR-SURFACE SOIL AT 1384 RUUS LANE, HAYWARD, CALIFORNIA

(Results in Parts Per Million)

SAMPLE I.D.	DEPTH-- Feet BGS	TEST PARAMETER				
		Petroleum EPA 418.1	Lead	Chl. Pest. EPA 8080	Fuels EPA 8015	Vol. Halo. EPA 8010
S-1H	0-0.5 (a)	NT	330	ND	5.6 (d)	ND
S-2H	0-0.5 (a)	NT	9	ND	7.1 (d)	ND
S-3H	0-0.5 (a)	NT	19	0.15 (c)	3.6 (d)	ND
S-4H	0-0.5 (a)	NT	5	0.06 (c)	7.4 (d)	ND
B-1	0-0.5	93 (b)	140	ND	ND	ND
B-2	0-0.5	14 (b)	11	ND	ND	ND
B-3	0-0.5	ND (b)	22	ND	ND	ND
B-4	0-0.5	31 (b)	36	ND	ND	ND
B-5	0-0.5	21 (b)	42	ND	ND	ND
B-6	0-0.5	230 (b)	15	(e)	60 (f)	ND
B-7	0-0.5	26 (b)	14	ND	ND	ND
B-8	0-0.5	ND (b)	39	ND	ND	ND
B-1A	0-0.5	140 (b)	35	0.08 (c)	ND	ND
B-2A	0-0.5	26 (b)	61	ND	3	ND
B-3A	0-0.5	25 (b)	44	ND	ND	ND
B-4A	0-0.5	ND (b)	14	ND	ND	ND
1	1-1.5	71	22	NT	NT	NT
2	1-1.5	34	22	NT	NT	NT
3	1-1.5	ND	13	NT	NT	NT
Average		50	47	n/s	n/s	n/s
95 % Confidence Interval		50 ± 34	47 ± 37	n/s	n/s	n/s
Median		31	22	n/s	n/s	n/s
Maximum		230	330	0.15 (Chlordane)	60 (f)	ND
Sample Size (N)		15	19	16	16	16

n/s = Not sufficient data to report or sampling was designed to determine maximum concentrations at suspected "hot spots"

ND = Not detected at or above the stated detection limit

TABLE 2 CONTINUED NEXT PAGE

**TABLE 2 (CONTINUED). SUMMARY OF CHEMICAL CHARACTERIZATION OF
NEAR-SURFACE SOIL AT 1384 RUUS LANE, HAYWARD,
CALIFORNIA**

NT = Sample not tested for the stated test parameter

(a) Sample depth reported as "surface"

(b) Sample tested for motor oil by EPA Method 8015. Detection limit is 10 ppm. Other samples were tested by EPA 418.1 with a detection limit of 15 ppm.

(c) Result reported is chlordane concentration in ppm.

(d) Result reported is diesel concentration in ppm.

(e) p,p'-methoxychlor was detected at 0.007 ppm. Chlordane was not detected at or above the detection limit of 0.005 ppm.

(f) The result reported as diesel was a nondiesel hydrocarbon in the diesel range.

SOURCES: Essenes Environmental, Inc., June 1, 1992

Certified Engineering & Testing Company, Inc., March 22,
1994

TABLE 2R. SAMPLING RATIONALE FOR CHEMICAL CHARACTERIZATION OF NEAR-SURFACE SOIL AT 1384 RUUS LANE, HAYWARD, CALIFORNIA

Sample I.D.	Location	Apparent Rationale
S-1H	Former junk pile	To test soil around junk pile
B-1	Former junk pile	To test soil around junk
B-2	Former junk pile	Same as above
2	Former junk pile	Same as above
3	Former junk pile	Same as above
S-2H	Depressed area of ponding and visible oil stain	To test sediment in ponding and stained area
B-4	Next to ponding area S-2H	To test soil next to ponding area S-2H
B-3	Southwest corner of site	Random samples or to test soil at limit of former junk storage
B-5	Central area south of buildings	Same as above
B-6	Central area south of buildings	Same as above
B-7	Central area south of buildings	Same as above
S-3H	A second depressed area of ponding	To test sediment in ponding area
S-4H	Heavy equipment storage area	To test for fuel or oil residues
B-1A B-2A B-3A B-4A	All four are along the west property line. B-1A is southernmost and B-4A is northernmost at Ruus Lane.	To test grab samples of ground water (for fuels, oil, aromatics, and halogenated volatiles) to address migration of contaminants onto Rassier property to the west

Attachment #1

Proposed Sampling Plan

SITE

The Site consists of two, contiguous, rectangular parcels, with a total land area of 4.47 acres. The Hohener parcel (APN 464-100-1-4) of 2.26 acres at 1384 Ruus Lane and the Tallyn parcel (APN 464-100-1-12) of 2.21 acres at 1362 Ruus Lane are in the U.S.G.S. California, 7.5-Minute, Newark Quadrangle. The parcels are located east of I880, north of Industrial Parkway West, on the south side of Ruus Lane between Stratford Road and Sims Court.

OBJECTIVES

Objectives of the Sampling Plan provided herein are 1) to complete the characterization of chemical quality of soil and ground water and 2) delineate vertical and lateral extent of known petroleum oil and lead in the south portion of the Site, overlapping both the Tallyn and Hohener parcels. Data are sought to enable evaluation of alternative remediation strategies, if warranted, and no action. In particular, reuse of the petroleum-affected soil on Site beneath roads will be evaluated.

Available documents specified herein were reviewed by CERTIFIED first to evaluate the gaps in the data, and second to reconcile the nature and extent of additional data that is needed to complete the Site contaminant characterization and delineation.

The City of Hayward, Alameda County Department of Environmental Health, and California Regional Water Quality Control Board may rely upon this Proposed Sampling Plan for their consideration of chemical characterization and assessment of the problem.

SOIL

Table S-1 presents the proposed sampling and test matrix and sampling rationale. Figure S-1 illustrates the proposed sampling locations. A total of sixteen (16) soil sampling locations are proposed. Eleven (11) of these will be sampled at 1.5 and 3 feet bgs and samples will be tested for petroleum oil (EPA 418.1) to delineate the lateral and vertical extent of petroleum-affected soil in the rear yard near the southern property boundary. An additional five (5) soil sampling locations on the Tallyn parcel will be sampled and tested for a variety of test parameters.

Methods. All test bores will be shallow and augered by hand using an auger to sampling depth. At sampling depth (1 foot and 2.5 feet bgs), a slide hammer with spoon containing one 2-inch diameter x 6-inch long brass sleeve will be lowered into the hole and then driven. Each sample will be retrieved from the spoon, sealed with

foil, end caps, and tape, labeled, and placed in an ice chest with water ice. Samples will be brought to Sequoia Analytical for testing under Sample Chain-of-Custody.

Test parameters will include petroleum oil and lead. Leaching potential will be tested to evaluate the appropriateness of soil scraping and covering petroleum-affected soil on-site beneath proposed road base and asphalt.

GROUND WATER

Table S-1 presents the proposed sampling and test matrix and sampling rationale. Figure S-1 illustrates the proposed sampling locations.

One (1) ground water monitoring well is proposed west southwest of the chemical toilet washout area and known area of surface petroleum-affected soil (see Figure S-1).

Methods. The monitoring well will be constructed as a shallow 15 to 25 foot, 2-inch diameter well with a monument-type cover and locking well cap. A permit application will be submitted to Alameda County Zone 7 Water District. CERTIFIED and drill contractor will comply with all terms of the well permit.

The well will be developed and then purged and sampled on two events, tentatively scheduled in July and September 1994. Well development and purge water will be stored temporarily on-site in a labelled 55-gallon drum pending receipt of test results.

Test parameters will include petroleum oil, diesel, kerosene, mineral oil, shellac, and thinner/stripper (methyl ethyl ketone) by EPA Method 8015 "fuel fingerprint". Halogenated volatile organics will be tested by EPA Method 8010. Test results for fuels/solvents and halogenated volatile organics will be compared to the appropriate detection limits or Maximum Contaminant Levels (MCLs). Formaldehyde will be tested by California DHS Standard Laboratory Requirements and results will be compared to the State of California action level for drinking water (30 ppb).

REPORTAGE

Data will be reported to the listed contacts listed herein. Summary tables, graphics, narrative discussion and recommendations will be included with laboratory letter reports, laboratory QA/QC, and Sample Chain-of-Custody.

SCHEDULE AND TIMING

This work including one well sampling is tentatively scheduled to be completed by **July 30, 1994**. At the discretion of the developer (Warmington Homes) and City of Hayward, certain interim soil remediation may be performed first to scrape petroleum-affected soil, prior to proposed testing and well installation. If so, soil sampling will be performed to test the efficacy of soil scraping, and the proposed well will be installed on the Tallyn parcel closer to the area of toilet washout and within the remediated area of petroleum-affected soil.

SAFETY PLAN

Summary of Hazard Recognition and Plan of Action--Potential worker exposures include exposures to petroleum hydrocarbons, lead, and formaldehyde. Level C protective garments will be worn including boots, gloves, safety glasses, and Tyvek overalls. Respiratory protection will not be required but will be available on the Site. A photoionization detector (PID) will be used to screen soil vapors for volatile organics. Formaldehyde badges will not be required as exposures above the Cal/OSHA 8-hour time weighted average (TWA) of 1 ppm and 15-minute short-term exposure limit (STEL) of 2 ppm are not expected in the ambient environment.

A written Safety Plan will be prepared by the CERTIFIED geologist. A pre-investigation safety meeting with the drill crew and sampling staff will be conducted by CERTIFIED's geologist at the beginning of work on the day of well installation. Surface hand-augering will be performed on the day of well installation.

CONTACTS

DEVELOPER: Mr. Gene Toschi
Warmington Homes
3160 Crow Canyon Place Suite 200
San Ramon, CA 94583

Tel (510) 866-6700 FAX (510) 866-6744

AGENCIES: Mr. Hugh Murphy
City of Hayward
Fire Department
25151 Clawiter Road
Hayward, CA 94545

TEL (510) 293-5454 FAX (510) 293-5017

**Sampling Plan--Page 4
1362 & 1384 Ruus Lane
Hayward, California**

Ms. Madhulla Logan, M.S.
Alameda County Health Agency
Division of Hazardous Materials
80 Swan Way Room 200
Oakland, CA 94621

TEL (510) 271-4320 FAX (510) 568-3706

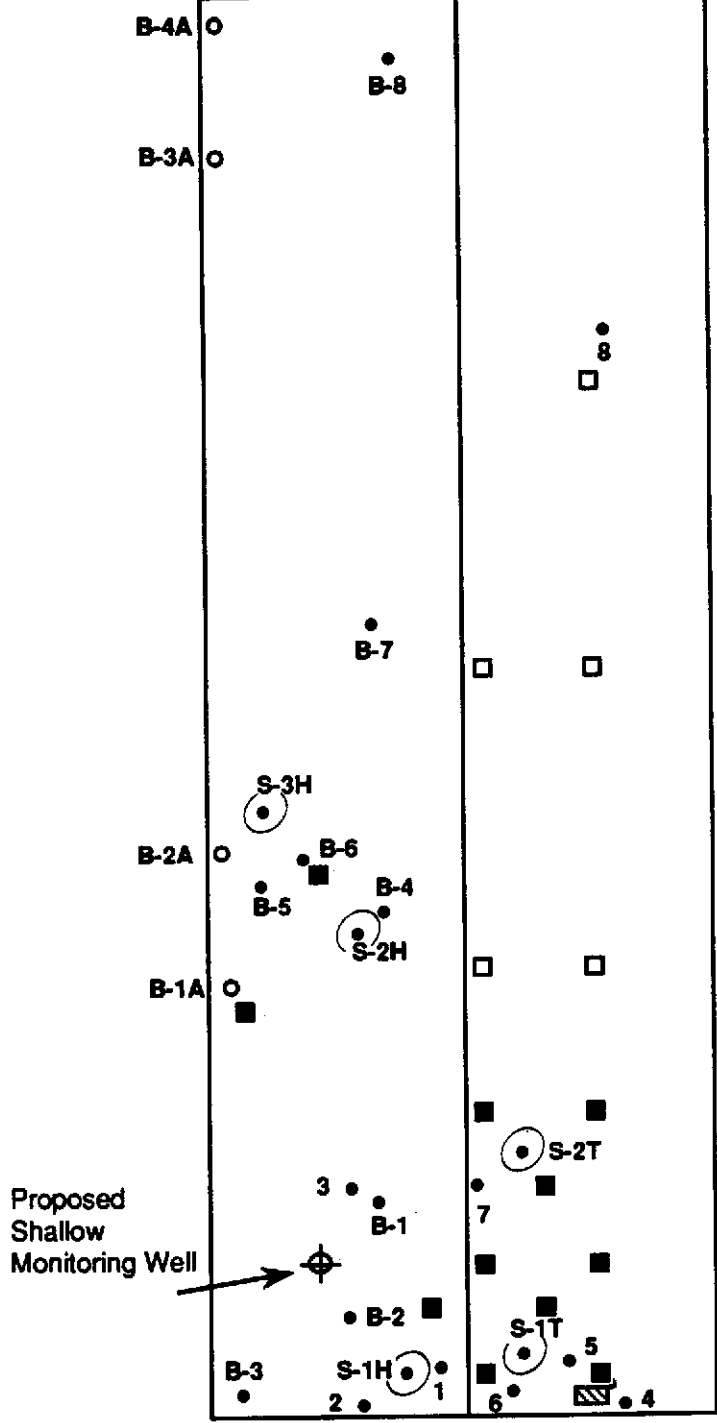
Mr. Eddy P. So, P.E.
California Regional Water Quality Control Board
San Francisco Bay Region
2101 Webster Street Suite 500
Oakland, CA 94612

TEL (510) 286-4366 FAX (510) 286-1380

CONSULTANT: Mr. Marc Papineau
Certified Engineering & Testing Company, Inc.
7000 Marina Boulevard, Fourth Floor
Brisbane, CA 94005

Tel (415) 742-9900 FAX (415) 742-1033

Ruus Lane



KEY

- Previous grab groundwater sampling location
- Previous soil and ~~grab ground~~ water sampling *TUP*
- ⊙ Previous soil sampling approximate location
- ▨ Concrete tank pad
- Eleven (11) soil samples proposed to test the vertical and/or lateral extent of petroleum oil
- Five (5) random samples to characterize soil chemistry of Tallyn parcel.

Note: Site structures and storage areas are not shown.



CERTIFIED -
7000 MARINA BLVD.
FOURTH FLOOR
BRISBANE, CA 94005



Scale: 1" = 100'

**FIGURE S-1
PROPOSED SAMPLING
LOCATIONS**

TABLE S-1. SAMPLING RATIONALE FOR PROPOSED CHEMICAL CHARACTERIZATION AND DELINEATION OF NEAR-SURFACE SOIL AT 1362 AND 1384 RUUS LANE, HAYWARD, CALIFORNIA

Sample I.D.	Location	Rationale
P1-1 through P8-1 and P1-3 through P8-3	Vicinity of known petroleum oil: EIGHT (8) ON TALLYN PARCEL EACH AT TWO DEPTHS	To delineate horizontal and vertical extent of oil
P9-1 through P11-1 and P9-3 through P11-3	Vicinity of known petroleum oil: THREE (3) ON HOHENER EACH AT TWO DEPTHS	To delineate horizontal and vertical extent of oil
R1 through R5	Randomly spread over Tallyn parcel	To characterize Tallyn soil
MW-1	Near the petroleum-affected soil and toilet washout area on Tallyn parcel	To test ground water for potential contaminants

Attachment #2

SELECTED BIBLIOGRAPHY

Correspondence

- 1 Hayward, City of, Fire Department, letter to Thomas F. Camp, Esq. regarding 1384 Ruus Lane (Hohener) (September 19, 1991).
[Requirement that all hazardous materials and wastes to be removed from the Site be documented by mapping and map annotation.]
- 2 Hayward, City of, Fire Department, letter to Thomas F. Camp, Esq. regarding 1384 Ruus Lane (Hohener) (October 8, 1991).
[Record of communication with waste removal contractor Erickson Inc. regarding documentation requirement.]
- 3 Alameda, County of, Department of Environmental Health, letter to Jack Hohener (December 2, 1991).
[Notice of Violation (Hohener). Record of over fifty scattered 55-gallon drums and soil appearing to be contaminated with petroleum hydrocarbons.]
- 4 Camp, Thomas F., Law Offices, letter to Alameda County Department of Environmental Health regarding 1384 Ruus Lane (December 5, 1991).
[Record of intent to remove wastes by Erickson Inc.]
- 5 Alameda, County of, District Attorney's Office, letter regarding receipt of Complaint Report Form and copy of complaint form 11/22/91 (January 6, 1992).
[Record of 30 55-gallon drums containing oil and some containing methyl ethyl ketone (MEK) on Hohener parcel.]
- 6 Hayward, City of, Fire Department, memorandum to Deputy Fire Chief regarding materials stored on 1356-62 Ruus Lane and 1384 Ruus Lane (January 21, 1992).
[A-1 Sanitary Supply at 1356-62 Ruus Lane has 55-gallon drums of formaldehyde and an above ground tank for storage of sewage from portable toilets. Jack Hohener property at 1384 Ruus Lane may have some contamination most likely by petroleum distillates.]
- 7 Camp, Thomas F., Law Offices, letter to Alameda County and Hayward Fire Department regarding 1384 Ruus Lane (Hohener) (March 3, 1992).

- 8 Erickson, Inc., letter to Balch Enterprises regarding 1384 Ruus Lane (Hohener) (May 8, 1992).
[Documents waste liquids hauled from the Hohener parcel for disposal: category #1 (23 partial drums) waste oil, diesel, mineral oil, and kerosene, and category #2 (400 containers) enamel paint, Latex paint, shellac thinners, strippers, and pigments. Copies of Uniform Waste Manifests 90640003 and 90792123 for waste generator CAC000656304.]
- 9 Alameda, County of, Department of Environmental Health, letter to Jack Hohener (June 26, 1992).
- 10 Hayward, City of, Agenda Report (November 17, 1992).
[Addresses history of nuisance and abatement at 1384 Ruus Lane.]
- 11 Alameda, County of, Department of Environmental Health, letter to Hugh Murphy (February 1, 1993).
[Requests further soil and ground water investigation on the Hohener parcel.]
- 12 Balch Enterprises, letter to Ravi Arulanathan of Alameda County Department of Environmental Health (February 9, 1993).
[A chronological summary of historical uses, storage, clean up, and testing of the Hohener property.]

Reports

- 13 Essenes Environmental, Inc., Soil Sampling Hohener Property, 1384 Ruus Lane, Hayward, California (June 1, 1992).
- 14 Essenes Environmental, Inc., Soil Sampling Tallyn Property, 1362 Ruus Lane, Hayward, California (June 1, 1992).
- 15 Essenes Environmental, Inc., Subsurface Investigation Hohener Property, 1384 Ruus Lane, Hayward, California (March 1, 1993).
- 16 Certified Engineering & Testing Company, Inc., Phase One Environmental Site Assessment 1362 and 1384 Ruus Lane, Hayward, California (February 17, 1994).

- 17 Certified Engineering & Testing Company, Inc., Limited Near Surface Soil Chemistry Testing 1362 and 1384 Ruus Lane, Hayward, California (March 22, 1994).
- 18 TRC Environmental Consultants, Preliminary Phase I Site Assessment Northeast Corner of Industrial Parkway West and Stratford Road Hayward, California (June 4, 1991).

Other References

- 19 A-1 Sanitation, 1993 Hazardous Materials Management Plan (September 3, 1993).
[Facility Storage Map, Hazardous Material Inventory Statement, and MSDSs. New oil (55 to 110 gallons), waste oil (165 gallons), Port-a-Fresh Super Q (1 to 4 5-gallon buckets). Port-a-Fresh Super Q contains 1 to 5 percent n-alkyl dimethyl benzyl ammonium chlorides and 1 to 5 percent n-alkyl dimethyl ethylbenzyl ammonium chlorides.]
- 20 U.S. Environmental Protection Agency, Region 9, Drinking Water Branch, Drinking Water Standards and Health Advisory Table (June 1989).



Fire Department



September 19, 1991

Mr. Thomas F. Camp
Law Offices of Thomas F. Camp
3700 Mt. Diablo Blvd.
Lafayette, CA 94549

RE: JACK HOHENER PROPERTY
1384 RUUS LANE
HAYWARD, CA

Dear Mr. Camp:

I have received and reviewed the proposal Erickson, Inc. prepared for the removal of hazardous materials and wastes at 1384 Ruus Lane in Hayward. Although it is difficult to assess the completeness and scope of a project without a detailed inventory of the materials under consideration, the approach and concept of the proposal are acceptable with the following clarifications.

- 1) Unsafe Conditions: The project leader must contact the Hazardous Materials Office of the Hayward Fire Department if an unsafe condition is suspected or telephone the 911 emergency number if an actual or eminent emergency situation exists.
- 2) Health and Safety Plan: A site specific health and safety plan will need to be prepared and available on-site for review prior to commencing operations. This plan must include provisions to insure that only qualified individuals are allowed to work in an area identified as containing hazardous materials and wastes.
- 3) Documentation: All locations where hazardous materials or wastes are located and removed must be entered onto a site map. This map should also include areas of observed or suspected spillage and must be submitted when the summary reports are prepared. The information contained in these reports will be used to facilitate further investigation that may be required for pending development.

Please note that the complete and proper removal of materials identified as hazardous remains the responsibility of the generator and/or property owner. We will be discussing this site with the Alameda County Environmental Health Department and will arrange follow-up inspections as necessary to ensure compliance with the applicable regulations and to determine the need for any further remedial or enforcement actions.

In a recent discussion, you indicated that Mr. Hohener was considering storing four or five 55-gallon drums of new petroleum products. If this is the case, Mr. Hohener will be required to obtain a hazardous materials storage permit, store the materials according to prescribed methods, and complete his reporting obligation by submitting a hazardous materials management plan. These issues can be clarified and completed pending a firm decision on the part of Mr. Hohener.

Sincerely,

JAY SWARDENSKI
HAZARDOUS MATERIALS INVESTIGATOR

JS:vs

cc: Hugh Murphy, Environmental Specialist
John Boykin, Hazardous Materials Coordinator
Debra Margolis, Deputy City Attorney
Ravi Arulanantham, Alameda County Environmental Health Department



CERTIFIED

7000 Marina Boulevard, 4th Floor, Brisbane, CA 94005
(415) 742-9900 • Fax (415) 742-1033

LETTER OF TRANSMITTAL

TO <i>MS. MADHULLA LOGAN</i>	DATE <i>6/23/94</i>
<i>ALAMEDA COUNTY</i>	CERTIFIED PROJECT NUMBER
	CLIENT PROJECT NUMBER <i>S40109</i>
ATTENTION	SAMPLE NUMBER
RE: <i>1362 AND 1384 RUVS LN.</i>	

WE ARE SENDING YOU Enclosed Under separate cover via _____ the following items:

Proposals Reports Drawings Samples Specifications Copy of letter Change order

DATE	COPIES	DESCRIPTION
<i>6/22/94</i>	<i>1</i>	<i>1362 AND 1384 RUVS LANE HAYWARD, CA</i>

THESE ARE TRANSMITTED as checked below:

For approval Approved as submitted Resubmit ___ copies for approval

For your use Approved as noted Submit ___ copies for distribution

As requested Returned for corrections Return ___ corrected prints

For review and comment _____

FOR BIDS DUE _____ 19 _____ PRINTS RETURNED AFTER LOAN TO US

REMARKS

SIGNATURE *M. Murphy* COPY TO *HUGH MURPHY*
EDDY P. SO

If enclosures are not as noted, kindly notify us at once.



Fire Department



October 8, 1991

Mr. Thomas F. Camp
 Law Offices of Thomas F. Camp
 3700 Mt. Diablo Blvd.
 Lafayette, CA 94549

RE: Jack Hohener Property
 1384 Ruus Lane, Hayward, CA

Dear Mr. Camp:

I have recently discussed with Erickson's representative, Mr. Bruce McCausland, the removal of hazardous materials and wastes from 1384 Ruus Lane in Hayward. We focused on issues raised in a letter from this office dated September 19, 1991 with the following results:

- 1) A site specific health and safety plan has been prepared and will be maintained on-site for review throughout the project.
- 2) All locations where hazardous materials or wastes are removed will be entered onto a site map and the map will also include areas of observed or suspected spillage.
- 3) The project work plan as presented includes only those materials and wastes characterized as "readily accessible." It does not include materials that may be contained in the various locked cargo boxes, nor has anyone approached this office with plans to address these inaccessible areas.

I must reiterate that the complete and proper removal of all materials that are or could potentially be classified as hazardous is the responsibility of the generator and/or property owner. We have arranged with the Alameda County Environmental Health Department to conduct an inspection of the site on October 25, 1991 to assess the progress of the

*9:30 AM w/ Ravi Anubhavanathan
 - Letter to owner/cc to Attorney w/in ~10 days*

remedial measures and to determine the need for enforcement actions.
Please contact me at 293-8695 if you wish to discuss these issues further.

Sincerely,



Jay Swardenski
Hazardous Materials Investigator

JS:lo

cc: Debra Margolis, Deputy City Attorney
Cynthia Palacio, Community Preservation
Ravi Arulanantham, ACEHD

10/1/11 Homeer MAILING ADDRESS:

3686 Beards Rd
Fremont, CA 94538

ALAMEDA COUNTY
HEALTH CARE SERVICES

AGENCY

DAVID J. KEARS, Agency Director



DEPARTMENT OF ENVIRONMENTAL HEALTH
Hazardous Materials Program
80 Swan Way, Rm. 200
Oakland, CA 94621
(415)

Certified Mail #: P 367604340

December 2, 1991

Mr. Jack Hohener
3686 Beard Road
Fremont, CA 94538

RECEIVED BY
HAZARDOUS MATERIALS OFFICE

DEC 06 1991

HAYWARD FIRE DEPARTMENT

RE: Jack Hohener Property
1384 Ruus Lane, Hayward, California

NOTICE OF VIOLATION

Dear Mr. Hohener:

I visited your property at 1384 Ruus Lane, Hayward on 10/25/91. Mr. Jay Swardenski of the Hayward Fire Department was also present at the time of the visit (please refer to the Hayward Fire Department's letter dated 10/08/91). Walking through your property I noticed that there were several damaged drums, most of them without any labels, scattered all over the property (we counted more than fifty drums during our visit). In several areas the soil appears to be contaminated with petroleum products. This property is clearly a public health hazard for residents living nearby

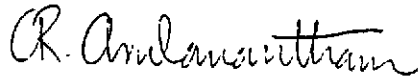
Several agencies have repeatedly requested that you take steps to mitigate the potentially dangerous situation that exists at your property. The City of Hayward has given you ample time and also provided the necessary resources that you would need to resolve this problem. However, very little progress has been made so far and the property still remains a potential health hazard to the nearby communities. I strongly urge you, therefore, to immediately address the concerns we have regarding the condition of your property (communicated to you and your attorney in several letters by the Hayward Fire Dept.). Pursuant to the California Code of Regulations (CCR), Title 22, section 66272.1., please submit a written plan of correction to this office, to reach me before December 15, 1991.

On receipt of your letter I will schedule a meeting with you and all other regulatory agencies to arrange for a suitable time table that you will follow, until the property is cleaned and


does not pose any more threat to the public. If the time table agreed upon is not reached, this case then will be referred to the District Attorney for legal actions.

Mr. Hohener, I would like to reiterate that this office, as the lead Agency for the management of hazardous materials and wastes, in Alameda County, is willing to cooperate with you to resolve this problem in a timely manner. If you have any questions regarding this letter, please contact me at 271-4320.

Sincerely,



Ravi Arulanantham
Hazardous Materials Specialist

cc: Gil Jensen, Alameda County District Attorney, Consumer and
Environmental Protection Division
Howard Hatayama, Regional Administrator, Region II,
California Environmental Protection Agency
Rafat Shahid, Director, Alameda County Department of
Environmental Health
 Edgar Howell, Chief, Hazardous Materials Division
Hugh Murphy, Environmental Specialist, City of Hayward Fire
Department
Jay Swardenski, Hazardous Materials Investigator, City of
Hayward Fire Department
Debra Margolis, Deputy City Attorney, City of Hayward
John Boykin, Hazardous Materials Coordinator, City of Hayward
Fire Department
Cynthia Palacio, Community Preservation, City of Hayward
Thomas Camp, Law offices of Thomas Camp

Law Offices of Thomas F. Camp**A Professional Law Corporation****3700 Mt. Diablo Boulevard
Lafayette, California 94549
Telephone: (415) 284-7881
FAX: (415) 284-7888**

December 5, 1991

**Ravi Arulanantham
Hazardous Materials Specialist
Department of Environmental Health
Hazardous Materials Program
80 Swan Way, Room 200
Oakland, CA 94621****Re: Jack Hohener Property
1384 Ruus Lane, Hayward, California
Our File No. 4862**

Dear Mr. Arulanantham:

This office has represented Mr. Hohener for several months in regard to the hazardous material problems at 1384 Ruus Lane.

Under agreements and directives from Mr. Swardenski of the Hayward City Fire Department, a plan for removal of the hazardous waste materials has been in place. Just since your inspection and immediately before your letter, we were able to complete the agreements necessary to issue to Erickson Company (an approved City of Hayward hazardous waste material contractor) to remove the hazardous waste materials. This work has been started and it is my understanding will be finished toward the end of the week of December 2.

It is our plan to immediately go into a clean-up of the balance of the debris on the property and it is Mr. Hohener's sincere intent to have the property completely cleaned at or around the turn of the year.

I am hopeful that based on the progress that is presently being made, no further action from your department will be necessary. Nevertheless, if you would wish to schedule the meeting that you speak of in your letter of December 2, would you please contact me at your earliest opportunity.

Thank you very much for your cooperation.

Very truly yours,

LAW OFFICES OF THOMAS F. CAMP

THOMAS F. CAMP

TFC/dmh

cc: Jack Hohener



Alameda County
District Attorney's Office
John J. Meehan, District Attorney

RECEIVED BY
HAZARDOUS MATERIALS OFFICE

JAN 16 1992

HAYWARD FIRE DEPARTMENT

January 6, 1992

Hayward Police Department
Attention: Detective Bob Gillis
300 West Winton Avenue
Hayward, California 94544

Dear Bob:

I just received this carbon copy "Complaint Report Form" from the California State Department of Health Services (DOHS). The amount specified on the complaint form, "thirty 55-gallon drums, mostly oils, MEK too" would be a substantial abandonment case under 25189.5 Health and Safety Code. (See attached copy of Health and Safety Code section). Would you look into this and let me know the results?

"MEK" is a known abbreviation for methyl ethyl ketone which is listed in Title 22 of the California Code of Regulation. (See attached copy of section 66680, subsection 499 and 500).

If you need any assistance, please let me know.

Very truly yours,

JOHN J. MEEHAN
DISTRICT ATTORNEY

By:


Donald Harris
Inspector

JJM:DH:shb
enclosures

NOTE
1-15-92 Checked with RICHARD GODFREY AND GARY RAUER AT
795-9080 AND 796-0653. DESCRIBED THE DUMP SITE AS
BEING ON RULIS LN. THIS SITE PRESENTLY UNDER INVESTIGATION.
Det. Gillis

COMPLAINT REPORT FORM (Use ball-point pen.)

Is this an emergency? Yes No If yes, call the Office of Emergency Services (OES): 800-852-7550

Log Number: 021110072 Date Complaint Received: 11-22-91 Time: 9:30 Received By: B. EDWARDS

Notifications made (Yes) (No) Prop. 65 Local agency Who? Alameda County HAZ MAT MAR SE

INFORMANT

Name: RICHARD GODFREY

Address: _____

City: _____ Zip: 475-2900

Phone: (510) 795-9080 475-8112
(510) 475-2905 (PAGER)

Confidential OR Anonymous: (Check one.)

ALLEGED RESPONSIBLE PARTY TIM SPATES

Name: VACANT Lot ABANDONED House

Firm: JACK HORNER Property

Address: West End of Baisard Rd HAYWARD

City: HAYWARD Zip: _____

County Code*: 1 Phone: () _____

COMPLAINT DATA

Date of Incident: NOV 20 1991 Allegation Code*: D, E Quantity: _____

Type/Condition of Containers Visible: THIRTY 55 GAL DRUMS MOSTLY OILS - MER TOL

Source of Complaint/Code*: D If Code A, Specify: _____

Response Code*: R Region/Agency Referred To: ALAMEDA CO ENV (Hercules)

Other Comments: _____

LARGE GRAY ABANDONED HOUSE, TRUCK (HORNER) IN FRONT
SOMEONE NAMED (NICK) ACCEPTS HOLE + DUMPS IN VACANT
LOT BEHIND ABANDONED HOUSE.

SOILS ARE CONTAMINATED. DRUMS SHOULD BE
VISIBLE FROM STREET.

THE CITY OF HAYWARD MAY KNOW ABOUT IT.

I CALLED THE COUNTY & TOLD HIM ABOUT IT

Response Date: _____ Investigator: _____ Date Assigned: _____

Note: Information to be transferred to complaint log is highlighted in bold italic print. Attach an addendum if necessary.

* See code on reverse side

CITY OF HAYWARD
FIRE DEPARTMENT

JANUARY 21, 1992

TO: JOHN HUTCHINS, DEPUTY FIRE CHIEF
FROM: HUGH MURPHY, ENVIRONMENTAL SPECIALIST
THROUGH: JOHN BOYKIN, HAZARDOUS MATERIALS COORDINATOR
SUBJECT: Balch/Rassier Property GPP 90-22/ZC-23 and GPP 90-14/ZC-14

In reviewing the proposed project, there are currently no hazardous materials concerns on the project property. A Phase 1 and Phase 2 Environmental Review was done on the subject project property by qualified environmental firms. No level of contamination was discovered on the property that would require clean up.

The majority of the businesses in the area appear to be related to the auto/truck service industry (i.e., auto body shops, towing services, and repair services). These industries use and store low amounts of hazardous materials such as lubricants, solvents, and paints.

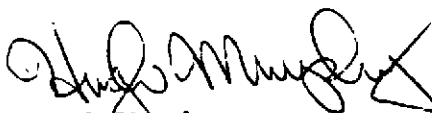
There are several businesses that have moderate to high amounts of hazardous materials in the vicinity, including:

- 1) Middleton Welding (1593 Industrial Parkway West) - Welding supply company that supplies flammable, oxidizing, and non-flammable gases in compressed gas cylinders to the welding industry. There is no storage of poisonous gases at this facility.
- 2) Bay Area Diablo Petroleum (1565 Industrial Parkway West) - Stores fuel in underground storage tanks. There is also above ground storage of 55-gallon drums of petroleum distillates including oils, fuels, and solvents.
- 3) A-1 Sanitary Supply (1356 Ruus Lane) - Services portable toilets, has storage of 55-gallon drums of formaldehyde. They have a large above ground storage tank that is currently empty but has been known to have sewage from portable toilets. There is indications that there may have been illegal discharges of materials from portable toilets on the soil. This is currently being investigated.
- 4) High Luster Metal Finishing (29527 Ruus Road) - Metal plating shop, that will be moving out of their current facility to American Avenue within the next several weeks.

- 5) Silva Pipeline (1310 Ruus Lane) - Storage of fuel in underground tanks. There currently is no contamination indicated on this property from the fueling operations.

- 6) Jack Hohener property (1384 Ruus Lane) - This property has been an issue of many public complaints because of dumping of vehicles, trash, etc. The property is currently being cleaned up by the owner, Mr. Hohener, under requirement from the City and the County. Hazardous materials and hazardous waste was used and stored on the property. Mr. Hohener has contracted with a hazardous waste disposal company to search the property and to remove and dispose of any hazardous materials found on the property. Currently these materials have been segregated by the hazardous waste company on the property and are awaiting proper disposal off site in the next few weeks. There may be some contamination on the property, most likely by petroleum distillates. It is recommended that if this property is ever to be developed, that an environmental assessment be done by a qualified individual.

If you have any questions, please give me a call at extension 5454.



Hugh Murphy
Environmental Specialist

cc: Jay Swardenski, Hazardous Materials Investigator
Rhoda Alvarez, Associate Planner

Law Offices of Thomas F. Camp

RECEIVED BY
HAZARDOUS MATERIALS OFFICE

A Professional Law Corporation

MAR 04 1992

3700 Mt. Diablo Boulevard
Lafayette, California 94549
Telephone: (415) 284-7881
FAX: (415) 284-7886

March 3, 1992

3/9/92 • Discusses w/ Camp
OK to implement

• Called Hohener - N/A

Jay Swardenski
Environmental Officer
Hayward Fire Department
2151 Clawiter Road
Hayward, CA 94545-2731

Ravi Arulanantham
Hazardous Materials Specialist
Department of Environmental Health
Hazardous Materials Program
80 Swan Way, Room 200
Oakland, CA 94621

Re: Jack Hohener Property
1384 Ruus Lane, Hayward, California
Our File No. 4862

Gentlemen:

This letter is intended as a brief but complete plan on behalf of Jack Hohener for the removal of the balance of the materials located on his property on Ruus Lane, Hayward, California.

We have identified 33 specific items remaining on the property at this time. They are listed on the attachment to this letter. Our proposal for removal of the balance of the materials would be as follows:

1. Mr. Hohener wishes to maintain several of the pieces of equipment and he will do that by moving them to one of two places in Stockton, California, 3132 Farmington Road and/or 2710 Loomis Road.

2. All of the batteries will be taken for disposal to American Battery Company, 22851 Sutro Street, Hayward, California in appropriate lot sizes.

3. The lumber will be disposed of at Waste Fibre Recovery, 1900 West Winton Avenue, Hayward, California.

4. Junk metal, including cut steel, etc. will be delivered to Schnitzer Steel, Co., Adeline Street, Oakland, California.

Mr. Jay Swardenski
Mr. Ravi Arulanantham
Re: Jack Hohener Property
March 3, 1992
Page 2

5. Automotive equipment and parts to be junked will go to Dorris Auto Wreckers, 3720 Depot Road, Hayward, California.

6. Junk and unsalvageable tires will be taken to Royster Tire Company, Tracy, California.

7. The loose junk and debris will be taken to either the Durham Road Landfill, 7010 Durham Road, Fremont, California, or BFI Waste Systems, 4001 N. Vasco Road, Livermore, California.

It is Mr. Hohener's belief that the above-designated recipients of the materials presently on the site will cover all of the stuff to be moved. Mr. Hohener will maintain weigh bills and/or receipts from disposal of all of the material turned over to others, and otherwise comply with all of the removal requirements and statutes.

Mr. Hohener will get started on this work within ten (10) days of receiving approval from your offices of this plan and he expects to be completed within 60 days and absolutely no longer than 90 days.

If for some reason the contents of this letter are not sufficiently specific for the offices of either of you, would you please give me a call and advise me how I could give you more detail.

I look forward to hearing from you shortly, hopefully with approval of this plan so that Mr. Hohener can resume the removal activities that he had underway at the time of the hearing in Mr. Jensen's office in early February.

Thank you for your cooperation.

Very truly yours,

LAW OFFICES OF THOMAS F. CAMP


THOMAS F. CAMP

TFC/dmh

Enclosure (Attachment)

1. 1952 GMC Truck
2. Truck rear axle, dual drive
3. Bare diesel engine
4. Overhead pulling hoist, drum and wheel
5. Winch frame and drum UC 60-RED
6. Two covered trailers (converted)
7. Single axle trailer
8. Geringer yard lift with G-71 engine
9. 1952 GMC truck (in shed)
10. Air compressor
11. Forklift engine
12. D-2 Cat farm tractor
13. 1951 Ford blue pick up
14. Kaiser auto
15. Water trailer - 500 gallon
16. 1949 Ford 1 ton cab and chassis - black
17. Old Dodge fire truck 1 1/2 ton
18. 12 foot single axle pull trailer
19. Crane boom truck, 2 axle
20. Body only - 21 flatbed
21. Bottom dump trailer, single axle
22. Two sets of bottom dump trailers
23. One farm pull disk
24. Four empty metal truck containers on ground and trailers
25. Approximately 100 tires and wheel miscellaneous
26. One cooler box with some old furniture inside
27. Approximately 15 car and truck batteries
28. 12-15 timber trusses
29. Six old camping or house trailers
30. 1500 to 2000 board feet of miscellaneous lumber and timbers
31. 50 to 75 cubic yards of miscellaneous construction debris
32. Five to ten cubic yards of miscellaneous junk pulled from containers during search for hazardous materials.
33. Eight to ten truck loads of various junk scattered throughout



ERICKSON
266 Parr Boulevard, Richmond, California 94801
(510) 235-1393 • FAX (510) 235-3709

ERICKSON, Inc.

May 8, 1992

Balch Enterprises
30960 Huntwood Ave.
Hayward, CA 94544

Attn: Sherman Balch, Sr.

The following is a breakdown of the waste material hauled off site (Hohner Property).

The liquids on site were collected and profiled using the following two categories:

1. Waste oil and related combustible liquids (ie. diesel, mineral oil, kerosene).
2. Paint related materials-Consisting of enamel paint, latex paint, paint pigments, shellac, thinners and strippers.

The material in category #1 was generated from approximately 23 partial drums.

The material in category #2 was generated from approximately 400 containers of various sizes.

The containers and drums from both categories were rinsed or scraped clean and crushed. These containers along with 80 plus empty drums resulted in approximately 10 yards of material shipped to Kettleman.

If you have any questions please contact me at (510) 235-1393.

Thank you,

Morgan Olk
Manager Lab Pack Services

MO/cj

RECEIVED MAY 14 1992

UNIFORM HAZARDOUS WASTE MANIFEST 1. Generator's US EPA ID No. CBG000656304 Manifest Document No. 29751 2. Page of 1 Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address JACK HOHNER PROPERTY 1384 RUUS LANE, HAYWARD, CA. 94545 A. State Manifest Document Number 90648003

4. Generator's Phone (415)-429-9400 (BALCH ENTERPRISE) B. State Generator's ID HABQ36042262

5. Transporter 1 Company Name ERICKSON, INC. 6. US EPA ID Number CAD009466392 C. State Transporter's ID 203746 D. Transporter's Phone 510-235-1393

7. Transporter 2 Company Name 8. US EPA ID Number E. State Transporter's ID F. Transporter's Phone

9. Designated Facility Name and Site Address CHEMICAL WASTE MANAGEMENT 35251 OLD SKYLINE RD. KETTLEMAN CITY, CA. 93239 10. US EPA ID Number CAT000646117 G. State Facility's ID H. Facility's Phone 209-386-9711

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number) NON RCRA HAZARDOUS WASTE SOLID (EMPTY CONTAINERS) 12. Containers No. 001 Type CM 13. Total Quantity 005 14. Unit Wt/Vol Y 15. Waste No. State 513,512 EPA/Other NON RCRA

b. State EPA/Other

c. State EPA/Other

d. State EPA/Other

J. Additional Descriptions for Materials Listed Above PROFILE: SFO K85629-016 K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information GLOVES, SAFETY GLASSES 24 HR EMERGENCY CONTACT: NAME: JACK HOHNER PHONE: 510-727-7720

18. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name JACK HOHNER Signature Jack Hohner Month Day Year 12/23/92

17. Transporter 1 Acknowledgement of Receipt of Materials Printed/Typed Name ROBERT A. DART Signature Robert A. Dart Month Day Year 12/13/92

18. Transporter 2 Acknowledgement of Receipt of Materials Printed/Typed Name Signature Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in item 15. Printed/Typed Name Signature Month Day Year

3022 A 8700-22 Do Not Write Below This Line

YELLOW: GENERATOR RETAINS

GEN ERATOR

TRANSPORTER

FACILITY

GEN ERATOR

TRANSPORTER

FACILITY

GEN ERATOR

TRANSPORTER

FACILITY

Please print or type. Form designed for use on elite (12-pitch typewriter).

and front of page 1

Sacramento, California

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. CAC000656004 Manifest Document No. 77306 2. Page 1 of Information in the shaded areas is not required by Federal law

3. Generator's Name and Mailing Address: JACK HOHENER PROPERTY 1384 RUUS LANE 4. Generator's Phone (415)-429-9400 (BALCH ENTERPRISES)

A. State Manifest Document Number: 90792123

B. State Generator's ID: HAHQ36-042262

6. Transporter 1 Company Name: ERICKSON, INC. 8. US EPA ID Number: CAD009466392

C. State Transporter's ID: 215690

D. Transporter's Phone: 510-235-1393

7. Transporter 2 Company Name: 9. US EPA ID Number:

E. State Transporter's ID: F. Transporter's Phone:

9. Designated Facility Name and Site Address: ROMIC CHEMICAL INC. 2081 BAY ROAD, E. PALO ALTO, CA. 94303 10. US EPA ID Number: CAD009452657

G. State Facility's ID: H. Facility's Phone: 415-234-1658

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number):

12. Containers No. Type 13. Total Quantity 14. Unit (Wt/Vol) 15. Waste No.

a. WASTE OIL, NOS, COMBUSTIBLE LIQUID, NA1270

DM 406 TIT0102140 G State 223 EPA/Other NONE 0001

b. WASTE PAINT RELATED MATERIAL, FLAMMABLE LIQUID, NA1263

DM 01015 TIT01021510 G State 3310023 EPA/Other 0001

c. Additional Descriptions for Materials Listed Above:

K. Handling Codes for Wastes Listed Above: a. b. c. d.

16. Special Handling Instructions and Additional Information: GLOVES, SAFETY GLASSES

24HR EMERGENCY CONTACT: WNAME: Jack Hohener PHONE: 510-794-6150

18. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations. If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

17. Transporter 1 Acknowledgement of Receipt of Materials: Printed/Typed Name: JACK HOHENER Signature: Jack Hohener Month Day Year: 10/21/09 12

18. Transporter 2 Acknowledgement of Receipt of Materials: Printed/Typed Name: Robert Noia Signature: [Signature] Month Day Year: 10/21/09 12

19. Discrepancy Indication Space

20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19. Printed/Typed Name: Signature: Month Day Year:

IN CASE OF AN EMERGENCY CALL 800-424-6302. ESPRIMO 800-424-6302. CALIFORNIA CALL 1-800-852-7650. DANGER ZONE. TRANSPORTATION. FACILITY.

Do Not Write Below This Line

NOTE: GENERATOR SENDS THIS COPY TO DOHS WITHIN 30 DAYS

ALAMEDA COUNTY
HEALTH CARE SERVICESAGENCY
SANDRA KEPPS, Agency Director

RAFAEL A. CHAMICO, Assistant Agency Director

June 26, 1992

DEPARTMENT OF ENVIRONMENTAL HEALTH
Hazardous Materials Division
30 Swan Way, Rm. 200
Oakland, CA 94621
(510) 271-4820Mr. Jack Hohener
3686 Beard Rd.
Fremont, Ca 94538

RE: Jack Hohener Property, 1384 Ruus Lane, Hayward, California

Dear Mr. Hohener,

On June 18, 1992, the Alameda County Department of Environmental Health and the Hayward Fire Department conducted an inspection of the above referenced site. The purpose of the inspection was to verify removal of both hazardous and non-hazardous materials in accordance with your proposal of March 3, 1992. Based on that inspection, we have made the following determinations:

1) Approximately 1/3 of the previously encompassed area has been cleared of all debris and a chain-linked fence installed along the western edge of your property. It is our understanding that this fence was installed by Mr. John Rossier, owner of the adjoining lot, after you removed materials that had migrated onto his property.

2) Although a majority of the hazardous materials and wastes have been removed from your property, we observed one 5-gallon container without a label, a one gallon labeled primer, and several open-top pails with smaller quantity pint and quart containers inside. Some were identifiable as paints and household cleaners, but most of their contents remained unknown. These materials should be placed in a designated area and considered hazardous until confirmation of the contents has been obtained. As the segregation and removal of debris continues, incidental materials will undoubtedly be uncovered and should be handled in a similar manner.

Since the readily identifiable hazardous materials and wastes have been removed, presumably by Erickson Inc., there remains the issue of documentation. Your proposal indicated you would retain all manifests, weigh bills, and receipts for disposed materials and our 60-day follow-up inspection requested that you begin preparing a summary report of your disposal practices. In order to close the reporting loop, please submit copies of these documents to both agencies within the next 10 days of receipt of this letter.

Failure to produce the required documentation will result in our reopening our initial complaint with the Alameda County District Attorney.

Jack Hohener Property
June 26, 1992
Page 2 of 2

3) Your property continues to be used for the storage of tires, vehicles, scrap steel and metal products, wood and other debris. Progress has been made in segregating these materials to allow for their eventual removal and disposal, but the property is far from being completely cleared, as was specified in your proposal.

Therefore, due to the incidental nature of any remaining materials that might be considered hazardous, we do not intent to impede the City of Hayward from implementing abatement procedures to remove the remaining debris from your property. Should you have any questions regarding this summary, please contact either of our offices.

Sincerely,



Ravi Arulanantham
Senior Hazardous Materials Specialist
Alameda County Dept. of Environmental Health
(510) 271-4320



Jay Swardenski
Hazardous Materials Investigator
Hayward Fire Department
(510) 293-8695

c: Gil Jensen, Alameda County District Attorney
Debra Margolis, Deputy City Attorney, City of Hayward
Rafat Shahid, Ass't Agency Director, Alameda County Health
John Boykin, Hayward Fire Department
Cynthia Palacio, Community Preservation, City of Hayward
Thomas Camp, Law offices of Thomas Camp

ALAMEDA COUNTY
HEALTH CARE SERVICES

AGENCY

DAVID W. KERR, Agency Director



PAUL A. DEAN, Assistant Agency Director

DEPARTMENT OF ENVIRONMENTAL HEALTH
Hazardous Materials Division
30 Swan Way, Rm. 200
Oakland, CA 94621
(510) 271-4020

June 26, 1992

Mr. Jack Hohener
3686 Beard Rd.
Fremont, Ca 94538

RE: Jack Hohener Property, 1384 Ruus Lane, Hayward, California

Dear Mr. Hohener,

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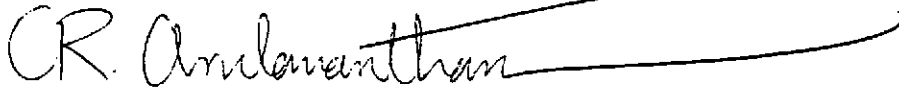
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Jack Hohener Property
June 26, 1992
Page 2 of 2

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Therefore, due to the incidental nature of any remaining materials that might be considered hazardous, we do not intent to impede the City of Hayward from implementing abatement procedures to remove the remaining debris from your property. Should you have any questions regarding this summary, please contact either of our offices.

Sincerely,



Ravi Arulanantham
Senior Hazardous Materials Specialist
Alameda County Dept. of Environmental Health
(510) 271-4320



Jay Swardenski
Hazardous Materials Investigator
Hayward Fire Department
(510) 293-8695

c: Gil Jensen, Alameda County District Attorney
Debra Margolis, Deputy City Attorney, City of Hayward
Rafat Shahid, Ass't Agency Director, Alameda County Health
John Boykin, Hayward Fire Department
Cynthia Palacio, Community Preservation, City of Hayward
Thomas Camp, Law offices of Thomas Camp



CITY OF HAYWARD AGENDA REPORT

AGENDA DATE 11/17/92

AGENDA ITEM _____

WORKSESSION ITEM _____

Date: November 13, 1992
To: Mayor and City Council
From: Environmental Manager

APPROPRIATION OF \$30,000 AND AUTHORIZATION TO ENTER INTO A CONTRACT
TO ABATE PUBLIC NUISANCES ON PROPERTY LOCATED AT 1384 RUUS LANE

Recommendation:

It is recommended that the City Council appropriate \$30,000 and authorize the Interim City Manager to execute a contract for the abatement of public nuisances located at 1384 Ruus Lane.

Background:

The property subject to abatement is owned by Jack Hohener and is a 2.26 acre vacant lot located in an industrial zone. The property is bordered to the north by Ruus Lane, to the east by a portable sanitary service business; to the south by a vacant lot fronting on Industrial Boulevard; and to the west by a vacant lot fronting on Stratford Road. The closest residential development is the Georgian Manor Mobilehome Park located to the north on the other side of Ruus Lane.

In November of 1989, Community Preservation Inspectors identified the property at 1384 Ruus Lane to be in violation of the newly adopted Community Preservation ordinance. Staff was aware that this property had been a source of concern for citizens in the past. Staff pursued this matter proactively since there had been no current complaints from citizens.

It was apparent from the condition of the property, past use permits, and the owner's occupation, that the site had been used as a storage yard for demolition materials, such as old vehicles, scrap metals, scrap lumber, tires, and other miscellaneous items. These items were grossly intermingled, giving the appearance of a dump.

Aerial photographs showed that in 1976, approximately one-third of the property was covered with cars, truck/trailers, structures and debris. The 1985 photographs showed that approximately one-half of the lot was covered. By 1991, the lot was almost completely covered with materials.

Research revealed that a 1975 use permit allowed the property to be used for a contractor's storage yard and a night watchman's office. A dwelling had been moved to the property for the night watchman's office. The conditions of the use permit were never completed.

Because of the complexity of violations and intermingling of junk, vehicles and buildings, Community Preservation organized a joint inspection with other departments to determine violations and to establish a process and strategies for abatement. Community Preservation took the lead and commenced the abatement process under the ordinance. The abatement process begins with efforts to obtain voluntary compliance and concludes with City abatement, if necessary.

The required Notice to Abate was sent to the property owner on March 5, 1990. After the owner failed to comply, Community Preservation sent the required Notice of Administrative Hearing to the owner, which was held on May 2, 1990. The owner and his attorney were present at the hearing. At the hearing, the City declared the property to be a public nuisance and ordered that the owner abate the nuisances by September 17, 1990, or the City would cause the nuisance to be abated and bill the owner for costs.

During that four month compliance period, the owner through his attorney, provided a plan and produced contracts to abate the nuisances. As the deadline approached, the owner changed attorneys and the new attorney requested an extension of time, again producing documents and contracts to demonstrate good faith.

Based on the owner's failure to follow through and voluntarily abate the nuisances on the property, Community Preservation gave notice to the owner that the City would begin abatement in January 1991, pursuant to the abatement orders given at the administrative hearing. Staff met with contractors at the site to obtain estimates for the abatement. During this process, the City learned that hazardous wastes were discovered intermingled among the junk and debris.

The estimates for abatement received from contractors ranged between \$131,000 and \$191,000. The City received separate proposals from two contractors to abate the hazardous wastes (\$51,000) and to abate the debris (\$80,000), for a combined total of \$131,000. The City also received a proposal from one contractor to abate both the hazardous wastes and debris for \$191,000. These proposals reflected the labor-intensive work needed to sort the intermingled hazardous wastes and debris.

Hazardous Wastes:

When the hazardous wastes were discovered, staff immediately contacted the City's Hazardous Materials Division to evaluate whether the condition of the property posed an immediate health or fire hazard. The Hazardous Materials Inspector determined that there was no risk of immediate exposure since the hazardous wastes were in non-leaking drums and consisted primarily of waste oils and roofing tars. There was no evidence of explosive materials on the site. Since the City has no authority to enforce the State's Hazardous Waste Control laws, the City's Hazardous Materials Division advised that the matter be referred to the County's Hazardous Materials Unit as prescribed by State law.

The City inspected the property jointly with the County to provide background information, ensure a smooth transition and expedite the County's role in resolving the hazardous waste issues. The contractor proposals' categorizing the types and amounts of debris and hazardous wastes were given to the County to assist them.

The County then turned the matter over to the District Attorney. A meeting held with the District Attorney's Office resulted in an order that the owner clean up the property within 90 days. Thus, the owner submitted a plan and began abating the hazardous wastes.

City Abatement:

In July 1992, the hazardous wastes were removed from the property to the satisfaction of the County Hazardous Materials Division. The matter was then returned to the City's Community Preservation Division to resume abatement of the non-hazardous wastes.

Community Preservation solicited contractors for vehicle and nuisance abatement by contacting neighboring cities to expand the potential list of abatement contractors. The City's weed abatement contractors are not presently capable of handling such an extensive abatement.

Community Preservation obtained a proposal from Campanella Construction Company to abate the remaining nuisances on the property in the amount of \$24,500. This cost is considerably lower than the initial estimates because the hazardous wastes have been removed from the property. The firm of Campanella, Inc., is used by neighboring cities and has been in the demolition and abatement business for many years. They have proposed to remove the junk, debris and vehicles from the property for the sum of \$24,500. This abatement would take approximately fifteen working days to complete and would include recycling.

New items have continuously been dumped at the property since the administrative hearing, and as recently as October 1992. The attached photographs of this dumping are submitted for Council's reference. Consequently, staff is requesting authority to execute a contract in an amount not to exceed \$30,000 in order to assure that there will be sufficient funds if significant additional dumping has occurred since the bid was made.

The abatement proposal does not include removal or demolition of the illegal dwelling located on the front of the property. The building is secured and does not currently present an immediate hazard to the community. The Police Department will continue to address the occasional problems of transients on the site as they occur.

Community Preservation is recommending that the City proceed with abatement even though acquisition of the property is currently being considered in connection with a development proposal (Rassier/Balch Tract 6472). The repeated promises made by the owner and his several attorneys did not result in abatement of the nuisances.

Staff cannot assure that there will not be dumping by the owner or other persons in the future on the property. However, by removing all debris from the vacant lot, there will be a baseline from which to measure subsequent violations that will improve staff's ability to monitor the property, and take action while any new dumping is at a minimum. In this way the City will not be faced again with such an overwhelming task and cost.

Cost Recovery:

Under the Community Preservation ordinance, the City will bill the owner for the actual costs of abatement as well as administrative fees that will reflect the time spent by staff in inspecting, monitoring and abating nuisances on the property since 1989. If the property owner refuses to voluntarily pay the cost of abatement, the ordinance provides that the abatement costs will be recorded as a lien against his property, and appear on his property tax bill.

The property owner recently filed for bankruptcy protection under Chapter 11 (reorganization). While the pending bankruptcy proceedings do not prohibit the City from exercising its police power to abate the public nuisances on the property, the bankruptcy provisions do preclude the City from collecting or enforcing a money judgment. The collection of abatement costs through imposition of a lien on the property could be construed to be analogous to the collecting of a money judgment. A definitive statement on this issue is not possible at this time because there is no case law that directly addresses this issue.

In summary, there is a chance that the City will never be able to recover the costs associated with this abatement proceeding. Staff is unable to even provide the Council with an estimate of the chances of recovery because of the absence of any applicable case law. Consequently, recovery of costs in this matter may need to be pursued by means of litigation. Such litigation would be undertaken in the absence of any clear sense of whether the City would in fact prevail in such a case.

Nevertheless, staff is recommending an appropriation of an amount not to exceed \$30,000 from the Reserve for Economic Uncertainty for the sole purpose of funding this abatement contract.

Conclusion:

Staff recommends that City Council award a contract to Campanella Construction Company in an amount not to exceed \$30,000 for the abatement of public nuisances at 1384 Ruus Lane. Staff brings this item to Council for consideration because it requires a commitment of substantial City funds, it is the first Community Preservation abatement, it was not previously budgeted, and the costs may not be recoverable. The cost of abatement has been significantly reduced (from \$191,000 to \$24,500) due to the removal of the hazardous wastes and some debris. Based on the history of this case, the degree of community concern it has generated and the non-performance of the owner in resolving the problems, staff recommends that the City complete the abatement action without further delay.

Submitted by:

Cynthia Palacio
Cynthia Palacio, Manager
Environmental Management
Division

Sylvia Ehrental
Sylvia Ehrental, Director
Community and Economic
Development Department

ALAMEDA COUNTY
HEALTH CARE SERVICES



AGENCY

DAVID J. KEARS, Agency Director

RAFAT A. SHAHID, Assistant Agency Director

February 1, 1993

DEPARTMENT OF ENVIRONMENTAL HEALTH
Hazardous Materials Division
80 Swan Way, Rm. 200
Oakland, CA 94621
(510) 271-4320

Hugh Murphy
City of Hayward Fire Department
25151 Clawiter Road
Hayward, CA 94545

RE: RESIDENTIAL DEVELOPMENT ADJACENT TO THE HOHENER PROPERTY

Dear Mr. Murphy,

This letter is to confirm the substantive points discussed at the 2/26/1993 meeting regarding the Rassier/Balch properties. I am also in receipt of your letter dated 1/22/1993 and the attached technical report. I agree that the immediate and the obvious health and environmental threat has been removed from the Jack Hohener property since I first issued a NOV in December 1991. Based on the current information provided to me, I believe, that the Jack Hohener property does not pose any public health threat to the proposed residential development on the Rassier/Balch properties (including the proposed park). Therefore, I have no objection to allow the sub-division approval of the Rassier/Balch properties.

However, I have requested further ground water and soil investigation on the Hohener property. The owners of the Rassier/Balch properties have agreed to proceed with a sampling plan accepted by me. The results of this investigation have to be reviewed by this Agency before an occupancy permit is issued to the developers. Should this investigation reveal any contamination that would pose a threat to the proposed new development, the developers would be obligated to mitigate the condition.

Should you have any question, please call me at 510/271-4320.

Sincerely,

Ravi Arulanantham
Senior Hazardous Materials Specialist

c; files

Hohener93

Post-It™ brand fax transmittal memo 7671		# of pages >
To	Hugh Murphy	From Ravi
Co.		Co.
Dept.		Phone #
Fax #		Fax #

Balch Enterprises Inc.

Developers — Builders — License #427860

RECEIVED BY
HAZARDOUS MATERIALS OFFICE

FEB 11 1993

30900 Huntwood Ave.
Hayward, CA 94544
(510) 429-9400
FAX (510) 429-9966

HAYWARD FIRE DEPARTMENT

February 9, 1993

Mr. Ravi Arulanathan
Hazardous Materials Specialist
Alameda County Health Department
80 Swan Way, Room 200
Oakland, CA 94621

SUBJECT: 1384 Ruus Lane, Hayward

Dear Ravi,

Subsequent to our meeting in your offices on January 26, 1993, I have been seeking information and pricing for the additional testing you requested to determine that this property does not pose an environmental hazard to adjacent residents.

John Rassier owns approximately 10 acres of land that abuts this property on the west and we are in the process of selling to Warmington Homes a 12 acre parcel we own approximately 1,000 feet west of this property. The parties involved have jointly filed a subdivision map on both Rassier's 10 acres and our 12 acres. As a condition of approval of this map the City of Hayward has stated that "--- the Hohener property--- shall be determined to be clear of toxic and hazardous material contamination that would pose environmental hazards to--- surrounding residents to the satisfaction of the City and/or County Environmental Health Department". Since you wrote the original letter to Jack Hohener, the land owner, on December 2, 1991 advising him of a potential "health hazard for residents living nearby", the City of Hayward has advised us that they want the clearance for this condition to come from you.

I want to give you some factual history on this property to clear up a great deal of misunderstanding and hysteria on its uses and potential for a health hazard. Unfounded statements have been made that the property was a landfill, has been a junk yard for 20 years, that debris and hazardous materials have been buried on the site, etc.

Balch Enterprises has been trying to purchase this property since 1990 and we have conducted extensive background checking as we do with all our land purchases. This includes environmental investigation, historical review, study of numerous years of aerial photos, owners use of the property and a review of public records.

Mr. Ravi Arulanathan
February 9, 1993
Page Two

The Hohener family owned approximately 16 acres on Ruus Lane until 1975 at which time they sold about 12 acres to the Rassier family for Georgian Manor Mobile Home Park and 2 acres to another neighbor. The Hohener's owned a successful business in San Leandro and had farmed land in Hayward until it was sold in 1975. At that time, the house and metal garage were moved to this property and Mr. Hohener and his son, Jack, used the land for storing farm equipment, trucks and grading equipment that Jack used in his business.

The father, Jacob Hohener died in 1987 and this property along with other holdings were left to Jack and his sister.

In 1988, Jack rented a portion of the rear property to Nick Tesi for storing trailers and trucks. Beginning in 1989, Nick Tesi started bringing in old house trailers, roofing timbers, unusable equipment and containers with an accumulation of tires, boxes, and furniture, motorcycles, bicycles and other items he felt he could recycle and sell. In mid 1989, Jack cancelled his agreement with Nick Tesi and ordered him to remove all his items from the property. Finally, as a result of an order from the City of Hayward, in November 1989, Jack Hohener obtained a court order against Nick Tesi from bringing any more items onto the site and ordering him to remove his possessions.

In February 1991, Balch Enterprises finally reached agreement with Hohener to purchase his property. To facilitate the property clean up (which was a condition of the purchase), Balch Enterprises agreed to loan Jack Hohener funds for the clean up. Balch Enterprises made a complete inventory of all items on the property. This was done by dividing the property into 30 rectangles about 50 feet by 60 feet and then listing everything on the site in each section. This typed comprehensive list is 21 pages long. Additionally we video taped the entire property.

The purpose of this inventory was to identify materials on site that were of a hazardous nature and also to use as a guide in disbursing funds to Jack Hohener for clean up. We also wanted to be sure that nothing was spilled on site during the clean up that would pose a problem later on. As industrial developers in Hayward, we are extremely cautious to make sure any property we purchase is environmentally clean before we purchase it. Our office is within 1/2 mile of this site and our people pass by the Hohener property a number of times daily. I live in Hayward and on weekends I ride my bicycle by this land.

Daniel Webster, who lives near the property rents an office/warehouse unit in one of our complexes. Mr. Webster has been trying without much success to get the City of Hayward to require Jack Hohener to clean up his property. He agreed that he would keep us advised of any clean up or other action on the site. Mr. Webster, Jack Hohener and Nick Tesi (who hauled in much of the debris) were constantly fighting over Jack Hohener's failure to clean up his property. Since we were going to require the property be cleaned, Mr. Webster was glad to "tattle on his obnoxious neighbors". While a number of times his complaints were overstated, we welcomed his calls and investigated each one of them.

On November 13, 1992, the City of Hayward authorized the expenditure of funds to remove the balance of equipment and old buildings on Jack Hohener's land. Since that time, Jack Hohener has been extremely busy in a clean up effort and up to the beginning of the heavy rains in December, had removed a major portion of broken down equipment still remaining. The heavy rains flooded 90 percent of his land. On January 19, 1993, Jack Hohener was pumping the water from his land into the storm drain when Mr. Webster stopped by with William Freeman, who is a Source Control Inspector from the City of Hayward Water Pollution Control Facility. Jack Hohener was ordered to stop pumping until the water could be tested for hazardous or toxic substances. The water samples were tested and found to be completely free of any toxics and Jack Hohener was allowed to finish the pumping.

On June 4, 1991, TRC Environmental Consultants conducted a Phase I Site Assessment on a portion of this property and the adjoining Rassier land. They subsequently took OVA readings on the west property line of the Hohener land and the readings were negative in all respects. In 1992, Erickson Environmental inspected the entire site and removed all of the hazardous and toxic materials from the property including the sheds, trailers, storage containers and enclosed trucks. They disposed of them according to current environmental laws. They did not find any evidence of any spilled material or evidence of any site contamination by the materials they removed.

In June 1991, Essenes Environmental made a site investigation and took samples of soil at four locations on the site. They picked locations that, in their opinion, would be most obviously contaminated. These samples were tested by an independent laboratory for the following.

- Total Petroleum Hydrocarbons (TPH) - Gasoline/B4LUFT
- TPH - Diesel/BILUFT
- Purgeable Halocarbons/EPA Method 8010
- Chlorinated Pesticides and PCBs/EPA Method 8080
- Title 22 (CAM 17 Metals) EPA-C07000

Mr. Ravi Arulananthan
February 9, 1993
Page Four

The results of these tests showed the property clean except a low level of lead at one location (330 mg/kg) and a minute amount of Chlordane at 2 spots. It is my understanding that these results are below remediation levels (150 ug/kg and 64 ug/kg). The report suggested that further sampling may be appropriate after removal of more of the equipment on the site. Based on the above information, Essenes Environmental expressed an opinion that the property would not pose an adverse affect on the Stratford Village development.

It is our opinion that based on the above information, the Hohener property is not an environmental threat to the surrounding residents. Additionally, since the property is the subject of a rezoning application to change the use from industrial to residential that any such approvals would require that the property be made to be environmentally safe not only for the surrounding residents but for the residential land use as well.

At the meeting in your office on January 26, 1993, you requested that we do some additional testing on the Hohener property to determine if there were any undisclosed environmental hazards. Additional soil sampling has also been suggested by Essenes Environmental in their report. We have discussed this matter with Dennis Judd of Essenes Environmental and one other environmental company. We propose therefore to immediately authorize the following tests based on their recommendation.


- Sample soil at 12 locations - 4 spaced equidistant on the west property line abutting the proposed residential development and 8 on site at areas the consultant deems might be most suspect. Two samples will be taken from each location, one at grade to 6 inches and one at 30" to 36". The top sample only will be tested with the deeper sample held in custody and tested only if contamination or a remediation level shows up in the testing of the first sample. The tests to be performed on these samples will be the same as listed above that were done on the original soils tests.
- At the four locations on the west property line from which soil samples are taken, a test hole will be drilled to the water line and water samples taken after purging the hole. These holes will be grouted in after the samples are taken.

The estimate of this testing is over \$28,000.00. This is a major expense to this project but time is a major factor in proceeding with the subdivision. I have been advised by Essenes Environmental that if you can give me verbal verification by Tuesday afternoon, the men and equipment can be on the site Friday, February 12, 1993. Test results and a final report would follow as quickly as the laboratory can complete their work.

Mr. Ravi Arulanathan
February 9, 1993
Page Five

We are anxious to proceed as quickly as possible. Please give me a call when you have time.

Sincerely,


Sherman L. Balch

SLB/sp

cc: Hugh Murphy, City of Hayward Hazardous Material Specialist
Alex Ameri, City of Hayward Development Services Engineer
Thomas H. Sanborn, Warmington Homes
John Rassier, Rassier Properties
David Lanferman, Varni, Fraser, Hartwell, Rodgers & Lanferman

Essenes Environmental, Inc.

June 1, 1992

Mr. Sherman Balch
Balch Enterprises Inc.
30960 Huntwood Avenue
Hayward, California 94544

Status Report
Soil Sampling
Hohener Property
1384 Ruus Lane, Hayward, California
Essenes Job # 920504.B

Dear Mr. Balch,

On May 5, 1992 Essenes Environmental, Inc. (Essenes) conducted surface soil sampling at the Hohener property located at 1384 Ruus Lane in Hayward, California. At the time of the sampling numerous piles of miscellaneous debris were observed throughout the property.

A total of four surface soil samples were collected from the Hohener property (See Figure 1). Sample S-1H was collected along the south east portion of the property near one of the numerous piles of debris. Samples S-2H and S-3H were sampled in low lying portions of the property where water had probably ponded in the past. Sample S-4H was collected in front of the garage in an area where heavy equipment was stored.

The samples were placed in an ice box and transported, using proper Chain of Custody (attached) to Chromalab, Inc., a State Certified Analytical Laboratory. The samples were analyzed for the following constituents:

- Total Petroleum Hydrocarbons (TPH) - Gasoline /B4LUFT
- TPH - Diesel / B1LUFT
- Purgeable Halocarbons / EPA Method 8010
- Chlorinated Pesticide and PCBs / EPA Method 8080
- Title 22 (CAM 17 Metals) / EPA-CO7000

Mr. Sherman Balch
June 1, 1992
Page 2

The results of the analyses (See Attached Laboratory Results), are summarized as follows:

Sample #	Gasoline	Diesel	8010	8080	chlordan	aldrin	DDE
		mg/kg			ug/kg	ug/kg	ug/kg
S-1H	nd	5.6	nd	nd	nd	nd	nd
S-2H	nd	7.1	nd	nd	nd	nd	.69
S-3H	nd	3.6	nd	nd	150	.61	nd
S-4H	nd	7.4	nd	nd	64	nd	nd

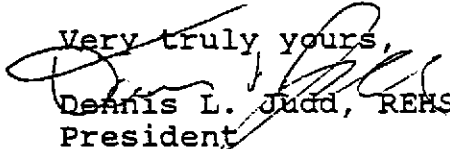
Sample #	Sb	As	Ba	Be	Cd	Co	Cr	Cu	Pb	Hg	Mo	Ni
	mg/kg---->											
S-1H	nd	4.9	45	.07	2.1	4.9	14	560	330	.52	nd	14
S-2H	nd	3.8	43	nd	1.1	3.0	12	16	8.7	.2	nd	11
S-3H	nd	6.6	61	nd	2.1	5.2	15	22	19	.30	nd	16
S-4H	nd	2.2	44	nd	1.5	4.3	13	29	4.9	.15	nd	12

Sample #	Se	Ag	Tl	V	Zn
	mg/kg----->				
S-1H	nd	nd	nd	23	98
S-2H	nd	nd	nd	15	19
S-3H	nd	nd	nd	25	65
S-4H	nd	nd	nd	19	27

These results revealed areas of concern at Sample location S-1H for lead (Pb) and at sample locations S-3H and possibly S-4H for Chlordane. These locations will have to be further evaluated to assess the lateral and vertical area of soil that may be impacted by these components. Additionally, due to the amount of debris still located on the property, Essenes suggests further sampling on the property after the debris has been removed.

If you have any questions, please contact me at my office.

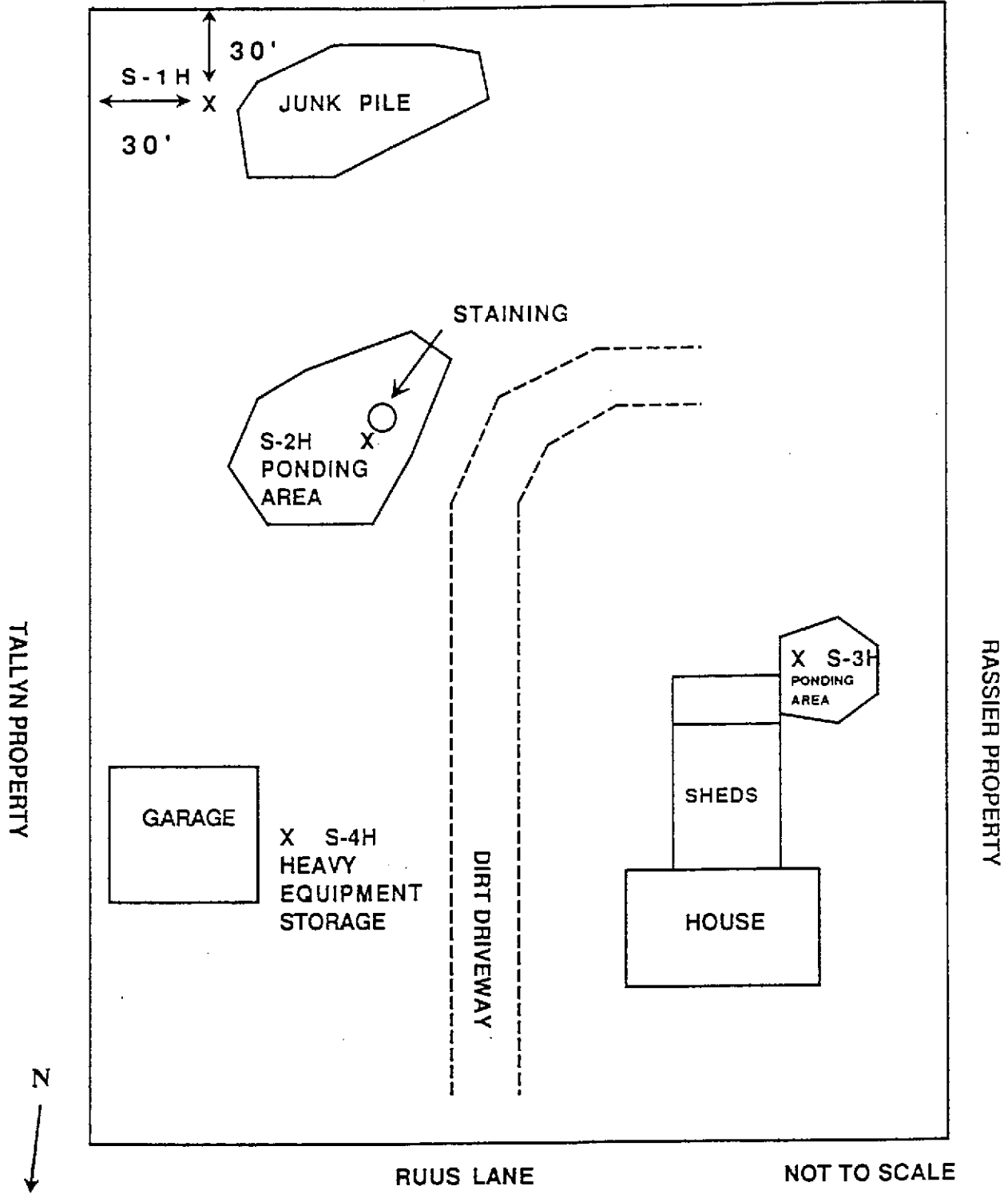
Very truly yours,


Dennis L. Judd, REHS, REA
President

Attachments

9205048.02

BALCH PROPERTY (FENCE)



KEY

X Sample Location

ESSENES ENVIRONMENTAL, INC.
5500 Burnside Road
Sebastopol, CA 95472
707-829-9331

BALCH ENTERPRISES, INC.
Hohener Property
1384 Ruus Lane
Hayward, California

Project No. 920504.B

Date: 6/1/92

Drawn by: OJ

Figure 1

CHROMALAB, INC.

5 DAYS TURNAROUND

Environmental Laboratory (1094)

May 12, 1992

ChromaLab File No.: 0592039

ESSENES ENVIRONMENTAL

Attn: Dennis Judd

RE: Four soil samples for Gasoline and Diesel analysis

Project Name: HOHNER

Project Number: 920504.B

Date Sampled: May 5, 1992

Date Submitted: May 5, 1992

Date Extracted: May 11, 1992

Date Analyzed: May 11, 1992

RESULTS:

Sample I.D.	Gasoline (mg/Kg)	Diesel* (mg/Kg)
S-1H	N.D.	5.6
S-2H	N.D.	7.1
S-3H	N.D.	3.6
S-4H	N.D.	7.4

BLANK	N.D.	N.D.
SPIKE REC.	95%	111%
DUP SPIKE REC	97%	113%
DET. LIMIT	1.0	1.0
METHOD OF ANALYSIS	5030/ 8015	3550/ 8015

* Unknown hydrocarbons in diesel range quantified as diesel.

ChromaLab, Inc.


Yiu Tam
Analytical Chemist


Eric Tam
Laboratory Director

CHROMALAB, INC.

5 DAYS TURNAROUND

Environmental Laboratory (1094)

May 12, 1992

ChromaLab File # 0592039 A

Client: Essenes Environmental
Attn: Dennis Judd
Date Sampled: May. 05, 1992
Date of Analysis: May. 11, 1992

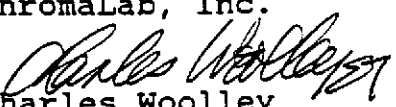
Date Submitted: May. 05, 1992

Project Name: Hohner
Project Number: 920504.B
Sample I.D.: S-1H
Method of Analysis: EPA 8010

Detection Limit: 5.0 µg/kg

COMPOUND NAME	µg/kg	Spike Recovery	
CHLOROMETHANE	N.D.	---	---
VINYL CHLORIDE	N.D.	---	---
BROMOMETHANE	N.D.	---	---
CHLOROETHANE	N.D.	---	---
TRICHLOROFLUOROMETHANE	N.D.	---	---
1,1-DICHLOROETHENE	N.D.	91%	93%
METHYLENE CHLORIDE	N.D.	---	---
1,2-DICHLOROETHENE (TOTAL)	N.D.	---	---
1,1-DICHLOROETHANE	N.D.	---	---
CHLOROFORM	N.D.	---	---
1,1,1-TRICHLOROETHANE	N.D.	---	---
CARBON TETRACHLORIDE	N.D.	---	---
1,2-DICHLOROETHANE	N.D.	---	---
TRICHLOROETHENE	N.D.	86%	100%
1,2-DICHLOROPROPANE	N.D.	---	---
BROMODICHLOROMETHANE	N.D.	---	---
2-CHLOROETHYLVINYLEETHER	N.D.	---	---
TRANS-1,3-DICHLOROPROPENE	N.D.	---	---
CIS-1,3-DICHLOROPROPENE	N.D.	---	---
1,1,2-TRICHLOROETHANE	N.D.	---	---
TETRACHLOROETHENE	N.D.	100%	110%
DIBROMOCHLOROMETHANE	N.D.	---	---
CHLOROENZENE	N.D.	---	---
BROMOFORM	N.D.	---	---
1,1,2,2-TETRACHLOROETHANE	N.D.	86%	91%
1,3-DICHLOROBENZENE	N.D.	---	---
1,4-DICHLOROBENZENE	N.D.	---	---
1,2-DICHLOROBENZENE	N.D.	---	---

ChromaLab, Inc.


Charles Woolley
Analytical Chemist


Eric Tam
Lab Director

CHROMALAB, INC.

5 DAYS TURNAROUND

Environmental Laboratory (1094)

May 12, 1992

ChromaLab File # 0592039 B

Client: Essenes Environmental
Attn: Dennis Judd
Date Sampled: May. 05, 1992
Date of Analysis: May. 11, 1992

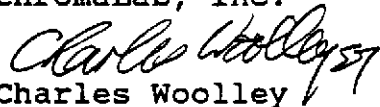
Date Submitted: May. 05, 1992

Project Name: Hohner
Project Number: 920504.B
Sample I.D.: S-2H
Method of Analysis: EPA 8010

Detection Limit: 5.0 µg/kg

COMPOUND NAME	µg/kg	Spike Recovery	
CHLOROMETHANE	N.D.	---	---
VINYL CHLORIDE	N.D.	---	---
BROMOMETHANE	N.D.	---	---
CHLOROETHANE	N.D.	---	---
TRICHLOROFUOROMETHANE	N.D.	---	---
1,1-DICHLOROETHENE	N.D.	91%	93%
METHYLENE CHLORIDE	N.D.	---	---
1,2-DICHLOROETHENE (TOTAL)	N.D.	---	---
1,1-DICHLOROETHANE	N.D.	---	---
CHLOROFORM	N.D.	---	---
1,1,1-TRICHLOROETHANE	N.D.	---	---
CARBON TETRACHLORIDE	N.D.	---	---
1,2-DICHLOROETHANE	N.D.	---	---
TRICHLOROETHENE	N.D.	86%	100%
1,2-DICHLOROPROPANE	N.D.	---	---
BROMODICHLOROMETHANE	N.D.	---	---
2-CHLOROETHYLVINYLEETHER	N.D.	---	---
TRANS-1,3-DICHLOROPROPENE	N.D.	---	---
CIS-1,3-DICHLOROPROPENE	N.D.	---	---
1,1,2-TRICHLOROETHANE	N.D.	---	---
TETRACHLOROETHENE	N.D.	100%	110%
DIBROMOCHLOROMETHANE	N.D.	---	---
CHLOROBENZENE	N.D.	---	---
BROMOFORM	N.D.	---	---
1,1,2,2-TETRACHLOROETHANE	N.D.	86%	91%
1,3-DICHLOROBENZENE	N.D.	---	---
1,4-DICHLOROBENZENE	N.D.	---	---
1,2-DICHLOROBENZENE	N.D.	---	---

ChromaLab, Inc.


Charles Woolley
Analytical Chemist


Eric Tam
Lab Director

CHROMALAB, INC.

5 DAYS TURNAROUND

Environmental Laboratory (1094)

May 12, 1992

ChromaLab File # 0592039 C

Client: Essenes Environmental

Attn: Dennis Judd

Date Sampled: May. 05, 1992

Date Submitted: May. 05, 1992

Date of Analysis: May. 11, 1992

Project Name: Hohner

Project Number: 920504.B

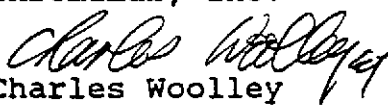
Sample I.D.: S-3H

Method of Analysis: EPA 8010

Detection Limit: 5.0 µg/kg

COMPOUND NAME	µg/kg	Spike Recovery	
CHLOROMETHANE	N.D.	---	---
VINYL CHLORIDE	N.D.	---	---
BROMOMETHANE	N.D.	---	---
CHLOROETHANE	N.D.	---	---
TRICHLOROFLUOROMETHANE	N.D.	---	---
1,1-DICHLOROETHENE	N.D.	91%	93%
METHYLENE CHLORIDE	N.D.	---	---
1,2-DICHLOROETHENE (TOTAL)	N.D.	---	---
1,1-DICHLOROETHANE	N.D.	---	---
CHLOROFORM	N.D.	---	---
1,1,1-TRICHLOROETHANE	N.D.	---	---
CARBON TETRACHLORIDE	N.D.	---	---
1,2-DICHLOROETHANE	N.D.	---	---
TRICHLOROETHENE	N.D.	86%	100%
1,2-DICHLOROPROPANE	N.D.	---	---
BROMODICHLOROMETHANE	N.D.	---	---
2-CHLOROETHYLVINYLEETHER	N.D.	---	---
TRANS-1,3-DICHLOROPROPENE	N.D.	---	---
CIS-1,3-DICHLOROPROPENE	N.D.	---	---
1,1,2-TRICHLOROETHANE	N.D.	---	---
TETRACHLOROETHENE	N.D.	100%	110%
DIBROMOCHLOROMETHANE	N.D.	---	---
CHLOROBENZENE	N.D.	---	---
BROMOFORM	N.D.	---	---
1,1,2,2-TETRACHLOROETHANE	N.D.	86%	91%
1,3-DICHLOROBENZENE	N.D.	---	---
1,4-DICHLOROBENZENE	N.D.	---	---
1,2-DICHLOROBENZENE	N.D.	---	---

ChromaLab, Inc.


Charles Woolley
Analytical Chemist


Eric Tam
Lab Director

CHROMALAB, INC.

5 DAYS TURNAROUND

Environmental Laboratory (1094)

May 12, 1992

ChromaLab File # 0592039 D

Client: Essenes Environmental

Attn: Dennis Judd

Date Sampled: May. 05, 1992

Date Submitted: May. 05, 1992

Date of Analysis: May. 11, 1992

Project Name: Hohner

Project Number: 920504.B

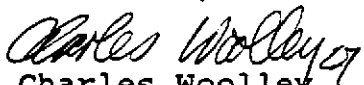
Sample I.D.: S-4H

Method of Analysis: EPA 8010

Detection Limit: 5.0 µg/kg

COMPOUND NAME	µg/kg	Spike Recovery	
CHLOROMETHANE	N.D.	---	---
VINYL CHLORIDE	N.D.	---	---
BROMOMETHANE	N.D.	---	---
CHLOROETHANE	N.D.	---	---
TRICHLOROFLUOROMETHANE	N.D.	---	---
1,1-DICHLOROETHENE	N.D.	91%	93%
METHYLENE CHLORIDE	N.D.	---	---
1,2-DICHLOROETHENE (TOTAL)	N.D.	---	---
1,1-DICHLOROETHANE	N.D.	---	---
CHLOROFORM	N.D.	---	---
1,1,1-TRICHLOROETHANE	N.D.	---	---
CARBON TETRACHLORIDE	N.D.	---	---
1,2-DICHLOROETHANE	N.D.	---	---
TRICHLOROETHENE	N.D.	86%	100%
1,2-DICHLOROPROPANE	N.D.	---	---
BROMODICHLOROMETHANE	N.D.	---	---
2-CHLOROETHYLVINYLEETHER	N.D.	---	---
TRANS-1,3-DICHLOROPROPENE	N.D.	---	---
CIS-1,3-DICHLOROPROPENE	N.D.	---	---
1,1,2-TRICHLOROETHANE	N.D.	---	---
TETRACHLOROETHENE	N.D.	100%	110%
DIBROMOCHLOROMETHANE	N.D.	---	---
CHLOROBENZENE	N.D.	---	---
BROMOFORM	N.D.	---	---
1,1,2,2-TETRACHLOROETHANE	N.D.	86%	91%
1,3-DICHLOROBENZENE	N.D.	---	---
1,4-DICHLOROBENZENE	N.D.	---	---
1,2-DICHLOROBENZENE	N.D.	---	---

ChromaLab, Inc.


Charles Woolley
Analytical Chemist


Eric Tam
Lab Director

CHROMALAB, INC.

5 DAYS TURNAROUND

Environmental Laboratory (1094)

May 13, 1992

ChromaLab File No.: 592039A

Essenes Environmental

Attn: Dennis Judd

RE: Four soil samples for 8080 analysis

Project Name: Hohner

Project Number: 920504.B

Date Sampled: May 5, 1992

Date Submitted: May 5, 1992

Date Analyzed: May 13, 1992

RESULTS: S-1-H

CHLORINATED PESTICIDE ANALYSIS

<u>Compounds</u>	<u>Concentration ($\mu\text{g}/\text{kg}$)</u>	<u>Detection Limit ($\mu\text{g}/\text{kg}$)</u>
ALDRIN	N.D.	.10
DIELDRIN	N.D.	.10
ENDRIN ALDEHYDE	N.D.	.50
ENDRIN	N.D.	.10
HEPTACHLOR	N.D.	.10
HEPTACHLOR EPOXIDE	N.D.	.10
p,p' - DDT	N.D.	.50
p,p' - DDE	N.D.	.10
p,p' - DDD	N.D.	.50
ENDOSULFAN I	N.D.	.50
ENDOSULFAN II	N.D.	.50
α - BHC	N.D.	.10
β - BHC	N.D.	.10
γ - BHC (LINDANE)	N.D.	.10
δ - BHC	N.D.	.10
ENDOSULFAN SULFATE	N.D.	.50
p,p' - METHOXYCHLOR	N.D.	.50
TOXAPHENE	N.D.	.50
PCB'S	N.D.	.50
CHLORDANE	N.D.	.50

ChromaLab, Inc.

Mary Cappelli

Mary Cappelli
Analytical Chemist



Eric Tam
Laboratory Director

CHROMALAB, INC.

5 DAYS TURNAROUND

Environmental Laboratory (1094)

May 13, 1992

ChromaLab File No.: 592039B

Essenes Environmental

Attn: Dennis Judd

RE: Four soil samples for 8080 analysis

Project Name: Hohner

Project Number: 920504.B

Date Sampled: May 5, 1992

Date Submitted: May 5, 1992

Date Analyzed: May 13, 1992

RESULTS: S-2-H

CHLORINATED PESTICIDE ANALYSIS

<u>Compounds</u>	<u>Concentration ($\mu\text{g}/\text{kg}$)</u>	<u>Detection Limit ($\mu\text{g}/\text{kg}$)</u>
ALDRIN	N.D.	.10
DIELDRIN	N.D.	.10
ENDRIN ALDEHYDE	N.D.	.50
ENDRIN	N.D.	.10
HEPTACHLOR	N.D.	.10
HEPTACHLOR EPOXIDE	N.D.	.10
p,p' - DDT	N.D.	.50
p,p' - DDE	0.69	.10
p,p' - DDD	N.D.	.50
ENDOSULFAN I	N.D.	.50
ENDOSULFAN II	N.D.	.50
α - BHC	N.D.	.10
β - BHC	N.D.	.10
γ - BHC (LINDANE)	N.D.	.10
δ - BHC	N.D.	.10
ENDOSULFAN SULFATE	N.D.	.50
p,p' - METHOXYCHLOR	N.D.	.50
TOXAPHENE	N.D.	.50
PCB'S	N.D.	.50
CHLORDANE	N.D.	.50

ChromaLab, Inc.

Mary Cappelli

Mary Cappelli
Analytical Chemist



Eric Tam
Laboratory Director

CHROMALAB, INC.

5 DAYS TURNAROUND

Environmental Laboratory (1094)

May 13, 1992

ChromaLab File No.: 592039C

Essenes Environmental

Attn: Dennis Judd

RE: Four soil samples for 8080 analysis

Project Name: Hohner

Project Number: 920504.B

Date Sampled: May 5, 1992

Date Submitted: May 5, 1992

Date Analyzed: May 13, 1992

RESULTS: S-3-H

CHLORINATED PESTICIDE ANALYSIS

<u>Compounds</u>	<u>Concentration ($\mu\text{g}/\text{kg}$)</u>	<u>Detection Limit ($\mu\text{g}/\text{kg}$)</u>
ALDRIN	0.61	.10
DIELDRIN	N.D.	.10
ENDRIN ALDEHYDE	N.D.	.50
ENDRIN	N.D.	.10
HEPTACHLOR	N.D.	.10
HEPTACHLOR EPOXIDE	N.D.	.10
P,p' - DDT	N.D.	.50
P,p' - DDE	N.D.	.10
P,p' - DDD	N.D.	.50
ENDOSULFAN I	N.D.	.50
ENDOSULFAN II	N.D.	.50
α - BHC	N.D.	.10
β - BHC	N.D.	.10
γ - BHC (LINDANE)	N.D.	.10
δ - BHC	N.D.	.10
ENDOSULFAN SULFATE	N.D.	.50
P,p' - METHOXYCHLOR	N.D.	.50
TOXAPHENE	N.D.	.50
PCB'S	N.D.	.50
CHLORDANE	150	.50

ChromaLab, Inc.

Mary Cappelli

Mary Cappelli
Analytical Chemist

Eric Tam

Eric Tam
Laboratory Director

CHROMALAB, INC.

5 DAYS TURNAROUND

Environmental Laboratory (1094)

May 13, 1992

ChromaLab File No.: 592039D

Essenes Environmental

Attn: Dennis Judd

RE: Four soil samples for 8080 analysis

Project Name: Hohner

Project Number: 920504.B

Date Sampled: May 5, 1992

Date Submitted: May 5, 1992

Date Analyzed: May 13, 1992

RESULTS: S-4-H

CHLORINATED PESTICIDE ANALYSIS

<u>Compounds</u>	<u>Concentration ($\mu\text{g}/\text{kg}$)</u>	<u>Detection Limit ($\mu\text{g}/\text{kg}$)</u>
ALDRIN	N.D.	.10
DIELDRIN	N.D.	.10
ENDRIN ALDEHYDE	N.D.	.50
ENDRIN	N.D.	.10
HEPTACHLOR	N.D.	.10
HEPTACHLOR EPOXIDE	N.D.	.10
p,p' - DDT	N.D.	.50
p,p' - DDE	N.D.	.10
p,p' - DDD	N.D.	.50
ENDOSULFAN I	N.D.	.50
ENDOSULFAN II	N.D.	.50
α - BHC	N.D.	.10
β - BHC	N.D.	.10
γ - BHC (LINDANE)	N.D.	.10
δ - BHC	N.D.	.10
ENDOSULFAN SULFATE	N.D.	.50
p,p' - METHOXYCHLOR	N.D.	.50
TOXAPHENE	N.D.	.50
PCB'S	N.D.	.50
CHLORDANE	64	.50

ChromaLab, Inc.

Mary Cappelli
Mary Cappelli
Analytical Chemist

Eric Tam
Eric Tam
Laboratory Director

CHROMALAB, INC.

5 DAYS TURNAROUND

Environmental Laboratory (1094)

May 13, 1992

ChromaLab File No.: 0592039

ESSENES ENVIRONMENTAL

Attn: Dennis Judd

RE: One soil sample for Title 22 CAM Metals (17) analysis

Project Name: HOHNER

Project Number: 920504.B

Date Sampled: May 5, 1992

Date Submitted: May 5, 1992

Date Analyzed: May 12, 1992

RESULTS: Sample I.D.: S-1-H

Metals	Concentration (mg/Kg)	Detection Limit (mg/Kg)
Antimony (Sb)	N.D.	1.00
Arsenic (As)	2.2	0.25
Barium (Ba)	44	0.25
Beryllium (Be)	N.D.	0.05
Cadmium (Cd)	1.5	0.05
Cobalt (Co)	4.3	0.50
Chromium (Cr)	13	0.50
Copper (Cu)	29	0.25
Lead (Pb)	4.9	0.50
Mercury (Hg)	0.15	0.05
Molybdenum (Mo)	N.D.	0.25
Nickel (Ni)	12	0.50
Selenium (Se)	N.D.	0.50
Silver (Ag)	N.D.	0.25
Thallium (Tl)	N.D.	2.00
Vanadium (V)	19	0.50
Zinc (Zn)	27	0.25

Method of Analysis: 3050/6010/7000

ChromaLab, Inc.

Refaat A Mankarious
Refaat A. Mankarious
Inorganics Supervisor


Eric Tam
Laboratory Director

CHROMALAB, INC.

5 DAYS TURNAROUND

Environmental Laboratory (1094)

May 13, 1992

ChromaLab File No.: 0592039

ESSENES ENVIRONMENTAL

Attn: Dennis Judd

RE: One soil sample for Title 22 CAM Metals (17) analysis

Project Name: HOHNER

Project Number: 920504.B

Date Sampled: May 5, 1992

Date Submitted: May 5, 1992

Date Analyzed: May 12, 1992

RESULTS: Sample I.D.: S-2-H

<u>Metals</u>	<u>Concentration</u> (mg/Kg)	<u>Detection</u> <u>Limit</u> (mg/Kg)
Antimony (Sb)	N.D.	1.00
Arsenic (As)	3.8	0.25
Barium (Ba)	43	0.25
Beryllium (Be)	N.D.	0.05
Cadmium (Cd)	1.1	0.05
Cobalt (Co)	3.0	0.50
Chromium (Cr)	12	0.50
Copper (Cu)	16	0.25
Lead (Pb)	8.7	0.50
Mercury (Hg)	0.2	0.05
Molybdenum (Mo)	N.D.	0.25
Nickel (Ni)	11	0.50
Selenium (Se)	N.D.	0.50
Silver (Ag)	N.D.	0.25
Thallium (Tl)	N.D.	2.00
Vanadium (V)	15	0.50
Zinc (Zn)	19	0.25

Method of Analysis: 3050/6010/7000

ChromaLab, Inc.

Refaat A. Mankarious
Refaat A. Mankarious
Inorganics Supervisor


Eric Tam
Laboratory Director

CHROMALAB, INC.

5 DAYS TURNAROUND

Environmental Laboratory (1094)

May 13, 1992

ChromaLab File No.: 0592039

ESSENES ENVIRONMENTAL

Attn: Dennis Judd

RE: One soil sample for Title 22 CAM Metals (17) analysis

Project Name: HOHNER

Project Number: 920504.B

Date Sampled: May 5, 1992

Date Submitted: May 5, 1992

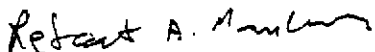
Date Analyzed: May 12, 1992

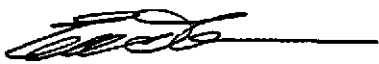
RESULTS: Sample I.D.: S-3-H

<u>Metals</u>	<u>Concentration</u> (mg/Kg)	<u>Detection</u> <u>Limit</u> (mg/Kg)
Antimony (Sb)	N.D.	1.00
Arsenic (As)	6.6	0.25
Barium (Ba)	61	0.25
Beryllium (Be)	N.D.	0.05
Cadmium (Cd)	2.1	0.05
Cobalt (Co)	5.2	0.50
Chromium (Cr)	15	0.50
Copper (Cu)	22	0.25
Lead (Pb)	19	0.50
Mercury (Hg)	0.30	0.05
Molybdenum (Mo)	N.D.	0.25
Nickel (Ni)	16	0.50
Selenium (Se)	N.D.	0.50
Silver (Ag)	N.D.	0.25
Thallium (Tl)	N.D.	2.00
Vanadium (V)	25	0.50
Zinc (Zn)	65	0.25

Method of Analysis: 3050/6010/7000

ChromaLab, Inc.


Refaat A. Mankarious
Inorganics Supervisor


Eric Tam
Laboratory Director

CHROMALAB, INC.

5 DAYS TURNAROUND

Environmental Laboratory (1094)

May 13, 1992

ChromaLab File No.: 0592039

ESSENES ENVIRONMENTAL

Attn: Dennis Judd

RE: One soil sample for Title 22 CAM Metals (17) analysis

Project Name: HOHNER

Project Number: 920504.B

Date Sampled: May 5, 1992

Date Submitted: May 5, 1992

Date Analyzed: May 12, 1992

RESULTS: Sample I.D.: S-4-H

<u>Metals</u>	<u>Concentration</u> (mg/Kg)	<u>Detection</u> <u>Limit</u> (mg/Kg)
Antimony (Sb)	N.D.	1.00
Arsenic (As)	4.9	0.25
Barium (Ba)	45	0.25
Beryllium (Be)	0.07	0.05
Cadmium (Cd)	2.1	0.05
Cobalt (Co)	4.9	0.50
Chromium (Cr)	14	0.50
Copper (Cu)	560	0.25
Lead (Pb)	330	0.50
Mercury (Hg)	0.52	0.05
Molybdenum (Mo)	N.D.	0.25
Nickel (Ni)	14	0.50
Selenium (Se)	N.D.	0.50
Silver (Ag)	N.D.	0.25
Thallium (Tl)	N.D.	2.00
Vanadium (V)	23	0.50
Zinc (Zn)	98	0.25

Method of Analysis: 3050/6010/7000

ChromaLab, Inc.

Refaat A. Mankarious

Refaat A. Mankarious
Inorganics Supervisor



Eric Tam
Laboratory Director

CHROMALAB, INC.

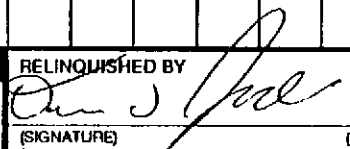

2239 Omega Road, #1 • San Ramon, California 94583
510/831-1788 • Facsimile 510/831-8798

CHROMALAB FILE # 592039
ORDER # 6327

DATE 5/5/92 PAGE 1 OF 1

PROJ. MGR. <u>Judd</u>	ANALYSIS REPORT															
COMPANY <u>ESSENE ENVIRONMENTAL</u>	TPH - Gasoline (EPA 5030, 8015)	TPH - Gasoline (EPA 5030, 8015) w/BTEX (EPA 802, 8020)	TPH - Diesel (EPA 3510/3550, 8015)	PURGEABLE AROMATICS BTEX (EPA 602, 8020)	PURGEABLE HALOCARBONS (EPA 601, 8010)	VOLATILE ORGANICS (EPA 624, 8240, 524.2)	BASENEUTRALS, ACIDS (EPA 625/627, 8270, 525)	TOTAL OIL & GREASE (EPA 5520 E&F)	PESTICIDES/PCB (EPA 808, 8080)	PHENOLS (EPA 804, 8040)	TOTAL RECOVERABLE HYDROCARBONS (EPA 418.1)	METALS: Cd, Cr, Pb, Zn, Ni	CAM METALS (17)	PRIORITY POLLUTANT METALS (13)	EXTRACTION (TCLP, STLC)	NUMBER OF CONTAINERS
ADDRESS <u>5500 BURASIDE RD. (CBAST 8101, CA 95472)</u>	SAMPLERS (SIGNATURE) <u>[Signature]</u> (PHONE NO.) <u>707 829-9331</u>															

SAMPLE ID.	DATE	TIME	MATRIX	LAB ID.	TPH - Gasoline (EPA 5030, 8015)	TPH - Gasoline (EPA 5030, 8015) w/BTEX (EPA 802, 8020)	TPH - Diesel (EPA 3510/3550, 8015)	PURGEABLE AROMATICS BTEX (EPA 602, 8020)	PURGEABLE HALOCARBONS (EPA 601, 8010)	VOLATILE ORGANICS (EPA 624, 8240, 524.2)	BASENEUTRALS, ACIDS (EPA 625/627, 8270, 525)	TOTAL OIL & GREASE (EPA 5520 E&F)	PESTICIDES/PCB (EPA 808, 8080)	PHENOLS (EPA 804, 8040)	TOTAL RECOVERABLE HYDROCARBONS (EPA 418.1)	METALS: Cd, Cr, Pb, Zn, Ni	CAM METALS (17)	PRIORITY POLLUTANT METALS (13)	EXTRACTION (TCLP, STLC)	NUMBER OF CONTAINERS	
S-111	5/5	10:35	Soil		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
S-211	5/5	10:45	"		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
S-311	5/5	10:55	"		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
S-411	5/5	11:05	"		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

PROJECT INFORMATION		SAMPLE RECEIPT		RELINQUISHED BY 1.		RELINQUISHED BY 2.		RELINQUISHED BY 3.	
PROJECT NAME: <u>HOHNER</u>	TOTAL NO. OF CONTAINERS: <u>4</u>	CHAIN OF CUSTODY SEALS	REC'D GOOD CONDITION/COLD	CONFORMS TO RECORD	VIA:	 (SIGNATURE) (TIME) DENNIS JUDD (PRINTED NAME) (DATE) ESSENE ENV. 5/5/92 (COMPANY)		(SIGNATURE) (TIME) (PRINTED NAME) (DATE) (COMPANY)	
PROJECT NUMBER: <u>920504.13</u>	LAB NO.	SPECIAL INSTRUCTIONS/COMMENTS:		RECEIVED BY 1. (SIGNATURE) (TIME) (PRINTED NAME) (DATE) (COMPANY)		RECEIVED BY 2. (SIGNATURE) (TIME) (PRINTED NAME) (DATE) (COMPANY)		RECEIVED BY (LABORATORY) 3.  (SIGNATURE) (TIME) SEAN HALSET 1615 (PRINTED NAME) (DATE) CHROMALAB 5/5 (COMPANY)	

Essenes Environmental, Inc.

June 1, 1992

Mr. Sherman Balch
Balch Enterprises Inc.
30960 Huntwood Avenue
Hayward, California 94544

Status Report
Soil Sampling
Tallyn Property
1362 Ruus Lane, Hayward, California
Essenes Job # 920505.B

Dear Mr. Balch,

On May 5, 1992 Essenes Environmental, Inc. (Essenes) conducted surface soil sampling at the Tallyn property located at 1362 Ruus Lane in Hayward, California. At the time of the sampling the property was being used for chemical toilet storage and operations by A-1 Sanitation.

A total of two surface soil samples were collected from the Tallyn property (See Figure 1). Sample S-1T was collected in the chemical toilet storage area where the soil had been stained a green color. Sample S-2T was collected at the chemical toilet wash out area.

The samples were placed in an ice box and transported, using proper Chain of Custody (attached) to Chromalab, Inc., a State Certified Analytical Laboratory. The samples were analyzed for the following constituents:

- Total Petroleum Hydrocarbons (TPH) - Gasoline /B4LUFT
- TPH - Diesel / B1LUFT
- Purgeable Halocarbons / EPA Method 8010
- Chlorinated Pesticide and PCBs / EPA Method 8080
- Title 22 (CAM 17 Metals) / EPA-CO7000

The results of the analyses (See Attached Laboratory Results), are summarized as follows:

Sample #	Gasoline	Diesel	8010	8080	chlordan ug/kg
S-1T	nd	nd	nd	nd	88
S-2T	nd	nd	nd	nd	nd

Mr. Sherman Balch
June 1, 1992
Page 2


Sample #	Sb	As	Ba	Be	Cd	Co	Cr	Cu	Pb	Hg	Mo	Ni
	mg/kg---->											
S-1T	1.6	3.4	86	nd	5.2	17	44	51	36	.17	nd	30
S-2T	nd	15	84	nd	3.5	9.2	33	40	27	.18	nd	20

Sample #	Se	Ag	Tl	V	Zn
	mg/kg ----->				
S-1T	nd	nd	nd	56	380
S-2T	nd	nd	nd	41	160

These results revealed an area of concern at Sample location S-1T for Chlordane.

If you have any questions, please contact me at my office.

Very truly yours,

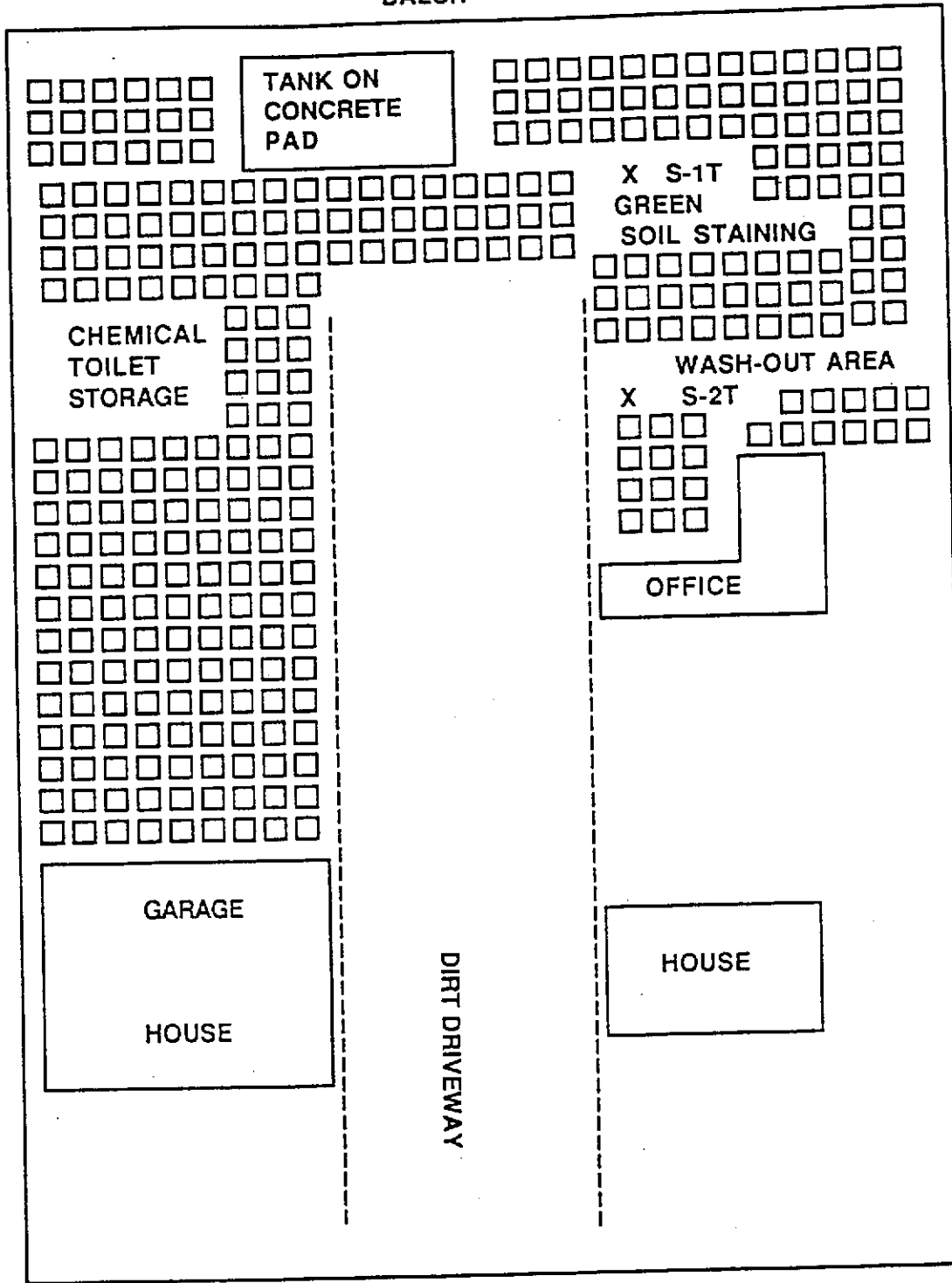


Dennis L. Judd, REHS, REA
President

Attachments

9205058.02

BALCH



HOHENER PROPERTY

RUUS LANE

NOT TO SCALE

KEY

- X SAMPLE LOCATION
- TOILET

ESSENES ENVIRONMENTAL, INC.
 5500 Burnside Road
 Sebastopol, CA 95472
 707-829-9331

BALCH ENTERPRISES
 Tallyn Property
 1362 Ruus Lane
 Hayward, California

Project No. 920505.B

Date: 6/1/92

Drawn by: OJ

Figure 1

CHROMALAB, INC.

5 DAYS TURNAROUND

Environmental Laboratory (1094)

May 27, 1992

ChromaLab File No.: 0592038

ESSENES ENVIRONMENTAL

Attn: Dennis Judd

RE: Two soil samples for Gas/BTEX and Diesel analyses

Project Name: TALLYN

Project Number: 920505.B

Date Sampled: May 5, 1992

Date Extracted: May 20, 1992

Date Submitted: May 5, 1992

Date Analyzed: May 26, 1992

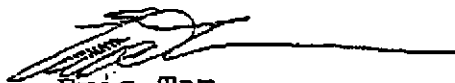
RESULTS:

Sample I.D.	Gasoline (mg/Kg)	Diesel (mg/Kg)	Benzene (μ g/Kg)	Toluene (μ g/Kg)	Ethyl Benzene (μ g/Kg)	Total Xylenes (μ g/Kg)
S-1T	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
S-2T	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
BLANK	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
SPIKE REC.	106%	88%	92%	94%	92%	93%
DUP SPIKE REC	----	100%	104%	105%	104%	104%
DET. LIMIT	1.0	1.0	5.0	5.0	5.0	5.0
METHOD OF ANALYSIS	5030/ 8015	3550/ 8015	8020	8020	8020	8020

ChromaLab, Inc.

Mary Cappelli

Mary Cappelli
Analytical Chemist


Eric Tam
Laboratory Director

CHROMALAB, INC.

Environmental Laboratory (1094)

5 DAYS TURNAROUND

May 27, 1992

ChromaLab File No.: 592038B

Essenes Environmental

Attn: Dennis Judd

RE: Two soil samples for 8080 analysis

Project Name: Tallyn

Project Number: 920505.B

Date Sampled: May 5, 1992

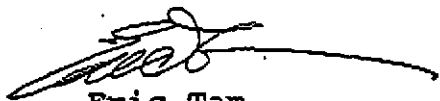
Date Submitted: May 5, 1992

Date Analyzed: May 26, 1992

RESULTS: S-1TCHLORINATED PESTICIDE ANALYSIS

Compounds	Concentration ($\mu\text{g}/\text{kg}$)	Detection Limit ($\mu\text{g}/\text{kg}$)
ALDRIN	N.D.	10
DIELDRIN	N.D.	10
ENDRIN ALDEHYDE	N.D.	50
ENDRIN	N.D.	10
HEPTACHLOR	N.D.	10
HEPTACHLOR EPOXIDE	N.D.	10
p,p' - DDT	N.D.	50
p,p' - DDE	N.D.	10
p,p' - DDD	N.D.	50
ENDOSULFAN I	N.D.	50
ENDOSULFAN II	N.D.	50
α - BHC	N.D.	10
β - BHC	N.D.	10
γ - BHC (LINDANE)	N.D.	10
δ - BHC	N.D.	10
ENDOSULFAN SULFATE	N.D.	50
p,p' - METHOXYCHLOR	N.D.	50
TOXAPHENE	N.D.	50
PCB'S	N.D.	50
CHLORDANE	88	50

ChromaLab, Inc.

*Mary Cappelli*Mary Cappelli
Analytical ChemistEric Tam
Laboratory Director

CHROMALAB, INC.

Environmental Laboratory (1094)

5 DAYS TURNAROUND

May 27, 1992

ChromaLab File # 0592038 A

Client: ESSENES ENVIRONMENTAL
Date Sampled: May 05, 1992
Date of Analysis: May 26, 1992

Attn: Dennis Judd
Date Submitted: May 05, 1992


Project Name: TALLYN
Sample I.D.: S-1T
Method of Analysis: EPA 8010

Detection Limit: 5.0 µg/kg

COMPOUND NAME	µg/kg	Spike Recovery	
CHLOROMETHANE	N.D.	---	---
VINYL CHLORIDE	N.D.	---	---
BROMOMETHANE	N.D.	---	---
CHLOROETHANE	N.D.	---	---
TRICHLOROFLUOROMETHANE	N.D.	---	---
1,1-DICHLOROETHENE	N.D.	92%	89%
METHYLENE CHLORIDE	N.D.	---	---
1,2-DICHLOROETHENE (TOTAL)	N.D.	---	---
1,1-DICHLOROETHANE	N.D.	---	---
CHLOROFORM	N.D.	---	---
1,1,1-TRICHLOROETHANE	N.D.	---	---
CARBON TETRACHLORIDE	N.D.	---	---
1,2-DICHLOROETHANE	N.D.	---	---
TRICHLOROETHENE	N.D.	107%	108%
1,2-DICHLOROPROPANE	N.D.	---	---
BROMODICHLOROMETHANE	N.D.	---	---
2-CHLOROETHYLVINYLEETHER	N.D.	---	---
TRANS-1,3-DICHLOROPROPENE	N.D.	---	---
CIS-1,3-DICHLOROPROPENE	N.D.	---	---
1,1,2-TRICHLOROETHANE	N.D.	---	---
TETRACHLOROETHENE	N.D.	109%	112%
DIBROMOCHLOROMETHANE	N.D.	---	---
CHLOROBENZENE	N.D.	---	---
BROMOFORM	N.D.	---	---
1,1,2,2-TETRACHLOROETHANE	N.D.	87%	102%
1,3-DICHLOROBENZENE	N.D.	---	---
1,4-DICHLOROBENZENE	N.D.	---	---
1,2-DICHLOROBENZENE	N.D.	---	---

ChromaLab, Inc.


Yiu Tam
Analytical Chemist


Eric Tam
Lab Director

CHROMALAB, INC.

Environmental Laboratory (1094)

5 DAYS TURNAROUND

May 27, 1992

ChromaLab File # 0592038 B

Client: ESSENES ENVIRONMENTAL
Date Sampled: May 05, 1992
Date of Analysis: May 26, 1992

Attn: Dennis Judd
Date Submitted: May 05, 1992

Project Name: TALLYN
Sample I.D.: S-2T
Method of Analysis: EPA 8010

Detection Limit: 5.0 µg/kg

COMPOUND NAME	µg/kg	Spike Recovery	
CHLOROMETHANE	N.D.	---	---
VINYL CHLORIDE	N.D.	---	---
BROMOMETHANE	N.D.	---	---
CHLOROETHANE	N.D.	---	---
TRICHLOROFLUOROMETHANE	N.D.	---	---
1,1-DICHLOROETHENE	N.D.	92%	89%
METHYLENE CHLORIDE	N.D.	---	---
1,2-DICHLOROETHENE (TOTAL)	N.D.	---	---
1,1-DICHLOROETHANE	N.D.	---	---
CHLOROFORM	N.D.	---	---
1,1,1-TRICHLOROETHANE	N.D.	---	---
CARBON TETRACHLORIDE	N.D.	---	---
1,2-DICHLOROETHANE	N.D.	---	---
TRICHLOROETHENE	N.D.	107%	108%
1,2-DICHLOROPROPANE	N.D.	---	---
BROMODICHLOROMETHANE	N.D.	---	---
2-CHLOROETHYLVINYLEETHER	N.D.	---	---
TRANS-1,3-DICHLOROPROPENE	N.D.	---	---
CIS-1,3-DICHLOROPROPENE	N.D.	---	---
1,1,2-TRICHLOROETHANE	N.D.	---	---
TETRACHLOROETHENE	N.D.	109%	112%
DIBROMOCHLOROMETHANE	N.D.	---	---
CHLOROBENZENE	N.D.	---	---
BROMOFORM	N.D.	---	---
1,1,2,2-TETRACHLOROETHANE	N.D.	87%	102%
1,3-DICHLOROBENZENE	N.D.	---	---
1,4-DICHLOROBENZENE	N.D.	---	---
1,2-DICHLOROBENZENE	N.D.	---	---

ChromaLab, Inc.


Yiu Tam
Analytical Chemist


Eric Tam
Lab Director

CHROMALAB, INC.

Environmental Laboratory (1094)

5 DAYS TURNAROUND

May 27, 1992

ChromaLab File No.: 592038A

Essenes Environmental

Attn: Dennis Judd

RE: Two soil samples for 8080 analysis

Project Name: Tallyn

Project Number: 920505.B

Date Sampled: May 5, 1992

Date Submitted: May 5, 1992

Date Analyzed: May 26, 1992

RESULTS: S-2T

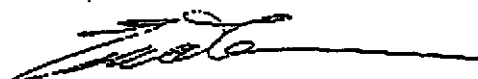
CHLORINATED PESTICIDE ANALYSIS

<u>Compounds</u>	<u>Concentration ($\mu\text{g}/\text{kg}$)</u>	<u>Detection Limit ($\mu\text{g}/\text{kg}$)</u>
ALDRIN	N.D.	10
DIELDRIN	N.D.	10
ENDRIN ALDEHYDE	N.D.	50
ENDRIN	N.D.	10
HEPTACHLOR	N.D.	10
HEPTACHLOR EPOXIDE	N.D.	10
p,p' - DDT	N.D.	50
p,p' - DDE	N.D.	10
p,p' - DDD	N.D.	50
ENDOSULFAN I	N.D.	50
ENDOSULFAN II	N.D.	50
α - BHC	N.D.	10
β - BHC	N.D.	10
γ - BHC (LINDANE)	N.D.	10
δ - BHC	N.D.	10
ENDOSULFAN SULFATE	N.D.	50
p,p' - METHOXYCHLOR	N.D.	50
TOXAPHENE	N.D.	50
PCB'S	N.D.	50
CHLORDANE	N.D.	50

ChromaLab, Inc.



Mary Cappelli
Analytical Chemist



Eric Tam
Laboratory Director

CHROMALAB, INC.

5 DAYS TURNAROUND

Environmental Laboratory (1094)

May 28, 1992

ChromaLab File No.: 0592038

ESSENES ENVIRONMENTAL

Attn: Dennis Judd

RE: One soil sample for Title 22 CAM Metals (17) analysis

Project Name: TALLYN

Project Number: 920505.B

Date Sampled: May 5, 1992

Date Submitted: May 5, 1992

Date Analyzed: May 27, 1992

RESULTS: Sample I.D.: S-2T

Metals	Concentration (mg/Kg)	Detection Limit (mg/Kg)
Antimony (Sb)	N.D.	1.00
Arsenic (As)	15	0.25
Barium (Ba)	84	0.25
Beryllium (Be)	N.D.	0.05
Cadmium (Cd)	3.5	0.05
Cobalt (Co)	9.2	0.50
Chromium (Cr)	33	0.50
Copper (Cu)	40	0.25
Lead (Pb)	27	0.50
Mercury (Hg)	0.18	0.05
Molybdenum (Mo)	N.D.	0.25
Nickel (Ni)	20	0.50
Selenium (Se)	N.D.	0.50
Silver (Ag)	N.D.	0.25
Thallium (Tl)	N.D.	2.00
Vanadium (V)	41	0.50
Zinc (Zn)	160	0.25

Method of Analysis: 3050/6010/7000

ChromaLab, Inc.

Refaat A. Mankarious

Refaat A. Mankarious
Inorganics Supervisor

Eric Tam

Eric Tam
Laboratory Director

CHROMALAB, INC.

5 DAYS TURNAROUND

Environmental Laboratory (1094)

May 28, 1992

ChromaLab File No.: 0592038

ESSENES ENVIRONMENTAL

Attn: Dennis Judd

RE: One soil sample for Title 22 CAM Metals (17) analysis

Project Name: TALLYN

Project Number: 920505.B

Date Sampled: May 5, 1992

Date Submitted: May 5, 1992

Date Analyzed: May 27, 1992

RESULTS: Sample I.D.: S-1T

<u>Metals</u>	<u>Concentration (mg/Kg)</u>	<u>Detection Limit (mg/Kg)</u>
Antimony (Sb)	1.6	1.00
Arsenic (As)	3.4	0.25
Barium (Ba)	86	0.25
Beryllium (Be)	N.D.	0.05
Cadmium (Cd)	5.2	0.05
Cobalt (Co)	17	0.50
Chromium (Cr)	44	0.50
Copper (Cu)	51	0.25
Lead (Pb)	36	0.50
Mercury (Hg)	0.17	0.05
Molybdenum (Mo)	N.D.	0.25
Nickel (Ni)	30	0.50
Selenium (Se)	N.D.	0.50
Silver (Ag)	N.D.	0.25
Thallium (Tl)	N.D.	2.00
Vanadium (V)	56	0.50
Zinc (Zn)	380	0.25

Method of Analysis: 3050/6010/7000

ChromaLab, Inc.

Refaat A. Mankarious
Refaat A. Mankarious
Inorganics Supervisor


Eric Tam
Laboratory Director

Essenes Environmental, Inc.

RECEIVED BY
HAZARDOUS MATERIALS OFFICE

MAR 09 1993

HAYWARD FIRE DEPARTMENT

SUBSURFACE INVESTIGATION

Site:

Hohener Property
1384 Ruus Lane
Hayward, California

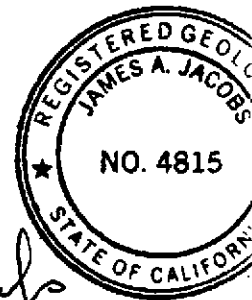
Prepared For:

Mr. Sherman Balch
Balch Enterprises
30960 Huntwood Avenue
Hayward, CA 94544

March 1, 1993

Olivia Jaestro for
Dennis Judd, R.E.A., R.E.H.S.
President

James A. Jacobs
James A. Jacobs, R.G# 4815
Principal Geologist



CONTENTS

ITEM	PAGE
Executive Summary	iii
1 Introduction	1
1.1 Scope of Work	1
2 Background	2
2.1 Site Description	2
2.2 Site History	2
3 Subsurface Investigation	3
4 Laboratory Analyses	4
5 Analytical Results	5
5.1 Soil Analysis	5
5.2 Groundwater Analysis	5
6 Distribution	6
7 Limitations	7

FIGURES

1. Site Location Map
2. Site Map with Soil Boring and Monitor Well Locations

TABLES

1. Analytic Results: Soil Samples- Soil Boring Samples - Organics and Hydrocarbons
2. Analytic Results: Soil Boring Samples - Metals
3. Analytic Results: Groundwater Samples - Organics and Hydrocarbons
4. Analytic Results: Groundwater Samples - Metals

APPENDICES

- A. Permit
- B. Boring Logs and Unified Soil Classification System
- C. Standard Operating Procedures
- D. Lab Reports and Chain of Custody Forms

EXECUTIVE SUMMARY

Essenes Environmental, Inc. (Essenes) conducted a subsurface investigation on the Hohener property at 1384 Ruus Lane in Hayward, California. The purpose of the investigation was to evaluate whether the groundwater and shallow soil on the property had been impacted from the on-site activities and to evaluate the potential environmental risks posed by the subject property to adjacent properties.

Twelve soil borings, designated as B-1 through B-8, and B-1A through B-4A, were drilled on the property on February 17, 1993. All borings were drilled into native material.

Boring B-1A through B-4A were drilled by licensed driller GUESS Drilling of San Rafael, California. Boring B-1 was drilled with a Mobile B-53 hollow stem auger rig. Due to drilling in inaccessible locations, borings B-1 through B-8 were drilled by licensed driller Artesian Environmental Consultants (#624461) using a 2-inch diameter hand augering tool. The soil borings B-1 through B-8 were drilled to a depth of 3 feet below ground surface. One alternate boring B-8' was drilled to 0.5 feet and abandoned due to resistance.

The soils were logged by a project geologist under the supervision of a California-registered geologist. Soil samples were collected in borings B-1 through B-8 at 6 inches, 18 inches and 36 inches below ground surface for lithologic, hydrologic and characterization and possible chemical analysis. Soil samples were collected in borings B-1A through B-4A at least every 5 feet for lithologic, hydrologic and characterization and possible chemical analysis.

Groundwater was measured to occur at about 11 feet below ground surface. Grab groundwater samples were collected in borings B-1A through B-4A. The samples were collected using a Teflon bailer in temporary well casings on February 17, 1993.

Selected soil and water samples were analyzed for total petroleum hydrocarbons as gasoline (TPH-g) diesel (TPH-d), kerosene (TPH-k), motor oil (TPH-mo) by EPA Method 8015; benzene, toluene, ethylbenzene and xylenes (BTEX) by EPA Method 8020. Samples were also analyzed for purgeable halocarbons by EPA Method 8010/601, chlorinated pesticides by EPA Method 8080/608 and the CAM 17 metals by EPA Methods 3010/6010/7470.

CONCLUSIONS

SOILS- Purgeable halocarbons and gasoline (TPH-g) were not detected in the soils. Motor oil (TPH-mo) was detected in 9 borings (B-1, B-2, B-4, B-5, B-6, B-7, B-1A, B-2A and B-3A) at levels as high as 230 parts per million (ppm). Kerosene (TPH-k) was detected in B-6 at 5.5 ppm. Diesel (TPH-d) was detected in borings B-6 and B-2A at levels as high as 60 ppm. Toluene, ethylbenzene and xylenes were detected in boring B-5 at levels of 10, 8.7 and 58 ppm,

respectively. Chlorinated pesticides were detected in 2 borings: B-6 contained 7.3 parts per billion (ppb) of p,p' methoxychlor and B-1A contained 2.7 ppb of dieldrin, 1.2 ppb p,p DDD and 77 ppb chlorodane. Metals were detected at concentrations associated with native soil conditions.

WATER- None of the target analytes were detected, except metals which were at concentrations associated with native conditions.

SUMMARY:

- Shallow soils were impacted by motor oil, kerosene, diesel, toluene, ethylbenzene, xylenes, chlorodane, dieldrin, and DDD. The extent of contamination is not fully known at this time. The highest concentrations appear to be associated with surface staining.
- Migration of contaminants onto adjacent properties through the wind appears remote due to the relatively low concentrations and low volatility of the contaminants.
- Migration of soil contaminants onto adjacent properties does not appear to have occurred based on the soil samples collected at approximately 10 feet below ground surface.
- Groundwater was not impacted.

2 BACKGROUND

2.1 SITE DESCRIPTION

The property is a 2.26 acre vacant lot located at 1384 Ruus Lane in Hayward, California in an industrial zone. The property is bordered to the north by Ruus Land, to the east by a portable sanitary service business; to the south by a vacant lot fronting on Industrial Boulevard; and to the west by a vacant lot fronting on Stratford Road.

2.2 SITE HISTORY

The property is believed to have been used for the storage of various types of junk. Soil staining is present. On June 1, 1992, Essenes conducted surface soil sampling. Four soil samples were analyzed for TPH-g, TPH-d, purgeable halocarbons, chlorinated pesticides and CAM 17 metals. Diesel at levels as high as 7.4 ppm, chlordane as high as 150 ppb, aldrin at 0.61 ppb and DDE at 0.69 ppb were detected on the property. Metals were detected at concentrations associated with naturally occurring levels.

3 SUBSURFACE INVESTIGATION

Essenes obtained permission to drill the borings through Alameda Flood Control - Zone 7, the Alameda County Environmental Health Department and the Hayward Fire Department. The boring permit is included in Appendix A. Underground service alert was notified prior to drilling. Essenes developed a health and safety plan and a magnetic line location survey was conducted prior to field activities.

Essenes supervised the drilling of twelve soil borings on the property. The borings, designated B-1 through B-8, and B-1A through B-4A, were drilled on February 17, 1993. All borings were drilled into native material. Borings B-1A through B-4A were drilled by licensed driller GUESS Drilling of San Rafael, California with a Mobile B-53 hollow stem auger rig. Borings B-1A through B-4A were drilled to a maximum depth of 15 feet below ground surface with an 8-inch diameter hollow stem augers. Due to inaccessible drilling locations, borings B-1 through B-8 were drilled by licensed driller Artesian Environmental Consultants using a 2-inch diameter hand augering tool. The soil borings B-1 through B-8 were drilled to a depth of 3 feet below ground surface. One alternate boring B-8' was drilled to 0.5 feet and abandoned due to resistance.

Field work was performed by a project geologist under the supervision of a California-registered geologist. Soil samples were collected in borings B-1 through B-8 at 6 inches, 18 inches and 36 inches below ground surface and at least every 5 feet in borings B-1A through B-4A. The samples were logged in the field for lithologic, hydrologic characteristics using the Unified Soil Classification System. Boring logs and the Unified Soil Classification System are included in Appendix B. Standard operating procedures for hollow stem auger soil sampling and continuous core sampling are included in Appendix C.

Groundwater was measured to occur at about 11 feet below ground surface. Grab groundwater samples were collected in borings B-1A through B-4A. The samples were collected using a Teflon bailer in temporary well casings on February 17, 1993.

Drilling equipment was decontaminated between borings using a steam cleaner for hollow stem augers or Alconox wash and two deionized water rinses for the hand augering equipment. The rinse water and drill cuttings were stored on site in labeled, 55-gallon, DOT 17-H drums in a manner consistent with agency regulations and guidelines. Borings B-1A through B-4A were abandoned on February 17, 1993 using a neat cement grout. The grout was placed in the bottom of the borehole with a tremie pipe. Shallow 2-inch diameter borings B-1 through B-8 were filled with low permeability native soils.

4 LABORATORY ANALYSES

All soil samples were labeled and packed on crushed ice for transportation to Chromalab, Inc of San Ramon, California, a State certified hazardous materials laboratory. Selected soil and water samples were analyzed for total petroleum hydrocarbons as gasoline (TPH-g) diesel (TPH-d), kerosene (TPH-k), motor oil (TPH-mo) by EPA Method 8015; benzene, toluene, ethylbenzene and xylenes (BTEX) by EPA Method 8020. Samples were also analyzed for purgeable halocarbons by EPA Method 8010/601, chlorinated pesticides by EPA Method 8080/608 and the CAM 17 metals by EPA Methods 3010/6010/7470. Chain of Custody documentation included in Appendix D accompanied all samples to the laboratory.

5 ANALYTIC RESULTS

5.1 SOIL ANALYSIS

The soil sample analyses are summarized in Tables 1 and 2. Purgeable halocarbons and gasoline (TPH-g) were not detected in the soils. Motor oil (TPH-mo) was detected in 9 borings (B-1, B-2, B-4, B-5, B-6, B-7, B-1A, B-2A and B-3A) at levels as high as 230 parts per million (ppm). Kerosene (TPH-k) was detected in B-6 at 5.5 ppm. Diesel (TPH-d) was detected in borings B-6 and B-2A at levels as high as 60 ppm. Toluene, ethylbenzene and xylenes were detected in boring B-5 at levels of 10, 8.7 and 58 ppm, respectively. Chlorinated pesticides were detected in 2 borings: B-6 contained 7.3 parts per billion (ppb) of p,p' methoxychlor and B-1A contained 2.7 ppb of dieldrin, 1.2 ppb p,p DDD and 77 ppb chlordane. Metals were detected at concentrations associated with native soil conditions.

5.2 GROUNDWATER ANALYSIS

The groundwater sample analysis is summarized in Tables 3 and 4. None of the target analytes were detected, except metals which were at concentrations associated with native conditions.

6 DISTRIBUTION

Essenes recommends that the client forward copies of this report to the appropriate regulatory agencies and representatives. Copies of this report have been included for this purpose. Copies sent to the regulators should include a cover letter from the client attesting the validity of this report to the best of the client's knowledge. This letter must be prepared on the client's letterhead and signed by the appropriate individual.

Dr. Ravi Arulanatham
Alameda County Department of Environmental Health
80 Swan Way, Room 200
Oakland, CA 94621

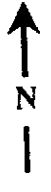
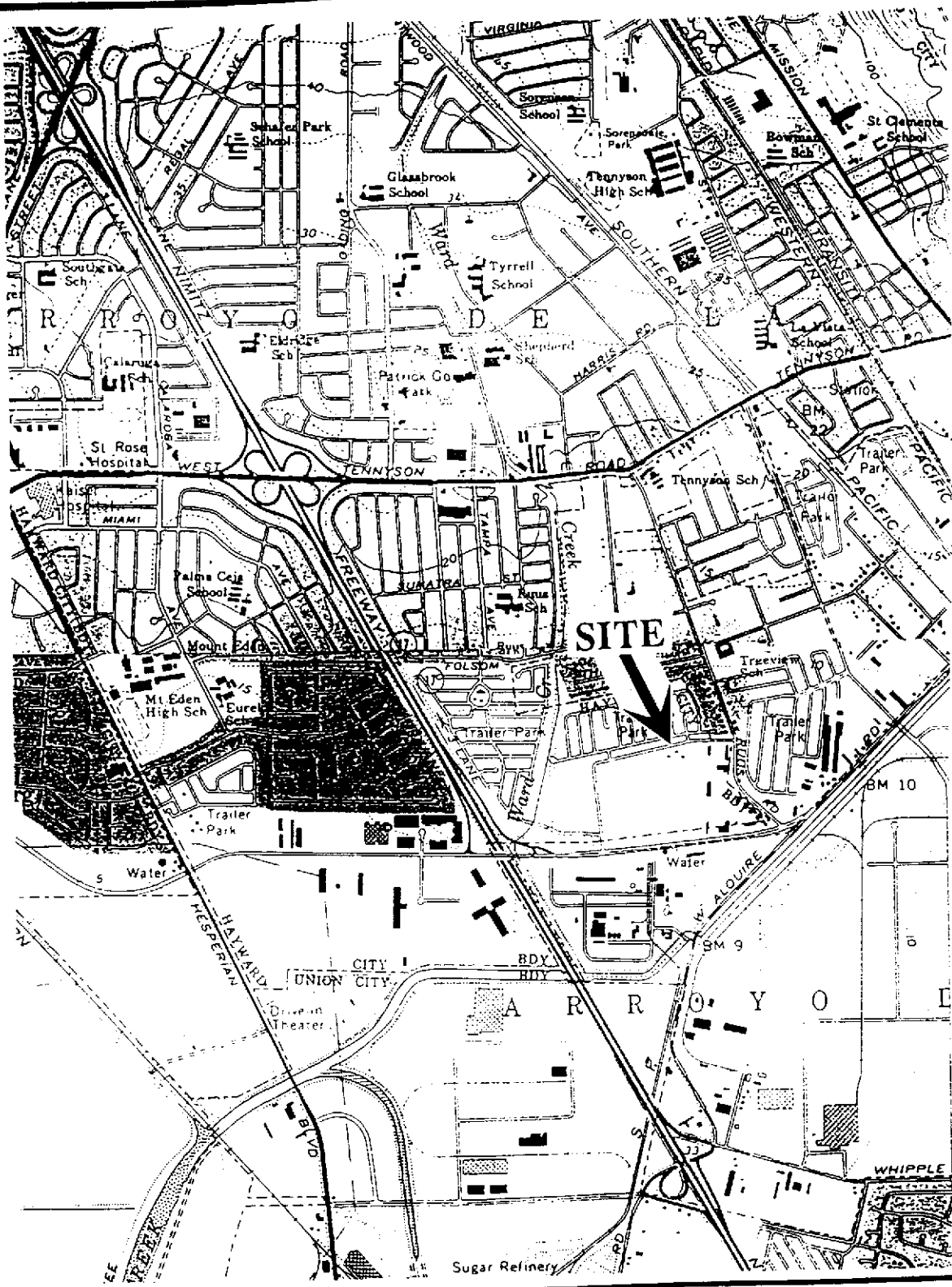
Mr. Hugh Murphy
Hayward Fire Department
25151 Clawiter Road
Hayward, CA 94545-2731

7 LIMITATIONS

The authors and firm offer no assurance and assume no responsibility for site conditions or activities which were beyond the scope of work requested by the client and referenced in the introduction of this report. The compensation agreed to by the client and the firm corresponds to the scope of work defined, with the associated limitations which are an integral and important part of this report. This report was prepared with generally accepted standards of environmental geological practice in California at the time this investigation was performed. This investigation was conducted solely as a tool in assessing environmental conditions of the soil and/or groundwater with respect to relative hydrocarbon product contamination in the immediate vicinity of the former underground storage tank. No soil engineering or geotechnical recommendations are implied or should be inferred. Evaluation of the geologic conditions at the site for the purpose of this investigation is made from a limited number of observation points. There may be variations in subsurface conditions away from the sample points available. There are no representations, warranties, or guarantees that the points selected for sampling are in anyway representative of the entire site. Data from this report reflects the sample conditions at specific locations at a specific point in time. No other interpretations, representations, warranties, guarantees, express or implied, are included or intended by this report. Additional work, including further subsurface investigation, can reduce the inherent uncertainties associated with this type of investigation. There are no guarantees or warranties, express or implied, that undocumented, nonpermitted, illegally or improperly abandoned subsurface containers (such as underground storage tanks or drums) or other sources of contamination or contaminated soil or groundwater itself, or covered, encapsulated, inaccessible or unobservable hazardous materials either do or do not exist on the property.

This project involved hazardous or toxic compounds and there are certain inherent risk factors involved (such as limitations on laboratory or analytical methods or equipment, variations in subsurface conditions, and risks associated with specific analysis not requested by the client), which may adversely affect the results of the project, even though the services were performed with such skill and care as are generally accepted professional standards for the environmental geology profession.

This report and all matters contained herein were prepared for the sole and exclusive benefit of the client specified herein, and is intended only for the use of the client. Neither all, nor any part of the contents of this report, or copy thereof, shall be used for any purpose by anyone but the client specified herein nor shall it be conveyed or disseminated by anyone without the express written consent of the authors. No one, except for the client specified herein, may rely on this report for any purpose. Any person or entity who obtains or reads this report, or a copy thereof, other than the client specified herein, expressly assumes all risk of damages to himself or third persons arising out of reliance thereon or use thereof and waives the right to bring any action based on this report, directly or indirectly, and the authors shall have no liability to any such person or entity.



Approximate Scale
(mile)

1959/PhotoRev 1980
USGS 1: 24,000 Scale
Newark/Hayward Quadrangle Topographic Map

VICINITY MAP

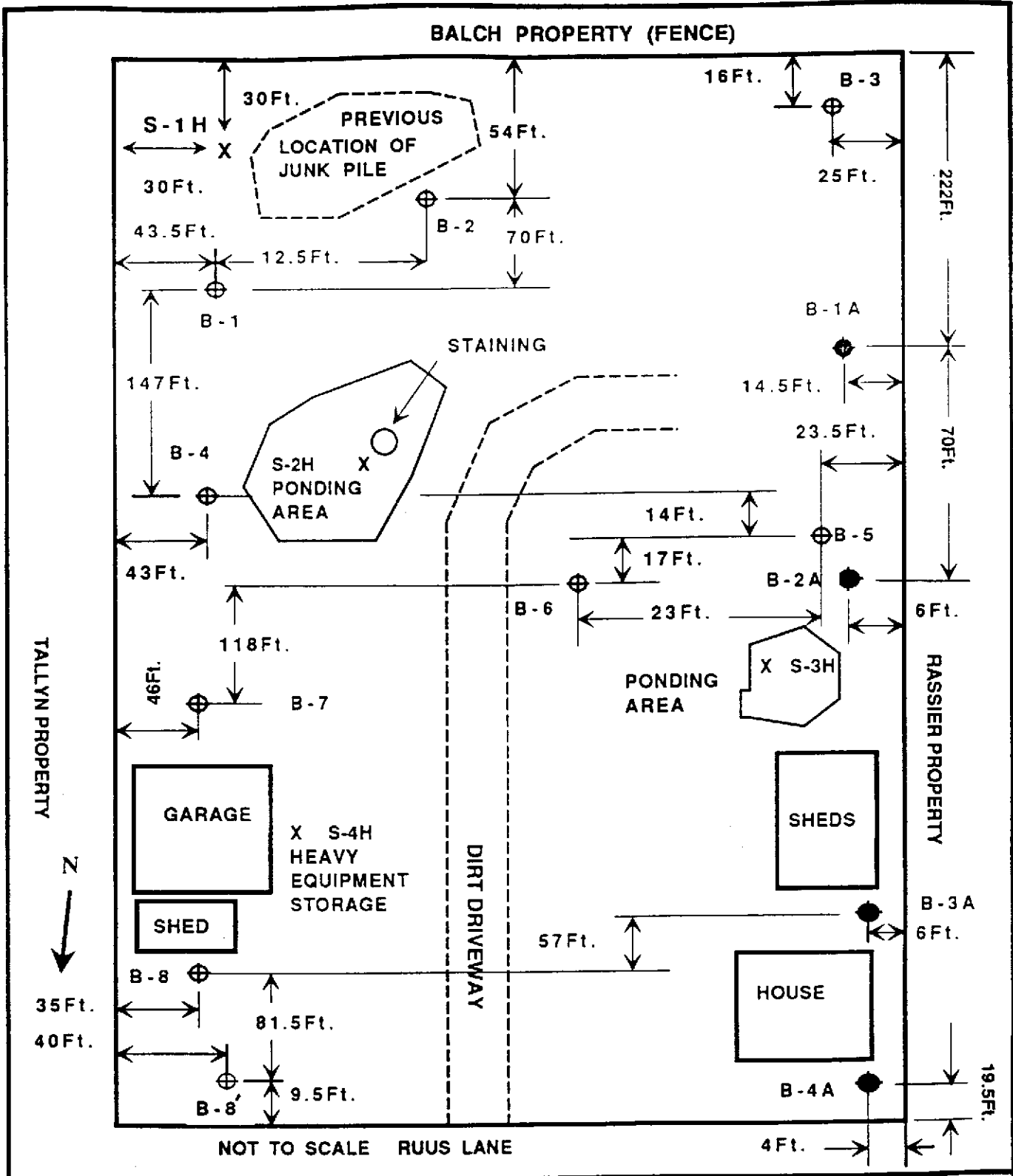
BALCH ENTERPRISES, INC.
Hohener Property
1384 Ruus Lane
Hayward, California

Project No. 033-008-01

Date: 3/2/93

Drawn by: PDS

Figure 1



NOT TO SCALE RUUS LANE

<p>Boring Key</p>	<p>ESSENES ENVIRONMENTAL, INC. 5500 Burnside Road Sebastopol, CA 95472 707-829-9331</p>	<p>BALCH ENTERPRISES, INC. Hohener Property 1384 Ruus Lane Hayward, California</p>	
<p>● 8" Dia. 2/17/93</p>			
<p>⊕ 3" Dia. 2/17/93</p>			
<p>X 5/5/93</p>	<p>Project No. 033-008-01</p>	<p>Date: 2/18/93</p>	<p>Drawn by: ML Plan View</p>

Table 1- Summary of Laboratory Data - Soils

Hohener Property

1384 Ruus Lane

Hayward, California

Sample Date: 2/17/93

Sample I.D.	Depth ft	TPH-k ppm	TPH-D ppm	TPH-mo ppm	Purg. Hal. ppb	TPH-g ppm	B-T-E-X ppb	Chl. Pest. ppb
B-1-1	0-0.5	ND	ND	93	ND	ND	ND-ND-ND-ND	ND
B-2-1	0-0.5	ND	ND	14	ND	ND	ND-ND-ND-ND	ND
B-3-1	0-0.5	ND	ND	ND	ND	ND	ND-ND-ND-ND	ND
B-4-1	0-0.5	ND	ND	31	ND	ND	ND-ND-ND-ND	ND
B-5-1	0-0.5	ND	ND	21	ND	ND	ND-10-8.7-58	ND
B-6-1	0-0.5	5.5	60*	230	ND	ND	ND-ND-ND-ND	7.3 p,p' methoxychlor
B-7-1	0-0.5	ND	ND	26	ND	ND	ND-ND-ND-ND	ND
B-8-1	0-0.5	ND	ND	ND	ND	ND	ND-ND-ND-ND	ND
B-1A-6	0-0.5	ND	ND	140	ND	ND	ND-ND-ND-ND	2.7 dieldrin; 1.2 p,p'- DDE; 77 chlorodane
B-1-A-11.0-11.5	11.0-11.5	ND	ND	ND	ND	ND	ND-ND-ND-ND	ND
B-2 A-6	0-0.5	ND	3	26	ND	ND	ND-ND-ND-ND	ND
B-2-A-10.5-11.0	10.5-11.0	ND	ND	ND	ND	ND	ND-ND-ND-ND	ND
B-3 A-6	0-0.5	ND	ND	25	ND	ND	ND-ND-ND-ND	ND
B-3-A-10.5-11.0	10.5-11.0	ND	ND	ND	ND	ND	ND-ND-ND-ND	ND
B-4 A-6	0-0.5	ND	ND	ND	ND	ND	ND-ND-ND-ND	ND
B-4-A-11.0-11.5	11.0-11.5	ND	ND	ND	ND	ND	ND-ND-ND-ND	ND

*= unknown hydrocarbon on diesel range

Table 2- Summary of Laboratory Data - Metals

Hohener Property

1384 Ruus Lane

Hayward, California

Sample Date: 2/17/93

Sample I.D.	Depth ft	Sb ppm	As ppm	Ba ppm	Be ppm	Cd ppm	Co ppm	Cr ppm	Cu ppm	Pb ppm	Hg ppm	Mn ppm	Ni ppm	Se ppm	Ab ppm	Tl ppm	V ppm	Zn ppm
B-1-1	0-0.5	2.5	5.2	104	0.44	ND	11	24	45	140	0.11	ND	40	ND	ND	ND	39	120
B-2-1	0-0.5	1.2	5.2	83	0.40	ND	9.1	22	17	11	ND	ND	36	ND	ND	ND	23	29
B-3-1	0-0.5	1.3	4.3	100	0.51	ND	11	24	60	22	0.12	ND	41	ND	ND	ND	54	58
B-4-1	0-0.5	1.6	1.0	106	0.42	ND	12	17	52	36	0.14	ND	36	ND	ND	ND	34	77
B-5-1	0-0.5	1.1	10	91	0.40	ND	13	28	68	42	0.89	ND	43	ND	ND	ND	46	220
B-6-1	0-0.5	ND	ND	70	0.40	ND	16	60	72	15	0.15	ND	ND	ND	ND	ND	30	43
B-7-1	0-0.5	ND	7.4	91	0.42	ND	11	27	46	14	0.059	ND	38	ND	ND	ND	30	73
B-8-1	0-0.5	ND	7.8	114	0.74	ND	18	8.3	87	39	0.26	ND	31	ND	ND	ND	105	101
B-1A-6	0-0.5	1.6	3.7	91	0.47	ND	12	41	36	35	0.12	ND	39	ND	ND	ND	43	60
B-1-A-11.0-11.5	11.0-11.5	ND	1.7	89	0.19	ND	5.3	27	18	6.1	ND	ND	28	ND	ND	ND	31	33
B-2 A-6	0-0.5	1.1	1.5	68	0.29	ND	11	22	39	61	0.14	ND	31	ND	ND	ND	23	107
B-2-A-10.5-11.0	10.5-11.0	1.2	6.1	92	0.40	ND	9.6	24	20	8.9	ND	ND	41	ND	ND	ND	20	36
B-3 A-6	0-0.5	2.2	6.5	66	0.34	ND	11	37	67	44	0.15	ND	64	ND	ND	ND	32	170
B-3-A-10.5-11.0	10.5-11.0	1.6	5.1	96	0.33	ND	8.5	23	20	9.6	ND	ND	37	ND	ND	ND	17	300
B-4 A-6	0-0.5	ND	2.4	150	0.70	ND	20	68	61	14	0.24	ND	102	ND	ND	ND	72	62
B-4-A-11.0-11.5	11.0-11.5	1.3	ND	95	0.38	ND	9.6	22	20	9	ND	ND	43	ND	ND	ND	24	35
TLC (ppm)		500.0	500.0	10000	75.00	100	8000	500	2500	1000	20	3500	2000	100	500	700	2400	5000

Table 3- Summary of Laboratory Data - Groundwater

Hohener Property

1384 Ruus Lane

Hayward, California

Sample I.D.	Sample Date	TPH-k ppb	TPH-D ppb	TPH-mo ppb	Purg. Hal. ppb	TPH-g ppb	B-T-E-X ppb	Chl. Pest. ppb
B-1 A-AQ	2/17/93	ND	ND	ND	ND	ND	ND-ND-ND-ND	ND
B-2-A-AQ	2/17/93	ND	ND	ND	ND	ND	ND-ND-ND-ND	ND
B-3 A-AQ	2/17/93	ND	ND	ND	ND	ND	ND-ND-ND-ND	ND
B-4 A-AQ	2/17/93	ND	ND	ND	ND	ND	ND-ND-ND-ND	ND

Table 4- Summary of Laboratory Data - Groundwater: Metals

Hohener Property

1384 Ruus Lane

Hayward, California

Sample Date: 2/17/93

Sample I.D.	Depth ft	Sb ppm	As ppm	Ba ppm	Be ppm	Cd ppm	Co ppm	Cr ppm	Cu ppm	Pb ppm	Hg ppm	Mn ppm	Ni ppm	Se ppm	Ag ppm	Tl ppm	V ppm	Zn ppm
B-1A-AQ	0-0.5	ND	ND	0.07	ND	ND	ND	ND	0.01	ND	ND	ND	ND	ND	ND	ND	0.03	0.02
B-2A-AQ	0-0.5	ND	0.01	0.07	ND	ND	ND	ND	0.01	ND	ND	ND	ND	ND	ND	ND	0.03	0.03
B-3A-AQ	0-0.5	ND	ND	0.11	ND	ND	ND	ND	0.01	ND	ND	ND	ND	ND	ND	ND	0.02	0.02
B-4A-AQ	0-0.5	ND	ND	0.06	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.01
STC- (ppm)		15.0	5.0	100	0.75	1	80	6	25	5	0.2	350	20	1	5	7	24	250

ABBREVIATIONS USED IN THE TABLES

ppb= parts per billion

ppm= parts per million

TPH-d= total petroleum hydrocarbons as diesel

TPH-g= total petroleum hydrocarbons as gasoline

TPH-k= total petroleum hydrocarbons as kerosene

TPH-mo= total petroleum hydrocarbons as motor oil

Chl. Pest.= chlorinated pesticides

Purg. Hal.= purgeable halocarbons

B= benzene

T= toluene

E= ethylbenzene

X= xylenes

Sb= antimony

As= arsenic

Ba= barium

Be= beryllium

Cd= cadmium

Co= cobalt

Cr= chromium

Cu= copper

Pb= lead

Hg= mercury

Mo= molybdenum

Ni= nickel

Se= selenium

Ag= silver

Tl= thallium

V= vanadium

Zn= zinc

NA= not analyzed

ND= below measured laboratory detection level



ZONE 7 WATER AGENCY

5997 PARKSIDE DRIVE PLEASANTON, CALIFORNIA 94588

VOICE (510) 484-2600
FAX (510) 462-3914

DRILLING PERMIT APPLICATION

FOR APPLICANT TO COMPLETE

FOR OFFICE USE

LOCATION OF PROJECT Hohener Property
1384 Rius Lane
Hayward CA

PERMIT NUMBER 93067
LOCATION NUMBER _____

CLIENT Dennis Judd
Address Essex Ent. Phone 707-829-9331
5500 Burnside Rd Zip 94722
Sebastopol CA

PERMIT CONDITIONS

Circled Permit Requirements Apply

APPLICANT Name Jim Jacobs
Antesian Environmental Consultants
Address 3175 Kemer Blvd E Phone 415-257-4801
City San Rafael CA Zip 94901

A. GENERAL

1. A permit application should be submitted so as to arrive at the Zone 7 office five days prior to proposed starting date.
2. Submit to Zone 7 within 60 days after completion of permitted work the original Department of Water Resources Water Well Driller's Report or equivalent for well projects, or drilling logs and location sketch for geotechnical projects.
3. Permit is void if project not begun within 90 days of approval date.

B. WATER WELLS, INCLUDING PIEZOMETERS

1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
2. Minimum seal depth is 50 feet for municipal and industrial wells or 20 feet for domestic and irrigation wells unless a lesser depth is specially approved. Minimum seal depth for monitoring wells is the maximum depth practicable or 20 feet.

C. GEOTECHNICAL. Backfill bore hole with compacted cuttings or heavy bentonite and upper two feet with compacted material. In areas of known or suspected contamination, tremied cement grout shall be used in place of compacted cuttings.

D. CATHODIC. Fill hole above anode zone with concrete placed by tremie.

E. WELL DESTRUCTION. See attached.

TYPE OF PROJECT
Well Construction _____ Geotechnical Investigation _____
Cathodic Protection _____ General X
Water Supply _____ Contamination _____
Monitoring _____ Well Destruction _____
Soil borings to 9 to 20 feet
PROPOSED WATER SUPPLY WELL USE
Domestic _____ Industrial _____ Other NONE
Municipal _____ Irrigation _____

DRILLING METHOD:
Mud Rotary _____ Air Rotary _____ Auger X
Cable _____ Other _____

DRILLER'S LICENSE NO. C-624461 (C-57)

WELL PROJECTS
Drill Hole Diameter 8 in. Maximum _____
Casing Diameter None in. Depth 20 ft.
Surface Seal Depth _____ ft. Number 12
grout w/ neat cement

GEOTECHNICAL PROJECTS
Number of Borings 12 Maximum _____
Hole Diameter 8 in. Depth 20' ft.

ESTIMATED STARTING DATE 2/12/93
ESTIMATED COMPLETION DATE 2/12/93

Approved Wyman Hong Date 10 Feb 93
Wyman Hong

I hereby agree to comply with all requirements of this permit and Alameda County Ordinance No. 73-68.

APPLICANT'S [Signature]

file - Essene Alaynd

MISSION DIVISION
24300 CLAWITER RD
HAYWARD CA 94545

02-12-93

ARTESIAN ENVIRONMENTAL CONSULTANTS
3175 KERNER BL STE "E"
SAN RAFAEL, CA 94901

Dear Customer,

Thank you for notifying us and other utilities through Underground Service Alert (USA) of your intent to work in the vicinity of our underground facilities. Surface markings have been, or will be, provided at the work site.

The material contained in this letter shall apply to all your jobs in our service area which may involve our facilities.

Pacific Gas and Electric Company exercises due care in making these surface markings as complete and accurate as reasonably possible. However, because of the nature of underground construction, the precise location of underground facilities can only be determined by you through careful probing or hand digging in compliance with Article 6 of the California Occupational Safety and Health Administration (Cal/OSHA) Construction Safety Orders.

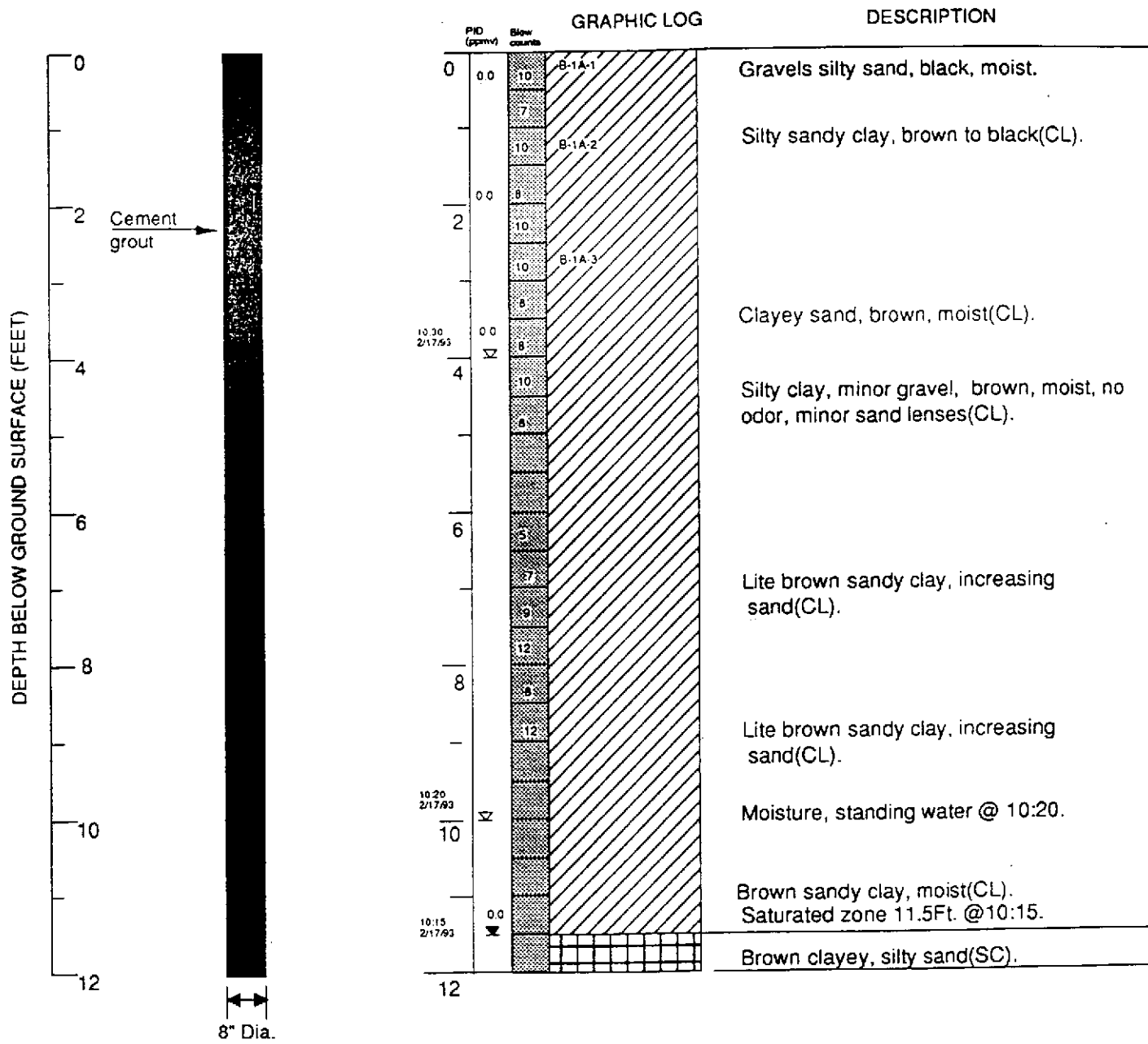
USA markings are only valid for 14 days; therefore, please renew your request with USA every 2 week period until the project is complete. We would like to emphasize the requirement for notifying USA at least two working days prior to the start of the actual construction.

If you have any questions concerning USA, please call Don Baker at (510) 784-3227.

Thank you for your cooperation.

Sincerely,

IRENE DEGL'INNOCENTI
DIVISION GAS ENGINEER



Logged By: Tom Magney Drilling Company: Guess Drilling Well Head Completion: None
 Inspector: Drilling Method: Mobile B-S3 Type of Sampler: California Split Spoon
 Dates Drilled: 2/17/93 Driller: Ed Svoboda TD(Total Depth): 15Ft.

EXPLANATION	
☒ Water level in completed well	——— Contacts: Solid where certain
☒ Water level during drilling Dotted where approximate
☒ Location of drill sample	- - - Dashed where uncertain
☒ Location of sample sealed for chemical analysis	////// Hachured where gradational
☒ Sieve sample	est K Estimated permeability (hydraulic conductivity) 1K = primary 2K = secondary
☒ Comb sample	NR No recovery

Boring Log and Well Completion Details

Boring B-1A
 Balch Enterprises
 1362 Russ Lane
 Hayward California

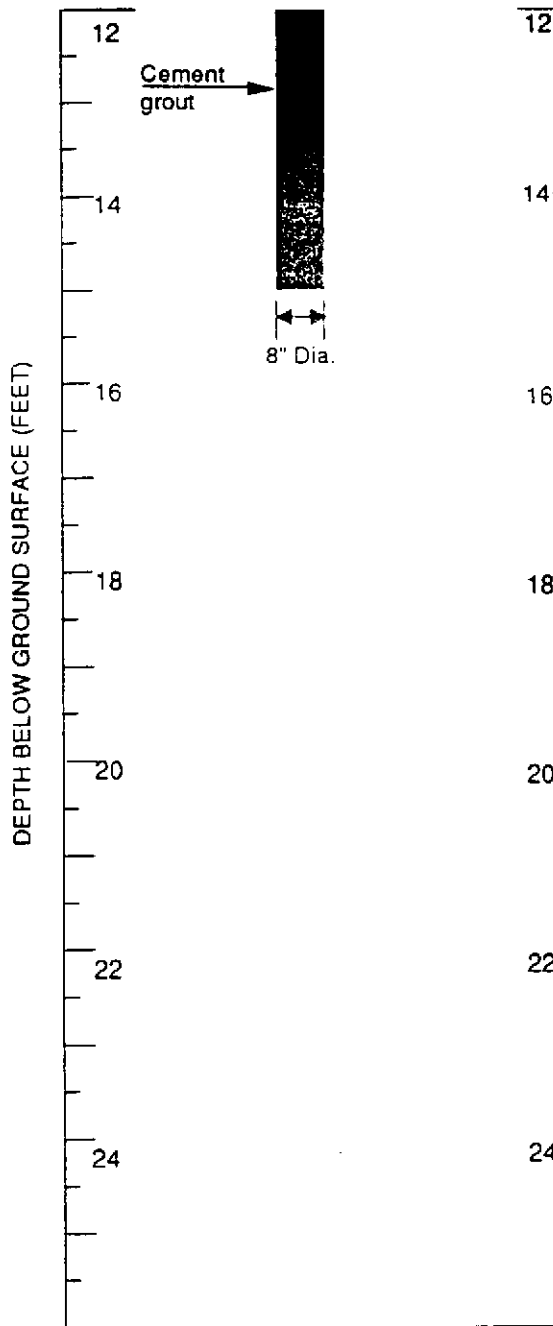
BORING

B-1A

PIB (ppmv) Blow Counts

GRAPHIC LOG

DESCRIPTION



12		12		Brown clayey, silty sand(SC).
14		14		
16		16		Boring terminated at 15Ft.
18		18		
20		20		
22		22		
24		24		

EXPLANATION

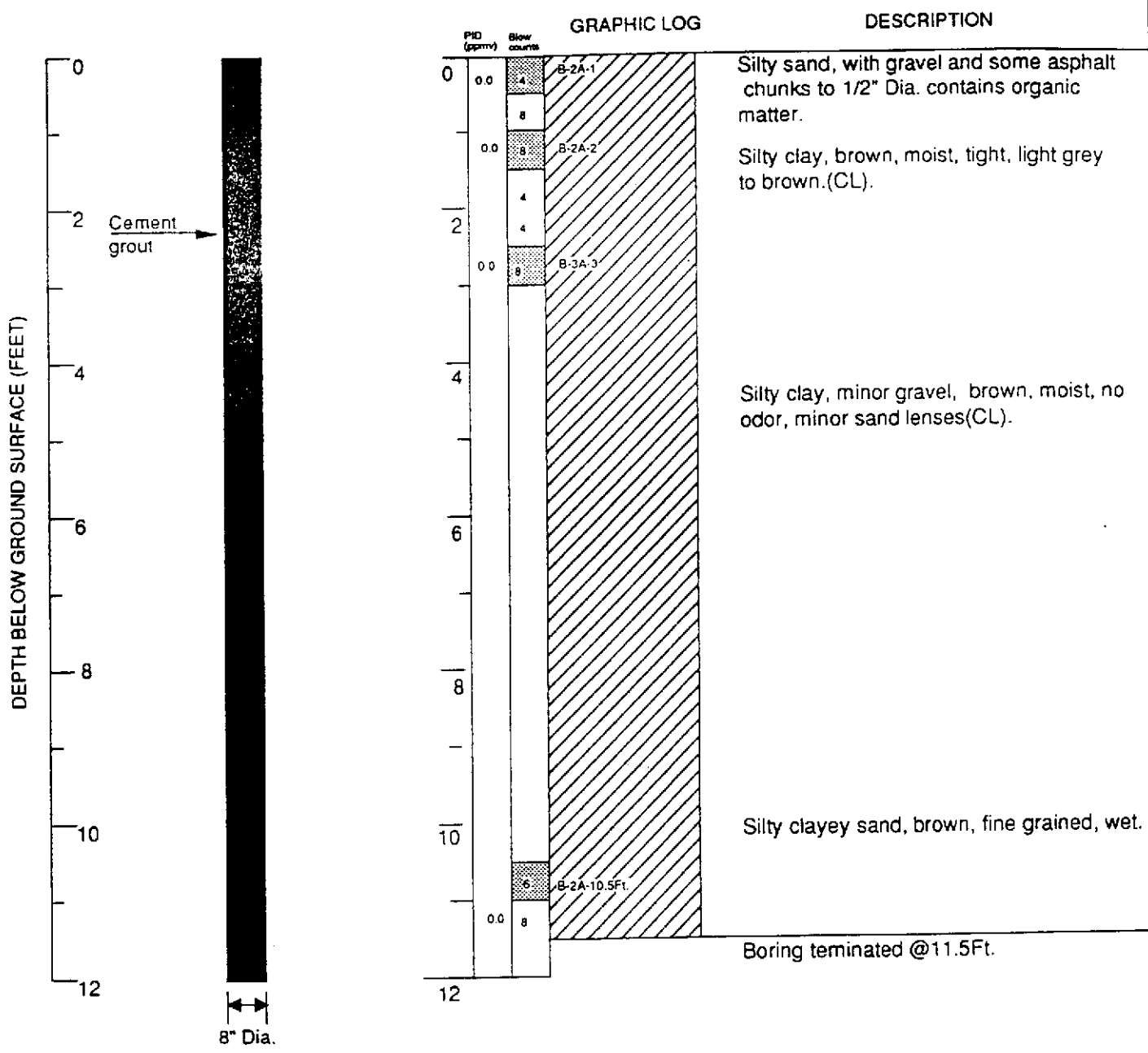
- ☒ Water level in completed well
- ☒ Water level during drilling
- ☒ Location of drill sample
- ☒ Location of sample sealed for chemical analysis
- ☒ Sieve sample
- ☒ Grab sample
- Contacts: Solid where certain
- Dotted where approximate
- - - - - Dashed where uncertain
- ////// Hachured where gradational
- est K Estimated permeability (hydraulic conductivity) 1K = primary 2K = secondary
- NR No recovery

Boring Log and Well Completion Details

Boring B-1A
 Balch Enterprises
 1362 Russ Lane
 Hayward California

Boring

B-1A



Logged By: Tom Magney	Drilling Company: Guess Drilling	Well Head Completion: None
Inspector:	Drilling Method: Mobile B-S3	Type of Sampler: California Split Spoon
Dates Drilled: 2/17/93	Driller: Ed Svoboda	TD(Total Depth): 11.5Ft.

EXPLANATION	
	Water level in completed well
	Water level during drilling
	Location of drill sample
	Location of sample sealed for chemical analysis
	Sieve sample
	Grab sample
	Contacts: Solid where certain
 Dotted where approximate
	- - - Dashed where uncertain
	////// Hachured where gradational
	est K Estimated permeability (hydraulic conductivity) 1K = primary 2K = secondary
	NR No recovery

Boring Log and Well Completion Details

Boring B-2A
Balch Enterprises
1362 Russ Lane
Hayward California

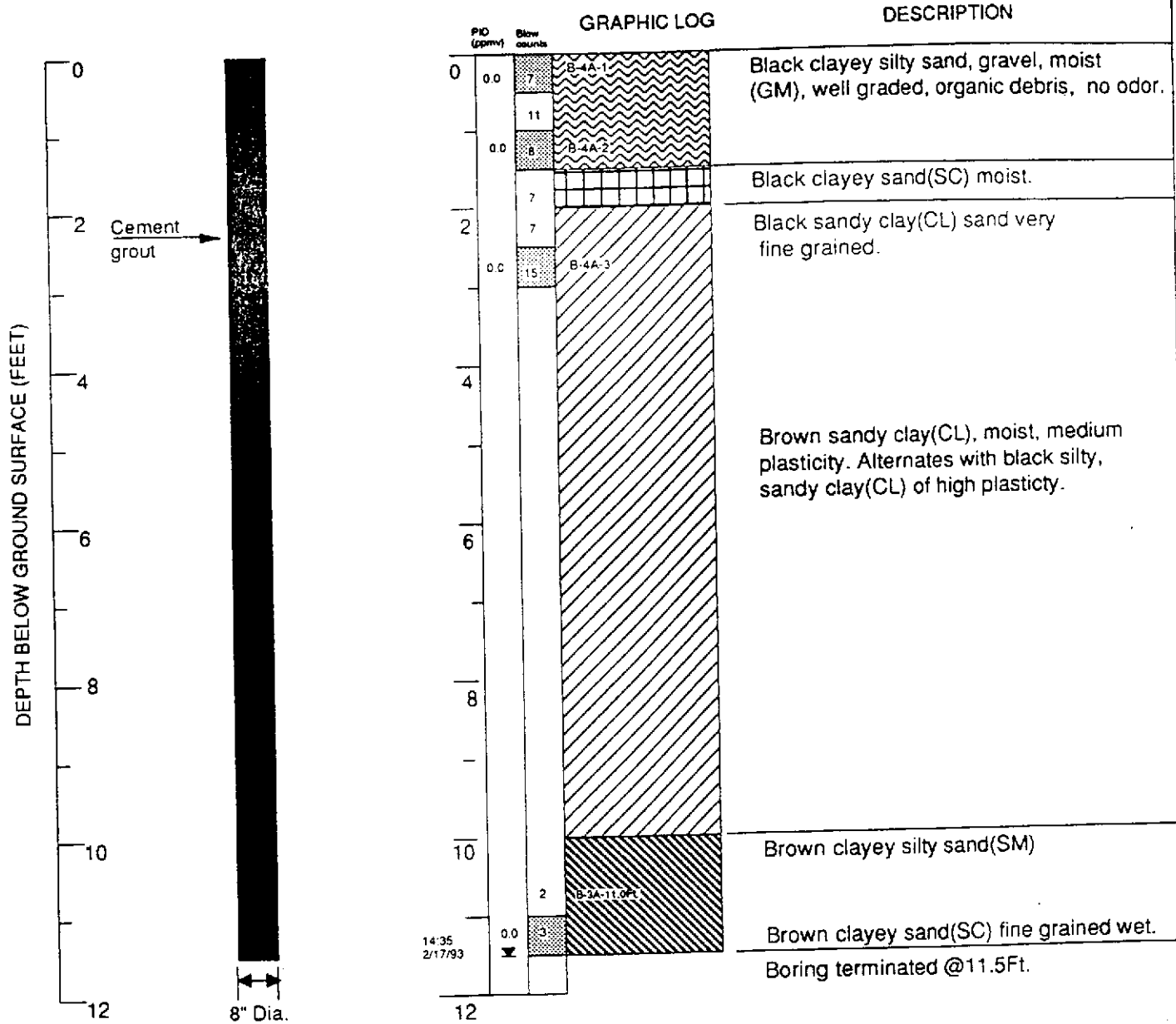
ARTESIAN ENVIRONMENTAL CONSULTANTS
3175 KERNER BLVD. SAN RAFAEL, CALIFORNIA 94901 (415) 257-4801

Date drawn: 2/17/93
By: ML

BORING

B-2A

033-008-01



Logged By: Tom Magney
 Inspector:
 Dates Drilled: 2/17/93

Drilling Company: Guess Drilling
 Drilling Method: Mobile B-S3
 Driller: Ed Svoboda

Well Head Completion: None
 Type of Sampler: California Split Spoon
 TD(Total Depth): 11.5Ft.

EXPLANATION

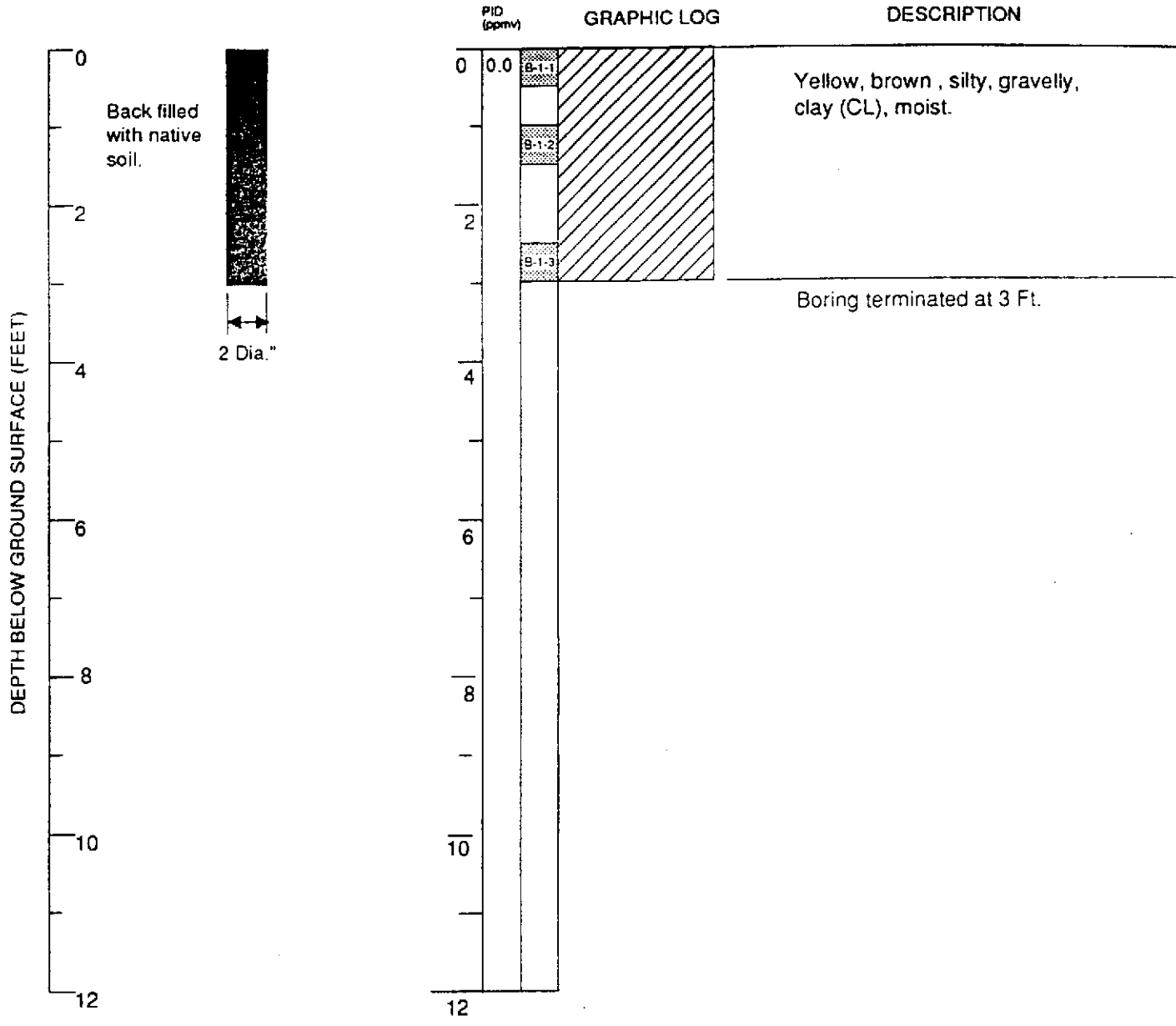
- ☒ Water level in completed well
 - ☒ Water level during drilling
 - ☒ Location of drill sample
 - ☒ Location of sample sealed for chemical analysis
 - ☒ Sieve sample
 - ☒ Grab sample
- Contacts:
 Solid where certain
 Dotted where approximate
 - - - Dashed where uncertain
 // // // // Hachured where gradational
 est K Estimated permeability (hydraulic conductivity)
 1K = primary 2K = secondary
 NR No recovery

Boring Log and Well Completion Details

Boring B-4A
 Balch Enterprises
 1362 Russ Lane
 Hayward California

BORING

B-4A



Logged By: Tom Magney Drilling Company: Artesian Environmental Con. Well Head Completion: None
 Inspector: Drilling Method: Hand Auger Type of Sampler: Slide Hammer Samplecup
 Dates Drilled: 2-17-93 Driller: Mason Latch TD(Total Depth): 3 Ft.

EXPLANATION

	Water level in completed well		Contacts: Solid where certain
	Water level during drilling		Dotted where approximate
	Location of drill sample		Dashed where uncertain
	Location of sample sealed for chemical analysis		Hachured where gradational
	Sieve sample	est K	Estimated permeability (hydraulic conductivity) 1K = primary 2K = secondary
	Grab sample	NR	No recovery

Boring Log and Well Completion Details Boring B-1 Balch Enterprises, Inc. 1384 Russ Lane Hayward, CA		BORING B-1
ARTESIAN ENVIRONMENTAL CONSULTANTS 3175 KERNER BLVD. SAN RAFAEL, CALIFORNIA 94941 (415) 257-4801		Date drawn: 2/17/93 By: ML 033-008-01

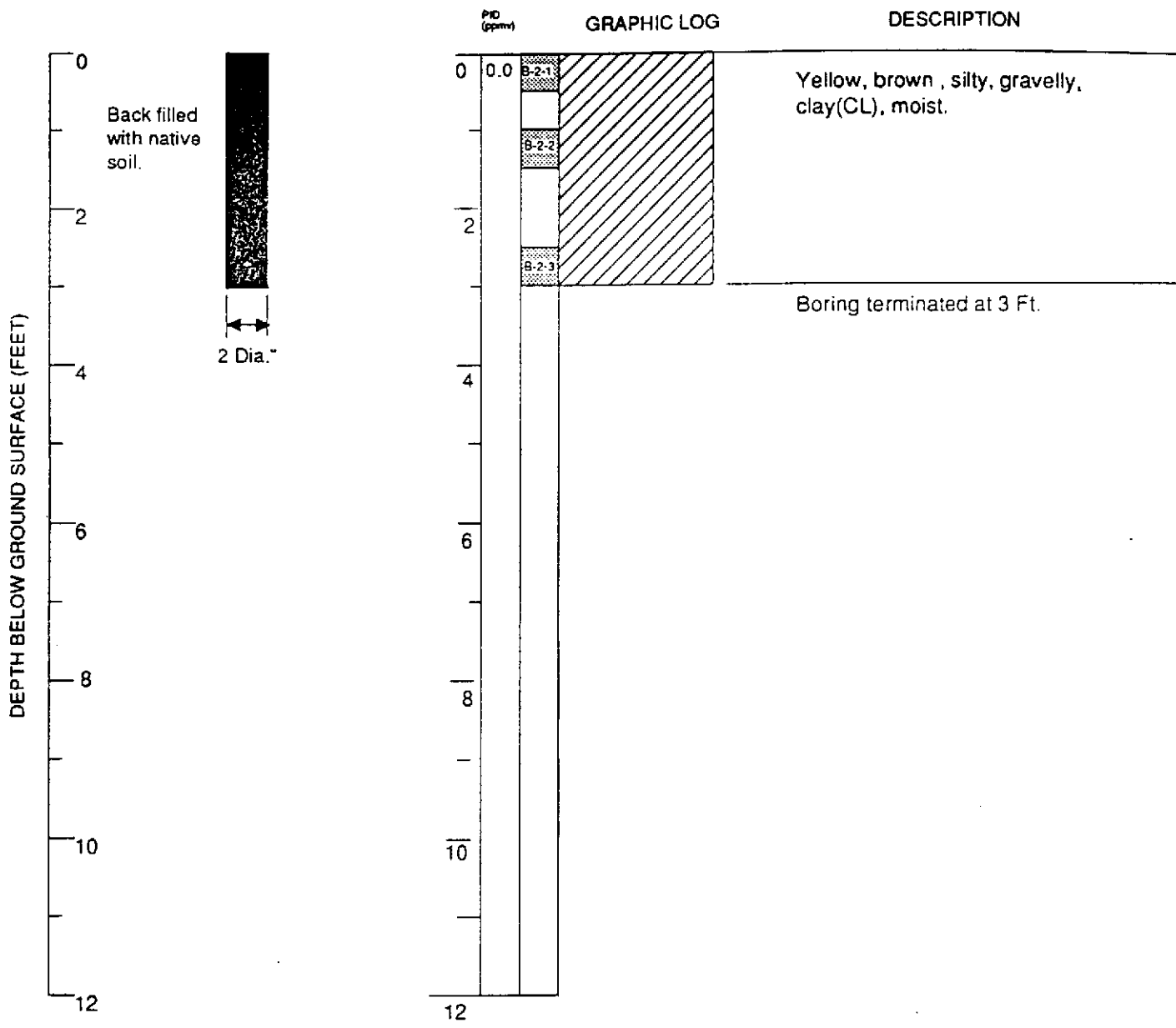


Fig 1 of 1

Logged By: Tom Magney Drilling Company: Artesian Environmental Con. Well Head Completion: None
 Inspector: Drilling Method: Hand Auger Type of Sampler: Slide Hammer Samplecup
 Dates Drilled: 2-17-93 Driller: Mason Latch TD(Total Depth): 3 Ft.

EXPLANATION

	Water level in completed well		Contacts: Solid where certain
	Water level during drilling		Dotted where approximate
	Location of drill sample		Dashed where uncertain
	Location of sample sealed for chemical analysis		Hachured where gradational
	Sieve sample	est K	Estimated permeability (hydraulic conductivity) 1K = primary 2K = secondary
	Grab sample	NR	No recovery

Boring Log and Well Completion Details

Boring B-2
 Balch Enterprises, Inc.
 1384 Russ Lane
 Hayward, CA

ARTESIAN ENVIRONMENTAL CONSULTANTS
 3175 KERNER BLVD. SAN RAFAEL, CALIFORNIA 94941 (415) 257-4801

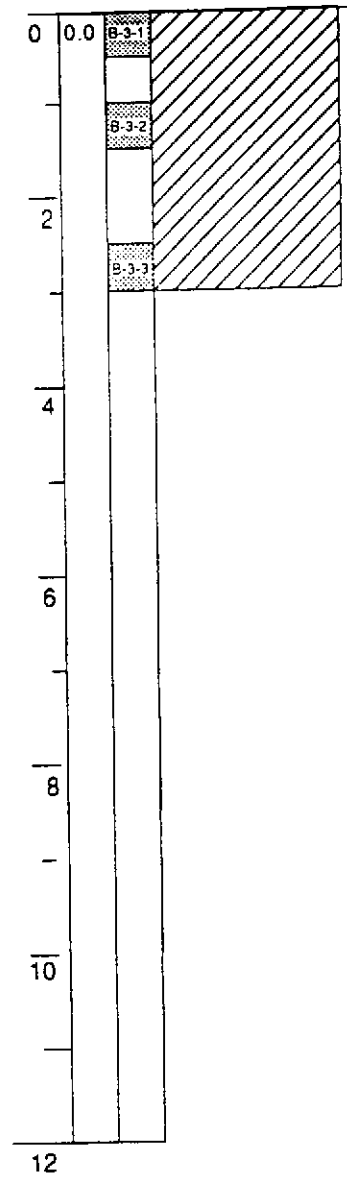
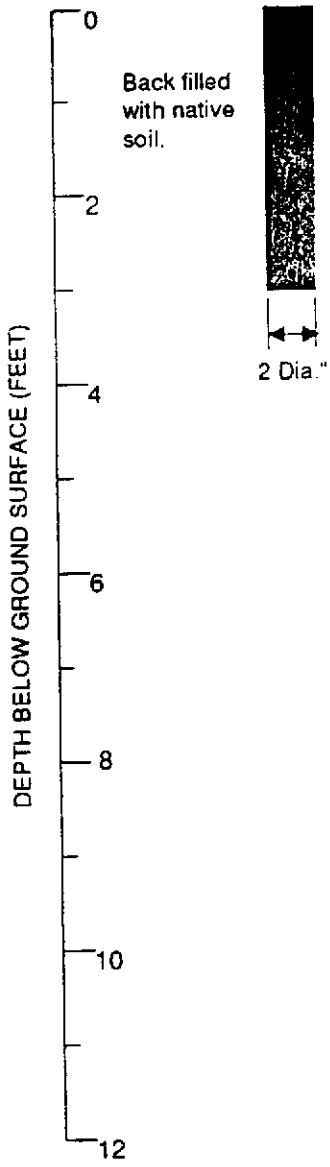
Date drawn: 2/17/93 By: ML

BORING

B-2

033-008-01

PID (ppmv) GRAPHIC LOG DESCRIPTION



Brown, black, silty, gravelly, clay (CL), moist.

Boring terminated at 3 Ft.

Logged By: Tom Magney Drilling Company: Artesian Environmental Con. Well Head Completion: None
 Inspector: Drilling Method: Hand Auger Type of Sampler: Slide Hammer Samplecup
 Dates Drilled: 2-17-93 Driller: Mason Latch TD(Total Depth): 3 Ft.

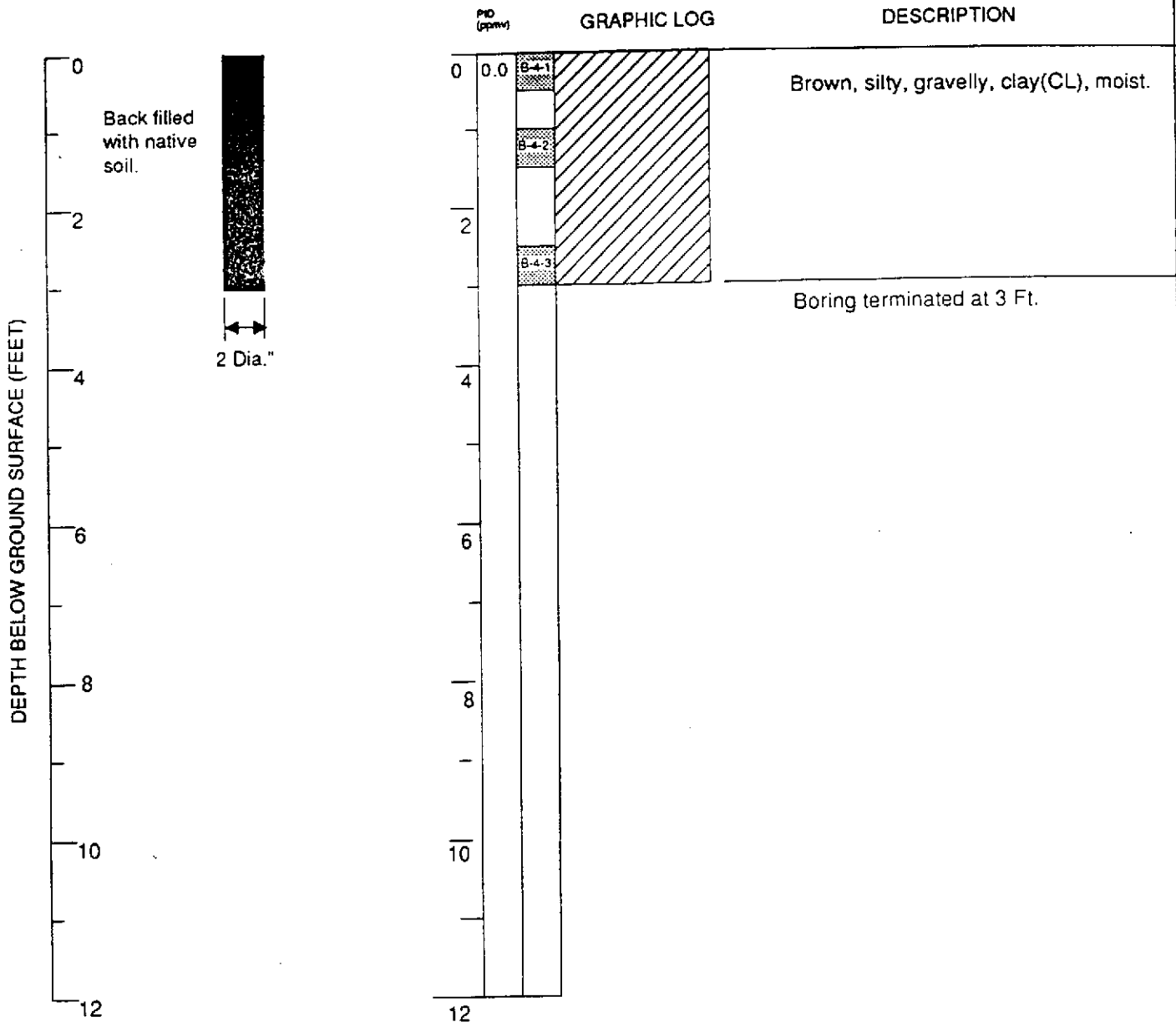
EXPLANATION	
	Water level in completed well
	Water level during drilling
	Location of drill sample
	Location of sample sealed for chemical analysis
	Sieve sample
	Grab sample
	Contacts: Solid where certain
	Contacts: Dotted where approximate
	Contacts: Dashed where uncertain
	Contacts: Hachured where gradational
	Estimated permeability (hydraulic conductivity) 1K = primary 2K = secondary
	No recovery

Boring Log and Well Completion Details

Boring B-3
 Balch Enterprises, Inc.
 1384 Russ Lane
 Hayward, CA

BORING

B-3



Logged By: Tom Magney Drilling Company: Artesian Environmental Con. Well Head Completion: None
 Inspector: Drilling Method: Hand Auger Type of Sampler: Slide Hammer Samplecup
 Dates Drilled: 2-17-93 Driller: Mason Latch TD(Total Depth): 3 Ft.

EXPLANATION

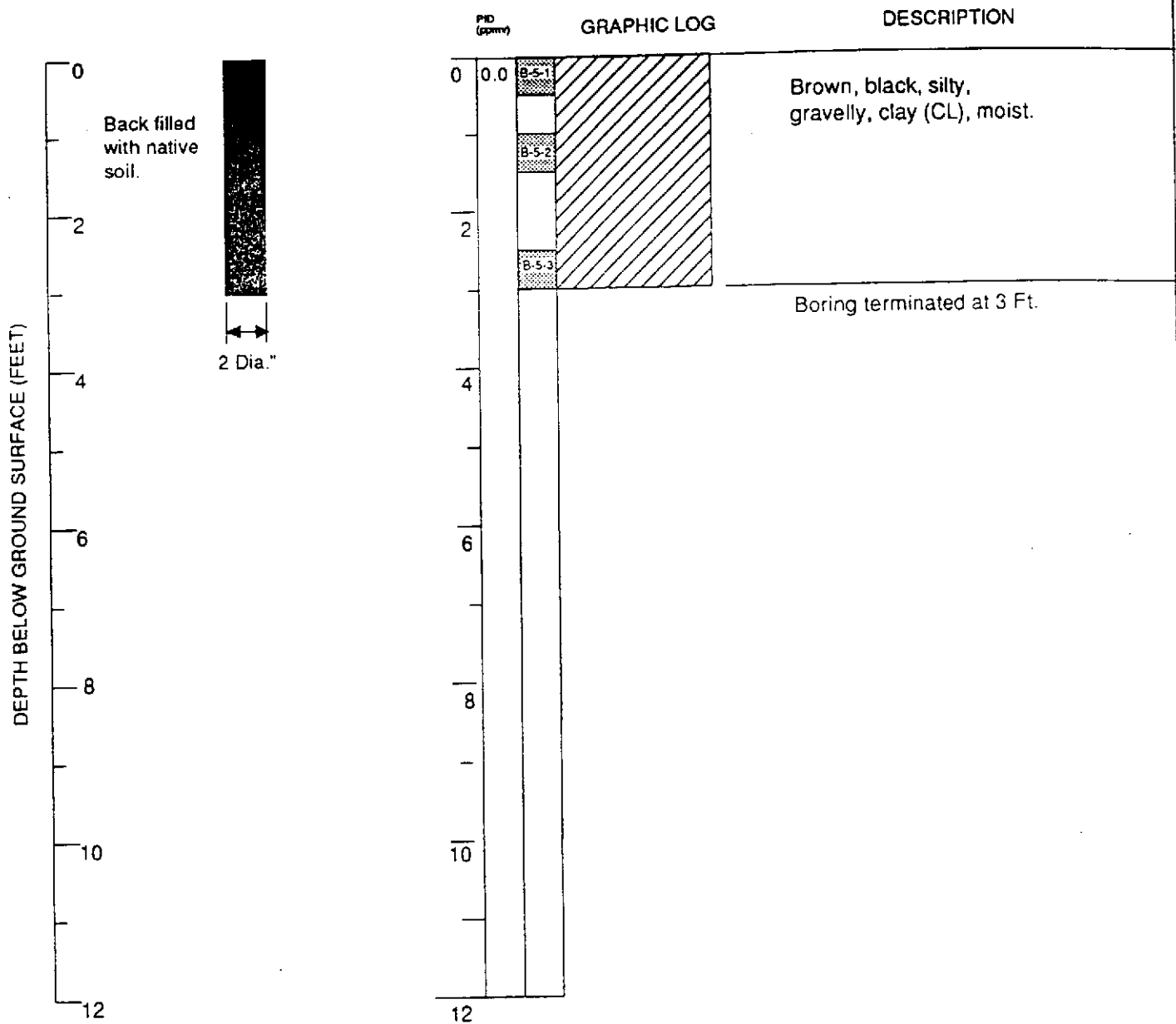
- ☒ Water level in completed well
- ☒ Water level during drilling
- ☒ Location of drill sample
- ☒ Location of sample sealed for chemical analysis
- ☒ Sieve sample
- ☒ Gmb sample
- Contacts: Solid where certain
- Dotted where approximate
- - - Dashed where uncertain
- ////// Hachured where gradational
- est K Estimated permeability (hydraulic conductivity) 1K = primary 2K = secondary
- NR No recovery

Boring Log and Well Completion Details

Boring B-4
 Balch Enterprises, Inc.
 1384 Russ Lane
 Hayward, CA

BORING

B-4



Logged By: Tom Magney Drilling Company: Artesian Environmental Con. Well Head Completion: None
 Inspector: Drilling Method: Hand Auger Type of Sampler: Slide Hammer Samplecup
 Dates Drilled: 2-17-93 Driller: Mason Latch TD(Total Depth): 3 Ft.

EXPLANATION

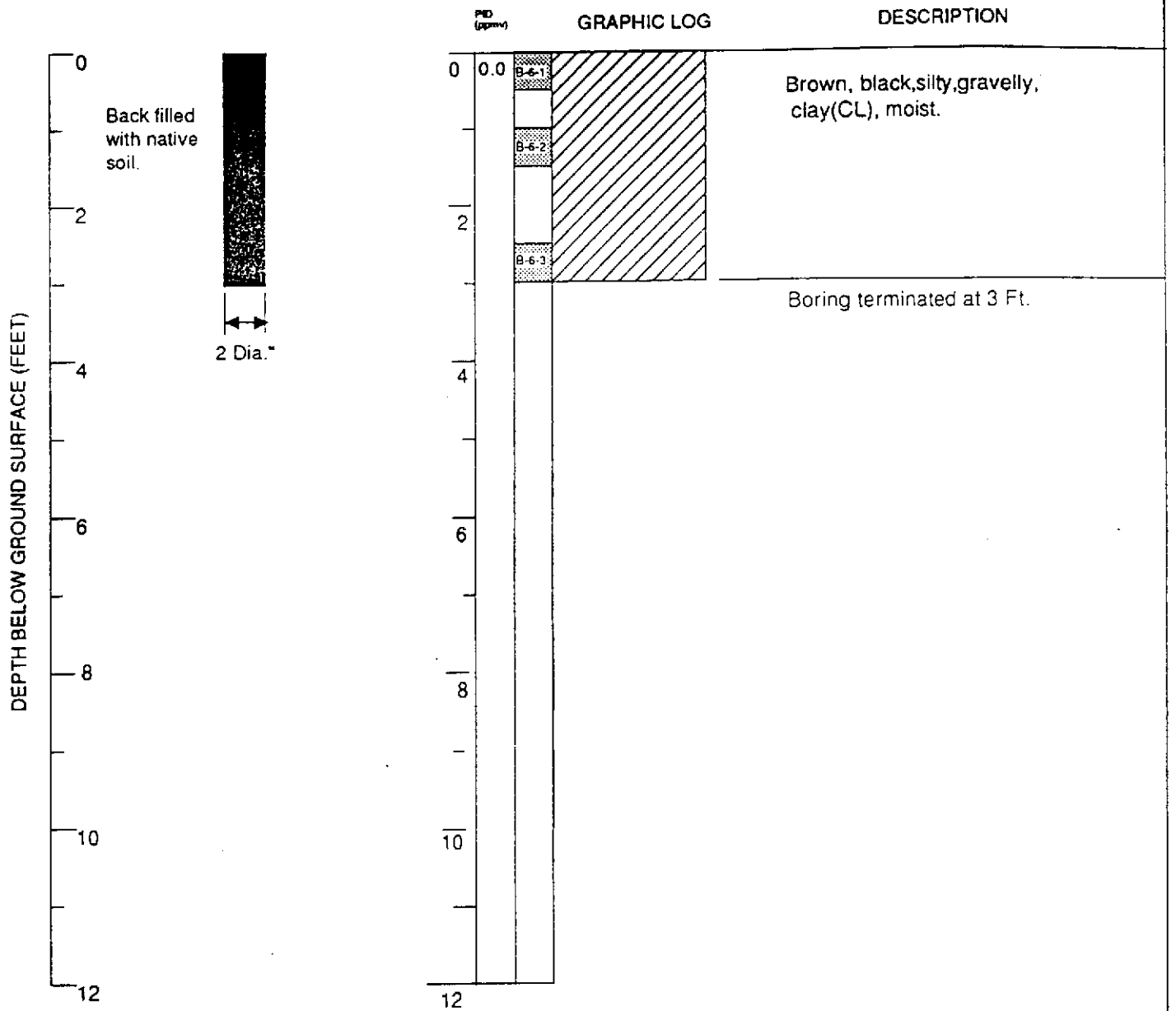
- Water level in completed well
- Water level during drilling
- Location of drill sample
- Location of sample sealed for chemical analysis
- Sieve sample
- Grab sample
- Contacts: Solid where certain
- Dotted where approximate
- Dashed where uncertain
- Hachured where gradational
- est K Estimated permeability (hydraulic conductivity)
1K = primary 2K = secondary
- NR No recovery

Boring Log and Well Completion Details

Boring B-5
 Balch Enterprises, Inc.
 1384 Russ Lane
 Hayward, CA

BORING

B-5



Logged By: Tom Magney	Drilling Company: Artesian Environmental Con.	Well Head Completion: None
Inspector:	Drilling Method: Hand Auger	Type of Sampler: Slide Hammer Samplecup
Dates Drilled: 2-17-93	Driller: Mason Latch	TD (Total Depth): 3Ft.

EXPLANATION

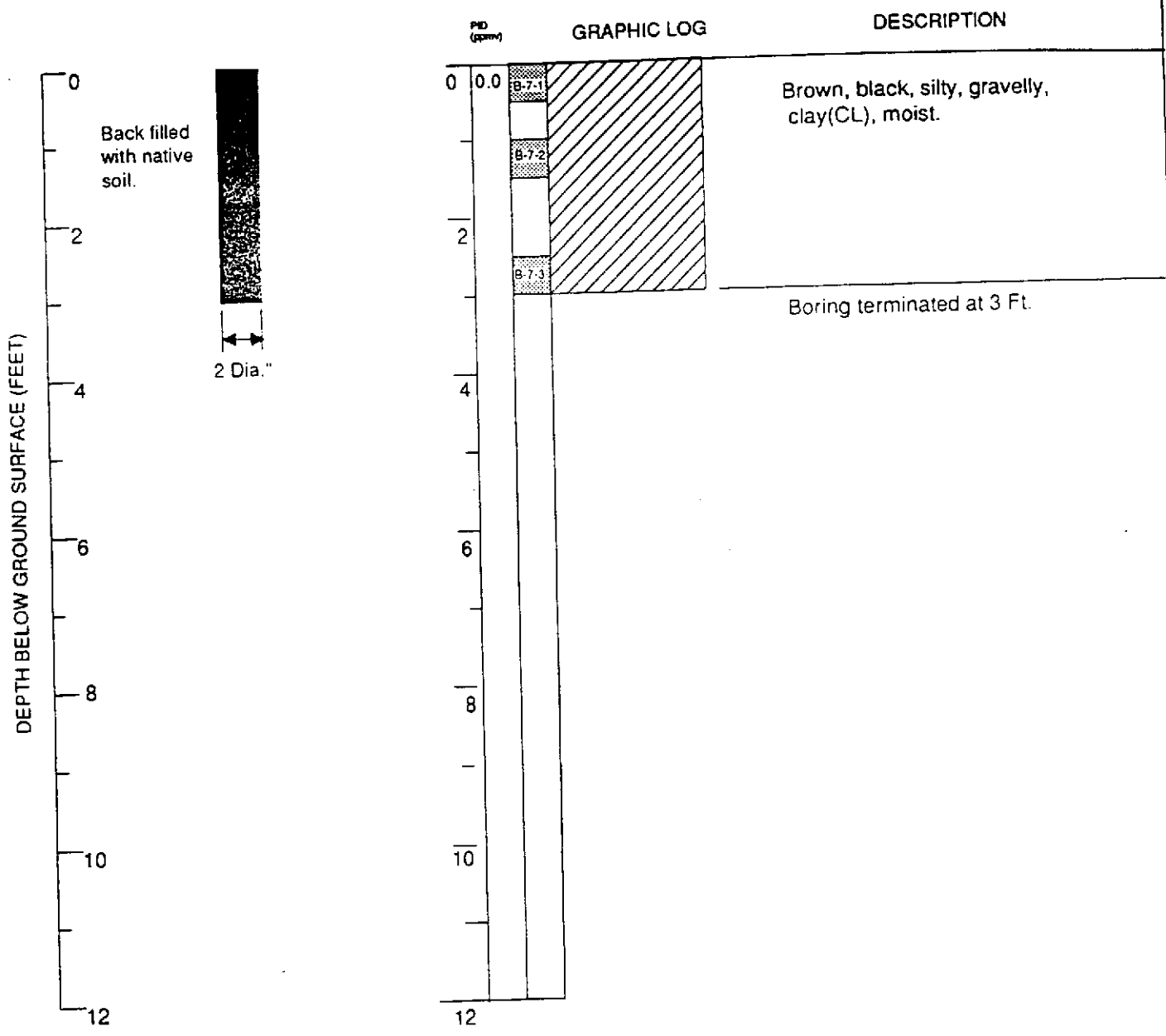
- Water level in completed well
- Water level during drilling
- Location of drill sample
- Location of sample sealed for chemical analysis
- Sieve sample
- Grab sample
- Contacts: Solid where certain
- Dotted where approximate
- Dashed where uncertain
- Hachured where gradational
- est K Estimated permeability (hydraulic conductivity)
1K = primary 2K = secondary
- NR No recovery

Boring Log and Well Completion Details

Boring B-6
 Balch Enterprises, Inc.
 1384 Russ Lane
 Hayward, CA

BORING

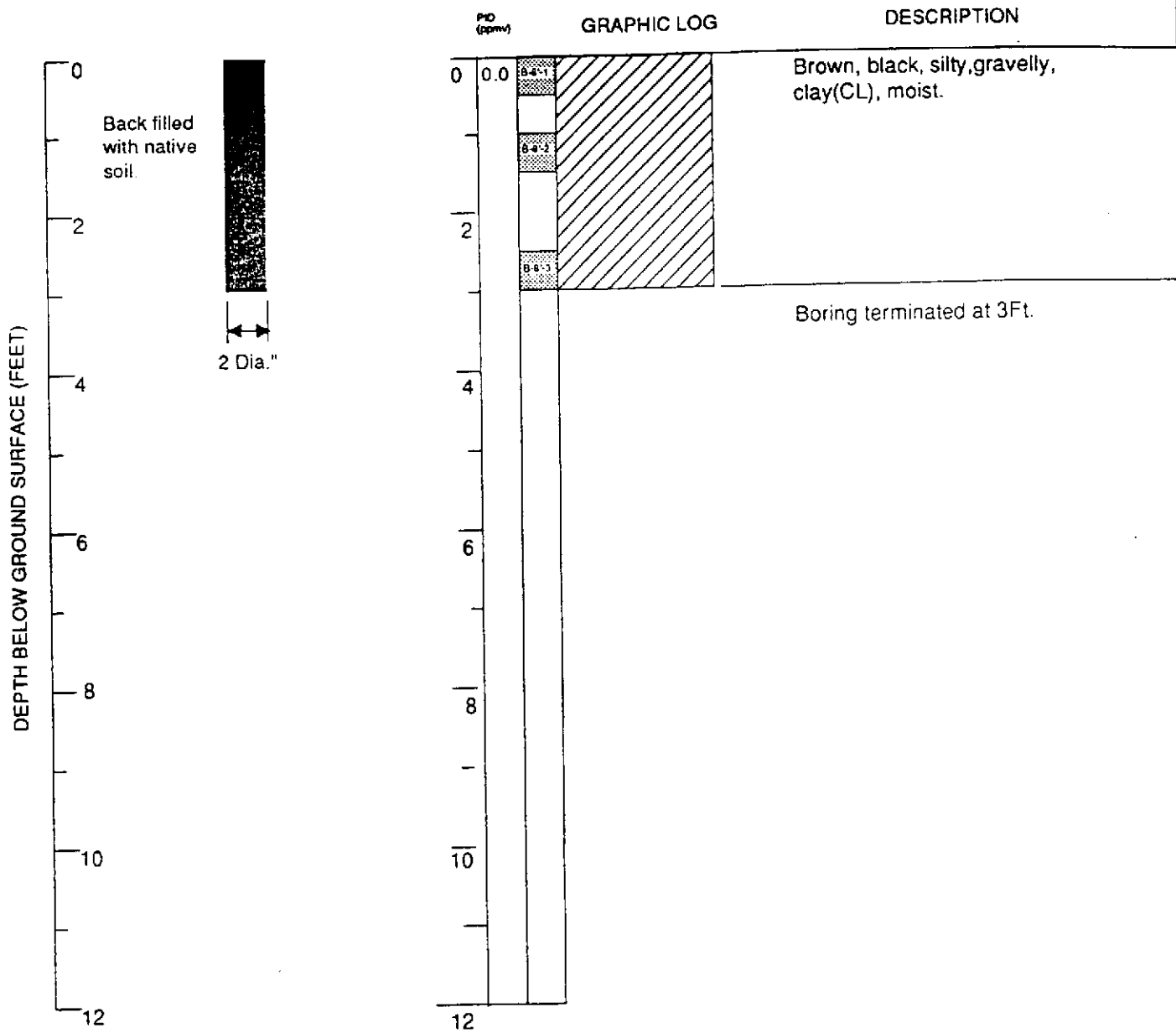
B-6



Logged By: Tom Magney Drilling Company: Artesian Environmental Con. Well Head Completion: None
 Inspector: Drilling Method: Hand Auger Type of Sampler: Slide Hammer Samplecup
 Dates Drilled: 2-17-93 Driller: Mason Latch TD(Total Depth): 3 Ft.

EXPLANATION	
✕	Water level in completed well
✕	Water level during drilling
■	Location of drill sample
■	Location of sample sealed for chemical analysis
⊕	Sieve sample
⊗	Grab sample
—	Contacts: Solid where certain
.....	Dotted where approximate
- - -	Dashed where uncertain
////	Hachured where gradational
est K	Estimated permeability (hydraulic conductivity) 1K = primary 2K = secondary
NR	No recovery

Boring Log and Well Completion Details Boring B-7 Balch Enterprises, Inc. 1384 Russ Lane Hayward, CA		BORING <h1>B-7</h1>
ARTESIAN ENVIRONMENTAL CONSULTANTS 3175 KERNER BLVD. SAN RAFAEL, CALIFORNIA 94941 (415) 257-4801		Date drawn: 2/17/93 By: ML 033-008-01



Fg 1 of 1

Logged By: Tom Magney Drilling Company: Artesian Environmental Con. Well Head Completion: None
 Inspector: Drilling Method: Hand Auger Type of Sampler: Slide Hammer Samplecup
 Dates Drilled: 2-17-93 Driller: Mason Latch TD (Total Depth): .5 Ft.

EXPLANATION

	Water level in completed well		Contacts: Solid where certain
	Water level during drilling		Dotted where approximate
	Location of drill sample		Dashed where uncertain
	Location of sample sealed for chemical analysis		Hatched where gradational
	Sieve sample	est K	Estimated permeability (hydraulic conductivity) 1K = primary 2K = secondary
	Grab sample	NR	No recovery

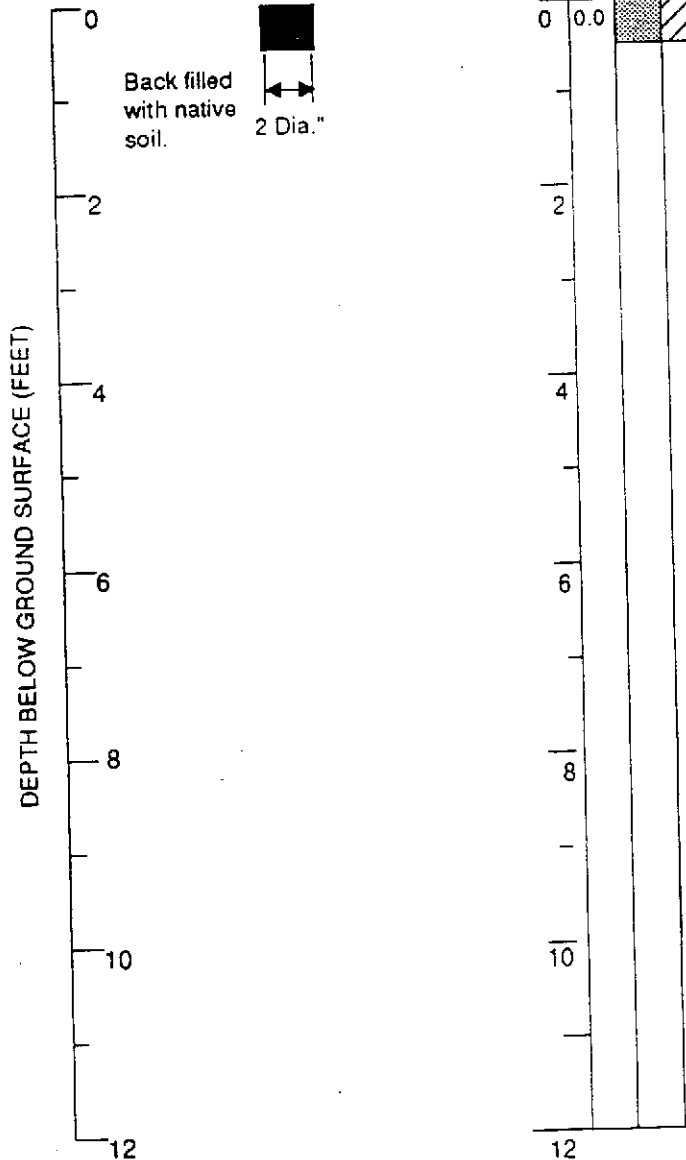
Boring Log and Well Completion Details		BORING
Boring B-8 Balch Enterprises, Inc. 1384 Russ Lane Hayward, CA		B-8
ARTESIAN ENVIRONMENTAL CONSULTANTS 3175 KERNER BLVD. SAN RAFAEL, CALIFORNIA 94941 (415) 257-4801	Date drawn 2/17/93	By ML
		033-008-01

DESCRIPTION

GRAPHIC LOG

PRD
(ppmv)

Brown, black, silty, gravelly, moist (CL).
Resistance met at 6 inch.



Pg 1 of 1

Logged By: Tom Magney Drilling Company: Artesian Environmental Con. Well Head Completion: None
 Inspector: Drilling Method: Hand Auger Type of Sampler: Slide Hammer Samplecup
 Dates Drilled: 2-17-93 Driller: Mason Latch TD(Total Depth): 0.5 Ft.

EXPLANATION

- ☒ Water level in completed well
- ☒ Water level during drilling
- ☒ Location of drill sample
- ☒ Location of sample sealed for chemical analysis
- ☒ Sieve sample
- ☒ Grab sample
- Contacts: Solid where certain
- Dotted where approximate
- - - Dashed where uncertain
- ////// Hatched where gradational
- est K Estimated permeability (hydraulic conductivity) 1K = primary 2K = secondary
- NR No recovery

Boring Log and Well Completion Details

Boring B-8'
Balch Enterprises, Inc.
1384 Russ Lane
Hayward, CA

BORING

B-8'

ARTESIAN ENVIRONMENTAL CONSULTANTS
3175 KERNER BLVD, SAN RAFAEL, CALIFORNIA 94941 (415) 257-4801

Date drawn 2/17/93 By ML

033-008-01

UNIFIED SOIL CLASSIFICATION SYSTEM

MAJOR DIVISIONS			GRAPHIC SYMBOL	LETTER SYMBOL	TYPICAL DESCRIPTIONS
COARSE GRAINED SOILS	GRAVEL AND GRAVELLY SOILS MORE THAN 50% OF COARSE FRACTION RETAINED ON NO. 4 SIEVE	CLEAN GRAVELS (LITTLE OR NO FINES)		GW	WELL-GRADED GRAVELS, GRAVEL-SAND MIXTURES, LITTLE OR NO FINES
		GRAVELS WITH FINES (APPRECIABLE AMOUNT OF FINES)		GP	POORLY-GRADED GRAVELS, GRAVEL-SAND MIXTURES, LITTLE OR NO FINES
		GRAVELS WITH FINES (APPRECIABLE AMOUNT OF FINES)		GM	SILTY GRAVELS, GRAVEL-SAND-SILT MIXTURES
	SAND AND SANDY SOILS MORE THAN 50% OF COARSE FRACTION PASSING NO. 4 SIEVE	CLEAN SAND (LITTLE OR NO FINES)		SW	WELL-GRADED SANDS, GRAVELLY SANDS, LITTLE OR NO FINES
		SANDS WITH FINES (APPRECIABLE AMOUNT OF FINES)		SP	POORLY-GRADED SANDS, GRAVELLY SANDS, LITTLE OR NO FINES
		SANDS WITH FINES (APPRECIABLE AMOUNT OF FINES)		SM	SILTY SANDS, SAND-SILT MIXTURES
FINE GRAINED SOILS	SILTS AND CLAYS LIQUID LIMIT LESS THAN 50	CLEAN SAND (LITTLE OR NO FINES)		ML	INORGANIC SILTS AND VERY FINE SANDS, ROCK FLOUR, SILTY OR CLAYEY FINE SANDS OR CLAYEY SILTS WITH SLIGHT PLASTICITY
		SANDS WITH FINES (APPRECIABLE AMOUNT OF FINES)		CL	INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, GRAVELLY CLAYS, SANDY CLAYS, SILTY CLAYS, LEAN CLAYS
		SANDS WITH FINES (APPRECIABLE AMOUNT OF FINES)		OL	ORGANIC SILTS AND ORGANIC SILTY CLAYS OF LOW PLASTICITY
	SILTS AND CLAYS LIQUID LIMIT GREATER THAN 50	SANDS WITH FINES (APPRECIABLE AMOUNT OF FINES)		MH	INORGANIC SILTS, MICACEOUS OR DIATOMACEOUS FINE SAND OR SILTY SOILS
		SANDS WITH FINES (APPRECIABLE AMOUNT OF FINES)		CH	INORGANIC CLAYS OF HIGH PLASTICITY, FAT CLAYS
		SANDS WITH FINES (APPRECIABLE AMOUNT OF FINES)		OH	ORGANIC CLAYS OF MEDIUM TO HIGH PLASTICITY, ORGANIC SILTS
HIGHLY ORGANIC SOILS				PT	PEAT, HUMUS, SWAMP SOILS WITH HIGH ORGANIC CONTENTS

NOTE: DASHED SYMBOLS ARE USED TO INDICATE BORDERLINE SOIL CLASSIFICATIONS

KEY TO LOG OF BORINGS

SAMPLES & BLOW COUNTS

- HAMMER BLOWS PER FOOT OF PENETRATION
- 30 ■ INDICATES UNDISTURBED SAMPLE
- ⊠ INDICATES DISTURBED SAMPLE
- STANDARD PENETRATION TEST SAMPLE
- NR . INDICATES NO RECOVERY
- SAMPLES DRIVEN WITH A 140-POUND HAMMER
DROPPING 30 INCHES

LABORATORY TESTS

- AL ATTERBERG LIMITS TEST
- DSCU DIRECT SHEAR TEST (Consolidated, Undrained)
- CBR CALIFORNIA BEARING RATIO TEST
- COMP COMPACTION TEST
- CON CONFINED COMPRESSION (Consolidation Test)
- .200 PERCENT PASSING NO. 200 SIEVE
(Test Results in Parentheses)

CHROMALAB, INC.

5 DAYS TURNAROUND

Environmental Laboratory (1094)

February 25, 1993

ChromaLab File No.: 0293186

ESSENES

RE: Sixteen soil samples for Gasoline and BTEX analysis


Project Name: BALCH-HAYWARD
Project Number: 033-008-01
Date Sampled: Feb. 17, 1993
Date Analyzed: Feb. 24, 1993

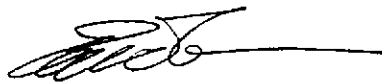
Date Submitted: Feb. 18, 1993

RESULTS:

Sample I.D.	Gasoline (mg/Kg)	Benzene (µg/Kg)	Toluene (µg/Kg)	Ethyl Benzene (µg/Kg)	Total Xylenes (µg/Kg)
B-1-1	N.D.	N.D.	N.D.	N.D.	N.D.
B-2-1	N.D.	N.D.	N.D.	N.D.	N.D.
B-3-1	N.D.	N.D.	N.D.	N.D.	N.D.
B-4-1	N.D.	N.D.	N.D.	N.D.	N.D.
B-5-1	N.D.	N.D.	10	8.7	58
B-6-1	N.D.	N.D.	N.D.	N.D.	N.D.
B-7-1	N.D.	N.D.	N.D.	N.D.	N.D.
B-8-1	N.D.	N.D.	N.D.	N.D.	N.D.
B-1A-6	N.D.	N.D.	N.D.	N.D.	N.D.
B-1A-11.0-11.5	N.D.	N.D.	N.D.	N.D.	N.D.
B-2A-6	N.D.	N.D.	N.D.	N.D.	N.D.
B-2A-10.5-11.0	N.D.	N.D.	N.D.	N.D.	N.D.
B-3A-6	N.D.	N.D.	N.D.	N.D.	N.D.
B-3A-10.5-11.0	N.D.	N.D.	N.D.	N.D.	N.D.
B-4A-6	N.D.	N.D.	N.D.	N.D.	N.D.
B-4A-11.0-11.5	N.D.	N.D.	N.D.	N.D.	N.D.
BLANK	N.D.	N.D.	N.D.	N.D.	N.D.
SPIKE RECOVERY	108%	98%	99%	91%	91%
DUP SPIKE RECOVERY	----	98%	96%	93%	93%
DETECTION LIMIT	1.0	5.0	5.0	5.0	5.0
METHOD OF ANALYSIS	5030/8015	8020	8020	8020	8020

ChromaLab, Inc.


Billy Thach
Analytical Chemist


Eric Tam
Laboratory Director

cc

CHROMALAB, INC.

5 DAYS TURNAROUND

Environmental Laboratory (1094)

February 25, 1993

ChromaLab File No.: 0293186

ESSENES

RE: Four water samples for Gasoline and BTEX analysis

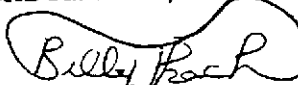
Project Name: BALCH-HAYWARD
Project Number: 033-008-01
Date Sampled: Feb. 17, 1993
Date Analyzed: Feb. 23, 1993

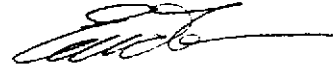
Date Submitted: Feb. 18, 1993

RESULTS:

Sample I.D.	Gasoline ($\mu\text{g/L}$)	Benzene ($\mu\text{g/L}$)	Toluene ($\mu\text{g/L}$)	Ethyl Benzene ($\mu\text{g/L}$)	Total Xylenes ($\mu\text{g/L}$)
B-1A-AQ	N.D.	N.D.	N.D.	N.D.	N.D.
B-2A-AQ	N.D.	N.D.	N.D.	N.D.	N.D.
B-3A-AQ	N.D.	N.D.	N.D.	N.D.	N.D.
B-4A-AQ	N.D.	N.D.	N.D.	N.D.	N.D.
BLANK	N.D.	N.D.	N.D.	N.D.	N.D.
SPIKE RECOVERY	96%	98%	98%	90%	93%
DUP SPIKE RECOVERY	---	96%	98%	93%	95%
DETECTION LIMIT	50	0.5	0.5	0.5	0.5
METHOD OF ANALYSIS	5030/8015	602	602	602	602

ChromaLab, Inc.


Billy Phach
Analytical Chemist


Eric Tam
Laboratory Director

do

CHROMALAB, INC.

5 DAYS TURNAROUND

Environmental Laboratory (1094)

February 25, 1993

ChromaLab File No.: 0293186
(REVISED)

ESSENES

RE: Sixteen soil samples for TEPH analysis

Project Name: BALCH-HAYWARD
Project Number: 033-008-01
Date Sampled: Feb. 17, 1993
Date Extracted: Feb. 23, 1993

Date Submitted: Feb. 18, 1993
Date Analyzed: Feb. 24, 1993

RESULTS:

Sample I.D.	Kerosene (mg/Kg)	Diesel (mg/Kg)	Motor Oil (mg/Kg)
B-1-1	N.D.	N.D.	93
B-2-1	N.D.	N.D.	14
B-3-1	N.D.	N.D.	N.D.
B-4-1	N.D.	N.D.	31
B-5-1	N.D.	N.D.	21
B-6-1	5.5	60*	230
B-7-1	N.D.	N.D.	26
B-8-1	N.D.	N.D.	N.D.
B-1A-6	N.D.	N.D.	140
B-1A-11.0-11.5	N.D.	N.D.	N.D.
B-2A-6	N.D.	3.0	26
B-2A-10.5-11.0	N.D.	N.D.	N.D.
B-3A-6	N.D.	N.D.	25
B-3A-10.5-11.0	N.D.	N.D.	N.D.
B-4A-6	N.D.	N.D.	N.D.
B-4A-11.0-11.5	N.D.	N.D.	N.D.
BLANK	N.D.	N.D.	N.D.
SPIKE RECOVERY	---	90%	---
DUP SPIKE RECOVERY	---	93%	---
DETECTION LIMIT	1.0	1.0	10.0
METHOD OF ANALYSIS	3550/8015	3550/8015	3550/8015

* Unknown hydrocarbon found on diesel range quantified as diesel.

ChromaLab, Inc.



Yiu Tam
Analytical Chemist

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Eric Tam
Laboratory Director

CHROMALAB, INC.

5 DAYS TURNAROUND

Environmental Laboratory (1094)

February 25, 1993

ChromaLab File No.: 0293186

ESSENES

RE: Four water samples for TEPH analysis

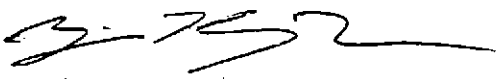
Project Name: BALCH-HAYWARD
Project Number: 033-008-01
Date Sampled: Feb. 17, 1993
Date Extracted: Feb. 24, 1993

Date Submitted: Feb. 18, 1993
Date Analyzed: Feb. 24, 1993

RESULTS:

Sample I.D.	Kerosene ($\mu\text{g/L}$)	Diesel ($\mu\text{g/L}$)	Motor Oil (mg/L)
B-1A-AQ	N.D.	N.D.	N.D.
B-2A-AQ	N.D.	N.D.	N.D.
B-3A-AQ	N.D.	N.D.	N.D.
B-4A-AQ	N.D.	N.D.	N.D.
BLANK	N.D.	N.D.	N.D.
SPIKE RECOVERY	---	87%	---
DUP SPIKE RECOVERY	---	93%	---
DETECTION LIMIT	50	50	0.5
METHOD OF ANALYSIS	3510/8015	3510/8015	3510/8015

ChromaLab, Inc.



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CHROMALAB, INC.

5 DAYS TURNAROUND

Environmental Laboratory (1094)

February 25, 1993

ChromaLab File # 0293186 A

ESSENES

Project Name: BALCH-HAYWARD
Date Sampled: Feb. 17, 1993
Date Submitted: Feb. 18, 1993
Date of Analysis: Feb. 23, 1993
Sample I.D.: B-7-1

Project No: 033-008-01
Method of Analysis: EPA 8010
Matrix: Soil
Reporting Det. Limit: 5.0 µg/Kg
Dilution Factor: None

COMPOUND NAME	µg/Kg	Spike Recovery
CHLOROMETHANE	N.D.	---
VINYL CHLORIDE	N.D.	---
BROMOMETHANE	N.D.	---
CHLOROETHANE	N.D.	---
TRICHLOROFLUOROMETHANE	N.D.	102% 101%
1,1-DICHLOROETHENE	N.D.	---
METHYLENE CHLORIDE	N.D.	---
1,2-DICHLOROETHENE (TRANS)	N.D.	---
1,2-DICHLOROETHENE (CIS)	N.D.	---
1,1-DICHLOROETHANE	N.D.	---
CHLOROFORM	N.D.	---
1,1,1-TRICHLOROETHANE	N.D.	---
CARBON TETRACHLORIDE	N.D.	---
1,2-DICHLOROETHANE	N.D.	95% 96%
TRICHLOROETHENE	N.D.	---
1,2-DICHLOROPROPANE	N.D.	---
BROMODICHLOROMETHANE	N.D.	---
2-CHLOROETHYLVINYLEETHER	N.D.	---
TRANS-1,3-DICHLOROPROPENE	N.D.	---
CIS-1,3-DICHLOROPROPENE	N.D.	---
1,1,2-TRICHLOROETHANE	N.D.	99% 91%
TETRACHLOROETHENE	N.D.	---
DIBROMOCHLOROMETHANE	N.D.	---
CHLOROBENZENE	N.D.	---
BROMOFORM	N.D.	104% 91%
1,1,2,2-TETRACHLOROETHANE	N.D.	---
1,3-DICHLOROBENZENE	N.D.	---
1,4-DICHLOROBENZENE	N.D.	---
1,2-DICHLOROBENZENE	N.D.	---

ChromaLab, Inc.

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5 DAYS TURNAROUND

Environmental Laboratory (1094)

February 25, 1993

ChromaLab File # 0293186 B

ESSENES

Project Name: BALCH-HAYWARD
Date Sampled: Feb. 17, 1993
Date Submitted: Feb. 18, 1993
Date of Analysis: Feb. 23, 1993
Sample I.D.: B-8-1

Project No: 033-008-01
Method of Analysis: EPA 8010
Matrix: Soil
Reporting Det. Limit: 5.0 µg/Kg
Dilution Factor: None

COMPOUND NAME	µg/Kg	Spike Recovery	
CHLOROMETHANE	N.D.	---	---
VINYL CHLORIDE	N.D.	---	---
BROMOMETHANE	N.D.	---	---
CHLOROETHANE	N.D.	---	---
TRICHLOROFLUOROMETHANE	N.D.	102%	101%
1,1-DICHLOROETHENE	N.D.	---	---
METHYLENE CHLORIDE	N.D.	---	---
1,2-DICHLOROETHENE (TRANS)	N.D.	---	---
1,2-DICHLOROETHENE (CIS)	N.D.	---	---
1,1-DICHLOROETHANE	N.D.	---	---
CHLOROFORM	N.D.	---	---
1,1,1-TRICHLOROETHANE	N.D.	---	---
CARBON TETRACHLORIDE	N.D.	---	---
1,2-DICHLOROETHANE	N.D.	95%	96%
TRICHLOROETHENE	N.D.	---	---
1,2-DICHLOROPROPANE	N.D.	---	---
BROMODICHLOROMETHANE	N.D.	---	---
2-CHLOROETHYLVINYLETHER	N.D.	---	---
TRANS-1,3-DICHLOROPROPENE	N.D.	---	---
CIS-1,3-DICHLOROPROPENE	N.D.	---	---
1,1,2-TRICHLOROETHANE	N.D.	99%	91%
TETRACHLOROETHENE	N.D.	---	---
DIBROMOCHLOROMETHANE	N.D.	---	---
CHLOROENZENE	N.D.	---	---
BROMOFORM	N.D.	104%	91%
1,1,2,2-TETRACHLOROETHANE	N.D.	---	---
1,3-DICHLOROENZENE	N.D.	---	---
1,4-DICHLOROENZENE	N.D.	---	---
1,2-DICHLOROENZENE	N.D.	---	---

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5 DAYS TURNAROUND

Environmental Laboratory (1094)

February 25, 1993

ChromaLab File # 0293186 C

ESSENES

Project Name: BALCH-HAYWARD
Date Sampled: Feb. 17, 1993
Date Submitted: Feb. 18, 1993
Date of Analysis: Feb. 23, 1993
Sample I.D.: B-1A-6

Project No: 033-008-01
Method of Analysis: EPA 8010
Matrix: Soil
Reporting Det. Limit: 5.0 µg/Kg
Dilution Factor: None

COMPOUND NAME	µg/Kg	Spike Recovery	
CHLOROMETHANE	N.D.	---	---
VINYL CHLORIDE	N.D.	---	---
BROMOMETHANE	N.D.	---	---
CHLOROETHANE	N.D.	---	---
TRICHLOROFLUOROMETHANE	N.D.	102%	101%
1,1-DICHLOROETHENE	N.D.	---	---
METHYLENE CHLORIDE	N.D.	---	---
1,2-DICHLOROETHENE (TRANS)	N.D.	---	---
1,2-DICHLOROETHENE (CIS)	N.D.	---	---
1,1-DICHLOROETHANE	N.D.	---	---
CHLOROFORM	N.D.	---	---
1,1,1-TRICHLOROETHANE	N.D.	---	---
CARBON TETRACHLORIDE	N.D.	---	---
1,2-DICHLOROETHANE	N.D.	95%	96%
TRICHLOROETHENE	N.D.	---	---
1,2-DICHLOROPROPANE	N.D.	---	---
BROMODICHLOROMETHANE	N.D.	---	---
2-CHLOROETHYLVINYLEETHER	N.D.	---	---
TRANS-1,3-DICHLOROPROPENE	N.D.	---	---
CIS-1,3-DICHLOROPROPENE	N.D.	---	---
1,1,2-TRICHLOROETHANE	N.D.	99%	91%
TETRACHLOROETHENE	N.D.	---	---
DIBROMOCHLOROMETHANE	N.D.	---	---
CHLOROBENZENE	N.D.	---	---
BROMOFORM	N.D.	104%	91%
1,1,2,2-TETRACHLOROETHANE	N.D.	---	---
1,3-DICHLOROBENZENE	N.D.	---	---
1,4-DICHLOROBENZENE	N.D.	---	---
1,2-DICHLOROBENZENE	N.D.	---	---

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5 DAYS TURNAROUND

Environmental Laboratory (1094)

February 25, 1993

ChromaLab File # 0293186 D

ESSENES

Project Name: BALCH-HAYWARD
Date Sampled: Feb. 17, 1993
Date Submitted: Feb. 18, 1993
Date of Analysis: Feb. 23, 1993
Sample I.D.: B-1A-11.0-11.5

Project No: 033-008-01
Method of Analysis: EPA 8010
Matrix: Soil
Reporting Det. Limit: 5.0 µg/Kg
Dilution Factor: None

COMPOUND NAME	µg/Kg	Spike Recovery	
CHLOROMETHANE	N.D.	---	---
VINYL CHLORIDE	N.D.	---	---
BROMOMETHANE	N.D.	---	---
CHLOROETHANE	N.D.	---	---
TRICHLOROFLUOROMETHANE	N.D.	102%	101%
1,1-DICHLOROETHENE	N.D.	---	---
METHYLENE CHLORIDE	N.D.	---	---
1,2-DICHLOROETHENE (TRANS)	N.D.	---	---
1,2-DICHLOROETHENE (CIS)	N.D.	---	---
1,1-DICHLOROETHANE	N.D.	---	---
CHLOROFORM	N.D.	---	---
1,1,1-TRICHLOROETHANE	N.D.	---	---
CARBON TETRACHLORIDE	N.D.	---	---
1,2-DICHLOROETHANE	N.D.	95%	96%
TRICHLOROETHENE	N.D.	---	---
1,2-DICHLOROPROPANE	N.D.	---	---
BROMODICHLOROMETHANE	N.D.	---	---
2-CHLOROETHYLVINYLETHER	N.D.	---	---
TRANS-1,3-DICHLOROPROPENE	N.D.	---	---
CIS-1,3-DICHLOROPROPENE	N.D.	---	---
1,1,2-TRICHLOROETHANE	N.D.	99%	91%
TETRACHLOROETHENE	N.D.	---	---
DIBROMOCHLOROMETHANE	N.D.	---	---
CHLORO BENZENE	N.D.	---	---
BROMOFORM	N.D.	104%	91%
1,1,2,2-TETRACHLOROETHANE	N.D.	---	---
1,3-DICHLOROBENZENE	N.D.	---	---
1,4-DICHLOROBENZENE	N.D.	---	---
1,2-DICHLOROBENZENE	N.D.	---	---

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5 DAYS TURNAROUND

Environmental Laboratory (1094)

February 25, 1993

ChromaLab File # 0293186 E

ESSENES

Project Name: BALCH-HAYWARD
Date Sampled: Feb. 17, 1993
Date Submitted: Feb. 18, 1993
Date of Analysis: Feb. 23, 1993
Sample I.D.: B-2A-6

Project No: 033-008-01
Method of Analysis: EPA 8010
Matrix: Soil
Reporting Det. Limit: 5.0 µg/Kg
Dilution Factor: None

COMPOUND NAME	µg/Kg	Spike Recovery	
CHLOROMETHANE	N.D.	---	---
VINYL CHLORIDE	N.D.	---	---
BROMOMETHANE	N.D.	---	---
CHLOROETHANE	N.D.	---	---
TRICHLOROFLUOROMETHANE	N.D.	---	---
1,1-DICHLOROETHENE	N.D.	102%	101%
METHYLENE CHLORIDE	N.D.	---	---
1,2-DICHLOROETHENE (TRANS)	N.D.	---	---
1,2-DICHLOROETHENE (CIS)	N.D.	---	---
1,1-DICHLOROETHANE	N.D.	---	---
CHLOROFORM	N.D.	---	---
1,1,1-TRICHLOROETHANE	N.D.	---	---
CARBON TETRACHLORIDE	N.D.	---	---
1,2-DICHLOROETHANE	N.D.	95%	96%
TRICHLOROETHENE	N.D.	---	---
1,2-DICHLOROPROPANE	N.D.	---	---
BROMODICHLOROMETHANE	N.D.	---	---
2-CHLOROETHYLVINYLETHER	N.D.	---	---
TRANS-1,3-DICHLOROPROPENE	N.D.	---	---
CIS-1,3-DICHLOROPROPENE	N.D.	---	---
1,1,2-TRICHLOROETHANE	N.D.	99%	91%
TETRACHLOROETHENE	N.D.	---	---
DIBROMOCHLOROMETHANE	N.D.	---	---
CHLOROBENZENE	N.D.	---	---
BROMOFORM	N.D.	---	---
1,1,2,2-TETRACHLOROETHANE	N.D.	104%	91%
1,3-DICHLOROBENZENE	N.D.	---	---
1,4-DICHLOROBENZENE	N.D.	---	---
1,2-DICHLOROBENZENE	N.D.	---	---

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5 DAYS TURNAROUND

Environmental Laboratory (1094)

February 25, 1993

ChromaLab File # 0293186 F

ESSENES

Project Name: BALCH-HAYWARD
Date Sampled: Feb. 17, 1993
Date Submitted: Feb. 18, 1993
Date of Analysis: Feb. 23, 1993
Sample I.D.: B-2A-10.5-11.0

Project No: 033-008-01
Method of Analysis: EPA 8010
Matrix: Soil
Reporting Det. Limit: 5.0 µg/Kg
Dilution Factor: None

COMPOUND NAME	µg/Kg	Spike Recovery
CHLOROMETHANE	N.D.	---
VINYL CHLORIDE	N.D.	---
BROMOMETHANE	N.D.	---
CHLOROETHANE	N.D.	---
TRICHLOROFLUOROMETHANE	N.D.	102% 101%
1,1-DICHLOROETHENE	N.D.	---
METHYLENE CHLORIDE	N.D.	---
1,2-DICHLOROETHENE (TRANS)	N.D.	---
1,2-DICHLOROETHENE (CIS)	N.D.	---
1,1-DICHLOROETHANE	N.D.	---
CHLOROFORM	N.D.	---
1,1,1-TRICHLOROETHANE	N.D.	---
CARBON TETRACHLORIDE	N.D.	---
1,2-DICHLOROETHANE	N.D.	95% 96%
TRICHLOROETHENE	N.D.	---
1,2-DICHLOROPROPANE	N.D.	---
BROMODICHLOROMETHANE	N.D.	---
2-CHLOROETHYLVINYLEETHER	N.D.	---
TRANS-1,3-DICHLOROPROPENE	N.D.	---
CIS-1,3-DICHLOROPROPENE	N.D.	---
1,1,2-TRICHLOROETHANE	N.D.	99% 91%
TETRACHLOROETHENE	N.D.	---
DIBROMOCHLOROMETHANE	N.D.	---
CHLOROBENZENE	N.D.	---
BROMOFORM	N.D.	104% 91%
1,1,2,2-TETRACHLOROETHANE	N.D.	---
1,3-DICHLOROBENZENE	N.D.	---
1,4-DICHLOROBENZENE	N.D.	---
1,2-DICHLOROBENZENE	N.D.	---

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5 DAYS TURNAROUND

Environmental Laboratory (1094)

February 25, 1993

ChromaLab File # 0293186 G


ESSENES

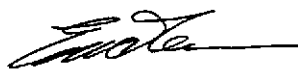
Project Name: BALCH-HAYWARD
Date Sampled: Feb. 17, 1993
Date Submitted: Feb. 18, 1993
Date of Analysis: Feb. 23, 1993
Sample I.D.: B-3A-6

Project No: 033-008-01
Method of Analysis: EPA 8010
Matrix: Soil
Reporting Det. Limit: 5.0 µg/Kg
Dilution Factor: None

COMPOUND NAME	µg/Kg	Spike Recovery	
CHLOROMETHANE	N.D.	---	---
VINYL CHLORIDE	N.D.	---	---
BROMOMETHANE	N.D.	---	---
CHLOROETHANE	N.D.	---	---
TRICHLOROFLUOROMETHANE	N.D.	---	---
1,1-DICHLOROETHENE	N.D.	102%	101%
METHYLENE CHLORIDE	N.D.	---	---
1,2-DICHLOROETHENE (TRANS)	N.D.	---	---
1,2-DICHLOROETHENE (CIS)	N.D.	---	---
1,1-DICHLOROETHANE	N.D.	---	---
CHLOROFORM	N.D.	---	---
1,1,1-TRICHLOROETHANE	N.D.	---	---
CARBON TETRACHLORIDE	N.D.	---	---
1,2-DICHLOROETHANE	N.D.	---	---
TRICHLOROETHENE	N.D.	95%	96%
1,2-DICHLOROPROPANE	N.D.	---	---
BROMODICHLOROMETHANE	N.D.	---	---
2-CHLOROETHYLVINYLETHER	N.D.	---	---
TRANS-1,3-DICHLOROPROPENE	N.D.	---	---
CIS-1,3-DICHLOROPROPENE	N.D.	---	---
1,1,2-TRICHLOROETHANE	N.D.	99%	91%
TETRACHLOROETHENE	N.D.	---	---
DIBROMOCHLOROMETHANE	N.D.	---	---
CHLOROBENZENE	N.D.	---	---
BROMOFORM	N.D.	---	---
1,1,2,2-TETRACHLOROETHANE	N.D.	104%	91%
1,3-DICHLOROBENZENE	N.D.	---	---
1,4-DICHLOROBENZENE	N.D.	---	---
1,2-DICHLOROBENZENE	N.D.	---	---

ChromaLab, Inc.


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CHROMALAB, INC.

5 DAYS TURNAROUND

Environmental Laboratory (1094)

February 25, 1993

ChromaLab File # 0293186 H

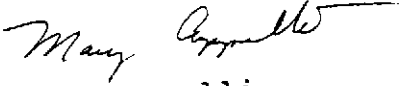
ESSENES

Project Name: BALCH-HAYWARD
Date Sampled: Feb. 17, 1993
Date Submitted: Feb. 18, 1993
Date of Analysis: Feb. 23, 1993
Sample I.D.: B-3A-10.5-11.0

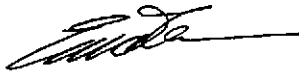
Project No: 033-008-01
Method of Analysis: EPA 8010
Matrix: Soil
Reporting Det. Limit: 5.0 µg/Kg
Dilution Factor: None

COMPOUND NAME	µg/Kg	Spike Recovery
CHLOROMETHANE	N.D.	---
VINYL CHLORIDE	N.D.	---
BROMOMETHANE	N.D.	---
CHLOROETHANE	N.D.	---
TRICHLOROFLUOROMETHANE	N.D.	102% 101%
1,1-DICHLOROETHENE	N.D.	---
METHYLENE CHLORIDE	N.D.	---
1,2-DICHLOROETHENE (TRANS)	N.D.	---
1,2-DICHLOROETHENE (CIS)	N.D.	---
1,1-DICHLOROETHANE	N.D.	---
CHLOROFORM	N.D.	---
1,1,1-TRICHLOROETHANE	N.D.	---
CARBON TETRACHLORIDE	N.D.	---
1,2-DICHLOROETHANE	N.D.	95% 96%
TRICHLOROETHENE	N.D.	---
1,2-DICHLOROPROPANE	N.D.	---
BROMODICHLOROMETHANE	N.D.	---
2-CHLOROETHYL VINYLETHER	N.D.	---
TRANS-1,3-DICHLOROPROPENE	N.D.	---
CIS-1,3-DICHLOROPROPENE	N.D.	---
1,1,2-TRICHLOROETHANE	N.D.	99% 91%
TETRACHLOROETHENE	N.D.	---
DIBROMOCHLOROMETHANE	N.D.	---
CHLOROBENZENE	N.D.	---
BROMOFORM	N.D.	104% 91%
1,1,2,2-TETRACHLOROETHANE	N.D.	---
1,3-DICHLOROBENZENE	N.D.	---
1,4-DICHLOROBENZENE	N.D.	---
1,2-DICHLOROBENZENE	N.D.	---

ChromaLab, Inc.


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Analytical Chemist

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CHROMALAB, INC.

5 DAYS TURNAROUND

Environmental Laboratory (1094)

February 25, 1993

ChromaLab File # 0293186 I

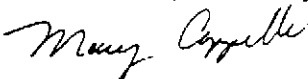
ESSENES


Project Name: BALCH-HAYWARD
Date Sampled: Feb. 17, 1993
Date Submitted: Feb. 18, 1993
Date of Analysis: Feb. 23, 1993
Sample I.D.: B-4A-6

Project No: 033-008-01
Method of Analysis: EPA 8010
Matrix: Soil
Reporting Det. Limit: 5.0 µg/Kg
Dilution Factor: None

COMPOUND NAME	µg/Kg	Spike Recovery	
CHLOROMETHANE	N.D.	---	---
VINYL CHLORIDE	N.D.	---	---
BROMOMETHANE	N.D.	---	---
CHLOROETHANE	N.D.	---	---
TRICHLOROFLUOROMETHANE	N.D.	---	---
1,1-DICHLOROETHENE	N.D.	102%	101%
METHYLENE CHLORIDE	N.D.	---	---
1,2-DICHLOROETHENE (TRANS)	N.D.	---	---
1,2-DICHLOROETHENE (CIS)	N.D.	---	---
1,1-DICHLOROETHANE	N.D.	---	---
CHLOROFORM	N.D.	---	---
1,1,1-TRICHLOROETHANE	N.D.	---	---
CARBON TETRACHLORIDE	N.D.	---	---
1,2-DICHLOROETHANE	N.D.	95%	96%
TRICHLOROETHENE	N.D.	---	---
1,2-DICHLOROPROPANE	N.D.	---	---
BROMODICHLOROMETHANE	N.D.	---	---
2-CHLOROETHYLVINYLETHER	N.D.	---	---
TRANS-1,3-DICHLOROPROPENE	N.D.	---	---
CIS-1,3-DICHLOROPROPENE	N.D.	---	---
1,1,2-TRICHLOROETHANE	N.D.	99%	91%
TETRACHLOROETHENE	N.D.	---	---
DIBROMOCHLOROMETHANE	N.D.	---	---
CHLOROBENZENE	N.D.	---	---
BROMOFORM	N.D.	---	---
1,1,2,2-TETRACHLOROETHANE	N.D.	104%	91%
1,3-DICHLOROBENZENE	N.D.	---	---
1,4-DICHLOROBENZENE	N.D.	---	---
1,2-DICHLOROBENZENE	N.D.	---	---

ChromaLab, Inc.


Mary Cappelli
Analytical Chemist


Eric Tam
Laboratory Director

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CHROMALAB, INC.

5 DAYS TURNAROUND

Environmental Laboratory (1094)

February 25, 1993

ChromaLab File # 0293186 J


ESSENES

Project Name: BALCH-HAYWARD
Date Sampled: Feb. 17, 1993
Date Submitted: Feb. 18, 1993
Date of Analysis: Feb. 23, 1993
Sample I.D.: B-4A-11.0-11.5

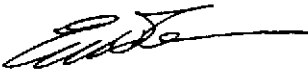
Project No: 033-008-01
Method of Analysis: EPA 8010
Matrix: Soil
Reporting Det. Limit: 5.0 µg/Kg
Dilution Factor: None

COMPOUND NAME	µg/Kg	Spike Recovery	
CHLOROMETHANE	N.D.	---	---
VINYL CHLORIDE	N.D.	---	---
BROMOMETHANE	N.D.	---	---
CHLOROETHANE	N.D.	---	---
TRICHLOROFLUOROMETHANE	N.D.	---	---
1,1-DICHLOROETHENE	N.D.	102%	101%
METHYLENE CHLORIDE	N.D.	---	---
1,2-DICHLOROETHENE (TRANS)	N.D.	---	---
1,2-DICHLOROETHENE (CIS)	N.D.	---	---
1,1-DICHLOROETHANE	N.D.	---	---
CHLOROFORM	N.D.	---	---
1,1,1-TRICHLOROETHANE	N.D.	---	---
CARBON TETRACHLORIDE	N.D.	---	---
1,2-DICHLOROETHANE	N.D.	---	---
TRICHLOROETHENE	N.D.	95%	96%
1,2-DICHLOROPROPANE	N.D.	---	---
BROMODICHLOROMETHANE	N.D.	---	---
2-CHLOROETHYLVINYLEETHER	N.D.	---	---
TRANS-1,3-DICHLOROPROPENE	N.D.	---	---
CIS-1,3-DICHLOROPROPENE	N.D.	---	---
1,1,2-TRICHLOROETHANE	N.D.	---	---
TETRACHLOROETHENE	N.D.	99%	91%
DIBROMOCHLOROMETHANE	N.D.	---	---
CHLOROBENZENE	N.D.	---	---
BROMOFORM	N.D.	---	---
1,1,2,2-TETRACHLOROETHANE	N.D.	104%	91%
1,3-DICHLOROBENZENE	N.D.	---	---
1,4-DICHLOROBENZENE	N.D.	---	---
1,2-DICHLOROBENZENE	N.D.	---	---

ChromaLab, Inc.


Mary Cappelli
Analytical Chemist

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Eric Tam
Laboratory Director

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5 DAYS TURNAROUND

Environmental Laboratory (1094)

February 25, 1993

ChromaLab File # 0293186 K


ESSENES

Project Name: BALCH-HAYWARD
Date Sampled: Feb. 17, 1993
Date Submitted: Feb. 18, 1993
Date of Analysis: Feb. 23, 1993
Sample I.D.: B-1-1


Project No: 033-008-01
Method of Analysis: EPA 8010
Matrix: Soil
Reporting Det. Limit: 5.0 µg/Kg
Dilution Factor: None

COMPOUND NAME	µg/Kg	Spike Recovery	
CHLOROMETHANE	N.D.	---	---
VINYL CHLORIDE	N.D.	---	---
BROMOMETHANE	N.D.	---	---
CHLOROETHANE	N.D.	---	---
TRICHLOROFLUOROMETHANE	N.D.	102%	101%
1,1-DICHLOROETHENE	N.D.	---	---
METHYLENE CHLORIDE	N.D.	---	---
1,2-DICHLOROETHENE (TRANS)	N.D.	---	---
1,2-DICHLOROETHENE (CIS)	N.D.	---	---
1,1-DICHLOROETHANE	N.D.	---	---
CHLOROFORM	N.D.	---	---
1,1,1-TRICHLOROETHANE	N.D.	---	---
CARBON TETRACHLORIDE	N.D.	---	---
1,2-DICHLOROETHANE	N.D.	95%	96%
TRICHLOROETHENE	N.D.	---	---
1,2-DICHLOROPROPANE	N.D.	---	---
BROMODICHLOROMETHANE	N.D.	---	---
2-CHLOROETHYLVINYLEETHER	N.D.	---	---
TRANS-1,3-DICHLOROPROPENE	N.D.	---	---
CIS-1,3-DICHLOROPROPENE	N.D.	---	---
1,1,2-TRICHLOROETHANE	N.D.	99%	91%
TETRACHLOROETHENE	N.D.	---	---
DIBROMOCHLOROMETHANE	N.D.	---	---
CHLOROBENZENE	N.D.	---	---
BROMOFORM	N.D.	104%	91%
1,1,2,2-TETRACHLOROETHANE	N.D.	---	---
1,3-DICHLOROBENZENE	N.D.	---	---
1,4-DICHLOROBENZENE	N.D.	---	---
1,2-DICHLOROBENZENE	N.D.	---	---

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5 DAYS TURNAROUND

Environmental Laboratory (1094)

February 25, 1993

ChromaLab File # 0293186 L


ESSENES

Project Name: BALCH-HAYWARD
Date Sampled: Feb. 17, 1993
Date Submitted: Feb. 18, 1993
Date of Analysis: Feb. 23, 1993
Sample I.D.: B-2-1


Project No: 033-008-01
Method of Analysis: EPA 8010
Matrix: Soil
Reporting Det. Limit: 5.0 µg/Kg
Dilution Factor: None

COMPOUND NAME	µg/Kg	Spike Recovery	
CHLOROMETHANE	N.D.	---	---
VINYL CHLORIDE	N.D.	---	---
BROMOMETHANE	N.D.	---	---
CHLOROETHANE	N.D.	---	---
TRICHLOROFLUOROMETHANE	N.D.	102%	101%
1,1-DICHLOROETHENE	N.D.	---	---
METHYLENE CHLORIDE	N.D.	---	---
1,2-DICHLOROETHENE (TRANS)	N.D.	---	---
1,2-DICHLOROETHENE (CIS)	N.D.	---	---
1,1-DICHLOROETHANE	N.D.	---	---
CHLOROFORM	N.D.	---	---
1,1,1-TRICHLOROETHANE	N.D.	---	---
CARBON TETRACHLORIDE	N.D.	---	---
1,2-DICHLOROETHANE	N.D.	95%	96%
TRICHLOROETHENE	N.D.	---	---
1,2-DICHLOROPROPANE	N.D.	---	---
BROMODICHLOROMETHANE	N.D.	---	---
2-CHLOROETHYLVINYLETHER	N.D.	---	---
TRANS-1,3-DICHLOROPROPENE	N.D.	---	---
CIS-1,3-DICHLOROPROPENE	N.D.	---	---
1,1,2-TRICHLOROETHANE	N.D.	99%	91%
TETRACHLOROETHENE	N.D.	---	---
DIBROMOCHLOROMETHANE	N.D.	---	---
CHLOROENZENE	N.D.	---	---
BROMOFORM	N.D.	104%	91%
1,1,2,2-TETRACHLOROETHANE	N.D.	---	---
1,3-DICHLOROENZENE	N.D.	---	---
1,4-DICHLOROENZENE	N.D.	---	---
1,2-DICHLOROENZENE	N.D.	---	---

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5 DAYS TURNAROUND

Environmental Laboratory (1094)

February 25, 1993

ChromaLab File # 0293186 M


ESSENES

Project Name: BALCH-HAYWARD
Date Sampled: Feb. 17, 1993
Date Submitted: Feb. 18, 1993
Date of Analysis: Feb. 24, 1993
Sample I.D.: B-5-1

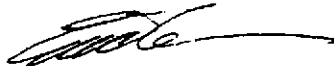
Project No: 033-008-01
Method of Analysis: EPA 8010
Matrix: Soil
Reporting Det. Limit: 5.0 µg/Kg
Dilution Factor: None

COMPOUND NAME	µg/Kg	Spike Recovery
CHLOROMETHANE	N.D.	---
VINYL CHLORIDE	N.D.	---
BROMOMETHANE	N.D.	---
CHLOROETHANE	N.D.	---
TRICHLOROFLUOROMETHANE	N.D.	102% 101%
1,1-DICHLOROETHENE	N.D.	---
METHYLENE CHLORIDE	N.D.	---
1,2-DICHLOROETHENE (TRANS)	N.D.	---
1,2-DICHLOROETHENE (CIS)	N.D.	---
1,1-DICHLOROETHANE	N.D.	---
CHLOROFORM	N.D.	---
1,1,1-TRICHLOROETHANE	N.D.	---
CARBON TETRACHLORIDE	N.D.	---
1,2-DICHLOROETHANE	N.D.	95% 96%
TRICHLOROETHENE	N.D.	---
1,2-DICHLOROPROPANE	N.D.	---
BROMODICHLOROMETHANE	N.D.	---
2-CHLOROETHYLVINYLETHER	N.D.	---
TRANS-1,3-DICHLOROPROPENE	N.D.	---
CIS-1,3-DICHLOROPROPENE	N.D.	---
1,1,2-TRICHLOROETHANE	N.D.	99% 91%
TETRACHLOROETHENE	N.D.	---
DIBROMOCHLOROMETHANE	N.D.	---
CHLORO BENZENE	N.D.	---
BROMOFORM	N.D.	104% 91%
1,1,2,2-TETRACHLOROETHANE	N.D.	---
1,3-DICHLORO BENZENE	N.D.	---
1,4-DICHLORO BENZENE	N.D.	---
1,2-DICHLORO BENZENE	N.D.	---

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5 DAYS TURNAROUND

Environmental Laboratory (1094)

February 25, 1993

ChromaLab File # 0293186 N


ESSENES

Project Name: BALCH-HAYWARD
Date Sampled: Feb. 17, 1993
Date Submitted: Feb. 18, 1993
Date of Analysis: Feb. 24, 1993
Sample I.D.: B-3-1

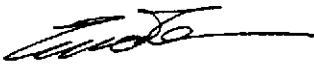
Project No: 033-008-01
Method of Analysis: EPA 8010
Matrix: Soil
Reporting Det. Limit: 5.0 µg/Kg
Dilution Factor: None

COMPOUND NAME	µg/Kg	Spike Recovery	
CHLOROMETHANE	N.D.	---	---
VINYL CHLORIDE	N.D.	---	---
BROMOMETHANE	N.D.	---	---
CHLOROETHANE	N.D.	---	---
TRICHLOROFLUOROMETHANE	N.D.	---	---
1,1-DICHLOROETHENE	N.D.	102%	101%
METHYLENE CHLORIDE	N.D.	---	---
1,2-DICHLOROETHENE (TRANS)	N.D.	---	---
1,2-DICHLOROETHENE (CIS)	N.D.	---	---
1,1-DICHLOROETHANE	N.D.	---	---
CHLOROFORM	N.D.	---	---
1,1,1-TRICHLOROETHANE	N.D.	---	---
CARBON TETRACHLORIDE	N.D.	---	---
1,2-DICHLOROETHANE	N.D.	---	---
TRICHLOROETHENE	N.D.	95%	96%
1,2-DICHLOROPROPANE	N.D.	---	---
BROMODICHLOROMETHANE	N.D.	---	---
2-CHLOROETHYLVINYLETHER	N.D.	---	---
TRANS-1,3-DICHLOROPROPENE	N.D.	---	---
CIS-1,3-DICHLOROPROPENE	N.D.	---	---
1,1,2-TRICHLOROETHANE	N.D.	---	---
TETRACHLOROETHENE	N.D.	99%	91%
DIBROMOCHLOROMETHANE	N.D.	---	---
CHLOROENZENE	N.D.	---	---
BROMOFORM	N.D.	---	---
1,1,2,2-TETRACHLOROETHANE	N.D.	104%	91%
1,3-DICHLOROENZENE	N.D.	---	---
1,4-DICHLOROENZENE	N.D.	---	---
1,2-DICHLOROENZENE	N.D.	---	---

ChromaLab, Inc.


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5 DAYS TURNAROUND

Environmental Laboratory (1094)

February 25, 1993

ChromaLab File # 0293186 0

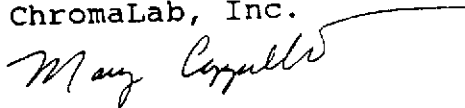
ESSENES

Project Name: BALCH-HAYWARD
Date Sampled: Feb. 17, 1993
Date Submitted: Feb. 18, 1993
Date of Analysis: Feb. 24, 1993
Sample I.D.: B-4-1

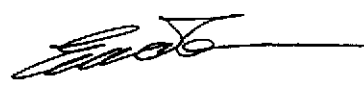
Project No: 033-008-01
Method of Analysis: EPA 8010
Matrix: Soil
Reporting Det. Limit: 5.0 µg/Kg
Dilution Factor: None

COMPOUND NAME	µg/Kg	Spike Recovery
CHLOROMETHANE	N.D.	---
VINYL CHLORIDE	N.D.	---
BROMOMETHANE	N.D.	---
CHLOROETHANE	N.D.	---
TRICHLOROFLUOROMETHANE	N.D.	---
1,1-DICHLOROETHENE	N.D.	102% 101%
METHYLENE CHLORIDE	N.D.	---
1,2-DICHLOROETHENE (TRANS)	N.D.	---
1,2-DICHLOROETHENE (CIS)	N.D.	---
1,1-DICHLOROETHANE	N.D.	---
CHLOROFORM	N.D.	---
1,1,1-TRICHLOROETHANE	N.D.	---
CARBON TETRACHLORIDE	N.D.	---
1,2-DICHLOROETHANE	N.D.	95% 96%
TRICHLOROETHENE	N.D.	---
1,2-DICHLOROPROPANE	N.D.	---
BROMODICHLOROMETHANE	N.D.	---
2-CHLOROETHYLVINYLEETHER	N.D.	---
TRANS-1,3-DICHLOROPROPENE	N.D.	---
CIS-1,3-DICHLOROPROPENE	N.D.	---
1,1,2-TRICHLOROETHANE	N.D.	99% 91%
TETRACHLOROETHENE	N.D.	---
DIBROMOCHLOROMETHANE	N.D.	---
CHLOROBENZENE	N.D.	---
BROMOFORM	N.D.	---
1,1,2,2-TETRACHLOROETHANE	N.D.	104% 91%
1,3-DICHLOROBENZENE	N.D.	---
1,4-DICHLOROBENZENE	N.D.	---
1,2-DICHLOROBENZENE	N.D.	---

ChromaLab, Inc.


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CHROMALAB, INC.

5 DAYS TURNAROUND

Environmental Laboratory (1094)

February 25, 1993

ChromaLab File # 0293186 P

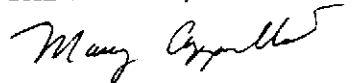
ESSENES

Project Name: BALCH-HAYWARD
Date Sampled: Feb. 17, 1993
Date Submitted: Feb. 18, 1993
Date of Analysis: Feb. 24, 1993
Sample I.D.: B-6-1

Project No: 033-008-01
Method of Analysis: EPA 8010
Matrix: Soil
Reporting Det. Limit: 5.0 µg/Kg
Dilution Factor: None

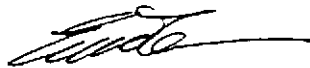
COMPOUND NAME	µg/Kg	Spike Recovery	
CHLOROMETHANE	N.D.	---	---
VINYL CHLORIDE	N.D.	---	---
BROMOMETHANE	N.D.	---	---
CHLOROETHANE	N.D.	---	---
TRICHLOROFLUOROMETHANE	N.D.	---	---
1,1-DICHLOROETHENE	N.D.	102%	101%
METHYLENE CHLORIDE	N.D.	---	---
1,2-DICHLOROETHENE (TRANS)	N.D.	---	---
1,2-DICHLOROETHENE (CIS)	N.D.	---	---
1,1-DICHLOROETHANE	N.D.	---	---
CHLOROFORM	N.D.	---	---
1,1,1-TRICHLOROETHANE	N.D.	---	---
CARBON TETRACHLORIDE	N.D.	---	---
1,2-DICHLOROETHANE	N.D.	---	---
TRICHLOROETHENE	N.D.	95%	96%
1,2-DICHLOROPROPANE	N.D.	---	---
BROMODICHLOROMETHANE	N.D.	---	---
2-CHLOROETHYLVINYLEETHER	N.D.	---	---
TRANS-1,3-DICHLOROPROPENE	N.D.	---	---
CIS-1,3-DICHLOROPROPENE	N.D.	---	---
1,1,2-TRICHLOROETHANE	N.D.	---	---
TETRACHLOROETHENE	N.D.	99%	91%
DIBROMOCHLOROMETHANE	N.D.	---	---
CHLOROENZENE	N.D.	---	---
BROMOFORM	N.D.	---	---
1,1,2,2-TETRACHLOROETHANE	N.D.	104%	91%
1,3-DICHLOROENZENE	N.D.	---	---
1,4-DICHLOROENZENE	N.D.	---	---
1,2-DICHLOROENZENE	N.D.	---	---

ChromaLab, Inc.



Mary Cappelli
Analytical Chemist

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Eric Tam
Laboratory Director

CHROMALAB, INC.

5 DAYS TURNAROUND

Environmental Laboratory (1094)

February 25, 1993

ChromaLab File # 0293186

ESSENES

Project Name: BALCH-HAYWARD
Date Sampled: Feb. 17, 1993
Date Submitted: Feb. 18, 1993
Date of Analysis: Feb. 24, 1993
Sample I.D.: B-1A-AQ

Project No: 033-008-01
Method of Analysis: EPA 601
Matrix: Water
Limit: 0.5 µg/L
Dilution Factor: None

COMPOUND NAME	µg/L	Spike Recovery
CHLOROMETHANE	N.D.	---
VINYL CHLORIDE	N.D.	---
BROMOMETHANE	N.D.	---
CHLOROETHANE	N.D.	---
TRICHLOROFLUOROMETHANE	N.D.	---
1,1-DICHLOROETHENE	N.D.	84% 99%
METHYLENE CHLORIDE	N.D.	---
1,2-DICHLOROETHENE (TRANS)	N.D.	---
1,2-DICHLOROETHENE (CIS)	N.D.	---
1,1-DICHLOROETHANE	N.D.	---
CHLOROFORM	N.D.	---
1,1,1-TRICHLOROETHANE	N.D.	---
CARBON TETRACHLORIDE	N.D.	---
1,2-DICHLOROETHANE	N.D.	97% 104%
TRICHLOROETHENE	N.D.	---
1,2-DICHLOROPROPANE	N.D.	---
BROMODICHLOROMETHANE	N.D.	---
2-CHLOROETHYLVINYLEETHER	N.D.	---
TRANS-1,3-DICHLOROPROPENE	N.D.	---
CIS-1,3-DICHLOROPROPENE	N.D.	---
1,1,2-TRICHLOROETHANE	N.D.	93% 106%
TETRACHLOROETHENE	N.D.	---
DIBROMOCHLOROMETHANE	N.D.	---
CHLOROENZENE	N.D.	---
BROMOFORM	N.D.	106% 99%
1,1,2,2-TETRACHLOROETHANE	N.D.	---
1,3-DICHLOROENZENE	N.D.	---
1,4-DICHLOROENZENE	N.D.	---
1,2-DICHLOROENZENE	N.D.	---

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5 DAYS TURNAROUND

Environmental Laboratory (1094)

February 25, 1993

ChromaLab File # 0293186

ESSENES

Project Name: BALCH-HAYWARD
Date Sampled: Feb. 17, 1993
Date Submitted: Feb. 18, 1993
Date of Analysis: Feb. 24, 1993
Sample I.D.: B-2A-AQ

Project No: 033-008-01
Method of Analysis: EPA 601
Matrix: Water
Limit: 0.5 µg/L
Dilution Factor: None

COMPOUND NAME	µg/L	Spike Recovery
CHLOROMETHANE	N.D.	---
VINYL CHLORIDE	N.D.	---
BROMOMETHANE	N.D.	---
CHLOROETHANE	N.D.	---
TRICHLOROFLUOROMETHANE	N.D.	84% 99%
1,1-DICHLOROETHENE	N.D.	---
METHYLENE CHLORIDE	N.D.	---
1,2-DICHLOROETHENE (TRANS)	N.D.	---
1,2-DICHLOROETHENE (CIS)	N.D.	---
1,1-DICHLOROETHANE	N.D.	---
CHLOROFORM	N.D.	---
1,1,1-TRICHLOROETHANE	N.D.	---
CARBON TETRACHLORIDE	N.D.	---
1,2-DICHLOROETHANE	N.D.	97% 104%
TRICHLOROETHENE	N.D.	---
1,2-DICHLOROPROPANE	N.D.	---
BROMODICHLOROMETHANE	N.D.	---
2-CHLOROETHYLVINYLEETHER	N.D.	---
TRANS-1,3-DICHLOROPROPENE	N.D.	---
CIS-1,3-DICHLOROPROPENE	N.D.	---
1,1,2-TRICHLOROETHANE	N.D.	93% 106%
TETRACHLOROETHENE	N.D.	---
DIBROMOCHLOROMETHANE	N.D.	---
CHLOROBENZENE	N.D.	---
BROMOFORM	N.D.	106% 99%
1,1,2,2-TETRACHLOROETHANE	N.D.	---
1,3-DICHLOROBENZENE	N.D.	---
1,4-DICHLOROBENZENE	N.D.	---
1,2-DICHLOROBENZENE	N.D.	---

ChromaLab, Inc.

Mary Cappelli

Mary Cappelli
Analytical Chemist

do

Eric Tam

Eric Tam
Laboratory Director

CHROMALAB, INC.

5 DAYS TURNAROUND

Environmental Laboratory (1094)

February 25, 1993

ChromaLab File # 0293186

ESSENES

Project Name: BALCH-HAYWARD
Date Sampled: Feb. 17, 1993
Date Submitted: Feb. 18, 1993
Date of Analysis: Feb. 24, 1993
Sample I.D.: B-3A-AQ

Project No: 033-008-01
Method of Analysis: EPA 601
Matrix: Water
Limit: 0.5 µg/L
Dilution Factor: None

COMPOUND NAME	µg/L	Spike Recovery	
CHLOROMETHANE	N.D.	---	---
VINYL CHLORIDE	N.D.	---	---
BROMOMETHANE	N.D.	---	---
CHLOROETHANE	N.D.	---	---
TRICHLOROFLUOROMETHANE	N.D.	---	---
1,1-DICHLOROETHENE	N.D.	84%	99%
METHYLENE CHLORIDE	N.D.	---	---
1,2-DICHLOROETHENE (TRANS)	N.D.	---	---
1,2-DICHLOROETHENE (CIS)	N.D.	---	---
1,1-DICHLOROETHANE	N.D.	---	---
CHLOROFORM	N.D.	---	---
1,1,1-TRICHLOROETHANE	N.D.	---	---
CARBON TETRACHLORIDE	N.D.	---	---
1,2-DICHLOROETHANE	N.D.	---	---
TRICHLOROETHENE	N.D.	97%	104%
1,2-DICHLOROPROPANE	N.D.	---	---
BROMODICHLOROMETHANE	N.D.	---	---
2-CHLOROETHYLVINYLEETHER	N.D.	---	---
TRANS-1,3-DICHLOROPROPENE	N.D.	---	---
CIS-1,3-DICHLOROPROPENE	N.D.	---	---
1,1,2-TRICHLOROETHANE	N.D.	---	---
TETRACHLOROETHENE	N.D.	93%	106%
DIBROMOCHLOROMETHANE	N.D.	---	---
CHLOROENZENE	N.D.	---	---
BROMOFORM	N.D.	---	---
1,1,2,2-TETRACHLOROETHANE	N.D.	106%	99%
1,3-DICHLOROENZENE	N.D.	---	---
1,4-DICHLOROENZENE	N.D.	---	---
1,2-DICHLOROENZENE	N.D.	---	---

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5 DAYS TURNAROUND

Environmental Laboratory (1094)

February 25, 1993

ChromaLab File # 0293186

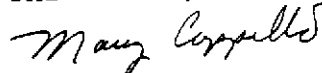
ESSENES

Project Name: BALCH-HAYWARD
Date Sampled: Feb. 17, 1993
Date Submitted: Feb. 18, 1993
Date of Analysis: Feb. 24, 1993
Sample I.D.: B-4A-AQ

Project No: 033-008-01
Method of Analysis: EPA 601
Matrix: Water
Limit: 0.5 µg/L
Dilution Factor: None

COMPOUND NAME	µg/L	Spike Recovery	
CHLOROMETHANE	N.D.	---	---
VINYL CHLORIDE	N.D.	---	---
BROMOMETHANE	N.D.	---	---
CHLOROETHANE	N.D.	---	---
TRICHLOROFLUOROMETHANE	N.D.	---	---
1,1-DICHLOROETHENE	N.D.	84%	99%
METHYLENE CHLORIDE	N.D.	---	---
1,2-DICHLOROETHENE (TRANS)	N.D.	---	---
1,2-DICHLOROETHENE (CIS)	N.D.	---	---
1,1-DICHLOROETHANE	N.D.	---	---
CHLOROFORM	N.D.	---	---
1,1,1-TRICHLOROETHANE	N.D.	---	---
CARBON TETRACHLORIDE	N.D.	---	---
1,2-DICHLOROETHANE	N.D.	---	---
TRICHLOROETHENE	N.D.	97%	104%
1,2-DICHLOROPROPANE	N.D.	---	---
BROMODICHLOROMETHANE	N.D.	---	---
2-CHLOROETHYLVINYLETHER	N.D.	---	---
TRANS-1,3-DICHLOROPROPENE	N.D.	---	---
CIS-1,3-DICHLOROPROPENE	N.D.	---	---
1,1,2-TRICHLOROETHANE	N.D.	93%	106%
TETRACHLOROETHENE	N.D.	---	---
DIBROMOCHLOROMETHANE	N.D.	---	---
CHLOROBENZENE	N.D.	---	---
BROMOFORM	N.D.	---	---
1,1,2,2-TETRACHLOROETHANE	N.D.	106%	99%
1,3-DICHLOROBENZENE	N.D.	---	---
1,4-DICHLOROBENZENE	N.D.	---	---
1,2-DICHLOROBENZENE	N.D.	---	---

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5 DAYS TURNAROUND

Environmental Laboratory (1094)

February 25, 1993

ChromaLab file number: 0293186

ESSENES

RE: One soil sample for Total CAM 17 Metals analyses (CA Title 22)

Project Name: BALCH-HAYWARD

Project Number: 033-008-01

Date Sampled: Feb. 17, 1993

Date Received: Feb. 18, 1993

Date Analyzed: Feb. 24, 1993


RESULTS: Sample I.D.: B-7-1

<u>Metals</u>	<u>Concentration (mg/Kg)</u>	<u>Detection Limit (mg/Kg)</u>
Antimony (Sb)	N.D.	1.00
Arsenic (As)	7.4	0.25
Barium (Ba)	91	0.25
Beryllium (Be)	0.42	0.05
Cadmium (Cd)	N.D.	0.05
Cobalt (Co)	11	0.50
Chromium (Cr)	27	0.50
Copper (Cu)	46	0.25
Lead (Pb)	14	0.50
Mercury (Hg)	0.059	0.05
Molybdenum (Mo)	N.D.	0.25
Nickel (Ni)	38	0.50
Selenium (Se)	N.D.	0.50
Silver (Ag)	N.D.	0.25
Thallium (Tl)	N.D.	2.00
Vanadium (V)	30	0.50
Zinc (Zn)	73	0.25

Method of Analysis: 3050/6010/7471

ChromaLab, Inc.

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Inorganic Supervisor


Eric Tam
Laboratory Director

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CHROMALAB, INC.

5 DAYS TURNAROUND

Environmental Laboratory (1094)

February 25, 1993

ChromaLab file number: 0293186

ESSENES

RE: One soil sample for Total CAM 17 Metals analyses (CA Title 22)

Project Name: BALCH-HAYWARD

Project Number: 033-008-01

Date Sampled: Feb. 17, 1993

Date Received: Feb. 18, 1993

Date Analyzed: Feb. 24, 1993

RESULTS: Sample I.D.: B-6-1

Metals	Concentration (mg/Kg)	Detection Limit (mg/Kg)
Antimony (Sb)	N.D.	1.00
Arsenic (As)	N.D.	0.25
Barium (Ba)	70	0.25
Beryllium (Be)	0.40	0.05
Cadmium (Cd)	N.D.	0.05
Cobalt (Co)	16	0.50
Chromium (Cr)	60	0.50
Copper (Cu)	72	0.25
Lead (Pb)	15	0.50
Mercury (Hg)	0.15	0.05
Molybdenum (Mo)	N.D.	0.25
Nickel (Ni)	N.D.	0.50
Selenium (Se)	N.D.	0.50
Silver (Ag)	N.D.	0.25
Thallium (Tl)	N.D.	2.00
Vanadium (V)	30	0.50
Zinc (Zn)	43	0.25

Method of Analysis: 3050/6010/7471

ChromaLab, Inc.

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5 DAYS TURNAROUND

Environmental Laboratory (1094)

February 25, 1993

ChromaLab File No.: 0293186

ESSENES

RE: One water sample for Total CAM 17 Metals analyses
(CA Title 22)

Project Name: BALCH-HAYWARD
Project Number: 033-008-01
Date Sampled: Feb. 17, 1993
Date Analyzed: Feb. 24, 1993

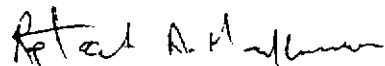
Date Submitted: Feb. 18, 1993

RESULTS: Sample I.D.: B-1A-AQ

Metals	Concentration (mg/L)	Detection Limit (mg/L)
Antimony (Sb)	N.D.	0.020
Arsenic (As)	N.D.	0.005
Barium (Ba)	0.07	0.005
Beryllium (Be)	N.D.	0.001
Cadmium (Cd)	N.D.	0.001
Cobalt (Co)	N.D.	0.01
Chromium (Cr)	N.D.	0.01
Copper (Cu)	0.01	0.005
Lead (Pb)	N.D.	0.010
Mercury (Hg)	N.D.	0.001
Molybdenum (Mo)	N.D.	0.005
Nickel (Ni)	N.D.	0.020
Selenium (Se)	N.D.	0.01
Silver (Ag)	N.D.	0.005
Thallium (Tl)	N.D.	0.01
Vanadium (V)	0.03	0.01
Zinc (Zn)	0.02	0.005

Method of Analysis: 3010/6010/7470

ChromaLab, Inc.



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CHROMALAB, INC.

5 DAYS TURNAROUND

Environmental Laboratory (1094)

February 25, 1993

ChromaLab File No.: 0293186

ESSENES

RE: One water sample for Total CAM 17 Metals analyses
(CA Title 22)

Project Name: BALCH-HAYWARD
Project Number: 033-008-01
Date Sampled: Feb. 17, 1993
Date Analyzed: Feb. 24, 1993

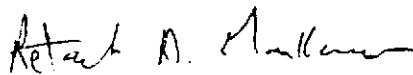
Date Submitted: Feb. 18, 1993


RESULTS: Sample I.D.: B-2A-AQ

Metals	Concentration (mg/L)	Detection Limit (mg/L)
Antimony (Sb)	N.D.	0.020
Arsenic (As)	0.01	0.005
Barium (Ba)	0.07	0.005
Beryllium (Be)	N.D.	0.001
Cadmium (Cd)	N.D.	0.001
Cobalt (Co)	N.D.	0.01
Chromium (Cr)	N.D.	0.005
Copper (Cu)	0.01	0.010
Lead (Pb)	N.D.	0.001
Mercury (Hg)	N.D.	0.005
Molybdenum (Mo)	N.D.	0.020
Nickel (Ni)	N.D.	0.01
Selenium (Se)	N.D.	0.005
Silver (Ag)	N.D.	0.01
Thallium (Tl)	N.D.	0.01
Vanadium (V)	0.03	0.005
Zinc (Zn)	0.03	0.005

Method of Analysis: 3010/6010/7470

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5 DAYS TURNAROUND

Environmental Laboratory (1094)

February 25, 1993

ChromaLab File No.: 0293186

ESSENES

RE: One water sample for Total CAM 17 Metals analyses
(CA Title 22)

Project Name: BALCH-HAYWARD
Project Number: 033-008-01
Date Sampled: Feb. 17, 1993
Date Analyzed: Feb. 24, 1993


Date Submitted: Feb. 18, 1993

RESULTS: Sample I.D.: B-3A-AQ

Metals	Concentration (mg/L)	Detection Limit (mg/L)
Antimony (Sb)	N.D.	0.020
Arsenic (As)	N.D.	0.005
Barium (Ba)	0.11	0.005
Beryllium (Be)	N.D.	0.001
Cadmium (Cd)	N.D.	0.001
Cobalt (Co)	N.D.	0.01
Chromium (Cr)	N.D.	0.005
Copper (Cu)	0.01	0.010
Lead (Pb)	N.D.	0.001
Mercury (Hg)	N.D.	0.005
Molybdenum (Mo)	N.D.	0.020
Nickel (Ni)	N.D.	0.01
Selenium (Se)	N.D.	0.005
Silver (Ag)	N.D.	0.01
Thallium (Tl)	N.D.	0.01
Vanadium (V)	0.02	0.005
Zinc (Zn)	0.02	0.005

Method of Analysis: 3010/6010/7470

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5 DAYS TURNAROUND

Environmental Laboratory (1094)

February 25, 1993

ChromaLab File No.: 0293186

ESSENES

RE: One water sample for Total CAM 17 Metals analyses
(CA Title 22)

Project Name: BALCH-HAYWARD
Project Number: 033-008-01
Date Sampled: Feb. 17, 1993
Date Analyzed: Feb. 24, 1993

Date Submitted: Feb. 18, 1993

RESULTS: Sample I.D.: B-4A-AQ

Metals	Concentration (mg/L)	Detection Limit (mg/L)
Antimony (Sb)	N.D.	0.020
Arsenic (As)	N.D.	0.005
Barium (Ba)	0.06	0.005
Beryllium (Be)	N.D.	0.001
Cadmium (Cd)	N.D.	0.001
Cobalt (Co)	N.D.	0.01
Chromium (Cr)	N.D.	0.01
Copper (Cu)	N.D.	0.005
Lead (Pb)	N.D.	0.010
Mercury (Hg)	N.D.	0.001
Molybdenum (Mo)	N.D.	0.005
Nickel (Ni)	N.D.	0.020
Selenium (Se)	N.D.	0.01
Silver (Ag)	N.D.	0.005
Thallium (Tl)	N.D.	0.01
Vanadium (V)	N.D.	0.01
Zinc (Zn)	0.01	0.005

Method of Analysis: 3010/6010/7470

ChromaLab, Inc.

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CHROMALAB, INC.

5 DAYS TURNAROUND

Environmental Laboratory (1094)

February 25, 1993

ChromaLab file number: 0293186

ESSENES

RE: One soil sample for Total CAM 17 Metals analyses (CA Title 22)

Project Name: BALCH-HAYWARD

Project Number: 033-008-01

Date Sampled: Feb. 17, 1993

Date Received: Feb. 18, 1993

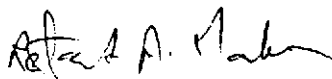
Date Analyzed: Feb. 24, 1993

RESULTS: Sample I.D.: B-4A-11-11.5

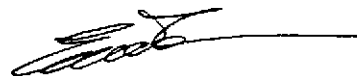
Metals	Concentration (mg/Kg)	Detection Limit (mg/Kg)
Antimony (Sb)	1.3	1.00
Arsenic (As)	N.D.	0.25
Barium (Ba)	95	0.25
Beryllium (Be)	0.38	0.05
Cadmium (Cd)	N.D.	0.05
Cobalt (Co)	9.6	0.50
Chromium (Cr)	22	0.50
Copper (Cu)	20	0.25
Lead (Pb)	9.0	0.50
Mercury (Hg)	N.D.	0.05
Molybdenum (Mo)	N.D.	0.25
Nickel (Ni)	43	0.50
Selenium (Se)	N.D.	0.50
Silver (Ag)	N.D.	0.25
Thallium (Tl)	N.D.	2.00
Vanadium (V)	24	0.50
Zinc (Zn)	35	0.25

Method of Analysis: 3050/6010/7471

ChromaLab, Inc.



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CHROMALAB, INC.

5 DAYS TURNAROUND

Environmental Laboratory (1094)

February 25, 1993

ChromaLab file number: 0293186

ESSENES

RE: One soil sample for Total CAM 17 Metals analyses (CA Title 22)

Project Name: BALCH-HAYWARD

Project Number: 033-008-01

Date Sampled: Feb. 17, 1993

Date Received: Feb. 18, 1993

Date Analyzed: Feb. 24, 1993

RESULTS: Sample I.D.: B-1-1

Metals	Concentration (mg/Kg)	Detection Limit (mg/Kg)
Antimony (Sb)	2.5	1.00
Arsenic (As)	5.2	0.25
Barium (Ba)	104	0.25
Beryllium (Be)	0.44	0.05
Cadmium (Cd)	N.D.	0.05
Cobalt (Co)	11	0.50
Chromium (Cr)	24	0.50
Copper (Cu)	45	0.25
Lead (Pb)	140	0.50
Mercury (Hg)	0.11	0.05
Molybdenum (Mo)	N.D.	0.25
Nickel (Ni)	40	0.50
Selenium (Se)	N.D.	0.50
Silver (Ag)	N.D.	0.25
Thallium (Tl)	N.D.	2.00
Vanadium (V)	39	0.50
Zinc (Zn)	120	0.25

Method of Analysis: 3050/6010/7471

ChromaLab, Inc.

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CHROMALAB, INC.

5 DAYS TURNAROUND

Environmental Laboratory (1094)

February 25, 1993

ChromaLab file number: 0293186

ESSENES

RE: One soil sample for Total CAM 17 Metals analyses (CA Title 22)

Project Name: BALCH-HAYWARD

Project Number: 033-008-01

Date Sampled: Feb. 17, 1993

Date Received: Feb. 18, 1993

Date Analyzed: Feb. 24, 1993

RESULTS: Sample I.D.: B-2A-6"

Metals	Concentration (mg/Kg)	Detection Limit (mg/Kg)
Antimony (Sb)	1.1	1.00
Arsenic (As)	1.5	0.25
Barium (Ba)	68	0.25
Beryllium (Be)	0.29	0.05
Cadmium (Cd)	N.D.	0.05
Cobalt (Co)	11	0.50
Chromium (Cr)	22	0.50
Copper (Cu)	39	0.25
Lead (Pb)	61	0.50
Mercury (Hg)	0.14	0.05
Molybdenum (Mo)	N.D.	0.25
Nickel (Ni)	31	0.50
Selenium (Se)	N.D.	0.50
Silver (Ag)	N.D.	0.25
Thallium (Tl)	N.D.	2.00
Vanadium (V)	23	0.50
Zinc (Zn)	107	0.25

Method of Analysis: 3050/6010/7471

ChromaLab, Inc.

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CHROMALAB, INC.

5 DAYS TURNAROUND

Environmental Laboratory (1094)

February 25, 1993

ChromaLab file number: 0293186

ESSENES

RE: One soil sample for Total CAM 17 Metals analyses (CA Title 22)

Project Name: BALCH-HAYWARD

Project Number: 033-008-01

Date Sampled: Feb. 17, 1993

Date Received: Feb. 18, 1993

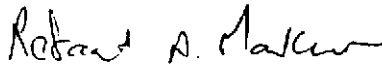
Date Analyzed: Feb. 24, 1993


RESULTS: Sample I.D.: B-2A-10.5-11

Metals	Concentration (mg/Kg)	Detection Limit (mg/Kg)
Antimony (Sb)	1.2	1.00
Arsenic (As)	6.1	0.25
Barium (Ba)	92	0.25
Beryllium (Be)	0.40	0.05
Cadmium (Cd)	N.D.	0.05
Cobalt (Co)	9.6	0.50
Chromium (Cr)	24	0.25
Copper (Cu)	20	0.50
Lead (Pb)	8.9	0.05
Mercury (Hg)	N.D.	0.25
Molybdenum (Mo)	N.D.	0.50
Nickel (Ni)	41	0.50
Selenium (Se)	N.D.	0.25
Silver (Ag)	N.D.	2.00
Thallium (Tl)	N.D.	0.50
Vanadium (V)	20	0.25
Zinc (Zn)	36	0.25

Method of Analysis: 3050/6010/7471

ChromaLab, Inc.


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CHROMALAB, INC.

Environmental Laboratory (1094)

5 DAYS TURNAROUND

February 25, 1993

ChromaLab file number: 0293186

ESSENES

RE: One soil sample for Total CAM 17 Metals analyses (CA Title 22)

Project Name: BALCH-HAYWARD

Project Number: 033-008-01

Date Sampled: Feb. 17, 1993

Date Received: Feb. 18, 1993

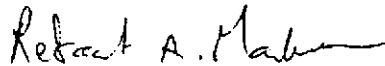
Date Analyzed: Feb. 24, 1993

RESULTS: Sample I.D.: B-3A-6"

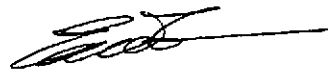
<u>Metals</u>	<u>Concentration</u> (mg/Kg)	<u>Detection</u> <u>Limit</u> (mg/Kg)
Antimony (Sb)	2.2	1.00
Arsenic (As)	6.5	0.25
Barium (Ba)	66	0.25
Beryllium (Be)	0.34	0.05
Cadmium (Cd)	N.D.	0.05
Cobalt (Co)	11	0.50
Chromium (Cr)	37	0.50
Copper (Cu)	67	0.25
Lead (Pb)	44	0.50
Mercury (Hg)	0.15	0.05
Molybdenum (Mo)	N.D.	0.25
Nickel (Ni)	64	0.50
Selenium (Se)	N.D.	0.50
Silver (Ag)	N.D.	0.25
Thallium (Tl)	N.D.	2.00
Vanadium (V)	32	0.50
Zinc (Zn)	170	0.25

Method of Analysis: 3050/6010/7471

ChromaLab, Inc.



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5 DAYS TURNAROUND

Environmental Laboratory (1094)

February 25, 1993

ChromaLab file number: 0293186

ESSENES

RE: One soil sample for Total CAM 17 Metals analyses (CA Title 22)

Project Name: BALCH-HAYWARD

Project Number: 033-008-01

Date Sampled: Feb. 17, 1993

Date Received: Feb. 18, 1993

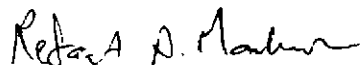
Date Analyzed: Feb. 24, 1993


RESULTS: Sample I.D.: B-3A-10.5-11.0

Metals	Concentration (mg/Kg)	Detection Limit (mg/Kg)
Antimony (Sb)	1.6	1.00
Arsenic (As)	5.1	0.25
Barium (Ba)	96	0.25
Beryllium (Be)	0.33	0.05
Cadmium (Cd)	N.D.	0.05
Cobalt (Co)	8.5	0.50
Chromium (Cr)	23	0.25
Copper (Cu)	20	0.25
Lead (Pb)	9.6	0.50
Mercury (Hg)	N.D.	0.05
Molybdenum (Mo)	N.D.	0.25
Nickel (Ni)	37	0.50
Selenium (Se)	N.D.	0.50
Silver (Ag)	N.D.	0.25
Thallium (Tl)	N.D.	2.00
Vanadium (V)	17	0.50
Zinc (Zn)	300	0.25

Method of Analysis: 3050/6010/7471

ChromaLab, Inc.


Refaat A. Mankarious
Inorganic Supervisor


Eric Tam
Laboratory Director

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CHROMALAB, INC.

5 DAYS TURNAROUND

Environmental Laboratory (1094)

February 25, 1993

ChromaLab file number: 0293186

ESSENES

RE: One soil sample for Total CAM 17 Metals analyses (CA Title 22)

Project Name: BALCH-HAYWARD

Project Number: 033-008-01

Date Sampled: Feb. 17, 1993

Date Analyzed: Feb. 24, 1993

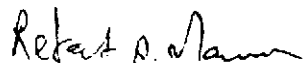
Date Received: Feb. 18, 1993

RESULTS: Sample I.D.: B-4A-6"

Metals	Concentration (mg/Kg)	Detection Limit (mg/Kg)
Antimony (Sb)	N.D.	1.00
Arsenic (As)	2.4	0.25
Barium (Ba)	150	0.25
Beryllium (Be)	0.70	0.05
Cadmium (Cd)	N.D.	0.05
Cobalt (Co)	20	0.50
Chromium (Cr)	68	0.25
Copper (Cu)	61	0.25
Lead (Pb)	14	0.50
Mercury (Hg)	0.24	0.05
Molybdenum (Mo)	N.D.	0.25
Nickel (Ni)	102	0.50
Selenium (Se)	N.D.	0.25
Silver (Ag)	N.D.	0.25
Thallium (Tl)	N.D.	2.00
Vanadium (V)	72	0.50
Zinc (Zn)	62	0.25

Method of Analysis: 3050/6010/7471

ChromaLab, Inc.



Refaat A. Mankarious
Inorganic Supervisor



Eric Tam
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CHROMALAB, INC.

5 DAYS TURNAROUND

Environmental Laboratory (1094)

February 25, 1993

ChromaLab file number: 0293186

ESSENES

RE: One soil sample for Total CAM 17 Metals analyses (CA Title 22)

Project Name: BALCH-HAYWARD

Project Number: 033-008-01

Date Sampled: Feb. 17, 1993

Date Analyzed: Feb. 24, 1993

Date Received: Feb. 18, 1993

RESULTS: Sample I.D.: B-8-1

<u>Metals</u>	<u>Concentration</u> (mg/Kg)	<u>Detection</u> <u>Limit</u> (mg/Kg)
Antimony (Sb)	N.D.	1.00
Arsenic (As)	7.8	0.25
Barium (Ba)	114	0.25
Beryllium (Be)	0.74	0.05
Cadmium (Cd)	N.D.	0.05
Cobalt (Co)	18	0.50
Chromium (Cr)	8.3	0.50
Copper (Cu)	87	0.25
Lead (Pb)	39	0.50
Mercury (Hg)	0.26	0.05
Molybdenum (Mo)	N.D.	0.25
Nickel (Ni)	31	0.50
Selenium (Se)	N.D.	0.50
Silver (Ag)	N.D.	0.25
Thallium (Tl)	N.D.	2.00
Vanadium (V)	105	0.50
Zinc (Zn)	101	0.25

Method of Analysis: 3050/6010/7471

ChromaLab, Inc.

Refaat A. Mankarious

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Inorganic Supervisor

Eric Tam

Eric Tam
Laboratory Director

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CHROMALAB, INC.

Environmental Laboratory (1094)

5 DAYS TURNAROUND

February 25, 1993

ChromaLab file number: 0293186

ESSENES

RE: One soil sample for Total CAM 17 Metals analyses (CA Title 22)

Project Name: BALCH-HAYWARD

Project Number: 033-008-01

Date Sampled: Feb. 17, 1993

Date Received: Feb. 18, 1993


Date Analyzed: Feb. 24, 1993

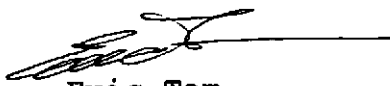
RESULTS: Sample I.D.: B-1A-6"

<u>Metals</u>	<u>Concentration</u> (mg/Kg)	<u>Detection</u> <u>Limit</u> (mg/Kg)
Antimony (Sb)	1.6	1.00
Arsenic (As)	3.7	0.25
Barium (Ba)	91	0.25
Beryllium (Be)	0.47	0.05
Cadmium (Cd)	N.D.	0.05
Cobalt (Co)	12	0.50
Chromium (Cr)	41	0.50
Copper (Cu)	36	0.25
Lead (Pb)	35	0.50
Mercury (Hg)	0.12	0.05
Molybdenum (Mo)	N.D.	0.25
Nickel (Ni)	39	0.50
Selenium (Se)	N.D.	0.50
Silver (Ag)	N.D.	0.25
Thallium (Tl)	N.D.	2.00
Vanadium (V)	43	0.50
Zinc (Zn)	60	0.25

Method of Analysis: 3050/6010/7471

ChromaLab, Inc.


Refaat A. Mankarious
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5 DAYS TURNAROUND

Environmental Laboratory (1094)

February 25, 1993

ChromaLab file number: 0293186

ESSENES

RE: One soil sample for Total CAM 17 Metals analyses (CA Title 22)

Project Name: BALCH-HAYWARD

Project Number: 033-008-01

Date Sampled: Feb. 17, 1993

Date Received: Feb. 18, 1993

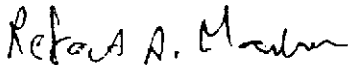
Date Analyzed: Feb. 24, 1993


RESULTS: Sample I.D.: B-1A-11.-11.5

Metals	Concentration (mg/Kg)	Detection Limit (mg/Kg)
Antimony (Sb)	N.D.	1.00
Arsenic (As)	1.7	0.25
Barium (Ba)	89	0.25
Beryllium (Be)	0.19	0.05
Cadmium (Cd)	N.D.	0.05
Cobalt (Co)	5.3	0.50
Chromium (Cr)	27	0.50
Copper (Cu)	18	0.25
Lead (Pb)	6.1	0.50
Mercury (Hg)	N.D.	0.05
Molybdenum (Mo)	N.D.	0.25
Nickel (Ni)	28	0.50
Selenium (Se)	N.D.	0.50
Silver (Ag)	N.D.	0.25
Thallium (Tl)	N.D.	2.00
Vanadium (V)	31	0.50
Zinc (Zn)	33	0.25

Method of Analysis: 3050/6010/7471

ChromaLab, Inc.


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Eric Tam
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CHROMALAB, INC.

Environmental Laboratory (1094)

5 DAYS TURNAROUND

February 25, 1993

ChromaLab file number: 0293186

ESSENES

RE: One soil sample for Total CAM 17 Metals analyses (CA Title 22)

Project Name: BALCH-HAYWARD

Project Number: 033-008-01

Date Sampled: Feb. 17, 1993

Date Received: Feb. 18, 1993

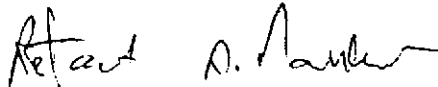
Date Analyzed: Feb. 24, 1993

RESULTS: Sample I.D.: B-2-1

<u>Metals</u>	<u>Concentration (mg/Kg)</u>	<u>Detection Limit (mg/Kg)</u>
Antimony (Sb)	1.2	1.00
Arsenic (As)	5.2	0.25
Barium (Ba)	83	0.25
Beryllium (Be)	0.40	0.05
Cadmium (Cd)	N.D.	0.05
Cobalt (Co)	9.1	0.50
Chromium (Cr)	22	0.50
Copper (Cu)	17	0.25
Lead (Pb)	11	0.50
Mercury (Hg)	N.D.	0.05
Molybdenum (Mo)	N.D.	0.25
Nickel (Ni)	36	0.50
Selenium (Se)	N.D.	0.50
Silver (Ag)	N.D.	0.25
Thallium (Tl)	N.D.	2.00
Vanadium (V)	23	0.50
Zinc (Zn)	29	0.25

Method of Analysis: 3050/6010/7471

ChromaLab, Inc.



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5 DAYS TURNAROUND

Environmental Laboratory (1094)

February 25, 1993

ChromaLab file number: 0293186

ESSENES

RE: One soil sample for Total CAM 17 Metals analyses (CA Title 22)

Project Name: BALCH-HAYWARD

Project Number: 033-008-01

Date Sampled: Feb. 17, 1993

Date Received: Feb. 18, 1993

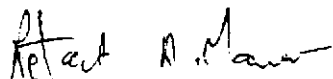
Date Analyzed: Feb. 24, 1993

RESULTS: Sample I.D.: B-3-1


Metals	Concentration (mg/Kg)	Detection Limit (mg/Kg)
Antimony (Sb)	1.3	1.00
Arsenic (As)	4.3	0.25
Barium (Ba)	100	0.25
Beryllium (Be)	0.51	0.05
Cadmium (Cd)	N.D.	0.05
Cobalt (Co)	11	0.50
Chromium (Cr)	24	0.50
Copper (Cu)	60	0.25
Lead (Pb)	22	0.50
Mercury (Hg)	0.12	0.05
Molybdenum (Mo)	N.D.	0.25
Nickel (Ni)	41	0.50
Selenium (Se)	N.D.	0.50
Silver (Ag)	N.D.	0.25
Thallium (Tl)	N.D.	2.00
Vanadium (V)	54	0.50
Zinc (Zn)	58	0.25

Method of Analysis: 3050/6010/7471

ChromaLab, Inc.



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CHROMALAB, INC.

Environmental Laboratory (1094)

5 DAYS TURNAROUND

February 25, 1993

ChromaLab file number: 0293186

ESSENES

RE: One soil sample for Total CAM 17 Metals analysis (CA Title 22)

Project Name: BALCH-HAYWARD

Project Number: 033-008-01

Date Sampled: Feb. 17, 1993

Date Received: Feb. 18, 1993

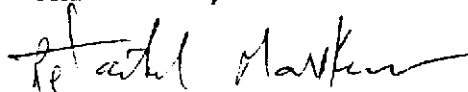
Date Analyzed: Feb. 24, 1993

RESULTS: Sample I.D.: B-4-1

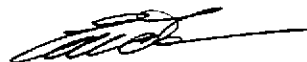
Metals	Concentration (mg/Kg)	Detection Limit (mg/Kg)
Antimony (Sb)	1.6	1.00
Arsenic (As)	1.0	0.25
Barium (Ba)	106	0.25
Beryllium (Be)	0.42	0.05
Cadmium (Cd)	N.D.	0.05
Cobalt (Co)	12	0.50
Chromium (Cr)	17	0.50
Copper (Cu)	52	0.25
Lead (Pb)	36	0.50
Mercury (Hg)	0.14	0.05
Molybdenum (Mo)	N.D.	0.25
Nickel (Ni)	36	0.50
Selenium (Se)	N.D.	0.50
Silver (Ag)	N.D.	0.25
Thallium (Tl)	N.D.	2.00
Vanadium (V)	34	0.50
Zinc (Zn)	77	0.25

Method of Analysis: 3050/6010/7471

ChromaLab, Inc.



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Eric Tam
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CHROMALAB, INC.

Environmental Laboratory (1094)

5 DAYS TURNAROUND

February 25, 1993

ChromaLab file number: 0293186

ESSENES

RE: One soil sample for Total CAM 17 Metals analyses (CA Title 22)

Project Name: BALCH-HAYWARD

Project Number: 033-008-01

Date Sampled: Feb. 17, 1993

Date Received: Feb. 18, 1993

Date Analyzed: Feb. 24, 1993

RESULTS: Sample I.D.: B-5-1

<u>Metals</u>	<u>Concentration (mg/Kg)</u>	<u>Detection Limit (mg/Kg)</u>
Antimony (Sb)	1.1	1.00
Arsenic (As)	10	0.25
Barium (Ba)	91	0.25
Beryllium (Be)	0.40	0.05
Cadmium (Cd)	N.D.	0.05
Cobalt (Co)	13	0.50
Chromium (Cr)	28	0.50
Copper (Cu)	68	0.25
Lead (Pb)	42	0.50
Mercury (Hg)	0.89	0.05
Molybdenum (Mo)	N.D.	0.25
Nickel (Ni)	43	0.50
Selenium (Se)	N.D.	0.50
Silver (Ag)	N.D.	0.25
Thallium (Tl)	N.D.	2.00
Vanadium (V)	46	0.50
Zinc (Zn)	220	0.25

Method of Analysis: 3050/6010/7471

ChromaLab, Inc.

Refaat A. Mankarious

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Eric Tam
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CHROMALAB, INC.

5 DAYS TURNAROUND

Environmental Laboratory (1094)

February 26, 1993

ChromaLab File No.: 0293186

ESSENES

Project Name: BALCH-HAYWARD
Project Number: 033-008-01
Date Sampled: Feb. 17, 1993
Date Extracted: Feb. 23, 1993


Date Submitted: Feb. 18, 1993
Date Analyzed: Feb. 23, 1993
Dilution Factor: None


Sample I.D.: B-1-1

CHLORINATED PESTICIDE ANALYSIS

<u>Compounds</u>	<u>Concentration ($\mu\text{g}/\text{kg}$)</u>	<u>Reporting Detection Limit ($\mu\text{g}/\text{kg}$)</u>
ALDRIN	N.D.	1
DIELDRIN	N.D.	1
ENDRIN ALDEHYDE	N.D.	5
ENDRIN	N.D.	1
HEPTACHLOR	N.D.	1
HEPTACHLOR EPOXIDE	N.D.	1
p,p' - DDT	N.D.	5
p,p' - DDE	N.D.	1
p,p' - DDD	N.D.	5
ENDOSULFAN I	N.D.	5
ENDOSULFAN II	N.D.	5
α - BHC	N.D.	1
β - BHC	N.D.	1
γ - BHC (LINDANE)	N.D.	1
δ - BHC	N.D.	1
ENDOSULFAN SULFATE	N.D.	5
p,p' - METHOXYCHLOR	N.D.	5
TOXAPHENE	N.D.	5
PCB'S	N.D.	5
CHLORDANE	N.D.	5

ChromaLab, Inc.


Yiu Tam
Analytical Chemist


Eric Tam
Laboratory Director

CHROMALAB, INC.

5 DAYS TURNAROUND

Environmental Laboratory (1094)
February 26, 1993

ChromaLab File No.: 0293186

ESSENES

Project Name: BALCH-HAYWARD
Project Number: 033-008-01
Date Sampled: Feb. 17, 1993
Date Extracted: Feb. 23, 1993

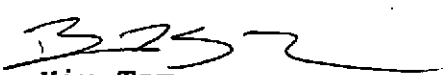
Date Submitted: Feb. 18, 1993
Date Analyzed: Feb. 23, 1993
Dilution Factor: None

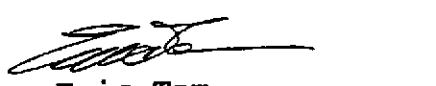
Sample I.D.: B-2-1

CHLORINATED PESTICIDE ANALYSIS

<u>Compounds</u>	<u>Concentration (µg/kg)</u>	<u>Reporting Detection Limit (µg/kg)</u>
ALDRIN	N.D.	1
DIELDRIN	N.D.	1
ENDRIN ALDEHYDE	N.D.	5
ENDRIN	N.D.	1
HEPTACHLOR	N.D.	1
HEPTACHLOR EPOXIDE	N.D.	1
p,p' - DDT	N.D.	5
p,p' - DDE	N.D.	1
p,p' - DDD	N.D.	5
ENDOSULFAN I	N.D.	5
ENDOSULFAN II	N.D.	5
α - BHC	N.D.	1
β - BHC	N.D.	1
γ - BHC (LINDANE)	N.D.	1
δ - BHC	N.D.	1
ENDOSULFAN SULFATE	N.D.	5
p,p' - METHOXYCHLOR	N.D.	5
TOXAPHENE	N.D.	5
PCB'S	N.D.	5
CHLORDANE	N.D.	5

ChromaLab, Inc.


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Eric Tam
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CHROMALAB, INC.

5 DAYS TURNAROUND

Environmental Laboratory (1094)

February 26, 1993

ChromaLab File No.: 0293186

ESSENES

Project Name: BALCH-HAYWARD
Project Number: 033-008-01
Date Sampled: Feb. 17, 1993
Date Extracted: Feb. 23, 1993


Date Submitted: Feb. 18, 1993
Date Analyzed: Feb. 23, 1993
Dilution Factor: None

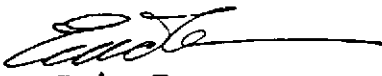
Sample I.D.: B-3-1

CHLORINATED PESTICIDE ANALYSIS

<u>Compounds</u>	<u>Concentration ($\mu\text{g}/\text{kg}$)</u>	<u>Reporting Detection Limit ($\mu\text{g}/\text{kg}$)</u>
ALDRIN	N.D.	1
DIELDRIN	N.D.	1
ENDRIN ALDEHYDE	N.D.	5
ENDRIN	N.D.	1
HEPTACHLOR	N.D.	1
HEPTACHLOR EPOXIDE	N.D.	1
p,p' - DDT	N.D.	5
p,p' - DDE	N.D.	1
p,p' - DDD	N.D.	5
ENDOSULFAN I	N.D.	5
ENDOSULFAN II	N.D.	5
α - BHC	N.D.	1
β - BHC	N.D.	1
γ - BHC (LINDANE)	N.D.	1
δ - BHC	N.D.	1
ENDOSULFAN SULFATE	N.D.	5
p,p' - METHOXYCHLOR	N.D.	5
TOXAPHENE	N.D.	5
PCB'S	N.D.	5
CHLORDANE	N.D.	5

ChromaLab, Inc.


Yiu Tam
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CHROMALAB, INC.

5 DAYS TURNAROUND

Environmental Laboratory (1094)

February 26, 1993

ChromaLab File No.: 0293186

ESSENES

Project Name: BALCH-HAYWARD
Project Number: 033-008-01
Date Sampled: Feb. 17, 1993
Date Extracted: Feb. 23, 1993


Date Submitted: Feb. 18, 1993
Date Analyzed: Feb. 23, 1993
Dilution Factor: None

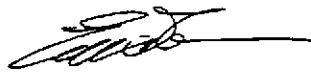
Sample I.D.: B-4-1

CHLORINATED PESTICIDE ANALYSIS

<u>Compounds</u>	<u>Concentration ($\mu\text{g}/\text{kg}$)</u>	<u>Reporting Detection Limit ($\mu\text{g}/\text{kg}$)</u>
ALDRIN	N.D.	1
DIELDRIN	N.D.	1
ENDRIN ALDEHYDE	N.D.	5
ENDRIN	N.D.	1
HEPTACHLOR	N.D.	1
HEPTACHLOR EPOXIDE	N.D.	1
p,p' - DDT	N.D.	5
p,p' - DDE	N.D.	1
p,p' - DDD	N.D.	5
ENDOSULFAN I	N.D.	5
ENDOSULFAN II	N.D.	5
α - BHC	N.D.	1
β - BHC	N.D.	1
γ - BHC (LINDANE)	N.D.	1
δ - BHC	N.D.	1
ENDOSULFAN SULFATE	N.D.	5
p,p' - METHOXYCHLOR	N.D.	5
TOXAPHENE	N.D.	5
PCB'S	N.D.	5
CHLORDANE	N.D.	5

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5 DAYS TURNAROUND

Environmental Laboratory (1094)

February 26, 1993

ChromaLab File No.: 0293186

ESSENES

Project Name: BALCH-HAYWARD
Project Number: 033-008-01
Date Sampled: Feb. 17, 1993
Date Extracted: Feb. 23, 1993


Date Submitted: Feb. 18, 1993
Date Analyzed: Feb. 23, 1993
Dilution Factor: None

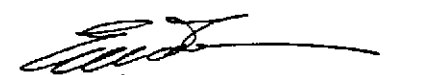
Sample I.D.: B-5-1

CHLORINATED PESTICIDE ANALYSIS

<u>Compounds</u>	<u>Concentration ($\mu\text{g}/\text{kg}$)</u>	<u>Reporting Detection Limit ($\mu\text{g}/\text{kg}$)</u>
ALDRIN	N.D.	1
DIELDRIN	N.D.	1
ENDRIN ALDEHYDE	N.D.	5
ENDRIN	N.D.	1
HEPTACHLOR	N.D.	1
HEPTACHLOR EPOXIDE	N.D.	1
P,p' - DDT	N.D.	5
P,p' - DDE	N.D.	1
P,p' - DDD	N.D.	5
ENDOSULFAN I	N.D.	5
ENDOSULFAN II	N.D.	5
α - BHC	N.D.	1
β - BHC	N.D.	1
γ - BHC (LINDANE)	N.D.	1
δ - BHC	N.D.	1
ENDOSULFAN SULFATE	N.D.	5
P,p' - METHOXYCHLOR	N.D.	5
TOXAPHENE	N.D.	5
PCB'S	N.D.	5
CHLORDANE	N.D.	5

ChromaLab, Inc.


Yiu Tam
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Eric Tam
Laboratory Director

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5 DAYS TURNAROUND

Environmental Laboratory (1094)

February 26, 1993

ChromaLab File No.: 0293186

ESSENES

Project Name: BALCH-HAYWARD
Project Number: 033-008-01
Date Sampled: Feb. 17, 1993
Date Extracted: Feb. 23, 1993

Date Submitted: Feb. 18, 1993
Date Analyzed: Feb. 23, 1993
Dilution Factor: None

Sample I.D.: B-6-1

CHLORINATED PESTICIDE ANALYSIS

<u>Compounds</u>	<u>Concentration ($\mu\text{g}/\text{kg}$)</u>	<u>Reporting Detection Limit ($\mu\text{g}/\text{kg}$)</u>
ALDRIN	N.D.	1
DIELDRIN	N.D.	1
ENDRIN ALDEHYDE	N.D.	5
ENDRIN	N.D.	1
HEPTACHLOR	N.D.	1
HEPTACHLOR EPOXIDE	N.D.	1
p,p' - DDT	N.D.	5
p,p' - DDE	N.D.	1
p,p' - DDD	N.D.	5
ENDOSULFAN I	N.D.	5
ENDOSULFAN II	N.D.	5
α - BHC	N.D.	1
β - BHC	N.D.	1
γ - BHC (LINDANE)	N.D.	1
δ - BHC	N.D.	1
ENDOSULFAN SULFATE	N.D.	5
p,p' - METHOXYCHLOR	7.3	5
TOXAPHENE	N.D.	5
PCB'S	N.D.	5
CHLORDANE	N.D.	5

ChromaLab, Inc.



Yiu Tam
Analytical Chemist



Eric Tam
Laboratory Director

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5 DAYS TURNAROUND

Environmental Laboratory (1094)

February 26, 1993

ChromaLab File No.: 0293186

ESSENES

Project Name: BALCH-HAYWARD
Project Number: 033-008-01
Date Sampled: Feb. 17, 1993
Date Extracted: Feb. 23, 1993

Date Submitted: Feb. 18, 1993
Date Analyzed: Feb. 23, 1993
Dilution Factor: None

Sample I.D.: B-7-1

CHLORINATED PESTICIDE ANALYSIS

<u>Compounds</u>	<u>Concentration ($\mu\text{g}/\text{kg}$)</u>	<u>Reporting Detection Limit ($\mu\text{g}/\text{kg}$)</u>
ALDRIN	N.D.	1
DIELDRIN	N.D.	1
ENDRIN ALDEHYDE	N.D.	5
ENDRIN	N.D.	1
HEPTACHLOR	N.D.	1
HEPTACHLOR EPOXIDE	N.D.	1
p,p' - DDT	N.D.	5
p,p' - DDE	N.D.	1
p,p' - DDD	N.D.	5
ENDOSULFAN I	N.D.	5
ENDOSULFAN II	N.D.	5
α - BHC	N.D.	1
β - BHC	N.D.	1
γ - BHC (LINDANE)	N.D.	1
δ - BHC	N.D.	1
ENDOSULFAN SULFATE	N.D.	5
p,p' - METHOXYCHLOR	N.D.	5
TOXAPHENE	N.D.	5
PCB'S	N.D.	5
CHLORDANE	N.D.	5

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5 DAYS TURNAROUND

Environmental Laboratory (1094)

February 26, 1993

ChromaLab File No.: 0293186

ESSENES

Project Name: BALCH-HAYWARD
Project Number: 033-008-01
Date Sampled: Feb. 17, 1993
Date Extracted: Feb. 23, 1993

Date Submitted: Feb. 18, 1993
Date Analyzed: Feb. 23, 1993
Dilution Factor: None


Sample I.D.: B-8-1

CHLORINATED PESTICIDE ANALYSIS

<u>Compounds</u>	<u>Concentration ($\mu\text{g}/\text{kg}$)</u>	<u>Reporting Detection Limit ($\mu\text{g}/\text{kg}$)</u>
ALDRIN	N.D.	1
DIELDRIN	N.D.	1
ENDRIN ALDEHYDE	N.D.	5
ENDRIN	N.D.	1
HEPTACHLOR	N.D.	1
HEPTACHLOR EPOXIDE	N.D.	1
p,p' - DDT	N.D.	5
p,p' - DDE	N.D.	1
p,p' - DDD	N.D.	5
ENDOSULFAN I	N.D.	5
ENDOSULFAN II	N.D.	5
α - BHC	N.D.	1
β - BHC	N.D.	1
γ - BHC (LINDANE)	N.D.	1
δ - BHC	N.D.	1
ENDOSULFAN SULFATE	N.D.	5
p,p' - METHOXYCHLOR	N.D.	5
TOXAPHENE	N.D.	5
PCB'S	N.D.	5
CHLORDANE	N.D.	5

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Environmental Laboratory (1094)

February 26, 1993

ChromaLab File No.: 0293186

ESSENES

Project Name: BALCH-HAYWARD
Project Number: 033-008-01
Date Sampled: Feb. 17, 1993
Date Extracted: Feb. 23, 1993

Date Submitted: Feb. 18, 1993
Date Analyzed: Feb. 23, 1993
Dilution Factor: None

Sample I.D.: B-1A-6

CHLORINATED PESTICIDE ANALYSIS

<u>Compounds</u>	<u>Concentration ($\mu\text{g}/\text{kg}$)</u>	<u>Reporting Detection Limit ($\mu\text{g}/\text{kg}$)</u>
ALDRIN	N.D.	1
DIELDRIN	2.7	1
ENDRIN ALDEHYDE	N.D.	5
ENDRIN	N.D.	1
HEPTACHLOR	N.D.	1
HEPTACHLOR EPOXIDE	N.D.	1
p,p' - DDT	N.D.	5
p,p' - DDE	1.2	1
p,p' - DDD	N.D.	5
ENDOSULFAN I	N.D.	5
ENDOSULFAN II	N.D.	5
α - BHC	N.D.	1
β - BHC	N.D.	1
γ - BHC (LINDANE)	N.D.	1
δ - BHC	N.D.	1
ENDOSULFAN SULFATE	N.D.	5
p,p' - METHOXYCHLOR	N.D.	5
TOXAPHENE	N.D.	5
PCB'S	N.D.	5
CHLORDANE	77	5

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ChromaLab File No.: 0293186

ESSENES

Project Name: BALCH-HAYWARD
Project Number: 033-008-01
Date Sampled: Feb. 17, 1993
Date Extracted: Feb. 23, 1993

Date Submitted: Feb. 18, 1993
Date Analyzed: Feb. 23, 1993
Dilution Factor: None

Sample I.D.: B-1A-11.0-11.5

CHLORINATED PESTICIDE ANALYSIS

<u>Compounds</u>	<u>Concentration ($\mu\text{g}/\text{kg}$)</u>	<u>Reporting Detection Limit ($\mu\text{g}/\text{kg}$)</u>
ALDRIN	N.D.	1
DIELDRIN	N.D.	1
ENDRIN ALDEHYDE	N.D.	5
ENDRIN	N.D.	1
HEPTACHLOR	N.D.	1
HEPTACHLOR EPOXIDE	N.D.	1
p,p' - DDT	N.D.	5
p,p' - DDE	N.D.	1
p,p' - DDD	N.D.	5
ENDOSULFAN I	N.D.	5
ENDOSULFAN II	N.D.	5
α - BHC	N.D.	1
β - BHC	N.D.	1
γ - BHC (LINDANE)	N.D.	1
δ - BHC	N.D.	1
ENDOSULFAN SULFATE	N.D.	5
p,p' - METHOXYCHLOR	N.D.	5
TOXAPHENE	N.D.	5
PCB'S	N.D.	5
CHLORDANE	N.D.	5

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Environmental Laboratory (1094)

February 26, 1993

ChromaLab File No.: 0293186

ESSENES

Project Name: BALCH-HAYWARD
Project Number: 033-008-01
Date Sampled: Feb. 17, 1993
Date Extracted: Feb. 23, 1993

Date Submitted: Feb. 18, 1993
Date Analyzed: Feb. 23, 1993
Dilution Factor: None

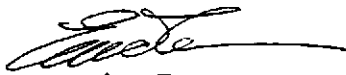
Sample I.D.: B-2A-6

CHLORINATED PESTICIDE ANALYSIS

<u>Compounds</u>	<u>Concentration ($\mu\text{g}/\text{kg}$)</u>	<u>Reporting Detection Limit ($\mu\text{g}/\text{kg}$)</u>
ALDRIN	N.D.	1
DIELDRIN	N.D.	1
ENDRIN ALDEHYDE	N.D.	5
ENDRIN	N.D.	1
HEPTACHLOR	N.D.	1
HEPTACHLOR EPOXIDE	N.D.	1
p,p' - DDT	N.D.	5
p,p' - DDE	N.D.	1
p,p' - DDD	N.D.	5
ENDOSULFAN I	N.D.	5
ENDOSULFAN II	N.D.	5
α - BHC	N.D.	1
β - BHC	N.D.	1
γ - BHC (LINDANE)	N.D.	1
δ - BHC	N.D.	1
ENDOSULFAN SULFATE	N.D.	5
p,p' - METHOXYCHLOR	N.D.	5
TOXAPHENE	N.D.	5
PCB'S	N.D.	5
CHLORDANE	N.D.	5

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5 DAYS TURNAROUND

Environmental Laboratory (1094)

February 26, 1993

ChromaLab File No.: 0293186

ESSENES

Project Name: BALCH-HAYWARD
Project Number: 033-008-01
Date Sampled: Feb. 17, 1993
Date Extracted: Feb. 23, 1993

Date Submitted: Feb. 18, 1993
Date Analyzed: Feb. 23, 1993
Dilution Factor: None

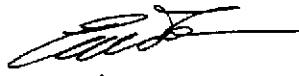
Sample I.D.: B-2A-10.5-11.0

CHLORINATED PESTICIDE ANALYSIS

<u>Compounds</u>	<u>Concentration ($\mu\text{g}/\text{kg}$)</u>	<u>Reporting Detection Limit ($\mu\text{g}/\text{kg}$)</u>
ALDRIN	N.D.	1
DIELDRIN	N.D.	1
ENDRIN ALDEHYDE	N.D.	5
ENDRIN	N.D.	1
HEPTACHLOR	N.D.	1
HEPTACHLOR EPOXIDE	N.D.	1
p,p' - DDT	N.D.	5
p,p' - DDE	N.D.	1
p,p' - DDD	N.D.	5
ENDOSULFAN I	N.D.	5
ENDOSULFAN II	N.D.	5
α - BHC	N.D.	1
β - BHC	N.D.	1
γ - BHC (LINDANE)	N.D.	1
δ - BHC	N.D.	1
ENDOSULFAN SULFATE	N.D.	5
p,p' - METHOXYCHLOR	N.D.	5
TOXAPHENE	N.D.	5
PCB'S	N.D.	5
CHLORDANE	N.D.	5

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February 26, 1993

ChromaLab File No.: 0293186

ESSENES

Project Name: BALCH-HAYWARD
Project Number: 033-008-01
Date Sampled: Feb. 17, 1993
Date Extracted: Feb. 23, 1993

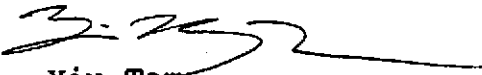
Date Submitted: Feb. 18, 1993
Date Analyzed: Feb. 23, 1993
Dilution Factor: None


Sample I.D.: B-3A-6

CHLORINATED PESTICIDE ANALYSIS

<u>Compounds</u>	<u>Concentration ($\mu\text{g}/\text{kg}$)</u>	<u>Reporting Detection Limit ($\mu\text{g}/\text{kg}$)</u>
ALDRIN	N.D.	1
DIELDRIN	N.D.	1
ENDRIN ALDEHYDE	N.D.	5
ENDRIN	N.D.	1
HEPTACHLOR	N.D.	1
HEPTACHLOR EPOXIDE	N.D.	1
p,p' - DDT	N.D.	5
p,p' - DDE	N.D.	1
p,p' - DDD	N.D.	5
ENDOSULFAN I	N.D.	5
ENDOSULFAN II	N.D.	5
α - BHC	N.D.	1
β - BHC	N.D.	1
γ - BHC (LINDANE)	N.D.	1
δ - BHC	N.D.	1
ENDOSULFAN SULFATE	N.D.	5
p,p' - METHOXYCHLOR	N.D.	5
TOXAPHENE	N.D.	5
PCB'S	N.D.	5
CHLORDANE	N.D.	5

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5 DAYS TURNAROUND

Environmental Laboratory (1094)

February 26, 1993

ChromaLab File No.: 0293186

ESSENES

Project Name: BALCH-HAYWARD
Project Number: 033-008-01
Date Sampled: Feb. 17, 1993
Date Extracted: Feb. 23, 1993


Date Submitted: Feb. 18, 1993
Date Analyzed: Feb. 23, 1993
Dilution Factor: None

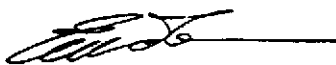
Sample I.D.: B-3A-10.5-11.0

CHLORINATED PESTICIDE ANALYSIS

<u>Compounds</u>	<u>Concentration ($\mu\text{g}/\text{kg}$)</u>	<u>Reporting Detection Limit ($\mu\text{g}/\text{kg}$)</u>
ALDRIN	N.D.	1
DIELDRIN	N.D.	1
ENDRIN ALDEHYDE	N.D.	5
ENDRIN	N.D.	1
HEPTACHLOR	N.D.	1
HEPTACHLOR EPOXIDE	N.D.	1
p,p' - DDT	N.D.	5
p,p' - DDE	N.D.	1
p,p' - DDD	N.D.	5
ENDOSULFAN I	N.D.	5
ENDOSULFAN II	N.D.	5
α - BHC	N.D.	1
β - BHC	N.D.	1
γ - BHC (LINDANE)	N.D.	1
δ - BHC	N.D.	1
ENDOSULFAN SULFATE	N.D.	5
p,p' - METHOXYCHLOR	N.D.	5
TOXAPHENE	N.D.	5
PCB'S	N.D.	5
CHLORDANE	N.D.	5

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5 DAYS TURNAROUND

Environmental Laboratory (1094)

February 26, 1993

ChromaLab File No.: 0293186

ESSENES

Project Name: BALCH-HAYWARD
Project Number: 033-008-01
Date Sampled: Feb. 17, 1993
Date Extracted: Feb. 23, 1993

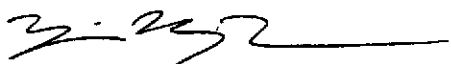
Date Submitted: Feb. 18, 1993
Date Analyzed: Feb. 23, 1993
Dilution Factor: None

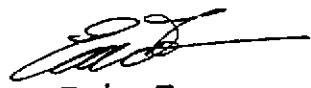
Sample I.D.: B-4A-6

CHLORINATED PESTICIDE ANALYSIS

<u>Compounds</u>	<u>Concentration ($\mu\text{g}/\text{kg}$)</u>	<u>Reporting Detection Limit ($\mu\text{g}/\text{kg}$)</u>
ALDRIN	N.D.	1
DIELDRIN	N.D.	1
ENDRIN ALDEHYDE	N.D.	5
ENDRIN	N.D.	1
HEPTACHLOR	N.D.	1
HEPTACHLOR EPOXIDE	N.D.	1
p,p' - DDT	N.D.	5
p,p' - DDE	N.D.	1
p,p' - DDD	N.D.	5
ENDOSULFAN I	N.D.	5
ENDOSULFAN II	N.D.	5
α - BHC	N.D.	1
β - BHC	N.D.	1
γ - BHC (LINDANE)	N.D.	1
δ - BHC	N.D.	1
ENDOSULFAN SULFATE	N.D.	5
p,p' - METHOXYCHLOR	N.D.	5
TOXAPHENE	N.D.	5
PCB'S	N.D.	5
CHLORDANE	N.D.	5

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5 DAYS TURNAROUND

Environmental Laboratory (1094)

February 26, 1993

ChromaLab File No.: 0293186

ESSENES

Project Name: BALCH-HAYWARD
Project Number: 033-008-01
Date Sampled: Feb. 17, 1993
Date Extracted: Feb. 23, 1993

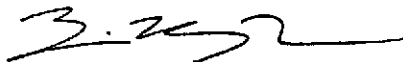
Date Submitted: Feb. 18, 1993
Date Analyzed: Feb. 23, 1993
Dilution Factor: None

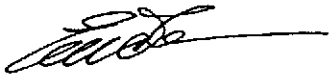
Sample I.D.: B-4A-11-11.5

CHLORINATED PESTICIDE ANALYSIS

<u>Compounds</u>	<u>Concentration ($\mu\text{g}/\text{kg}$)</u>	<u>Reporting Detection Limit ($\mu\text{g}/\text{kg}$)</u>
ALDRIN	N.D.	1
DIELDRIN	N.D.	1
ENDRIN ALDEHYDE	N.D.	5
ENDRIN	N.D.	1
HEPTACHLOR	N.D.	1
HEPTACHLOR EPOXIDE	N.D.	1
p,p' - DDT	N.D.	5
p,p' - DDE	N.D.	1
p,p' - DDD	N.D.	5
ENDOSULFAN I	N.D.	5
ENDOSULFAN II	N.D.	5
α - BHC	N.D.	1
β - BHC	N.D.	1
γ - BHC (LINDANE)	N.D.	1
δ - BHC	N.D.	1
ENDOSULFAN SULFATE	N.D.	5
p,p' - METHOXYCHLOR	N.D.	5
TOXAPHENE	N.D.	5
PCB'S	N.D.	5
CHLORDANE	N.D.	5

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5 DAYS TURNAROUND

Environmental Laboratory (1094)

February 26, 1993

ChromaLab File No.: 0293186

ESSENES

Project Name: BALCH-HAYWARD
Project Number: 033-008-01
Date Sampled: Feb. 17, 1993
Date Extracted: Feb. 24, 1993

Date Submitted: Feb. 18, 1993
Date Analyzed: Feb. 24, 1993
Dilution Factor: None

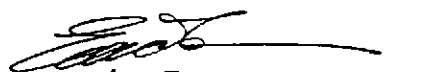
Sample I.D.: B-1A-AQ

CHLORINATED PESTICIDE ANALYSIS

<u>Compounds</u>	<u>Concentration ($\mu\text{g/L}$)</u>	<u>Reporting Detection Limit ($\mu\text{g/L}$)</u>
ALDRIN	N.D.	.10
DIELDRIN	N.D.	.10
ENDRIN ALDEHYDE	N.D.	.50
ENDRIN	N.D.	.10
HEPTACHLOR	N.D.	.10
HEPTACHLOR EPOXIDE	N.D.	.10
p,p' - DDT	N.D.	.50
p,p' - DDE	N.D.	.10
p,p' - DDD	N.D.	.50
ENDOSULFAN I	N.D.	.50
ENDOSULFAN II	N.D.	.50
α - BHC	N.D.	.10
β - BHC	N.D.	.10
γ - BHC (LINDANE)	N.D.	.10
δ - BHC	N.D.	.10
ENDOSULFAN SULFATE	N.D.	.50
p,p' - METHOXYCHLOR	N.D.	.50
TOXAPHENE	N.D.	.50
PCB'S	N.D.	.50
CHLORDANE	N.D.	.50

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5 DAYS TURNAROUND

Environmental Laboratory (1094)

February 26, 1993

ChromaLab File No.: 0293186

ESSENES

Project Name: BALCH-HAYWARD
Project Number: 033-008-01
Date Sampled: Feb. 17, 1993
Date Extracted: Feb. 24, 1993


Date Submitted: Feb. 18, 1993
Date Analyzed: Feb. 24, 1993
Dilution Factor: None

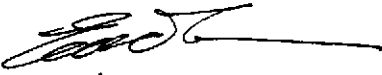
Sample I.D.: B-3A-AQ

CHLORINATED PESTICIDE ANALYSIS

<u>Compounds</u>	<u>Concentration ($\mu\text{g/L}$)</u>	<u>Reporting Detection Limit ($\mu\text{g/L}$)</u>
ALDRIN	N.D.	.10
DIELDRIN	N.D.	.10
ENDRIN ALDEHYDE	N.D.	.50
ENDRIN	N.D.	.10
HEPTACHLOR	N.D.	.10
HEPTACHLOR EPOXIDE	N.D.	.10
p,p' - DDT	N.D.	.50
p,p' - DDE	N.D.	.10
p,p' - DDD	N.D.	.50
ENDOSULFAN I	N.D.	.50
ENDOSULFAN II	N.D.	.50
α - BHC	N.D.	.10
β - BHC	N.D.	.10
γ - BHC (LINDANE)	N.D.	.10
δ - BHC	N.D.	.10
ENDOSULFAN SULFATE	N.D.	.50
p,p' - METHOXYCHLOR	N.D.	.50
TOXAPHENE	N.D.	.50
PCB'S	N.D.	.50
CHLORDANE	N.D.	.50

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ESSENES

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Project Number: 033-008-01
Date Sampled: Feb. 17, 1993
Date Extracted: Feb. 24, 1993


Date Submitted: Feb. 18, 1993
Date Analyzed: Feb. 24, 1993
Dilution Factor: None


Sample I.D.: B-4A-AQ

CHLORINATED PESTICIDE ANALYSIS

<u>Compounds</u>	<u>Concentration ($\mu\text{g/L}$)</u>	<u>Reporting Detection Limit ($\mu\text{g/L}$)</u>
ALDRIN	N.D.	.10
DIELDRIN	N.D.	.10
ENDRIN ALDEHYDE	N.D.	.50
ENDRIN	N.D.	.10
HEPTACHLOR	N.D.	.10
HEPTACHLOR EPOXIDE	N.D.	.10
p,p' - DDT	N.D.	.50
p,p' - DDE	N.D.	.10
p,p' - DDD	N.D.	.50
ENDOSULFAN I	N.D.	.50
ENDOSULFAN II	N.D.	.50
α - BHC	N.D.	.10
β - BHC	N.D.	.10
γ - BHC (LINDANE)	N.D.	.10
δ - BHC	N.D.	.10
ENDOSULFAN SULFATE	N.D.	.50
p,p' - METHOXYCHLOR	N.D.	.50
TOXAPHENE	N.D.	.50
PCB'S	N.D.	.50
CHLORDANE	N.D.	.50

ChromaLab, Inc.


Yiu Tam
Analytical Chemist


Eric Tam
Laboratory Director

CHAIN OF CUSTODY

AMPLERS: (Signature) *Thomas Meyers*
PROJECT NAME: BALCH - HAYWARD **JOB NUMBER:** 033-008-01
DESCRIPTION: 14 BORING - SOIL & WATER SAMPLES
ADDRESS: 1387 ~~HAYWARD~~ - RIVUS LANE, HAYWARD CA.

ANALYSIS REQUESTED
 TOTAL PETROLEUM HYDROCARBONS - GAS, ~~LIQUID~~
 BTEX & E
 VOC - EPA 8240
 TOTAL OIL & GREASE
 TETRAETHYL LEAD
 TEPA FOR
 MOTOR OIL/DIESEL
 CAN 17 METALS
 8010, 8080
 KEROSENE

CROSS REFERENCE NUMBER	DATE	TIME	SOIL	WATER	STATION LOCATION	TOTAL PETROLEUM HYDROCARBONS - GAS	BTEX & E	VOC - EPA 8240	TOTAL OIL & GREASE	TETRAETHYL LEAD	TEPA FOR MOTOR OIL/DIESEL	CAN 17 METALS	8010, 8080	REMARKS
1-1	2/17/93		α		BORING B-1	✓	✓	✓	✓	✓	✓	✓	✓	RUN
1-2	"		α		"	✓	✓	✓	✓	✓	✓	✓	✓	HOLD
1-2	"		α		"	✓	✓	✓	✓	✓	✓	✓	✓	HOLD
2-1	"		α		BORING B-2	✓	✓	✓	✓	✓	✓	✓	✓	RUN
2-2	"		α		"	✓	✓	✓	✓	✓	✓	✓	✓	HOLD
2-3	"		α		"	✓	✓	✓	✓	✓	✓	✓	✓	HOLD
3-1	"		α		BORING B-3	✓	✓	✓	✓	✓	✓	✓	✓	RUN
3-2	"		α		"	✓	✓	✓	✓	✓	✓	✓	✓	HOLD
3-3	"		α		"	✓	✓	✓	✓	✓	✓	✓	✓	HOLD
4-1	"		α		BORING B-4	✓	✓	✓	✓	✓	✓	✓	✓	RUN
4-2	"		α		"	✓	✓	✓	✓	✓	✓	✓	✓	HOLD
4-3	"		α		"	✓	✓	✓	✓	✓	✓	✓	✓	↓
5-1	"		α		BORING B-5	✓	✓	✓	✓	✓	✓	✓	✓	RUN
5-2	"		α		"	✓	✓	✓	✓	✓	✓	✓	✓	HOLD
5-3	"		α		"	✓	✓	✓	✓	✓	✓	✓	✓	↓
6-1	"		α		BORING B-6	✓	✓	✓	✓	✓	✓	✓	✓	RUN

RELINQUISHED BY: (Signature) <i>Thomas Meyers</i> RELINQUISHED BY: (Signature) RELINQUISHED BY: (Signature) RELINQUISHED BY: (Signature)	DATE 2/18/93 TIME 11:35 DATE _____ TIME _____ DATE _____ TIME _____ DATE _____ TIME _____	RECEIVED BY: (Signature) RECEIVED BY: (Signature) RECEIVED BY: (Signature) RECEIVED FOR LABORATORY BY: (Signature) <i>B. J. ...</i>	DATE _____ TIME _____ DATE _____ TIME _____ DATE _____ TIME _____ DATE 2-18-93 TIME 11:35
---	--	--	--

CHAIN OF CUSTODY

DIESEL & OILS

SAMPLERS: (Signature) *Thomas Mayaj*

PROJECT NAME: BALCH - HAYWARD JOB NUMBER: 033-008-01

DESCRIPTION: 1A BORINGS - SOIL & WATER SAMPLES

ADDRESS: 1384 RUDS LANE, HAYWARD CA

ANALYSIS
REQUESTED

	TOTAL PETROLEUM HYDROCARBONS - DIESEL & OILS	BTX & E	VOC - EPA 8240	TOTAL OIL & GREASE	TETRAETHYL LEAD	MOTOR OIL / DIESEL / KEROSENE	CAM 17 METALS	8010 + 8080	
CROSS REFERENCE NUMBER	DATE	TIME	SOIL	WATER	STATION LOCATION	REMARKS			
-1A-6"	2/17/93	9:30	✓		BORING B-1A	RUN	✓	✓	
-1A-18"	"	9:30	✓		"	HOLD	✓	✓	
-1A-36"	"	9:40	✓		"	↓	✓	✓	
-1A-11-11.5	"	10:35	✓		"	RUN	✓	✓	
2A-6"	"	11:10	✓		BORING B2A	RUN	✓	✓	
2A-18"	"	11:10	✓		"	HOLD	✓	✓	
2A-36"	"	11:10	✓		"	↓	✓	✓	
2A-10.5-11	"	11:30	✓		"	RUN	✓	✓	
3A-6"		13:10	✓		BORING B-3A	RUN	✓	✓	
3A-18"		13:10	✓		"	HOLD	✓	✓	
3A-36"		13:10	✓		"	↓	✓	✓	
3A-10.5-11.0		15:20	✓		"	RUN	✓	✓	
4A-6"		14:20	✓		BORING B-4A	RUN	✓	✓	
4A-18"		14:20	✓		"	HOLD	✓	✓	
4A-36"		14:25	✓		"	↓	✓	✓	
4A-11-11.5		14:35	✓		"	RUN	✓	✓	

RELINQUISHED BY: (Signature) <i>Thomas Mayaj</i>	DATE <u>2/18/93</u>	RECEIVED BY: (Signature) _____	DATE _____
RELINQUISHED BY: (Signature) _____	TIME <u>11:35</u>	RECEIVED BY: (Signature) _____	TIME _____
RELINQUISHED BY: (Signature) _____	DATE _____	RECEIVED BY: (Signature) _____	DATE _____
RELINQUISHED BY: (Signature) _____	TIME _____	RECEIVED BY: (Signature) _____	TIME _____
RELINQUISHED BY: (Signature) _____	DATE _____	RECEIVED FOR LABORATORY BY: (Signature) _____	DATE <u>2-16-93</u>
RELINQUISHED BY: (Signature) _____	TIME _____		TIME <u>11:35</u>

CHROMALAB FILE # 298186
 ORDER # 10517

LDY

SAMPLERS (Signature) *Thomas Meyer*
 PROJECT NAME: BALCH - HAYWARD JOB NUMBER: 033-008-01
 DESCRIPTION: 14 BORINGS - SOIL & WATER SAMPLES
 ADDRESS: 1384 RUS LANE, HAYWARD CA.

ANALYSIS
 REQUESTED

TOTAL PETROLEUM HYDROCARBONS GAS-ANALYSIS
 BTX & E
 VOC - EPA 8240
 TOTAL OIL & GREASE
 TETRAETHYL LEAD
 MOLD
 CM17 OIL/ANALYSIS/KF100-1P
 PD10, 8080

CROSS REFERENCE NUMBER	DATE	TIME	SOIL	WATER	STATION LOCATION	TOTAL PETROLEUM HYDROCARBONS GAS-ANALYSIS	BTX & E	VOC - EPA 8240	TOTAL OIL & GREASE	TETRAETHYL LEAD	MOLD	CM17 OIL/ANALYSIS/KF100-1P	PD10, 8080	REMARKS
B-6-2	2/17/93		X		BORING B-6	↓	↓							HOLD
B-6-3	"		X		"	↓	↓							↓
B-7-1	"		X		BORING B-7	↓	↓							RUN
B-7-2	"		X		"	↓	↓							HOLD
B-7-3	"		X		"	↓	↓							↓
B-8-1	"		X		BORING B-8 (PRIME)	↓	↓							RUN
B-8-2	"		X		"	↓	↓							HOLD
B-8-3	"		X		"	↓	↓							↓
B-8-4	"		X		BORING B-8	↓	↓							↓
-1A-AQ	2/17/93			X										RUN
-2A-AQ	2/17/93			X										RUN
-3A-AQ	2/17/93			X										RUN
-4A-AQ	2/17/93			X										RUN

RELINQUISHED BY: (Signature) <i>Thomas Meyer</i>	DATE 2/18/93	RECEIVED BY: (Signature)	DATE
RELINQUISHED BY: (Signature)	TIME 11:35	RECEIVED BY: (Signature)	TIME
RELINQUISHED BY: (Signature)	DATE	RECEIVED BY: (Signature)	DATE
RELINQUISHED BY: (Signature)	TIME	RECEIVED BY: (Signature)	TIME
RELINQUISHED BY: (Signature)	DATE	RECEIVED FOR LABORATORY BY: (Signature)	DATE 2-18-93
RELINQUISHED BY: (Signature)	TIME		TIME 11:35

CERTIFIED
S40029

PHASE ONE ENVIRONMENTAL
SITE ASSESSMENT
1362 AND 1384 RUUS LANE
HAYWARD, CALIFORNIA

CERTIFIED/EARTH METRICS
PROJECT NO. S40029
CLIENT PROJECT NO. 13152A

PREPARED FOR:

WARMINGTON HOMES
3160 CROW CANYON PLACE SUITE 200
SAN RAMON, CA 94583

DATE ISSUED: FEBRUARY 17, 1994



February 17, 1994

Mr. Tom Sanborn
Warmington Homes
3160 Crow Canyon Place, Suite 200
San Ramon, CA 94583

Subject: Phase One Environmental Site Assessment: 1362 and 1384
Ruus Lane, Hayward, California (CERTIFIED/Earth Metrics
file reference S40029)

Dear Mr. Sanborn:

Enclosed herewith is CERTIFIED/Earth Metrics Phase One Environmental Site Assessment for the above referenced site. The assessment was prepared in conformance with the Phase One Scope of Work, accepted practices for such studies, and the in-house quality assurance program of CERTIFIED/Earth Metrics. The undersigned pledge that the facts presented herein are based upon available information discovered by CERTIFIED/Earth Metrics and represent existing conditions at the site up to the present time. No representation can be made regarding the total chemical composition of the subsurface of the site, since such conditions are not visible and since no comprehensive subsurface chemical testing has been performed on the subject site.

Sincerely,

Marc Papineau
Manager, Physical Sciences Department
California REA 791

Certified
Engineering
& Testing®
Company

Environmental
Consultants
& Laboratory
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San Francisco
Los Angeles

CERTIFIED
S40029

PHASE ONE ENVIRONMENTAL
SITE ASSESSMENT
1362 AND 1384 RUUS LANE
HAYWARD, CALIFORNIA

CERTIFIED/EARTH METRICS
PROJECT NO. S40029
CLIENT PROJECT NO. 13152A

PREPARED FOR:

WARMINGTON HOMES
3160 CROW CANYON PLACE SUITE 200
SAN RAMON, CA 94583

DATE ISSUED: FEBRUARY 17, 1994

PREPARED BY:

CERTIFIED/EARTH METRICS
7000 MARINA BOULEVARD, 4TH FLOOR
BRISBANE, CA 94005
(415-742-9900)

TABLE OF CONTENTS

1.0	INTRODUCTION	1
	1.1 Purpose	1
	1.2 Involved Parties	1
2.0	SCOPE OF WORK	1
3.0	SITE OVERVIEW	2
	3.1 Location	2
	3.2 Adjacent Properties	2
	3.3 Site Description	3
4.0	SITE HISTORY AND OPERATIONS	6
5.0	ENVIRONMENTAL SETTING	6
	5.1 Regional Physiography	6
	5.2 Soil Conditions	8
	5.3 Ground-Water Conditions	8
6.0	RESULTS OF INVESTIGATION	9
	6.1 Site Inspection Observations	9
	6.2 Site Vicinity	11
	6.3 Asbestos	13
	6.4 Results of Regulatory Agency Contacts	13
	6.5 Results of Personnel Interviews/Site Records Review	14
	6.6 Results of Aerial Photo Review	15
	6.7 Synopsis of Results of Previous Environmental Investigations	16
7.0	DISCUSSION	16

TABLE OF CONTENTS (continued)

8.0	CONCLUSIONS	17
8.1	Areas of No Apparent Concern	16
8.2	Areas of Further Concern	17
9.0	RECOMMENDATIONS	17
9.1	Areas of No Action	17
9.2	Further Investigations	17
9.3	Site Clean Up	17
10.0	LIMITATIONS	18
11.0	REFERENCES	19
11.1	Persons/Offices Contacted Regarding the Site	19
11.2	Reports, Plans and Other Documents Reviewed	19

LIST OF FIGURES

Figure 1.	Local Site Map	4
Figure 2.	Assessor Parcel Map	5
Figure 3.	Topographic Map	7
Figure 4.	Fuel Leaks and Spills within a One-Half and One-Mile Radius of the Subject Site	12

LIST OF TABLES

Table 1.	Aerial Photographs Reviewed for 1362 and 1384 Ruus Lane, Hayward	10 45 <i>mp</i>
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1.0 INTRODUCTION

1.1 Purpose

Certified Engineering & Testing Company, Inc. (CERTIFIED) presents the Phase One Environmental Site Assessment of 1362 and 1384 Ruus Lane in the City of Hayward, California (the Site). The Site location is illustrated in Figures 1 and 2.

CERTIFIED prepared this assessment for Warmington Homes to discover and disclose any apparent evidence of environmental impairment on the Site, on properties adjoining the Site, or in the site vicinity.

1.2 Involved Parties

Warmington Homes intends to purchase the property and develop it with single-family houses. This report may be used by Warmington Homes and its lender in consideration of developing and financing.

This report is prepared for the sole use and benefit of Warmington Homes and is based, in part, upon documents, writings, and information owned and possessed by Warmington Homes. Neither this report, nor any of the information contained herein, shall be used or relied upon for any purpose by any person or entity other than Warmington Homes and its lender.

This report was prepared by Certified Engineering & Testing Company, Inc. (CERTIFIED), by Mr. Marc Papineau, a State of California Registered Environmental Assessor, Number REA 00791.

2.0 SCOPE OF WORK

The scope of this Phase One Environmental Site Assessment consists of a limited evaluation and review of specified records to evaluate the potential for environmental impairment on the Site or of risk to the Site. Potential soil and ground-water contamination on the Site and in the neighborhood is researched and documented using specified agency lists and records. A history of recent Site usage based upon archived aerial photographic review and consultation with knowledgeable parties is provided herein. Chemical analysis of soil, ground water, or building materials is not within the scope of this assessment. Other limitations are presented in Section 10.

The Site was the subject of a soils investigation, findings of which are summarized in Section 6.7 herein. The particular scope of this assignment is to prepare a Phase One Environmental Site Assessment to document current and historic conditions on the Site and in the vicinity. Asbestos sampling and testing are not parts of the Scope of Work for this assignment. Sampling of shallow soil at four locations is included, but testing and reportage are additional, subject to authorization by Warmington Homes. Previous soil chemistry investigation is summarized in Section 6.7.

3.0 SITE OVERVIEW

3.1 Location

The subject site is located at 1362 and 1384 Ruus Lane in the City of Hayward, Alameda County, California (Site). The Site is located on the south side of Ruus Lane between Stratford Road and Sims Court, approximately 150 feet west of Sims Court. The Assessor Parcel Numbers are 464-100-1-12 (1362 Ruus Lane) and 464-100-1-4 (1384 Ruus Lane) (see Figures 1 & 2).

3.2 Adjacent Properties

The general land uses in the neighborhood are residential and industrial/commercial. The Site is bounded on the east by industrial/commercial uses along Sims Court; on the south by commercial uses along Industrial Parkway West; on the west by vacant land which is being improved as Stratford Village residences and community park; and on the north by Ruus Lane and Georgian Manor mobile home park on Ruus Lane across the lane from the Site. The following properties adjoin the Site:

East

Rene Marcotte & Co. (29151 Sims Court)
Ford Tractor Equipment (29197 Sims Court)
Ice Cream Vendor Truck Storage (29225 Sims Court)
Construction Equipment Storage

West

Undeveloped land (part of Stratford Village)

North

Georgian Manor mobile home park

South

Grainger Industrial and Commercial Equipment and Supplies
(1617 Industrial Parkway West)
Middleton Welders Supply Co. (1573 Industrial Parkway West)

3.3 Site Description

The Site consists of two parcels: a 2.21 acre parcel (APN 464-100-1-12) and a 2.26 acre parcel (APN 464-100-1-4). The first parcel, also known as 1362 Ruus Lane or the Tallyn parcel, is improved with two single-family houses and miscellaneous sheds and temporary structures. The second parcel, also known as 1384 Ruus Lane or the Hohener parcel, has one wood-frame house on it. Each parcel is approximately 131 feet wide (along the Ruus Lane frontage) by 741 feet deep.

All outside grounds on the Hohener property are bare turned soil without asphalt cover or landscape vegetation. On the Tallyn parcel, the grounds are nearly 100 percent covered with sheds, temporary trailer office, vehicle storage, portable toilet storage, and other miscellaneous equipment storage except for a gravel driveway and a small front yard. The toilets, chemicals, and equipment are used by A-1 Sanitation for this chemical toilet business.

The Site is currently zoned I (Industrial) and is consistent with the General Plan land use designation. Previous zoning for this area was Industrial.

4.0 **SITE HISTORY AND OPERATIONS**

Review of archived aerial photographs taken in 1947 and 1968 at Pacific Aerial Surveys in Oakland, California, show structures at both 1362 Ruus Lane and 1384 Ruus Lane. In the 1947 aerial photograph reviewed by CERTIFIED, both parcels appear to be used for agriculture. Structures, presumably the residences, are located in the front portions of the parcels. The rear portions appear to be open, flat land, unplanted in March 1947.

In the 1968 aerial photograph the residences appear as in 1947. However, the rear yard appears to have a large circular area of trodden earth connected by a

dirt road to Ruus Lane. Around the circular feature or "cul-de-sac" are several features which appear to be vehicles or equipment of that size. CERTIFIED's interpretation of the aerial photograph is that the activity conducted in the rear yard overlapping both parcels could be a junking activity. The 1968 aerial photograph could also be consistent with equipment storage, but this is less probable in view of the absence of any covered structure and large number of vehicles or equipment in excess of ten vehicles.

5.0 ENVIRONMENTAL SETTING

5.1 Regional Physiography

The Site is located in the U.S.G.S. California 7.5-Minute Series, Newark Quadrangle, Alameda County, California (U.S. Geological Survey, 1959, photorevised 1980). Topographically, the Site property is level and lies at approximately 10 feet above National Geodetic Vertical Datum (see Figure 3). Surface waters drain from the Site to Ward Creek west of the Site. Because the entire area is developed, much of the stormwater is intercepted by engineered drainage systems and discharged to Alameda Creek/Flood Control Channel. Alameda Creek/Flood Control Channel is located south and southeast of the Site.

Wetlands survey was not performed as part of this investigation. According to available information, there are no formal designated wetlands within U. S. Army Corps of Engineers jurisdiction on the Site or on land adjoining the Site.

The Site is flat. There is no apparent evidence of fill on the Site.

5.2 Soil Conditions

There were no available soil boring logs from the Site. According to a 1992 report conducted on nearby 1097 W. Tennyson Road, west of the Site, the Site lies within the East Bay Plain ground water basin. In the Site vicinity, Quaternary alluvium overlies Tertiary, Jurassic, and Cretaceous Franciscan Formation rocks. The regional water-bearing zone is a Pleistocene alluvial deposit that is several hundred feet thick. The very top of this zone is at least 50 feet below ground surface in the vicinity of the Site (Weiss Associates, 1992). No geotechnical soils reports for the Site property were discovered by CERTIFIED.

According to CERTIFIED's review of logs of soil borings at 1441 Industrial Parkway West (Close Building Supply/Vince's Equipment Rental), the near-surface soils consist of ten feet of very dark grey silty

clay and olive grey to greyish brown silty fine sands, overlying deeper silty fine sands (Clayton Environmental Consultants, April 1991). No known faults traverse the Site property. The Hayward fault is located approximately 1.5 miles east of the Site.

Inspection of available soil boring logs from the Hohener parcel shows that the Site's soils consist primarily of dark sandy, silty clays, underlain by silty sands at ten feet or less below grade surface. Ground water is encountered in the silty sands at approximately 10 feet below grade surface. This information is consistent with other available soils data.

Please refer to Figure 3 for Site Topography.

5.3 Ground-Water Conditions

Based upon ground-water elevation data collected for the Hohener parcel, local shallow ground water is encountered at approximately 10 feet below grade surface (Esseness Environmental, Inc., measured February 17, 1993 and reported March 1, 1993).

According to available well monitoring reports for proximate sites in the neighborhood, shallow ground water beneath the Site is approximately 8 to 10 feet below grade surface (Clayton Environmental Consultants, April 1991). Shallow ground water flows locally toward the west southwest toward Ward Creek (Clayton Environmental Consultants, 1991; Weiss Associates, 1992; Environmental Science & Engineering, 1992; Groundwater Technology, 1993).

No ground water production wells or natural springs were observed on-Site. Shallow ground water in the Site is generally not utilized for domestic purposes, but deeper ground water is used domestically and there are numerous domestic or irrigation wells within a one-half mile radius of the Site.

6.0 RESULTS OF INVESTIGATION

6.1 Site Inspection Observations

As of February 10, 1994 there were no apparent visible or other signs of environmental impairment observed by the inspector. Observations are detailed below:

1362 Ruus Lane (Tallyn Parcel)

- Landscape vegetation did not appear stressed. Most of the Tallyn parcel was covered by structures, permanent or temporary, and stored equipment.
- Visible drums were observed which were unlabeled. Acetylene tanks used for welding were observed.
- No ground-water wells or tank vent pipes were observed.
- No pooled oil or oily water was observed. Some on-Site ponding in depressions in the unpaved driveway was observed.
- There were numerous portable toilets, equipment, and vehicles in the rear storage yard.
- No pad-mounted or pole mounted transformers were observed.
- There were two, single-story wood frame residences and out-structures. The building interiors were not inspected.

1384 Ruus Lane (Hohener Parcel)

- Landscape vegetation did not appear stressed. Most of the Hohener parcel appeared generally uncovered, unplanted, and recently turned.
- No visible drums, ground-water wells, or tank vent pipes were observed.
- No pooled oil or oily water was observed.
- The Hohener parcel was not cluttered with equipment of any kind.
- No pad-mounted or pole mounted transformers were observed.
- There was one, single-story wood frame residence. The building interior was not inspected.

6.2 Site Vicinity

The Site vicinity did not have any remarkable features that may be of environmental concern. In general, the neighborhood appeared to be

residential north and west of the Site, and industrial/commercial-oriented east of the Site along Sims Court and south of the Site along Industrial Parkway West. There was no visible evidence of dumping or filling on adjacent properties.

There are several agency listed sites of fuel releases within one-half to one-mile of the Site. These are illustrated in Figure 4. None of these listed sites poses an apparent risk of impairment to the subject Site owing to their locations and local direction of ground-water flow to the west-southwest. The sites are described as follows:

Bay Ford Tractor, 975 Industrial Parkway West. A waste oil tank was removed in June 1988. Monitoring of two wells found 1,500 ppb in MW-1 and 250 ppb TPH as motor oil in well MW-2 in August 1988. Based upon 18 months of monitoring (August 1988 to February 1990), no further action was recommended (Delta Environmental Consultants, 1990).

Vince's Equipment Rental (also known as Close Building Supply), 1441 Industrial Parkway West. This Close Building Supply site has four underground fuel tanks. The City of Hayward filed an unauthorized release form (URF) report on July 30, 1990. Well installation and monitoring in 1991 found detectable concentrations of benzene, gasoline and diesel in the well downgradient of the tanks. An additional fourth well was installed inside the Vince's Equipment Rental building in August 1991. Ground-water flows locally toward the west-southwest (Clayton Environmental Consultants, April 1991 and August 1991).

Bay Area/Diablo Petroleum Company, 1565 Industrial Parkway West. According to the 1993 Hazardous Materials Management Plan (HMMP) this commercial fueling site stores on an average daily basis 57,500 gallons of diesel and gasoline, 4000 gallons of mineral spirits and kerosene, and 10,500 gallons of lubrication oil and gear oil. Bay Area/Diablo Petroleum is not on the leaking underground storage tank (LUST) list. It is listed on CalSites (ASPIS) with "no further action" status. The Bay Area/Diablo site is not listed as a contaminated site by the City of Hayward.

None of the properties adjoining the Site is listed on any of the specified agency lists of contaminated sites, RCRA waste generators, or Underground Storage Tank (UST) sites. The nearest RCRA generator is G & G Enterprises (1571 Industrial Parkway West), CAD No. 981685175. G & G Enterprises has a Hazardous Materials Management Plan on file at the City of Hayward (Permit No. 91-268), which lists thinners and reducers used in auto body repair/painting. The nearest UST site is Bay

Area/Diablo Petroleum Company (formerly, Holdener Petroleum Co.) at
1565 Industrial Parkway West.

6.3 Asbestos

Asbestos inspection reports are not available for any of the on-Site structures. Sample testing was not part of this Phase One assignment. Because the intended plan for the Site is to develop single-family residences, all structures will be demolished. Any asbestos-containing materials confirmed by testing will be removed prior to demolition by a licensed asbestos abatement contractor. Consulting, testing and abatement related to asbestos are activities regulated by the State of California and San Francisco Bay Area Air Quality Management District.

In view of the appearance and apparent age of the structures, which are evident in the 1968 aerial photograph reviewed by CERTIFIED, destructive sampling will be necessary to classify building materials as asbestos-containing or non-asbestos-containing materials. This must be performed prior to demolition and will be required by the City of Hayward for the demolition permit.

6.4 Results of Regulatory Contacts

CERTIFIED contacted the City of Hayward Fire Department representative, Mr. Hugh Murphy, regarding the Tallyn and Hohener parcels. Neither property is listed on the City of Hayward List of Contaminated Sites. The City of Hayward has files of one or more of inspections, Hazardous Material Management Plan, and soil investigations for the parcels. Results of soils investigation are summarized in Section 6.7.

According to Mr. Murphy, Mr. Murphy recalled that soil scraping and disposal may have been performed on the Hohener parcel, soil being off-hauled for disposal by Erickson Inc. There was no available record of soil clean up in the City of Hayward files. Also, Mr. Murphy stated that the A-1 Sanitation operation of the Tallyn parcel is under Hazardous Materials Management Plan (HMMP) and permit to the City of Hayward.

CERTIFIED reviewed the HMMP and available records of City of Hayward inspections. The business address of A-1 sanitation is listed as 1356 Ruus Lane, and CERTIFIED believes the business is actually situated on the subject Tallyn parcel. New oil, waste oil, formaldehyde solution (chemical toilet chemical), and acetylene for welding are currently stored on the Tallyn parcel, in drum storage (oil and toilet chemical) or compressed gas cylinders (acetylene).

Inspection reports for 1991, 1992, 1993, and 1994 have noted since 1991 various items such as uncovered storage and staining or spillage. According to Mr. Murphy, the subject Tallyn and Hohener parcels have a long history of junk storage which he stated increased during the 1980s. Clean up of storage and spillage matters have been ordered by the City of Hayward Fire Department. Mr. Murphy did not recollect any soil cleanup on the Tallyn parcel comparable to the soil scraping and off-haul for disposal that Mr. Murphy recalled were performed at the Hohener parcel.

The City of Hayward Planning and Zoning Department, Building Department, and Fire Department were consulted during preparation of this Phase One report. The City of Hayward has no record of hazardous material usage, storage, or unauthorized release for the Site. The Alameda County Department of Environmental Health was contacted to determine if any record of hazardous material usage or storage exists with this agency for the Site. This agency has no record of hazardous material usage or storage, or any record of hazardous material release, for 1362 or 1384 Ruus Lane, Hayward.

The State of California Environmental Protection Agency, Department of Toxic Substances Control, was contacted to determine if any record of hazardous material usage or storage exists with this agency for the site. This agency has no record of hazardous material usage, storage, or transportation manifests for 1362 or 1384 Ruus Lane, Hayward.

The Site is not listed with the State of California, San Francisco Bay Regional Water Quality Control Board as a site that has been contaminated by leaking fuel or as a site where known toxic chemicals have been released to the environment. The Site is not listed as a hazardous waste cleanup site. The Site is not listed as a Hazardous Waste and Substances Site by the State of California, or as a Resource Conservation and Recovery Act (RCRA) waste generator, Comprehensive Environmental Response, Compensation, and Liability Information (CERCLIS) site or National Priority List (NPL) site by the United States Environmental Protection Agency (U.S. EPA).

According to the State of California, Cal/EPA, the region has low potential for radon. Therefore, radon sampling is not performed.

6.5 Results of Personnel Interviews

CERTIFIED interviewed Mr. Tom Sanborn of Warmington Homes regarding his personal knowledge of the Site. Mr. Sanborn provided by

teletype eight pages of previous investigation and correspondence concerning the Hohener parcel.

6.6 Results of Aerial Photo Review

Aerial photographs archived at Pacific Aerial Surveys in Oakland were viewed by CERTIFIED as a part of this investigation. Two aerial photographs from missions flown in 1947 and 1968 were viewed as identified in Table 1.

In 1947 the Site was apparently used for agriculture and appears to have residences on both of the subject parcels. Ruus Lane appears to be at an angle, north of its current alignment, and terminates approximately 1000 feet west of Ruus Road. At the subject parcels Ruus Lane appears to be approximately 300 feet north of its current alignment. The structures are setback a distance from Ruus Lane. The immediate area around the Site appears to be tilled agricultural land.

In 1968 the alignment and configuration of Ruus Lane appear the same as in 1947. There is a long dirt road ending in a circle or cul-de-sac which has stored equipment or junk vehicles around it. The cul-de-sac or storage area appears large enough to overlap both of the subject parcels (Tallyn and Hohener). The center of the storage or junk area is approximately 600 feet south of Ruus Lane as currently aligned. The extent of the storage area appears to be approximately 200 feet in diameter. The combined width of the two subject parcels is 260 feet.

TABLE 1. AERIAL PHOTOGRAPHS REVIEWED FOR 1362 AND 1384 RUUS LANE, HAYWARD, CALIFORNIA

DATE	IDENTIFICATION NUMBER	SCALE
3-24-47	AV 11-05-30	1:20,000
4-22-68	AV 844-17-39	1:30,000
SOURCE: Pacific Aerial Surveys, 1994.		

6.7 Synopsis of Results of Previous Environmental Investigations

Previous investigations have been performed in several phases for both the Tallyn and Hohener parcels. CERTIFIED reviewed information provided by Warmington Homes relevant to the Hohener parcel and also independently reviewed additional information available from the City of Hayward relevant to the Tallyn and Hohener parcels.

Surface sampling and testing of two soil samples collected from stained areas on the Tallyn parcel show no detectable gasoline or diesel fuel, no unusual metals concentration above normal background, and trace pesticide residue in parts per billion (Essenes Environmental, Inc., June 1, 1992). No additional test results of additional samples were available at the City of Hayward.

Surface and depth sampling on the Hohener parcel occurred in February 1993 and again in May 1993. The May 1993 test results were provided by Warmington Homes and the February 1993 test results were found on file at the City of Hayward. Select shallow soil samples were tested and found to contain detectable petroleum hydrocarbons as motor oil above 50 ppm or lead above expected background. The select samples containing such detectable levels of the stated substances were samples B-1-1 and B-6-1. Ground-water samples were tested and found not to contain detectable petroleum hydrocarbons, benzene, chlorinated hydrocarbon solvents or pesticides (Essenes Environmental, Inc., March 1, 1993).

Subsequent sampling and testing was performed on the Hohener parcel, results being summarized below based upon information received from Warmington Homes.

Previous Assessment of Public Hazards for the Hohener parcel (1384 Ruus Lane) was reviewed by CERTIFIED. CERTIFIED reviewed in particular the June 1, 1992 Status Report of Soil Sampling (Essenes Environmental, Inc., 1993). This status report documented low-concentration pesticide residue (chlordane Aldrin and DDE) and elevated lead and copper in surface soil at locations specified in the report. The level of pesticides were low, not of concern, and expected in view of the historical agricultural use of the area. Correspondence to the Alameda County Department of Environmental Health dated March 9, 1993 was reviewed by CERTIFIED, which suggests that pesticides and petroleum contaminants on the Hohener parcel are limited to the areas of surface staining, have not migrated off-Site or to ground water, and pose no apparent health risks (Artesian Environmental Consultants, March 9, 1993).

7.0 DISCUSSION

Asbestos. The asbestos content of all suspect building materials will be investigated prior to demolition. Any suspect ACMs confirmed by testing to be asbestos-containing must be removed prior to demolition.

PCBs. Electrical equipment does not appear to pose any risk of toxic impairment on the Site. There is no history of transformer storage or transformer carcass salvage on the Site.

Historical Uses. The Site was apparently used for agriculture. Based upon available tests for chlorinated pesticides on the Hohener parcel, pesticide residue does not appear to pose any constraint to the proposed residential use. Pesticide screening on the Tallyn parcel is an available means of verifying this condition for Tallyn.

Subject Site. The subject Site is not listed as a contaminated site, RCRA waste generators, or Underground Storage Tank (UST) sites on any of the specified agency lists. The subject Site is not listed on the City of Hayward list of contaminated sites. There is no record of manifested off-haul of hazardous waste from the Site as of May 1991.

Adjoining Properties. None of the adjoining properties is listed on any of the specified agency lists of contaminated sites, RCRA waste generators, or Underground Storage Tank (UST) sites. The nearest RCRA generator is G & G Enterprises (1571 Industrial Parkway West), CAD No. 981685175. G & G Enterprises has a Hazardous Materials Management Plan on file at the City of Hayward (Permit No. 91-268), which lists thinners and reducers used in auto body repair/painting. The nearest UST site is Bay Area/Diablo Petroleum Company (formerly, Holdener Petroleum Co.) at 1565 Industrial Parkway West.

8.0 CONCLUSIONS

8.1 Areas of No Apparent Concern

There is no apparent evidence of impairment by off-site releases of fuels or toxic substances. Asbestos is not a concern as the buildings will be demolished. However, an asbestos survey must be performed to obtain a demolition permit and confirmed ACMs, if any, must be removed before demolition.

8.2 Areas of Further Concern

On-Site storage and junk storage, potential historic use of hazardous materials, and potential for old abandoned on-Site tanks for heating oil, farm implement fuel, or sanitary waste are matters of potential concern.

9.0 RECOMMENDATIONS

9.1 Areas of No Action

No further action or investigation is recommended regarding the Site history or off-site sources of contamination.

9.2 Further Investigations

Soil testing is recommended by CERTIFIED, particularly on the Tallyn parcel and on the Hohener parcel in the vicinity of previous sample S-1H which appears to coincide with the historic storage or junking area evident in the 1968 aerial photograph reviewed herein.

9.3 Site Clean Up

According to Mr. Hugh Murphy soil clean up has previously been performed on the Hohener parcel. Evaluation of the potential need for additional soil clean up on the Tallyn and Hohener parcels is pending receipt of soil test results.

10.0 LIMITATIONS

The findings set forth in the attached Environmental Site Assessment Report are strictly limited in time and scope to the date of the evaluation. The conclusions presented in the Report are limited by the time and budget constraints imposed by the client and are based solely on the services described in the Report, and not on scientific tasks or procedures beyond the agreed upon Scope of Work and Terms and Conditions of CERTIFIED's Standard Consulting Services Agreement.

This Report may contain recommendations which are partially based on the analysis of data accumulated at the time and place set forth in the Report through subsurface exploration. However, further investigations may reveal

additional data or variations from the current data which may indicate that the recommendations be reviewed or reevaluated.

Chemical analyses may have been performed for specific parameters during the course of this site assessment, as described in the Report. However, it should be noted that additional chemical constituents not searched for during the current study may be present in soil and/or ground water at the Site.

Partial findings of this assessment are based on data provided by others. No warranty is expressed or implied with the usage of such agency or consultants data.

The following items of work were not performed as part of this Phase One Environmental Site Assessment: laboratory testing related to any soils, foundation or structural engineering issues; subsurface probing or geophysical survey; chemical testing; investigations regarding any flora and fauna including potentially toxic vegetation; investigations regarding naturally occurring heavy metals in soils; investigations used for any intended demolition; soil and ground-water remediation or investigation (the performed study is intended for financial purposes only); and investigation of any wetlands, archaeology or floodplains.

Much of the information provided in this Report is based upon personal interviews and research of available documents, records, and maps held by most government and private agencies. The Report is therefore subject to the limitations of the presented historical documentation, availability and accuracy of pertinent records, and the personal recollection of those persons contacted.

The presence or absence of radioactive materials, biological hazards and/or asbestos was not evaluated unless specifically noted.

11.0 REFERENCES

11.1 Persons/Offices Contacted Regarding the Site:

Hayward, City of, Planning and Zoning Department, personal communication (1994).

Hayward, City of, Building Department, personal communication (1994).

Murphy, Hugh, City of Hayward Fire Department, personal communication (1994).

Sanborn, Tom, Warmington Homes, telephone and telecopy communication (1994).

Travis, Laura, City of Hayward, personal communication (1994).

11.2 Reports, Plans and Other Documents Reviewed:

Annual Work Plan for Hazardous Substance Cleanup (formerly, BEP), California EPA (1985 revised 1990).

Artesian Environmental Consultants, letter to Alameda County Department of Environmental Health (March 9, 1993).

California Regional Water Quality Control Board, Underground Fuel Leaks List, City of South San Francisco (April, 1993).

California State of, California Waste Management Board, Solid Waste Information System (SWIS) Active Landfills (1989).

California, State of, California Waste Management Board, Solid Waste Information System (SWIS) Closed and Inactive Landfills (1989).

California, State of, California Waste Management Board, Solid Waste Information System (SWIS) Transfer Stations (1989).

California, State of, State Water Resources Control Board, Solid Waste Assessment Test (SWAT) Program (1989).

California State Office of Planning and Research, Hazardous Waste and Substances Sites List Pursuant to AB 3750 (CORTESE) (July, 1992).

Clayton Environmental Consultants, "Soil and Groundwater Investigation for Vince's Equipment Rental 1441 Industrial Parkway West, Hayward" (April 5, 1991).

Clayton Environmental Consultants, "Additional Soil and Groundwater Investigation for 1441 Industrial Parkway West, Hayward" (August 28, 1991).

Delta Environmental Consultants, "History and Results of 18-Month Monitoring, 975 Industrial Parkway West, Hayward" (May 24, 1990).

Essenes Environmental, Inc., "Status Report Soil Sampling Tallyn Property, 1362 Ruus Lane, Hayward" (June 1, 1992).

Essences Environmental, Inc., "Subsurface Investigation for Hohner Property, 1384 Ruus Lane, Hayward," (March 1, 1993).

Hayward, City of, Fire Department, Hazardous Materials Office, Inspection Reports (January 27, 1994; August 30, 1993; January 16, 1992).

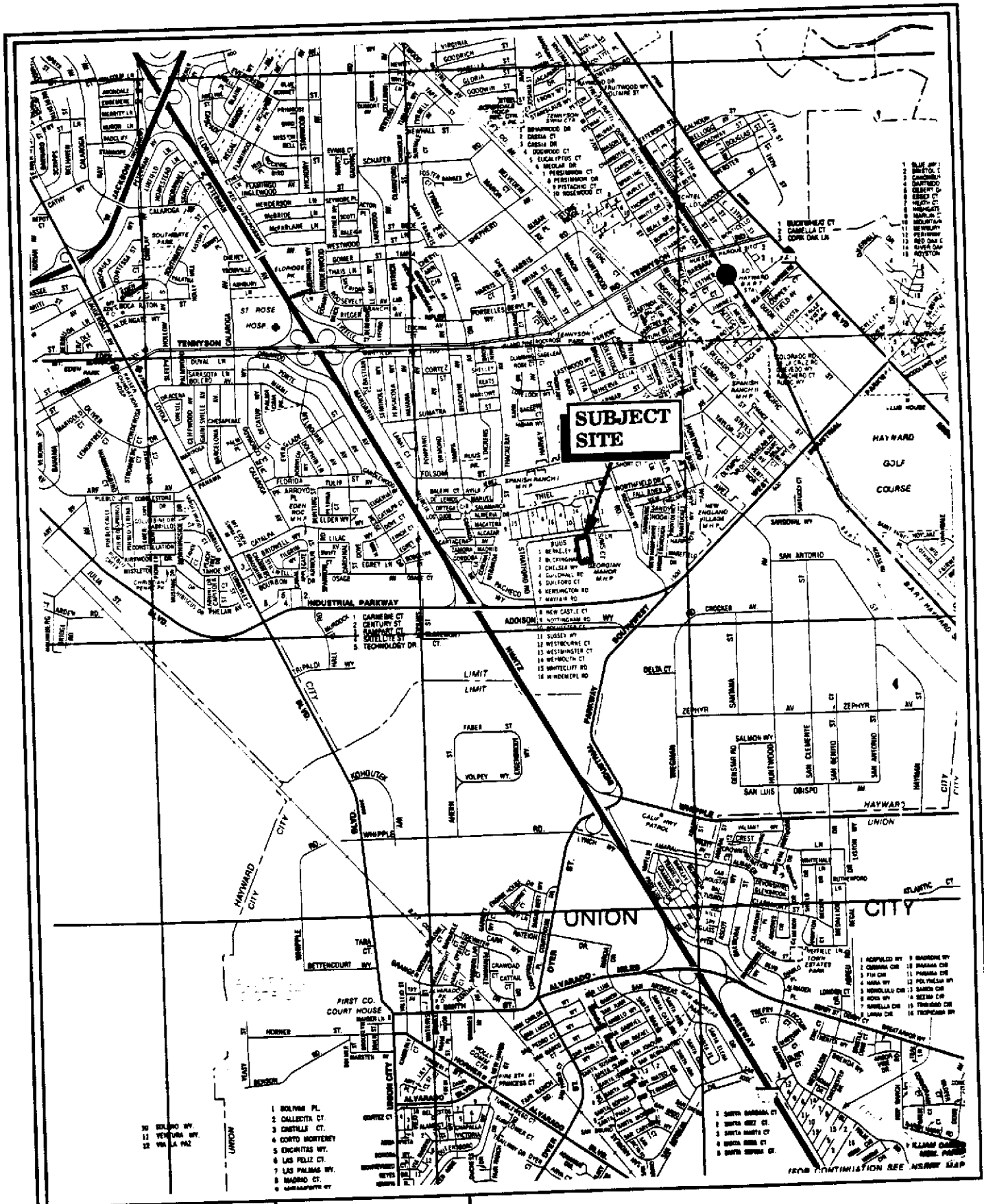
Pacific Aerial Surveys, Aerial Photographs, AV 11-05-30, 1947 (scale: 1:20,000) and AV 844-17-39, 1968 (scale 1:30,000).

U.S. Department of the Interior, Geological Survey, Newark, California 7.5 Minute Quadrangle (1959, photorevised 1980).

U.S. Environmental Protection Agency, Comprehensive Environmental Responses Compensation and Liability Information System (CERCLIS) (1993).

U.S. Environmental Protection Agency, National Priority List (SUPERFUND) (November, 1993).

U.S. Environmental Protection Agency, RCRA List (May (1991)).

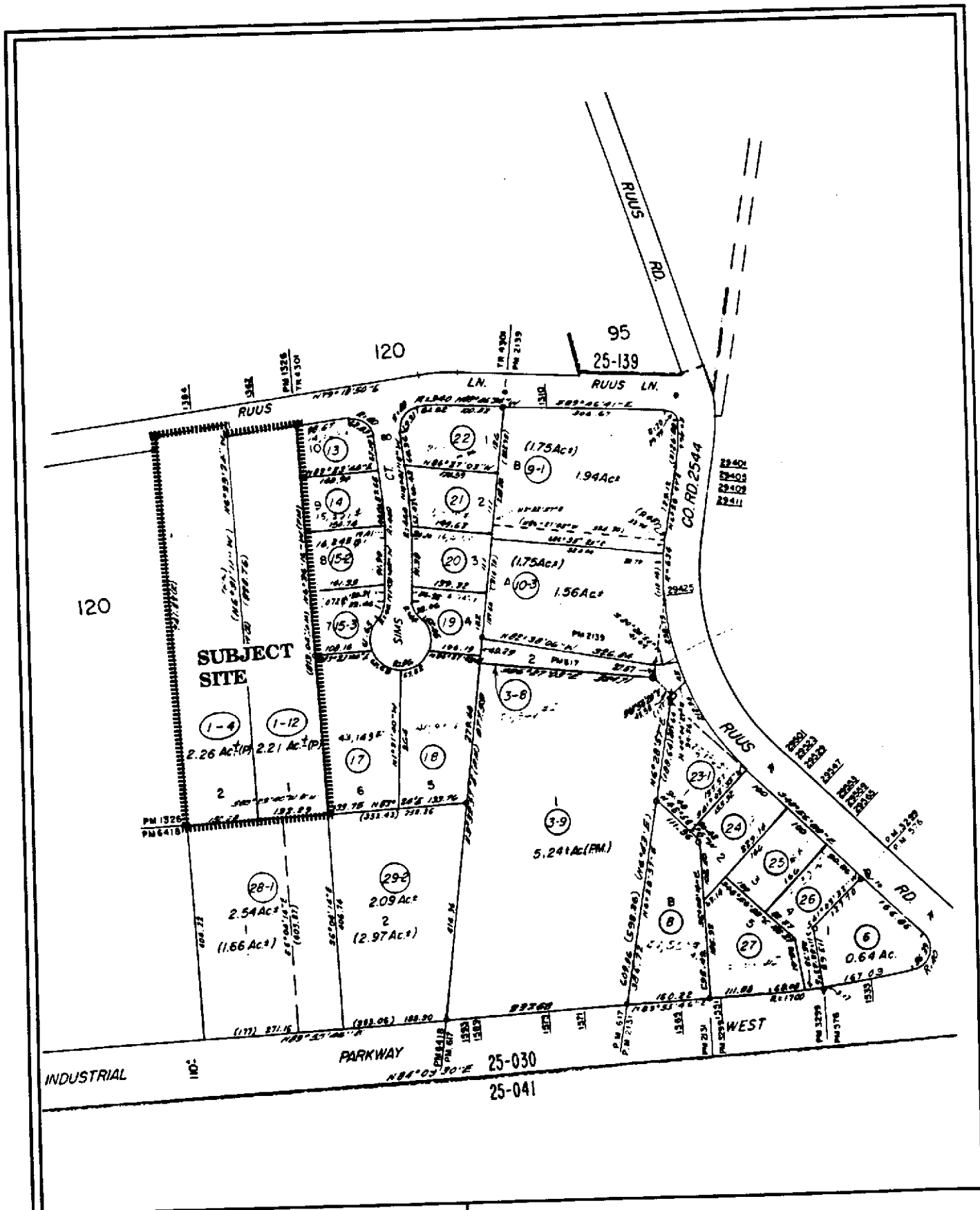


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 FOURTH FLOOR
 BRISBANE, CA 94005



Scale: 1" = 2400'

FIGURE 1.
LOCAL SITE MAP

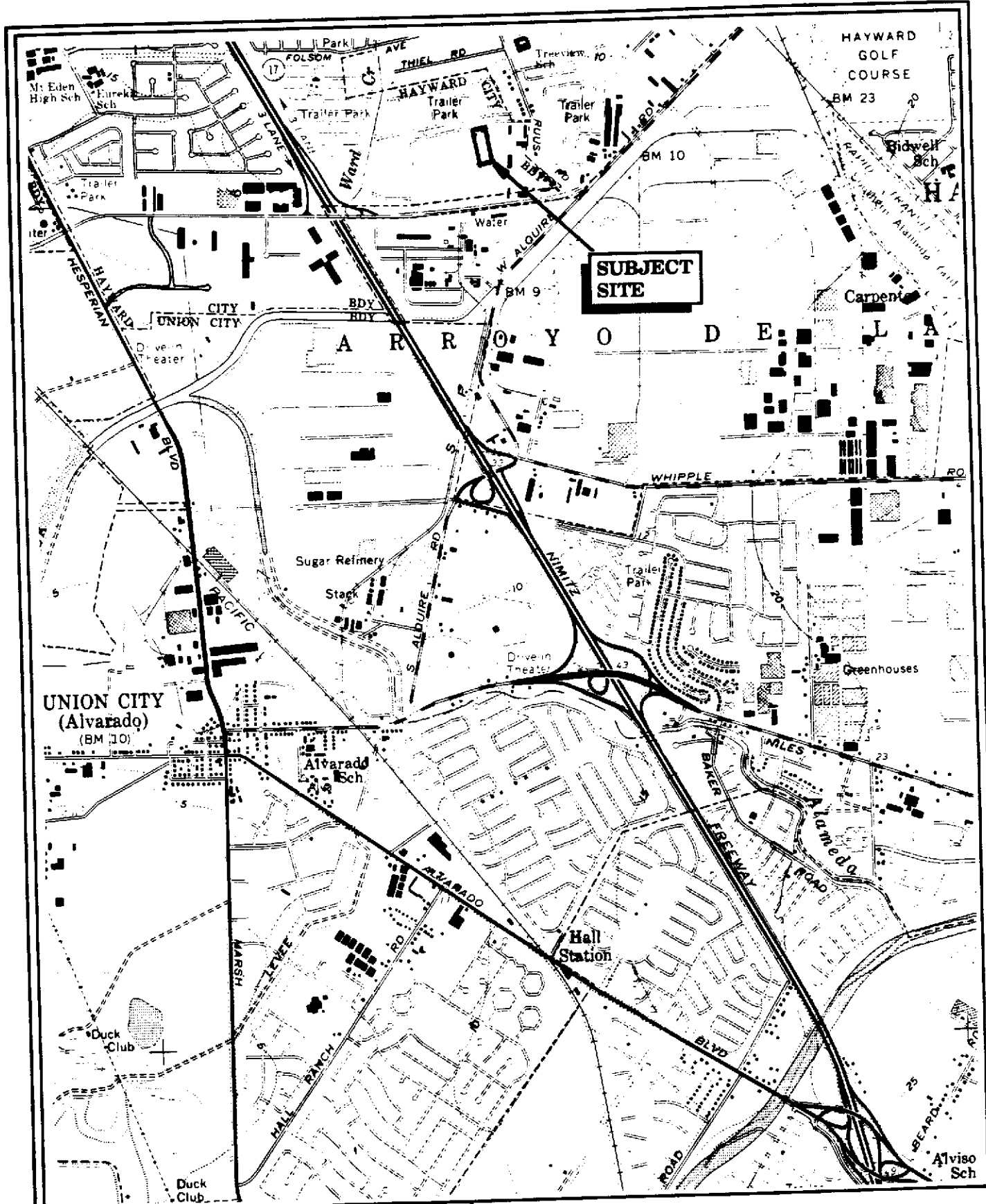


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No Scale

FIGURE 2.
ASSESSOR PARCEL MAP

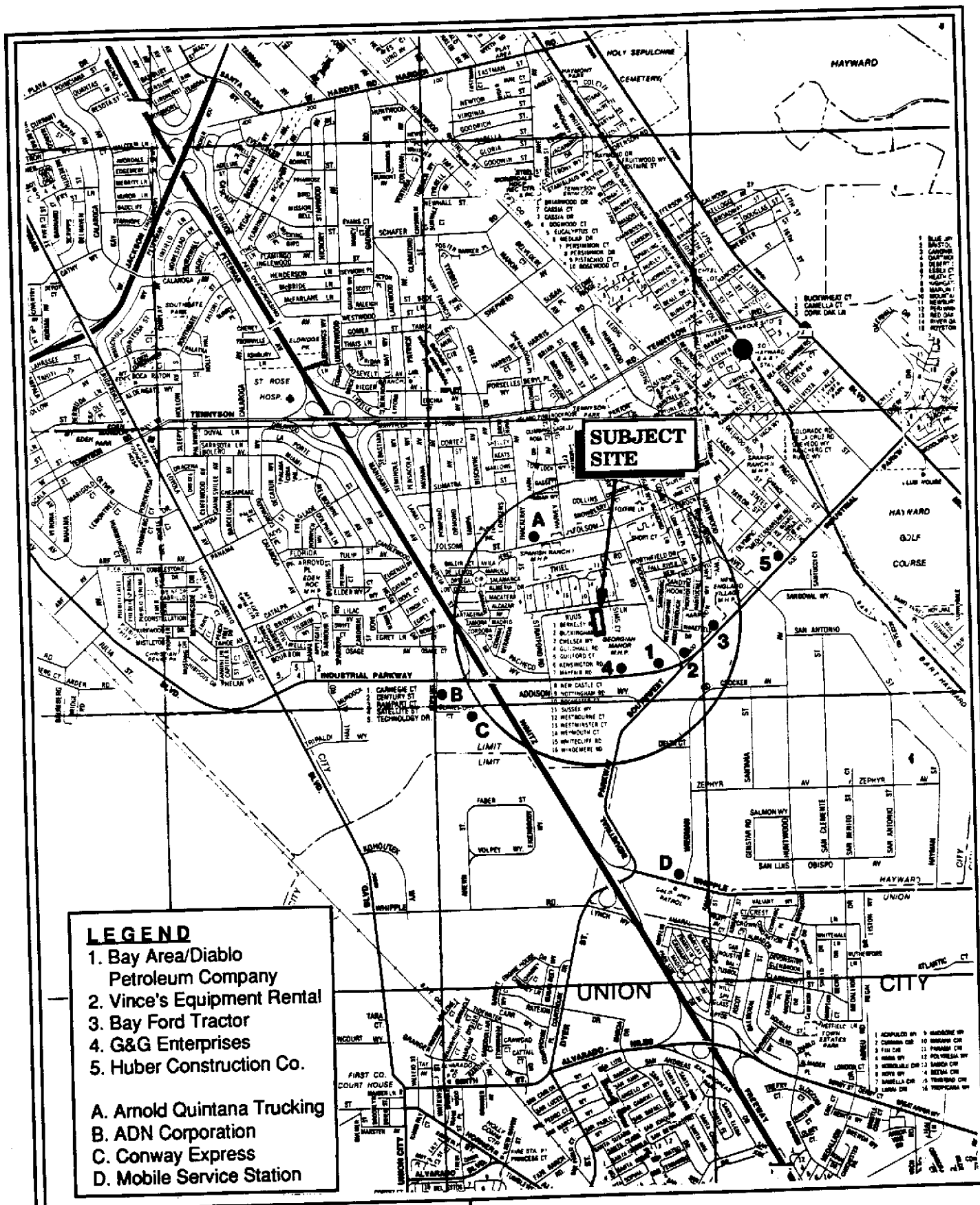


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 BRISBANE, CA 94005



Scale: 1" = 2000'

FIGURE 3.
TOPOGRAPHIC MAP



LEGEND

- 1. Bay Area/Diablo Petroleum Company
- 2. Vince's Equipment Rental
- 3. Bay Ford Tractor
- 4. G&G Enterprises
- 5. Huber Construction Co.

- A. Arnold Quintana Trucking
- B. ADN Corporation
- C. Conway Express
- D. Mobile Service Station



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Scale: 1" = 2400'

FIGURE 4.
LISTED SITES OF POTENTIAL
CONCERN WITHIN A
ONE-HALF-MILE RADIUS OF
THE SUBJECT SITE



March 22, 1994

Mr. Gene Toschi
Warmington Homes
3160 Crow Canyon Place, Suite 200
San Ramon, CA 94583

Subject: Limited Near Surface Soil Chemistry Testing: 1362 and 1384
Ruus Lane Hayward, California (CERTIFIED/Earth Metrics
file reference S40041)

Dear Mr. Toschi:

This letter is to convey the findings of the Limited Near Surface Soil Chemistry Testing by CERTIFIED/Earth Metrics on the Tallyn and Hohener parcels in Hayward, California. This work was recommended to Warmington Homes in the 1994 Phase I report prepared by CERTIFIED/Earth Metrics.

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& Testing®
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Sampling Method. CERTIFIED/Earth Metrics personnel performed soil sampling on March 7 and March 8, 1994. Soil samples were collected at the eight locations pre-designated in CERTIFIED/Earth Metrics proposal file reference 13152B dated February 22, 1994. These locations are illustrated in Figures 1 and 2.

At each of the eight locations, CERTIFIED/Earth Metrics removed the surface soil and weeds, where present, to a depth of one foot below grade surface, using a pick and shovel. A soil sample was collected at each location with a driven sampler consisting of a slide hammer and spoon containing a 2-inch diameter, 6-inch long brass sleeve. The sleeve was retrieved from the brass sleeve, covered the ends with aluminum foil, caps, and tape. The sample was labelled and placed in an ice chest with blue ice.

The Sample Chain-of-Custody was completed by the sampler and designated the test parameters for which each sample would be tested.

Testing Methods. The samples were transported to Sequoia Analytical in Redwood City for testing of petroleum oil by U.S. EPA 418.1, organochlorine pesticides and polychlorinated biphenyls (PCBs) by U.S. EPA 8080, industrial solvents by U.S. EPA 8015 modified, and lead by U.S. EPA 6010.

Results. No detectable chlorinated pesticides or PCBs were found in the samples tested (#4, #5, and #8). No detectable industrial solvents were found in the samples tested (#5 and #8).

Petroleum oil above 50 parts per million (equivalently, 50 milligrams per kilogram of sample weight) was detected in samples #6 and #7 from the southwest corner of the Tallyn parcel at 1362 Ruus Lane and in sample #1 from the southeast corner of the Hohener parcel. These same samples, which were tested and found to contain more than 50 ppm as petroleum oil, were also found to contain lead. These particular oil and lead results for samples #1, #6, and #7 are summarized below:

<u>Sample</u>	<u>Depth (Inches)</u>	<u>Oil (PPM)</u>	<u>Lead (PPM)</u>
#1 (Hohener)	12 to 18	71	22
#6 (Tallyn)	12 to 18	230	70
#7 (Tallyn)	12 to 18	140	43

Other test results are contained in the laboratory letter report enclosed herein.

Discussion. Samples #1, #6, and #7 contain oil that may be related to historic farm tractor or other surface storage operations conducted in the southern portion of the two parcels and overlapping the two parcels. This historic use, evident in the aerial photographs, was documented by CERTIFIED/Earth Metrics in its 1994 Phase I report.

Soil observed at locations #6 and #7 was sandy. Therefore, the maximum depth of petroleum-affected soil is not known at this time.

Mr. Hugh Murphy of the City of Hayward has stated that soil scraping and off-haul for disposal has previously been performed on the Hohener parcel, under co-jurisdictional review of Alameda County Department of Health Services. The depth and lateral extent of this previous scraping on the Hohener parcel is unknown to CERTIFIED/Earth Metrics. Scraping on the Hohener parcel appears to have been effective based upon the test results at locations #2 and #3 where petroleum oil was

found to be less than 50 ppm and lead less than 22 ppm. Soil clean up has not been performed on the Tallyn parcel.

Conclusions and Recommendations. CERTIFIED/Earth Metrics concludes that there is evidence of surficial petroleum-affected soil in the southwest area of the Tallyn parcel, which potentially overlaps the southeast corner of the Hohener parcel. Soil scraping and testing could be effective for removing the petroleum-affected soil.

Optionally, prior to soil clean-up, Warmington Homes could have additional samples from the Tallyn parcel collected and tested, to understand the lateral and vertical extent of petroleum-affected soil. Additional sampling and testing would be facilitated by clearing the Site of interfering stored equipment and sheds.

The current surficial soil sampling is preliminary. It tends to confirm effectiveness of past clean-up on the Hohener parcel, and demonstrates presence of petroleum-affected soil on the Tallyn parcel. Test results presented herein are representative of soil chemistry conditions at the location of the soil samples at the time of sampling. No representation is made herein of soil conditions in any locations that were not sampled by CERTIFIED/Earth Metrics.

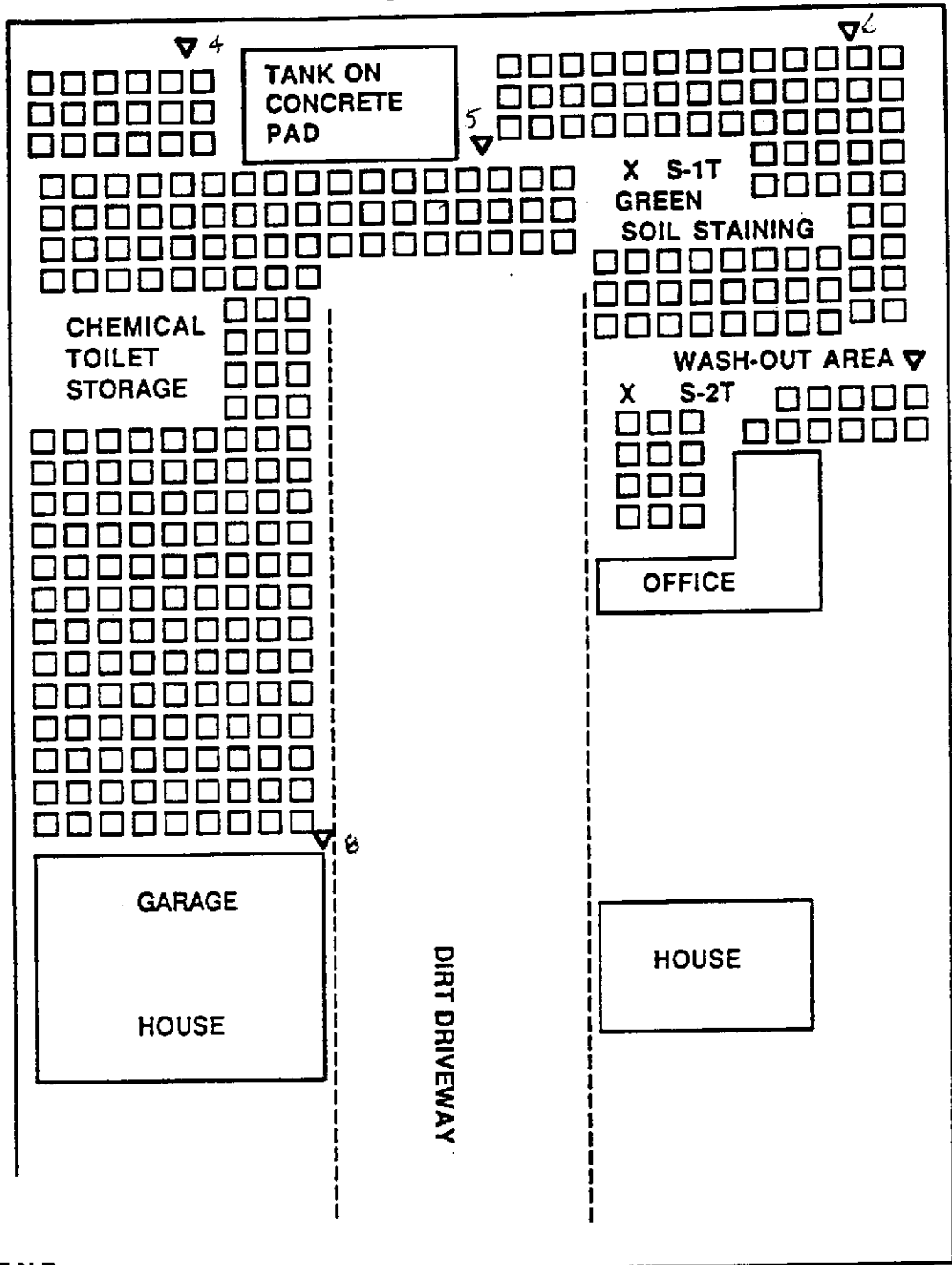
Sincerely,



Marc Papineau
California REA 791

enclosures: Figures 1 and 2, Lab Results, Sample Chain-of Custody

BALCH



LEGEND

X Previous Sampling Locations by Essenes Environmental

▽ Additional Soil Sampling Locations Proposed by CERTIFIED

RUUS LANE



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BRISBANE, CA 94005



No Scale

FIGURE 2.
ADDITIONAL SOIL SAMPLING
LOCATIONS ON
TALLYN PARCEL
1384 RUUS LANE
HAYWARD, CALIFORNIA

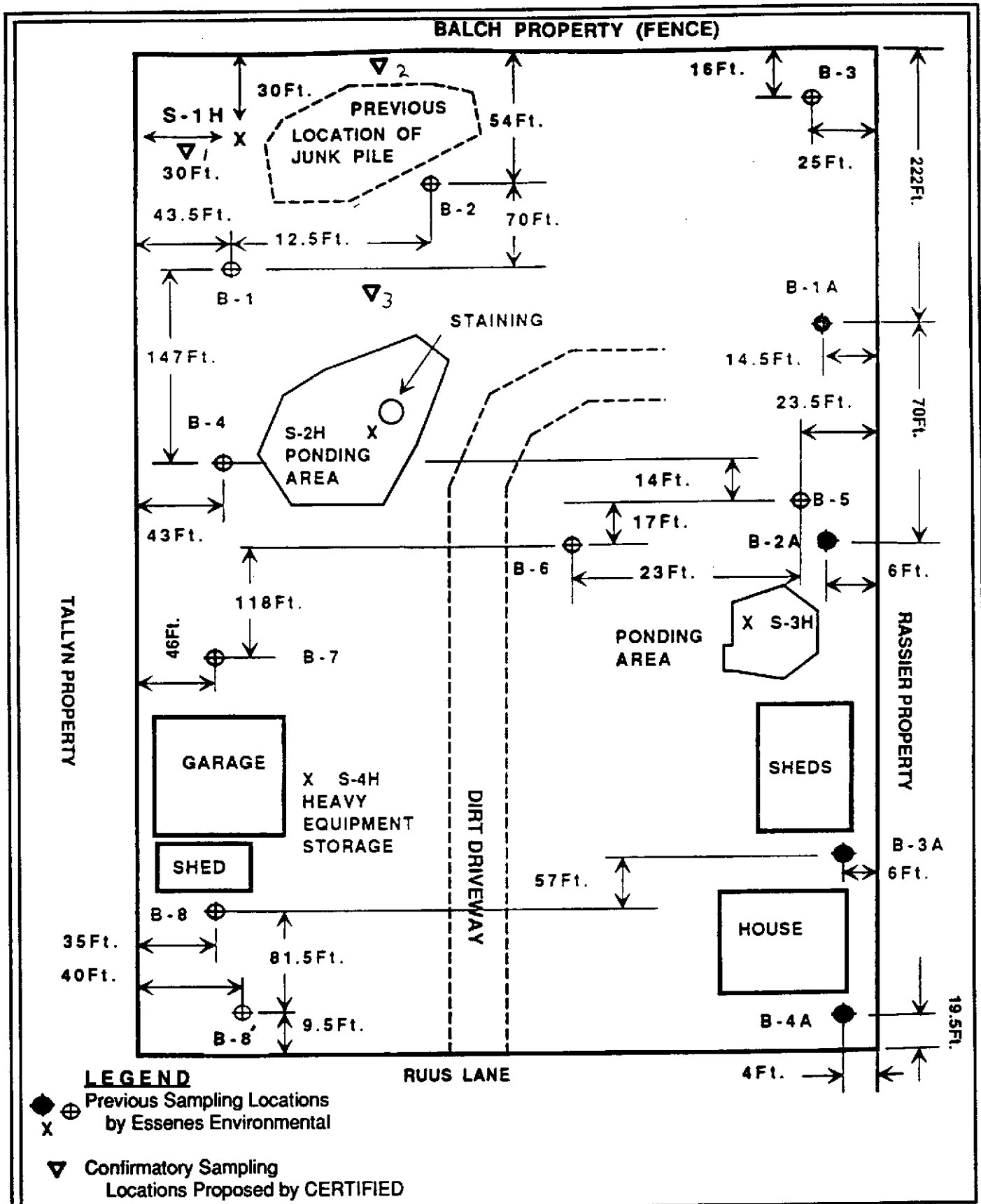


FIGURE 1.
CONFIRMATORY SAMPLING
LOCATIONS ON
HOHENER PARCEL
1384 RUUS LANE
HAYWARD, CALIFORNIA



Certified Engineering & Testing
7000 Marina Blvd.
Brisbane, CA 94005
Attention: Marc Papineau

Client Project ID: 1362 & 1384 Rus. Ln. Hayward
Sample Descript: Soil
Analysis for: Lead
First Sample #: 4C65801

Sampled: Mar 7, 1994
Received: Mar 8, 1994
Analyzed: Mar 13, 1994
Reported: Mar 21, 1994

LABORATORY ANALYSIS FOR: Lead

Sample Number	Sample Description	Detection Limit mg/kg	Sample Result mg/kg
4C65801	1	5.0	22
4C65802	2	5.0	22
4C65803	3	5.0	13
4C65806	6	5.0	70
4C65807	7	5.0	43

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

Todd Olive
Project Manager

4C65801.EAR <1>





Certified Engineering & Testing
7000 Marina Blvd.
Brisbane, CA 94005
Attention: Marc Papineau

Client Project ID: 1362 & 1384 Rus. Ln. Hayward
Matrix Descript: Soil
Analysis Method: EPA 418.1 (I.R. with clean-up)
First Sample #: 4C65801

Sampled: Mar 7, 1994
Received: Mar 8, 1994
Analyzed: Mar 17, 1994
Reported: Mar 21, 1994

TOTAL RECOVERABLE PETROLEUM HYDROCARBONS

Sample Number	Sample Description	Petroleum Oil mg/kg (ppm)
4C65801	1	71
4C65802	2	34
4C65803	3	N.D.
4C65806	6	230
4C65807	7	140

Detection Limits:

15

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

Todd Olive
Project Manager

4C65801.EAR <2>





Certified Engineering & Testing
7000 Marina Blvd.
Brisbane, CA 94005
Attention: Marc Papineau

Client Project ID: 1362 & 1384 Rus. Ln. Hayward
Sample Descript: Soil, 4
Analysis Method: EPA 8080
Lab Number: 4C65804

Sampled: Mar 7, 1994
Received: Mar 8, 1994
Extracted: Mar 11, 1994
Analyzed: Mar 14, 1994
Reported: Mar 21, 1994

ORGANOCHLORINE PESTICIDES AND PCB'S (EPA 8080)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Aldrin.....	5.0	N.D.
alpha-BHC.....	5.0	N.D.
beta-BHC.....	5.0	N.D.
delta-BHC.....	5.0	N.D.
gamma-BHC (Lindane).....	5.0	N.D.
Chlordane.....	100	N.D.
4,4'-DDD.....	30	N.D.
4,4'-DDE.....	10	N.D.
4,4'-DDT.....	30	N.D.
Dieldrin.....	10	N.D.
Endosulfan I.....	10	N.D.
Endosulfan II.....	10	N.D.
Endosulfan sulfate.....	30	N.D.
Endrin.....	10	N.D.
Endrin aldehyde.....	30	N.D.
Heptachlor.....	5.0	N.D.
Heptachlor expoxide.....	5.0	N.D.
Methoxychlor.....	100	N.D.
Toxaphene.....	400	N.D.
PCB-1016.....	100	N.D.
PCB-1221.....	400	N.D.
PCB-1232.....	100	N.D.
PCB-1242.....	100	N.D.
PCB-1248.....	100	N.D.
PCB-1254.....	100	N.D.
PCB-1260.....	100	N.D.

Analytes reported as N.D. were not present above the stated limit of detection. Because matrix effects and/or other factors required additional sample dilution, detection limits for this sample have been raised.

SEQUOIA ANALYTICAL

T. Olive
Todd Olive
Project Manager





Certified Engineering & Testing
7000 Marina Blvd.
Brisbane, CA 94005
Attention: Marc Papineau

Client Project ID: 1362 & 1384 Rus. Ln. Hayward
Sample Descript: Soil, 5
Analysis Method: EPA 8080
Lab Number: 4C65805

Sampled: Mar 7, 1994
Received: Mar 8, 1994
Extracted: Mar 11, 1994
Analyzed: Mar 14, 1994
Reported: Mar 21, 1994

ORGANOCHLORINE PESTICIDES AND PCB'S (EPA 8080)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Aldrin.....	5.0	N.D.
alpha-BHC.....	5.0	N.D.
beta-BHC.....	5.0	N.D.
delta-BHC.....	5.0	N.D.
gamma-BHC (Lindane).....	5.0	N.D.
Chlordane.....	100	N.D.
4,4'-DDD.....	30	N.D.
4,4'-DDE.....	10	N.D.
4,4'-DDT.....	30	N.D.
Dieldrin.....	10	N.D.
Endosulfan I.....	10	N.D.
Endosulfan II.....	10	N.D.
Endosulfan sulfate.....	30	N.D.
Endrin.....	10	N.D.
Endrin aldehyde.....	30	N.D.
Heptachlor.....	5.0	N.D.
Heptachlor epoxide.....	5.0	N.D.
Methoxychlor.....	100	N.D.
Toxaphene.....	400	N.D.
PCB-1016.....	100	N.D.
PCB-1221.....	400	N.D.
PCB-1232.....	100	N.D.
PCB-1242.....	100	N.D.
PCB-1248.....	100	N.D.
PCB-1254.....	100	N.D.
PCB-1260.....	100	N.D.

Analytes reported as N.D. were not present above the stated limit of detection. Because matrix effects and/or other factors required additional sample dilution, detection limits for this sample have been raised.

SEQUOIA ANALYTICAL

T. Olive
Todd Olive
Project Manager





Certified Engineering & Testing
7000 Marina Blvd.
Brisbane, CA 94005
Attention: Marc Papineau

Client Project ID: 1362 & 1384 Rus. Ln. Hayward
Sample Descript: Soil, 8
Analysis Method: EPA 8080
Lab Number: 4C65808

Sampled: Mar 8, 1994
Received: Mar 8, 1994
Extracted: Mar 11, 1994
Analyzed: Mar 14, 1994
Reported: Mar 21, 1994

ORGANOCHLORINE PESTICIDES AND PCB'S (EPA 8080)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Aldrin.....	5.0	N.D.
alpha-BHC.....	5.0	N.D.
beta-BHC.....	5.0	N.D.
delta-BHC.....	5.0	N.D.
gamma-BHC (Lindane).....	5.0	N.D.
Chlordane.....	100	N.D.
4,4'-DDD.....	30	N.D.
4,4'-DDE.....	10	N.D.
4,4'-DDT.....	30	N.D.
Dieldrin.....	10	N.D.
Endosulfan I.....	10	N.D.
Endosulfan II.....	10	N.D.
Endosulfan sulfate.....	30	N.D.
Endrin.....	10	N.D.
Endrin aldehyde.....	30	N.D.
Heptachlor.....	5.0	N.D.
Heptachlor epoxide.....	5.0	N.D.
Methoxychlor.....	100	N.D.
Toxaphene.....	400	N.D.
PCB-1016.....	100	N.D.
PCB-1221.....	400	N.D.
PCB-1232.....	100	N.D.
PCB-1242.....	100	N.D.
PCB-1248.....	100	N.D.
PCB-1254.....	100	N.D.
PCB-1260.....	100	N.D.

Analytes reported as N.D. were not present above the stated limit of detection. Because matrix effects and/or other factors required additional sample dilution, detection limits for this sample have been raised.

SEQUOIA ANALYTICAL

Todd Olive
Project Manager





Certified Engineering & Testing
7000 Marina Blvd.
Brisbane, CA 94005
Attention: Marc Papineau

Client Project ID: 1362 & 1384 Rus. Ln. Hayward
Sample Descript: Soil, 5
Analysis Method: EPA 3810/8015 Modified
Lab Number: 4C65805

Sampled: Mar 7, 1994
Received: Mar 8, 1994
Analyzed: Mar 14, 1994
Reported: Mar 21, 1994

INDUSTRIAL SOLVENTS SCAN

Analyte	Detection Limit mg/kg	Sample Results mg/kg
Acetone.....	0.40	N.D.
Acetonitrile.....	1.0	N.D.
Benzene.....	0.020	N.D.
iso-Butanol.....	0.10	N.D.
n-Butanol.....	0.10	N.D.
sec-Butanol.....	0.10	N.D.
t-Butanol.....	0.10	N.D.
Carbon tetrachloride.....	0.10	N.D.
Chloroform.....	0.10	N.D.
Cyclohexane.....	0.020	N.D.
1,2-Dichloroethane.....	0.20	N.D.
t-1,2-Dichloroethene.....	0.040	N.D.
Ethanol.....	0.20	N.D.
Ethyl acetate.....	0.10	N.D.
Ethyl benzene.....	0.020	N.D.
Ethyl ether.....	0.020	N.D.
Freon 113 (Trichlorotrifluoroethane).....	0.20	N.D.
Hexane.....	0.10	N.D.
Methanol.....	0.20	N.D.
Methyl ethyl ketone.....	0.20	N.D.
Methyl isobutyl ketone.....	0.20	N.D.
Methylene chloride.....	0.20	N.D.
iso-Octane.....	0.020	N.D.
iso-Propanol.....	0.10	N.D.
n-Propanol.....	0.10	N.D.
n-Propyl benzene.....	0.020	N.D.
Tetrachloroethylene.....	0.10	N.D.
Tetrahydrofuran.....	0.40	N.D.
1,1,1,-Trichlorethane.....	0.10	N.D.
Trichloroethylene.....	0.10	N.D.
Toluene.....	0.020	N.D.
m-Xylene.....	0.020	N.D.
o-Xylene.....	0.020	N.D.
p-Xylene.....	0.020	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

T. Olive
Todd Olive
Project Manager





Certified Engineering & Testing
7000 Marina Blvd.
Brisbane, CA 94005
Attention: Marc Papineau

Client Project ID: 1362 & 1384 Rus. Ln. Hayward
Sample Descript: Soil, 8
Analysis Method: EPA 3810/8015 Modified
Lab Number: 4C65808

Sampled: Mar 8, 1994
Received: Mar 8, 1994
Analyzed: Mar 14, 1994
Reported: Mar 21, 1994

INDUSTRIAL SOLVENTS SCAN

Analyte	Detection Limit mg/kg	Sample Results mg/kg
Acetone.....	0.40	N.D.
Acetonitrile.....	1.0	N.D.
Benzene.....	0.020	N.D.
iso-Butanol.....	0.10	N.D.
n-Butanol.....	0.10	N.D.
sec-Butanol.....	0.10	N.D.
t-Butanol.....	0.10	N.D.
Carbon tetrachloride.....	0.10	N.D.
Chloroform.....	0.10	N.D.
Cyclohexane.....	0.020	N.D.
1,2-Dichloroethane.....	0.20	N.D.
t-1,2-Dichloroethene.....	0.040	N.D.
Ethanol.....	0.20	N.D.
Ethyl acetate.....	0.10	N.D.
Ethyl benzene.....	0.020	N.D.
Ethyl ether.....	0.020	N.D.
Freon 113 (Trichlorotrifluoroethane).....	0.20	N.D.
Hexane.....	0.10	N.D.
Methanol.....	0.20	N.D.
Methyl ethyl ketone.....	0.20	N.D.
Methyl isobutyl ketone.....	0.20	N.D.
Methylene chloride.....	0.20	N.D.
iso-Octane.....	0.020	N.D.
iso-Propanol.....	0.10	N.D.
n-Propanol.....	0.10	N.D.
n-Propyl benzene.....	0.020	N.D.
Tetrachloroethylene.....	0.10	N.D.
Tetrahydrofuran.....	0.40	N.D.
1,1,1,-Trichlorethane.....	0.10	N.D.
Trichloroethylene.....	0.10	N.D.
Toluene.....	0.020	N.D.
m-Xylene.....	0.020	N.D.
o-Xylene.....	0.020	N.D.
p-Xylene.....	0.020	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

T. Olive
Todd Olive
Project Manager





Certified Engineering & Testing
7000 Marina Blvd.
Brisbane, CA 94005
Attention: Marc Papineau

Client Project ID: 1362 & 1384 Rus. Ln. Hayward
Matrix: Solid

QC Sample Group: 4C65801 - 08

Reported: Mar 21, 1994

QUALITY CONTROL DATA REPORT

ANALYTE	Beryllium	Cadmium	Chromium	Nickel	Ttl. Recover. Pet. Hyd.
Method:	EPA 6010	EPA 6010	EPA 6010	EPA 6010	EPA 418.1
Analyst:	S. O'Donnell	S. O'Donnell	S. O'Donnell	S. O'Donnell	K.Hynes

MS/MSD Batch#:	4C52101	4C52101	4C52101	4C52101	4C47701
Date Prepared:	3/11/94	3/11/94	3/11/94	3/11/94	3/17/94
Date Analyzed:	3/13/94	3/13/94	3/13/94	3/13/94	3/17/94
Instrument I.D.#:	MTJA-2	MTJA-2	MTJA-2	MTJA-2	N.A.
Conc. Spiked:	100 mg/kg	100 mg/kg	100 mg/kg	100 mg/kg	260 mg/kg
Matrix Spike % Recovery:	90	88	283	321	72
Matrix Spike Duplicate % Recovery:	94	92	232	285	70
Relative % Difference:	4.3	4.4	20	12	2.8

LCS Batch#:	MI020894	MI020894	MI020894	MI020894
Date Prepared:	2/8/94	2/8/94	2/8/94	2/8/94
Date Analyzed:	3/13/94	3/13/94	3/13/94	3/13/94
Instrument I.D.#:	MTJA-2	MTJA-2	MTJA-2	MTJA-2
LCS % Recovery:	102	101	103	100

% Recovery Control Limits:	75-125	75-125	75-125	75-125	60-140
---------------------------------------	--------	--------	--------	--------	--------

Please Note:

The LCS is a control sample of known, interferent free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

SEQUOIA ANALYTICAL

Todd Olive
Project Manager





Certified Engineering & Testing
7000 Marina Blvd.
Brisbane, CA 94005
Attention: Marc Papineau

Client Project ID: 1362 & 1384 Rus. Ln. Hayward
Matrix: Solid

QC Sample Group: 4C65801 - 08

Reported: Mar 21, 1994

QUALITY CONTROL DATA REPORT

ANALYTE	Dieldrin	Aldrin	Heptachlor
Method:	EPA 8080	EPA 8080	EPA 8080
Analyst:	L.Haar	L.Haar	L.Haar

MS/MSD Batch#:	BLK030794	BLK030794	BLK030794
Date Prepared:	3/7/94	3/7/94	3/7/94
Date Analyzed:	3/7/94	3/7/94	3/7/94
Instrument I.D.#:	GCPE-5	GCPE-5	GCPE-5
Conc. Spiked:	80 µg/kg	20 µg/kg	20 µg/kg
Matrix Spike % Recovery:	68	80	80
Matrix Spike Duplicate % Recovery:	92	130	85
Relative % Difference:	30	48	6.1

LCS Batch#:

Date Prepared:
Date Analyzed:
Instrument I.D.#:

LCS %
Recovery:

% Recovery Control Limits:	10-176	31-170	35-145
-------------------------------	--------	--------	--------

SEQUOIA ANALYTICAL

T. Olive
Todd Olive
Project Manager

Please Note:

The LCS is a control sample of known, interferent free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.





Certified Engineering & Testing
7000 Marina Blvd.
Brisbane, CA 94005
Attention: Marc Papineau

Client Project ID: 1362 & 1384 Rus. Ln. Hayward
Matrix: Solid

QC Sample Group: 4C65801 - 08

Reported: Mar 21, 1994

QUALITY CONTROL DATA REPORT

ANALYTE	Acetone	MIBK	Tetra-hydrofuan	1,1,1-TCA	TCE	p-Xylene
Method:	Indsol	Indsol	Indsol	Indsol	Indsol	Indsol
Analyst:	T. Tran	T. Tran	T. Tran	T. Tran	T. Tran	T. Tran

MS/MSD Batch#:	4BF5901	4BF5901	4BF5901	4BF5901	4BF5901	4BF5901
Date Prepared:	3/9/94	3/9/94	3/9/94	3/9/94	3/9/94	3/9/94
Date Analyzed:	3/9/94	3/9/94	3/9/94	3/9/94	3/9/94	3/9/94
Instrument I.D.#:	GCV-1	GCV-1	GCV-1	GCV-1	GCV-1	GCV-1
Conc. Spiked:	4.0 mg/kg	1.0 mg/kg	2.0 mg/kg	1.0 mg/kg	1.0 mg/kg	0.20 mg/kg
Matrix Spike % Recovery:	96	92	97	99	94	83
Matrix Spike Duplicate % Recovery:	106	104	104	96	94	88
Relative % Difference:	9.9	12	7.0	3.1	0.0	5.8

LCS Batch#:

Date Prepared:
Date Analyzed:
Instrument I.D.#:

LCS %
Recovery:

% Recovery Control Limits:	50-150	50-150	50-150	50-150	50-150	50-150
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SEQUOIA ANALYTICAL

T. Olive
Todd Olive
Project Manager

Please Note:

The LCS is a control sample of known, interferent free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.





SEQUOIA ANALYTICAL CHAIN OF CUSTODY

- 680 Chesapeake Drive • Redwood City, CA 94063 • (415) 364-9600 FAX (415) 364-9233
- 819 West Striker Ave. • Sacramento, CA 95834 • (916) 921-9600 FAX (916) 921-0100
- 1900 Bates Ave., Suite LM • Concord, CA 94520 • (510) 686-9600 FAX (510) 686-9689

Company Name: <u>CERTIFIED ENGINEERING</u>			Project Name: <u>1362 AND 1384 RUVS LN HAYWARD, CA</u>		
Address: <u>7000 MARINA BLVD 4th FLR</u>			Billing Address (if different):		
City: <u>BREBANE</u>	State: <u>CA</u>	Zip Code: <u>94005</u>			
Telephone: <u>415 742 9900</u>		FAX #: <u>415 742 1033</u>	P.O. #:		
Report To: <u>MARC PAPINEAU</u>		Sampler: <u>MARC PAPINEAU</u>	QC Data: <input type="checkbox"/> Level A <input checked="" type="checkbox"/> Level B <input type="checkbox"/> Level C <input type="checkbox"/> Level D		

Turnaround 10 Working Days 3 Working Days 2 - 8 Hours
 Time: 7 Working Days 2 Working Days
 5 Working Days 24 Hours

Analyses Requested

Drinking Water
 Waste Water
 Other

Client Sample I.D.	Date/Time Sampled	Matrix Desc.	# of Cont.	Cont. Type	Sequoia's Sample #	Petroleum Oil	AIB 1	Organochlorine	Lead (Pb)	Industrial Solvents	Modified	Comments
1. 1 1384 RUVS Ln Hayward	3/7/94 12:06 PM	Soil	1	Brass		✓		✓				9403658-01
2. 2 1384 RUVS	3/7/94 12:24 PM	Soil	1			✓		✓				-02
3. 3 1384 RUVS	3/7/94 4:00 PM	Soil	1			✓		✓				-03
4. 4 1362 RUVS	3/7/94 4:31 PM	Soil	1				✓					-04
5. 5 1362 RUVS Ln Hayward	3/7/94 4:40 PM	Soil	1				✓		✓			purchase - 05
6. 6 1362 RUVS Ln Hayward	3/7/94 4:55 PM	Soil	1			✓		✓				order will be FAXED -06
7. 7 1362 RUVS Ln Hayward	3/7/94 5:10 PM	Soil	1			✓		✓				-07
8. 8 1362 RUVS Ln Hayward	3/8/94 9:34 AM	Soil	1	Brass			✓		✓			-08
9.												
10.												

Relinquished By: <u>Marc Papineau</u>	Date: <u>3/8/94</u>	Time: <u>10:30 AM</u>	Received By:	Date:	Time:
Relinquished By:	Date:	Time:	Received By:	Date:	Time:
Relinquished By:	Date:	Time:	Received By Lab: <u>J. Stenstrom</u>	Date: <u>3/8/94</u>	Time: <u>1030</u>

Pink - Client

Yellow - Sequoia

White - Sequoia



Send to Hugh Memphis
6/11/91

TRC Environmental Consultants, Inc.

1201 North McDowell Blvd., Petaluma, CA 94954
(707) 769-5250

Rhoda
See Page 14 & 15
[Signature]

**PRELIMINARY PHASE I
SITE ASSESSMENT
NORTHEAST CORNER OF INDUSTRIAL
PARKWAY WEST AND STRATFORD ROAD
HAYWARD, CALIFORNIA**

Prepared For:
Rassier Properties
201 N. Hartz Avenue, Suite 0
Danville, California 94526

June 4, 1991
TRC Project Number 8565-P710-00

Prepared By: *William R. Shofner*
William R. Shofner
Project Hydrogeologist

Dennis L. Judd
Dennis L. Judd, R.E.A., R.E.H.S.
Principal Project Manager

RECEIVED
JUN 5 1991
PLANNING DEPT.

TABLE OF CONTENTS

1.0 SCOPE OF WORK	1
2.0 LIMITATIONS	2
3.0 SITE DESCRIPTION	2
4.0 PHYSICAL SETTING	3
4.1 Topography	3
4.2 Geology	3
4.3 Hydrology	3
5.0 SITE HISTORY	4
6.0 SITE INVESTIGATION	4
6.1 Aerial Photograph Review	4
6.2 Site Visit	5
6.3 Study Area Reconnaissance	7
6.4.1 Agency List Review	8
7.0 DISCUSSION:	10
7.1 On-site Status	10
7.2 Off-site Status	12
8.0 CONCLUSIONS AND RECOMMENDATIONS	14
9.0 BIBLIOGRAPHY	16
Appendix A	18
DISTRIBUTION	19
Plate 1 Vicinity Map	
Plate 2 Vicinity Map and Listed Sites	
Plate 3 Site Map	
Table 1 Listed Properties Within a One Mile Radius	

1.0 SCOPE OF WORK

This report presents the results of a Phase I Preliminary Hazardous Materials Site Assessment (PSA) which was prepared by TRC Environmental Consultants, Inc. (TRC) for a 19.84 acre property located on the northeast corner of Industrial Parkway West and Stratford Road, in Hayward, California (Plate 1). This assessment was authorized by Mr. John Rassier, with Rassier Properties, under TRC's standard service agreement dated September 27, 1990. Rassier Properties plans to develop the subject property.

The purpose of this PSA was to provide information on the possible presence of hazardous material contamination at the subject property. This assessment is based on information gathered from government agencies; interviews with personnel familiar with the property; a site visit; and off-site reconnaissance conducted by TRC personnel.

To evaluate the potential impact of hazardous materials on the subject property, TRC conducted the PSA, which consisted of the following scope of work:

o Task 1 - Site History Review

Review of existing historical information on former uses of the subject property to evaluate the potential for on-site and off-site hazardous material contamination.

o Task 2 - Records Review

Review of agency lists to verify the environmental status of the subject property, and to help identify potential off-site Hazardous Material Sites within the one mile-radius study area surrounding the property.

o Task 3 - Site Visit and Off-Site Reconnaissance

Conduct a site visit of the subject property and off-site reconnaissance within the 1 mile study area to visually observe possible hazardous material contamination uncovered during the site history review, and records review.

o Task 4 - Report Preparation

Preparation of this written report.

2.0 LIMITATIONS

The findings of this PSA are based largely on information collected from interviews, during visual observations, and from reviewing existing reports. In accordance with the previously described scope of work, the PSA does not include soil and/or groundwater sampling. Consequently, TRC can not guarantee the presence or absence of hazardous material contamination at or near the subject property. TRC has utilized its professional judgement, in accordance with practices and procedures generally accepted in the environmental consulting and engineering fields, to evaluate the status of possible hazardous material issues associated with the subject property that may be facing Rassier Properties. No other warranty is given or implied by this report. A more extensive assessment that would include a surface and/or subsurface investigation and chemical analyses of soil and/or groundwater samples may provide more definitive information concerning site-specific conditions.

3.0 SITE DESCRIPTION

The subject property, which is currently owned by Rassier Properties, consists of 19.84 undeveloped acres. It is located on the northeast corner of Industrial Parkway West and Stratford Road. It is just east of the Nimitz Freeway. According to Mr. Thane Sendejaz, Planning Technician with the City of Hayward Planning Department, the site and the surrounding area to the east and south is zoned Industrial. The area to the north and west is zoned for mobile home parks (Plate 1).

The subject property is bordered to the north by the Georgian Manor - A Mobile Home Community. Vacant undeveloped property, owned by Balch Enterprises, Inc., is located to the adjacent southeast of the subject property, and also to the west of the property, across Stratford Road. Numerous pieces of junkyard type material is located to the adjacent east of the subject property, and also on a portion of the subject property itself. An automobile parking area, and leased office and small warehouse buildings are located to the south across Industrial Parkway West. A small fenced area, located to the adjacent southwest of the subject property, across Stratford Road, is the location of the Valle Vista Pump Station for the City of Hayward Wastewater Treatment Plant sewer line.

4.0 PHYSICAL SETTING

4.1 Topography

The topography of the subject property along Stratford Road is approximately 1 to 3 feet lower in elevation in the northern area of the property than in the southern area of the property. This is apparently due to the rest of the property having been raised in elevation by the importation of fill. The surface soil on the property contains small pieces of broken concrete and asphalt intermixed. Both levels of the property are relatively flat and appear to have been graded in the past. Based on the United States Geological Service (USGS) Map of the area, the elevation is approximately 7 to 13 feet above Mean Sea Level.

4.2 Geology

The geology of the area is characterized by interbedded layers of clay, sandy clay, and silt deposits. Near surface geology is primarily a soft brown clayey sand or soft brown sandy clay (IT 1986).

According to a report by Harding Lawson Associates (HLA 1987) the relatively flat Hayward topography is made up of unconsolidated alluvium of Quaternary age material. This was deposited by Alameda Creek and its tributaries in fan like deposits. This is characterized in the subsurface as sand lenses interfingered with silts and clay.

4.3 Hydrology

Topographic maps of the area show that the closest surface water is a flood drain located on the vacant undeveloped land to the adjacent west of the subject property. The drain, which is managed by the Alameda County Flood Control Water Conservation District flows southeast into the Alameda Creek which is located approximately one half mile south of the site. According to Mr. Andreas Godfrey, Assistant Geologist with the Water Resources Section of the Public Works Agency of Alameda County, the Alameda Creek is not used as a source of drinking water, but is used for recreational purposes.

Mr. Godfrey also provided the following information on groundwater that was based on his review of existing investigative reports on record within his office. Groundwater in the subject property vicinity reportedly occurs at depths ranging from nine to twenty feet below ground surface. Additional investigative reports in the area (Hart 1989) (IT 1986) show the groundwater flow direction toward the west and southwest respectively.

According to Mr. Godfrey, and Mr. Kelvin Hickenbottom, Civil Engineer II with the Alameda County Flood Control District, Zone

7, and Mr. Jim Lundgrin, Deputy Director of Public Works for the City of Hayward Water Department, there are four aquifers in the area, each approximately one hundred feet beneath the other. The lower aquifers are of potable quality. However, they are only used as emergency stand-by. The shallow groundwater is probably non potable due to its high salinity content. Drinking water in the area is provided by the City of Hayward Water Department which obtains the water from the Hetch Hetchy Reservoir System. The closest municipal stand-by wells are located approximately one mile to the west at Industrial Boulevard and Hesperian Road.

Discussions with Mr. Rich Rohrer, Permit Engineer with the City of Hayward, Department of Streets and Sewers, revealed that the subject property is within the area serviced by the City's sanitary sewer.

5.0 SITE HISTORY

The subject property was purchased by Louis T. Rassier and Rose Marie Rassier, Joint Tenants, who acquired the property from Clarence Hesse and Cecil B. Hesse in 1951. The property is currently owned by John T. Rassier and family. The records of Ownership transfers were compiled from the Alameda County Tax Assessors office by Chicago Title back to 1951.

6.0 SITE INVESTIGATION

6.1 Aerial Photograph Review

Historical and current uses of the subject property and surrounding areas were also evaluated by examining available aerial photographs at the Pacific Aerial Surveys library in Oakland, California. Aerial photographs of the site taken in 1947, 1957, 1959, 1969, 1971, 1975, 1981, and 1988 were available for examination.

In the March 24, 1947 photograph, the subject property and surrounding areas are undeveloped. Some grading seems to have been done in the general area which would indicate the possibility of agricultural use. Industrial Parkway West appears as a small unpaved, dirt farm road.

The subject property and surrounding area is still predominantly undeveloped in the May 3, 1957 photograph, however Interstate 880 is under construction to the west of the subject property. Additionally, a major outdoor storage area approximately 30 acres in size is located across Industrial Parkway West to the southwest of the subject property (this area was later identified as being the Ameron Pipe Division cement pipe manufacturing facility). The type of materials stored could not be identified from the aerial photograph. Industrial Parkway West still appears to be unpaved.

Interstate 880 is completed in the July 7, 1959 photograph. All else appears the same as the 1957 photograph.

The Ameron facility southwest of the subject property has expanded eastward along Industrial Parkway West in the May 2, 1969 photograph. Large residential developments are in place within a quarter of a mile to the north of the subject property. The subject property is still undeveloped.

In the May 19, 1971 photograph, Industrial Parkway West now appears as a paved thoroughfare. The subject property is still undeveloped.

Pacheco Way and Stratford Road are completed in the May 19, 1975 photograph. The Ameron facility to the south of the subject property appears to have less material storage.

In the June 22, 1981 photograph, The Georgian Manor - A Mobile Home Community, is complete to the north of the subject property. Simms Court is completed to the northeast of the subject property, and miscellaneous debris appearing like a junkyard is present to the west of Simms Court, directly east of the subject property. The subject property is still undeveloped. The Ameron facility to the south has even less material storage on the premises than was shown on the 1975 photograph. *what Simms*

The Ameron facility to the south is gone in the March 30, 1988 photograph. It is now paved and used for parking automobiles. Additionally, Addison Way is now paved and there are several buildings along it. More debris appears to be stored on the property along Simms Court. The subject property is still undeveloped.

6.2 Site Visit

A site visit was conducted by TRC personnel on September 28, 1990. The purpose of the visit was to assess areas of potential environmental concern related to the use of hazardous materials at the subject property. The weather on that day was partly cloudy and warm.

The subject property is an undeveloped vacant parcel that is fenced along the northern, southern, southeastern and western sides. Small pieces of broken asphalt and concrete were observed scattered throughout the property. The majority of the asphalt and concrete, however, was piled in several mound areas on the property. The surface of the ground appeared to have been recently earth raked, and only small amounts of dried vegetation was present.

A portion of the subject property, along the eastern property boundary, is covered with numerous pieces of junk yard type material, which has overlapped onto the subject property from the

adjacent site. The type of material generally found overlapping onto the property includes:

- * Automobiles and automobile parts
- * Various small containers of paint, lubricants and waste oil
- * Approximately fifty 55-gallon unlabeled drums, some of which were empty, half-full or full
- * Used automobile batteries
- * Various types of old appliances
- * Scrap metal

During the site visit, TRC personnel conducted an interview with Mr. Nick Tesse, a friend of the owners of the adjacent property, who were storing the junkyard type material on a portion of the subject property. Mr. Tesse stated that the debris has been stored on the subject property for approximately three months and that he and the owners of the property were in the process of removing the debris off of the subject property. He stated that some of the debris will be sold as scrap metal. During the site visit, some of the debris was in the process of being moved off the subject property. Mr. Tesse stated that their facility was once the location of Able Construction, which was mostly involved in roofing construction. Mr. Tesse stated that the 55-gallon drums at their site contained roof tar. Mr. Tesse further stated that a gravity fed above ground storage tank, being stored just to the east of the subject property boundary, has been on the adjacent property for approximately 3-4 years, and remains empty.

Most of the materials which were stored on the portion of the subject property did not appear to pose a serious environmental concern to the subject property. However, four small areas of surface staining, covering an area of approximately 25 square feet were observed on the subject property. The surface staining appeared as a direct result of minor spilling or leaking of motor oil. Mr. Tesse stated that the minor staining observed was as a result of leaking of oil from company vehicles. The stains appeared to be at least a few inches below the ground surface. Other areas of potential environmental concern were not observed, because of the large amounts of junk yard material overlapping onto the subject property. As this material is removed, any ground surface spill areas may then be observed.

During the on-site visit, TRC personnel looked for, but did not find, evidence of the following:

- Surface impoundments,
- Water or monitoring wells,
- Visual evidence of surface-water run-on or runoff,
- Underground storage tanks and their associated piping,
- Treatment or disposal operations of hazardous materials and/or wastes,

- Odors, and
- Transformers.

6.3 Study Area Reconnaissance

Reconnaissance of the study area (i.e., the off-site area within a one mile radius of the subject property) was performed on September 28, 1990, by TRC personnel. Observations were made while walking and driving by on public streets.

The area within a one mile radius, as shown in Plate 1, is characterized by industrial or light commercial activities to the east and south, mobile home parks to the north, and vacant property to the west. Beyond the vacant property (approximately one half mile) are industrial complexes beginning with 1581 Industrial Parkway West. This complex consists of a building and an uncovered fenced storage area. The complex has several tenants including; G & C Truck Repairs, Smith & Denison, Middleton Welders Supply, California Brake and Clutch, and R & R Oil. Further east is the Bay Area Petroleum Company which sells Shell Oil Products. Bay Area Petroleum has drum storage facilities and several fuel islands indicating the presence of underground tanks.

Industrial storage areas are located about one half mile to the east-northeast of the subject property. One is operated by Silva's Pipeline, Inc. for the storage of cement pipes and construction vehicles. Another is operated by A-1 Sanitation Company, and is used to store portable chemical toilets, some cars, and an unburied underground tank.

The Valle Vista Pump Station for the City of Hayward Wastewater Treatment Plant sewer line was observed to the southwest of the subject property, across Stratford Road. The station was completely fenced, and TRC did not observe any visual indications of hazardous material storage or mismanagement. TRC spoke with Mr. Bill Algire, City Engineer with the City of Hayward Engineering Department. Mr. Algire stated that none of the sewer lines which feed into the pump station are located on the subject property.

Small leased offices/warehouses are located to the south of the subject property, across Industrial Parkway West.

The Georgian Manor - A Mobile Home Community, is located to the north of the subject property. An unlined storm drain with water and flourishing vegetation was observed to the west of the vacant undeveloped land, owned by Balch Enterprises, Inc., across Stratford Road. The drain which is under the authority of the Alameda County Flood Control Water Conservation District, empties into Alameda Creek about one half mile south of the subject property.

6.4 Review of Records

The discussion presented in this section is based on available information provided by government agencies. Occasionally, this information is limited or incomplete and may not accurately reflect the status of properties within the study area. Because of this, in addition to reviewing agency lists of sites that have had reported problems with hazardous materials, TRC personnel followed up with a review of agency files for further information on these sites. TRC also contacted agency personnel for information on additional sites that have been identified, but have not yet been placed on these lists, and for information on areas of potential environmental concern that may not be covered by the available lists. A list of the agency representatives who were contacted is presented in Appendix A; files and documents that were examined are referenced in Section 9.0 Bibliography.

6.4.1 Agency List Review

TRC reviewed and evaluated the following regulatory agency lists to ascertain if the subject property is listed as having environmental concerns and to assess if off-site facilities within the study area may have the potential to impact the site.

- A. U.S. Environmental Protection Agency (USEPA) National Priorities List (NPL) for Uncontrolled Hazardous Waste Sites, March, 1989

The NPL provides a list of Federal Superfund Sites that are primarily ranked based on a numerical assessment of the site's risk to human health or the environment using the Hazard Ranking System.

No properties were listed within the one mile study area.

- B. USEPA Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS), May 10, 1989

CERCLIS provides information on businesses or properties that are in the Federal Superfund Program. Under this program, a business or property is identified and a preliminary assessment is performed to assess whether the site will be ranked for inclusion on the Federal Superfund list.

No properties were listed within the one mile study area.

- C. USEPA, List of All Enforcement Actions Taken Against Class I Violations in Alameda County, December 28, 1989

The List of Enforcement Actions Taken Against Class I Violations addresses hazardous waste management sites that have been investigated and found to be in violation of groundwater

monitoring, closure/post-closure, financial responsibility, Part B, compliance schedule, manifest, land ban, and other requirements.

No properties were listed within the one mile study area.

D. Expenditure Plan for the Hazardous Substance Cleanup Bond Act of 1984 (State Bond Expenditure Plan), January 1989

The Expenditure Plan contains a list of identified hazardous waste sites located throughout the State of California that have been targeted for cleanup by responsible parties, the California Department of Health Services (DOHS), or the USEPA. The plan was developed and is updated annually by the DOHS.

No properties were listed within the one mile study area.

E. Hazardous Waste and Substances Site List (Cortese List), June, 1989

The Hazardous Waste and Substances Site List is consolidated by the California State Office of Planning and Research. It provides information concerning identified hazardous waste/substance sites within the State of California, from data supplied by the State Water Resources Control Board, The California Waste Management Board and the DOHS.

Twenty-one properties were identified within the one mile study area. These properties are listed in Table 1. None of the properties are within a quarter mile of the subject property.

F. DOHS Abandoned Sites Lists, October 1988

The DOHS Abandoned Sites List provides information concerning past and present potential hazardous waste sites that could be considered potential State Bond Expenditure Plan sites. This list was generated in the early and mid 1980's by conducting very general overviews of sources which included telephone books. Consequently, this list is not considered as an accurate final source of information, but as a preliminary first review.

Twelve properties were identified within the one mile study area. These properties are identified within Table 1.

G. RWQCB Fuel Leaks List for Alameda County, November 3, 1989

The RWQCB Fuel Leaks List for Alameda County provides a list of site names, addresses and types of reported fuel leaks from underground storage tanks.

Twenty properties were identified within the one mile study area. These properties are identified within Table 1.

H. RWQCB North Bay Toxics Cases, January 23, 1990

The RWQCB North Bay Toxics List provides a list of cases included in the RWQCB Site Management System for Alameda County.

Two properties were identified within the one mile study area. These properties are identified within Table 1. Both of these properties are not within a quarter mile radius of the subject property.

I. State Water Resources Control Board, Leaking Underground Storage Tank Information System (LUSTIS), January 1988

LUSTIS consists of reported underground storage tank releases within California, that required any emergency response. These types of releases account for less than two percent of all reported releases.

Fifteen properties were identified within the one mile study area. These properties are identified in Table 1. None of them are within a quarter mile radius of the subject property.

7.0 DISCUSSION

7.1 On-site Status

TRC reviewed a Preliminary Soil Investigation report (Terrasearch 1984) conducted in June 1984, for the subject property. The report stated that an unknown amount of fill material was dumped on the property, resulting in an uneven ground surface, in an otherwise flat-lying region. The majority of the fill is located along the western and southern property boundaries. The fill material was measured at a maximum of 7 feet below the ground surface during exploratory drilling of 6 boreholes on the property. The natural subsurface soils encountered during the exploratory drilling are generally uniform, consisting of brown silty clay, overlying fine clayey sand and sandy, gravelly clay. During exploratory drilling of the 6 boreholes, groundwater was encountered from 6-16 feet below the ground surface on the property.

From TRC's site visit it appeared that there was imported soil material on much of the subject property. The soil material, which contained debris which included small pieces of broken concrete and asphalt, had been somewhat leveled. In an effort to obtain more information on the source of the soil material and debris, TRC contacted Mr. Pat Perreira, General Manager of Double D Transportation. Mr. Perreira stated that in 1984, Double D Transportation was contracted by Mr. John Rassier to level the soil and debris material on the subject property. The work also involved separating the larger chunks (greater than 12 inches) of

Table 1

Listed Properties Within a One
Mile Radius of the Subject Property

Site name	Address	Dir.	Lists					
			E	F	G	H	I	
1. ADN Corp.	29001 Hopkins	SW	X		X			X
2. Valley Pet Supply	30845 Huntwood	SE	X		X			
3. Redgwick Const Co.	25599 Huntwood	SE		X				
4. Smiser Freight	2340 Industrial Pk	SW	X		X			
5. American Pipe Proc.	29901 Industrial Pk	S	X		X			X
6. Bay Ford Tractors	975 Industrial Pk	E	X		X			
7. B.A.R.T.	500 Industrial Pk	E		X				
8. Alpha Termite Control	727 Industrial Pk	E		X				
9. Ameron Inc.	29901 Indust. Pk SW	SW		X				
10. Holdener Petroleum	1565 Indust. Pk SW	SE		X				
11. C.R. Sheldrake Co.	749 Indust. Pk West	E		X				
12. Bay City Auto Auct.	Industrial Way	S	X		X			X
13. Rotten Robbie	720 W. Tennyson	N	X		X			X
14. Kayo(Jet Gasoline)	438 W. Tennyson	NE	X		X			X
15. Shell	1097 W. Tennyson	NW	X		X			
16. Mobile	1109 W. Tennyson	NW	X		X			
17. Reynolds Aluminum	2425 Whipple	S	X				X	X
18. Crescent Truck Lines	2480 Whipple	S	X		X			X
19. Mobile	2492 Whipple	S	X		X			
20. J & R Warehouse	31281 Wiegmann	SE	X	X	X			X
21. FGP Laundry (formerly Wiegmann Farms)	31177 Wiegmann	SE		X			X	
22. Lews Diesel Repair	29318 Pacific	NE	X		X			X
23. Duncan & Sons Petro.	29303 Pacific	NE	X	X	X			X
24. G.N.B. Corp.	29393 Pacific	NE		X				
25. Hayward Pallet Co.	29270 Pacific	NE		X				
26. Intern'l Window	30526 San Antonio	E	X		X			X
27. GI Trucking	30542 San Antonio	E	X		X			X
28. A&J Elect. Cable	30608 San Antonio	E	X		X			X
29. Hormel Co.	30611 San Antonio	E	X		X			X
30. Valley Pet Supply	1209 Zepher	SE	X		X			X
31. J.T. Baker Chemical	1995 Zepher	SE		X				

-
- All sites are within the City of Hayward
 - Lists letter codes correspond to text
 - Site number codes corresponds to Plate 3

debris into piles on the property. Mr. Perreira stated that the subject property obtained the soil and debris material from numerous construction sites in the area, and the site was known to be a dumping area for these types of materials. Mr. Perreira further stated that he is not aware of the exact origin of the soil and debris material.

TRC reviewed regulatory agency lists, and interviewed regulatory agency personnel, but did not obtain information that would indicate that the subject property has known (reported) levels of contamination.

Review of the aerial photographs revealed what may have been some type of soil disturbance during the 1940's to 1960's which may have been the result of agricultural activities. Conversations with Mr. Jim Newey, Deputy Agricultural Commissioner with the Alameda County Agricultural Commissioners Office revealed that the area may have been used for growing grain crops. If this were the case, Mr. Newey did not think that pesticides would generally have been used, due to the poor economics of the crop.

7.2 Off-site Status

Discussions with regulatory agency personnel along with the review of listed sites did not identify regional environmental contamination problems. Because of the industrial zoning and usage of the area, and associated use of hazardous materials, there have been documented localized contamination problems, generally associated with tank leaks. The primary concern in assessing potential groundwater contamination at the subject property from leaking underground storage tanks (USTs) in the vicinity, is the location of the UST in respect to the direction of groundwater flow. The regional groundwater flow direction is primarily to the west-southwest, towards San Francisco Bay. Therefore, leaks that could occur from USTs at facilities located hydrologically downgradient or crossgradient of the subject property should be less likely to impact the subject property than leaks that might occur from USTs at facilities located directly hydrologically upgradient. It is possible, however, for local anomalies, such as the presence of creeks, wells, or variations in geologic conditions, to affect the regional groundwater flow direction.

TRC identified 31 sites within the one mile radius of the subject property. Nineteen of these sites appear to be located downgradient or crossgradient with respect to groundwater flow direction, at distances that probably result in no or a minimal risk to the subject property. This opinion is based on our judgement that if groundwater is contaminated from activity on these sites, the contaminated groundwater would not be expected to flow under the subject property. These sites are identified in Table 1 as sites 1,2,3,4,5,9,10,12,13,14,15,16,17,18,19,20,21,30, and 31.

The remaining twelve sites appear to be located hydrologically upgradient of the subject property. These sites are identified as 6,7,8,11,22,23,24,25,26,27,28, and 29, and are listed in Table 1. Six of the sites, which appear to be hydrologically upgradient sites (7,8,11,23,24, and 25), only appeared on the DOHS Abandoned Sites List and were categorized as "no further action". This status means that the DOHS preliminary assessment investigation found no information indicating that hazardous substances/wastes contaminated the environment. The remaining six sites (6,22,26,27,28, and 29) are discussed in the following paragraphs.

6. Bay Ford Tractors, 975 Industrial Parkway

A waste oil leak was discovered in June 1987 while removing a 300 gallon waste oil tank. Approximately ten 55-gallon drums of contaminated soil was also removed from the site at that time (Blymer 1988). The most recent round of groundwater sampling data available in RWQCB files were conducted on November 11, 1989. Samples collected from two on-site monitoring wells revealed an absence of benzene, toluene, ethylbenzene, and xylenes (BTEX), total petroleum hydrocarbons (TPH), and oil and grease. California Assessment Manual metals were either absent or at levels indicative of background levels (Delta 1989). Based upon this information, TRC believes that there is a low potential for contamination from the Bay Ford Tractors site to reach the subject property.

The remaining five sites are discussed briefly in the following paragraphs. TRC did not find information indicating that contamination from these sites is likely to impact the subject property.

22. Lews Diesel Repair, 29318 Pacific

Two 1,000 gallon steel USTs used for storing diesel fuel, were removed in June of 1985. The excavation backfill was noted as being very odorous and both water and soil samples were collected. No further information on this site was readily available in the fuel leaks files at the RWQCB.

26. International Window, 30526 San Antonio

In 1986 Exceltech installed groundwater monitoring wells in the vicinity of two 10 to 14 year old 7,500 gallon fiberglass USTs. A sheen of fuel was detected on the groundwater at a depth of 15 feet. Fuel product was also observed on the soil. Sample analysis resulted in the detection of Hydrocarbons at 840 parts per million (ppm). In an April 1988 letter, Ms. Danielle Ruchonnet of the City of Hayward Fire Department, required that a closure plan and permit application for tank removal be obtained. The tanks were subsequently pumped out. No further information of remediation or tank removal was available in the RWQCB fuel leak files.

27. GI Trucking, 30542 San Antonio

The files were missing at the RWQCB.

28. A & J Electric Cable, 30608 San Antonio

The files were missing at the RWQCB.

29. Hormel Co., 30611 San Antonio

On February 19, 1988 a 10,000 gallon fiberglass UST used for storing diesel fuel was removed by Environmental Technology. A subsurface investigation and laboratory analysis was completed in May of 1988 in which Environmental Technology concluded that "No detectable levels of total petroleum hydrocarbons (TPH) - diesel were in groundwater, and that no significant levels of TPH - diesel were found in soil.

8.0 CONCLUSIONS AND RECOMMENDATIONS

Off-Site:

Although there are many sites within a one mile radius that appear on various government hazardous materials or toxics lists, none seem to directly threaten the subject property. Several of the listed sites were investigated and found not to be a threat to the environment. Several of the sites are not located hydrologically upgradient of the subject property (contamination of the project site via groundwater transport of chemicals is thought to be the most probable means of environmental contamination). The few sites, which appear to be located hydrologically upgradient of the subject property, are a significant distance (1/2-1 mile) away, and the degree to which they pose a threat to groundwater at the subject property is small.

Imported Fill:

There is no known source of the imported fill material located on the subject property. The site visit revealed that numerous chunks of concrete and asphalt (construction debris) have been dumped on the property in the past. This type of debris suggests that the material may have been dumped on the property from construction site areas. Should the property be developed industrially, the unknown source of the imported fill material is not as much of an exposure issue, versus if it is developed residentially. Industrial development would tend to cover the areas around the buildings in asphalt and minimize human exposure versus residential where contact with the soil in yards would be probable. If residential use is intended, TRC recommends that shallow soil

samples be collected and analyzed for petroleum hydrocarbons, organic chlorine pesticides, PCBs, and priority pollutant metals to determine the presence or absence of hazardous materials on the property.

Junkyard Debris:

During the site visit, four small areas of surface staining were observed on a portion of the subject property, which appeared as a direct result of minor spilling or leaking of motor oil. Although the staining in these areas appear superficial, other areas of potential staining could not be observed due to the junkyard debris covering the ground surface on that portion of the property. TRC recommends that after the junkyard material is removed from the property, that another site visit be scheduled to observe any additional environmental concerns for the property.

Note: A report was prepared for Lawrence
Preservation regarding these stains.
~~the~~ TRC should look
at that report.

9.0 BIBLIOGRAPHY

Blymer 1988. Final Report to B.W. Properties for 975 Industrial Parkway West, Hayward, California. Blymer Engineers, Inc. September 1988

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_____, Expenditure Plan for the Hazardous Substance Cleanup Bond Act of 1984, January 1989.

California State Office of Planning and Research, Hazardous Wastes and Substances Site List (Cortese List), June 1989.

Delta 1989. Development Water from Monitoring Wells, Bay Ford Tractor, 975 Industrial Parkway West, Hayward, California. Delta Environmental Consultants, Inc. February 1989.

DOHS - see California Department of Health Services

HLA 1987. GroundWater Investigation for Dewatering Planned New Gravel Quarry, Sunol, California. Harding Lawson Associates. 8/11/87.

Hart 1989. Phase I Environmental Assessment of the Vacant Property on Addison Way in Hayward, California. Fred C. Hart Associates, Inc. November 1989.

IT 1986. Report of Underground Storage Tank Monitoring Program Established for Reynolds Aluminum Company, San Francisco Can Plant, Hayward, California. IT Corporation. 4/86.

Regional Water Quality Control Board, Fuel Leaks List for Alameda County, November 3, 1989.

_____, North Bay Toxics Cases (as of January 23, 1990).

RWQCB - see Regional Water Quality Control Board

State Water Resources Control Board, Leaking Underground Storage Tank Information System (LUSTIS), January 1988

SWRCB - see State Water Resources Control Board

Terrasearch 1984. Preliminary Soil Investigation on Proposed Commercial/Industrial Site, Russ Lane and Stratford Road, Hayward, California. Terrasearch, Inc. 6/84.

USEPA - see U.S. Environmental Protection Agency

U.S. Environmental Protection Agency, National Priorities List for

Uncontrolled Hazardous Waste Sites; March 1989.

_____, Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS), May 10, 1989.

_____, List of All Enforcement Actions Taken Against Class I Violations in Alameda County, December 28, 1989.

United States Geological Survey, 7.5 Minute Topographic Maps, Newark and Hayward Quadrangles, Photo Revised 1980.

**Appendix A
Personnel Contacted**

Name, Title/Position: Thane Sendejaz, Planning Technician
Agency: City of Hayward Planning Department
Phone: 415-581-2345 **Date:** 10/2/90

Name, Title/Position: Rich Rohrer, Permit Engineer
Agency: City of Hayward Department of Streets and
Sewers
Phone: 415-581-2345 **Date:** 1/30/90

Name, Title/Position: Kelvin Hickenbottom, Civil Engineer
Andreas Godfrey, Assistant Geologist
Agency: Public Works Agency of Alameda County
Phone: 415-670-5575 **Date:** 1-31-90, 2-1-90

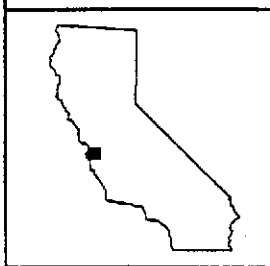
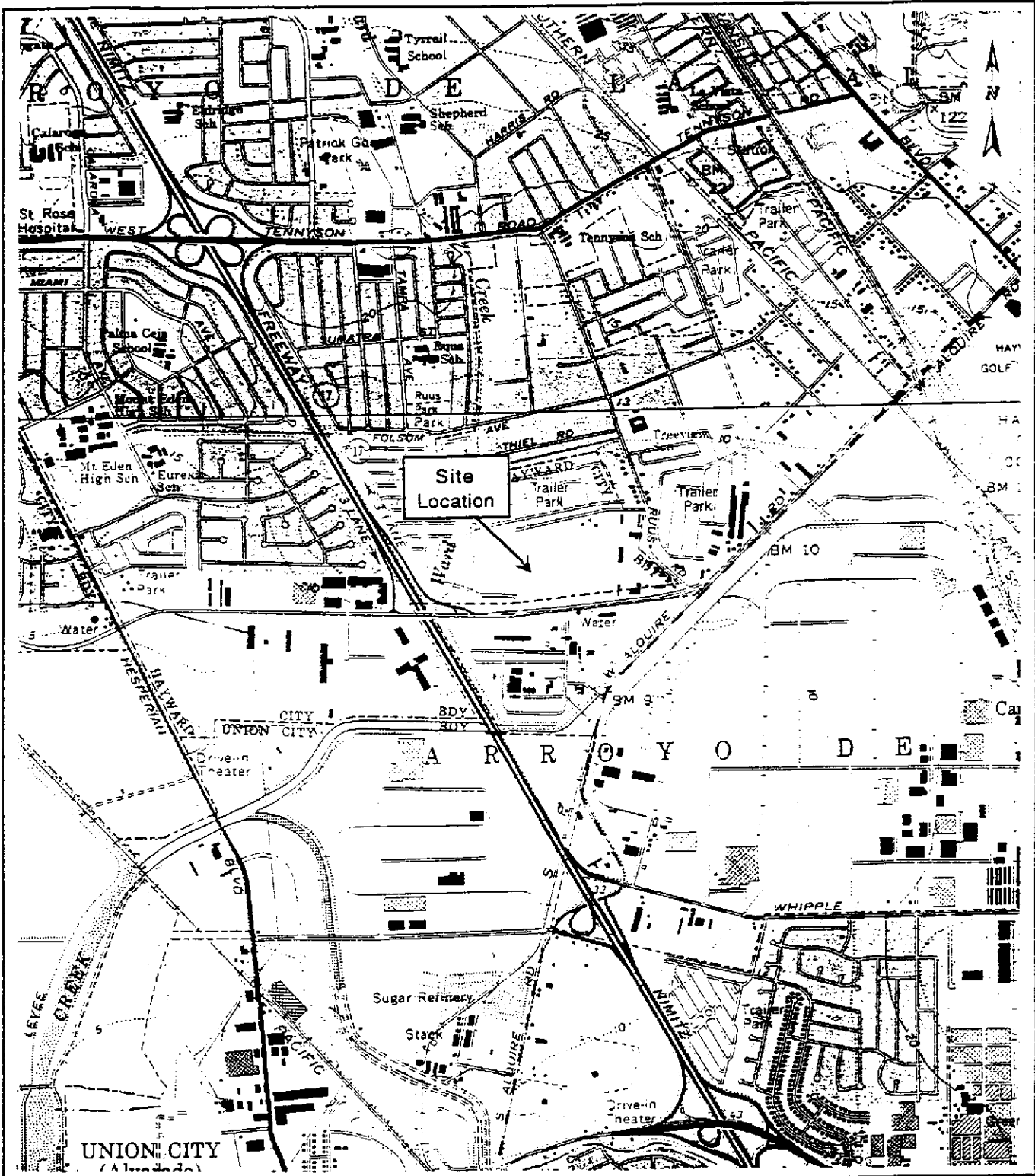
Name, Title/Position: Jim Lundgrin, Deputy Director of Public Works
Agency: City of Hayward - Water Department
Phone: 415-784-8650 **Date:** 1-30-90

Name, Title/Position: Nick Tesse
Agency:
Phone: 415-794-6150 **Date:** 9/28/90

Name, Title/Position: Bill Algire, City Engineer
Agency: City of Hayward, Engineering Department
Phone: 415-782-8218 **Date:** 9/28/90

Name, Title/Position: Pat Perreira, General Manager
Agency: Double D Transportation
Phone: 415-783-2334 **Date:** 10/2/90

Name, Title/Position: Jim Newey, Deputy Agricultural Commissioner
Agency: Alameda County Agricultural Commissioner
Phone: 415-670-5232 **Date:** 2-1-90



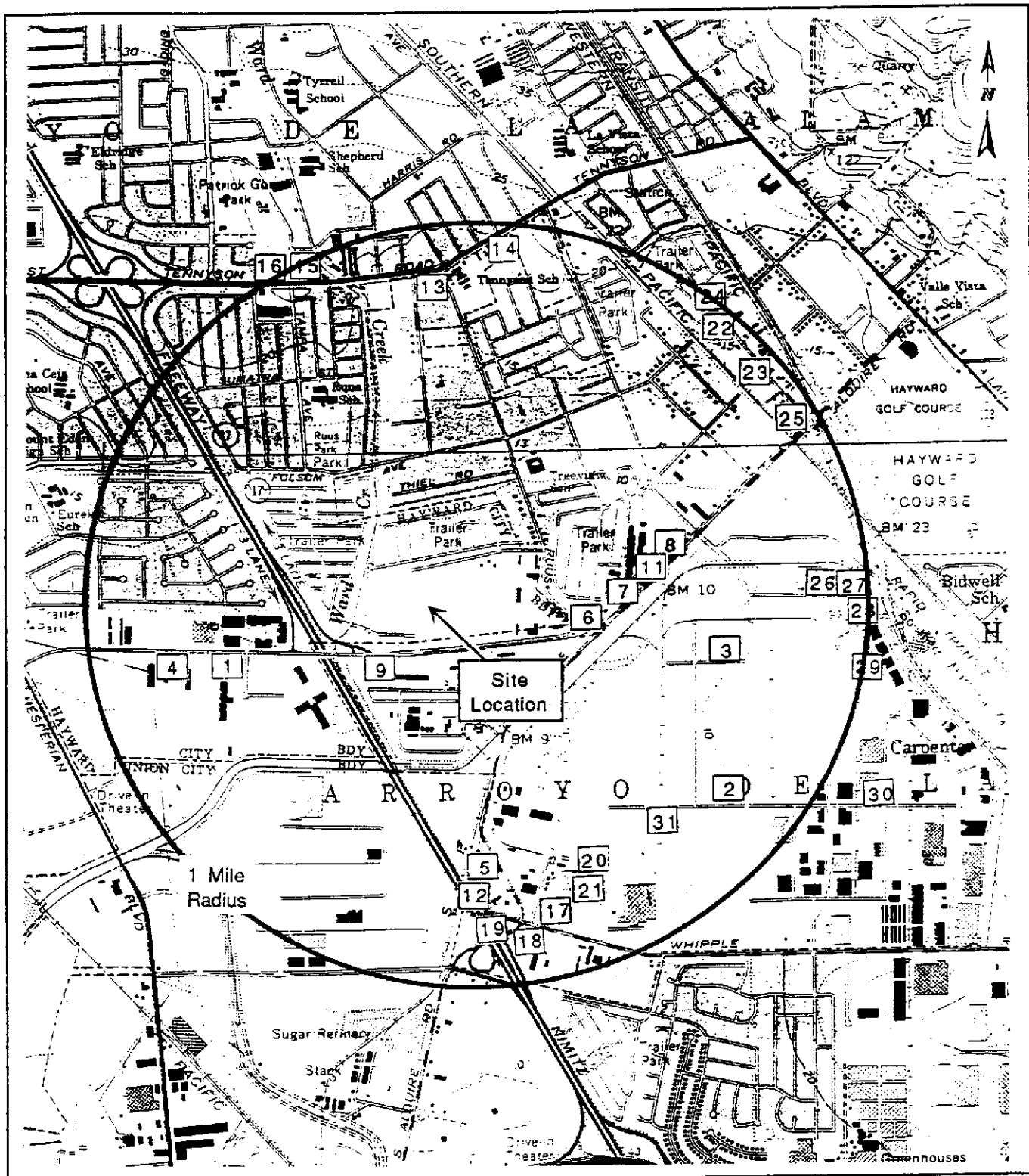
0 1/2
 Statute Miles

USGS 1: 24,000 SCALE
 HAYWARD, NEWARK
 QUADRANGLE TOPOGRAPHIC MAPS

VICINITY MAP

NORTHEAST CORNER OF INDUSTRIAL
 PARKWAY WEST AND STRATFORD ROAD
 HAYWARD, CALIFORNIA

8565-P710-00 PLATE 1



0 1/2
 Statute Miles

USGS 1: 24,000 SCALE
 HAYWARD, NEWARK
 QUADRANGLE TOPOGRAPHIC MAPS

VICINITY MAP AND LISTED SITES

NORTHEAST CORNER OF INDUSTRIAL
 PARKWAY WEST AND STRATFORD ROAD
 HAYWARD, CALIFORNIA

8565-P710-00 PLATE 2

Georgian Manor
Mobile Home Community

Ruus Lane



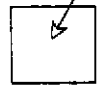
Vacant
Undeveloped Land

Stratford Road

Junk Yard
Property

Pacheco Way

City of Hayward
Lift Station



Vacant
Undeveloped Land

Industrial Parkway West

Car Storage
Company

Small Offices and Warehouses

EXPLANATION

Subject Property
Boundary



0 200



Junk Yard
Material Overlap



Approximate Scale
(Feet)

SITE MAP

NORTHEAST CORNER OF INDUSTRIAL
PARKWAY WEST AND STRATFORD ROAD
HAYWARD, CALIFORNIA

8565-P710-00

PLATE 3

**DISTRIBUTION
PHASE I PRELIMINARY HAZARDOUS MATERIALS SITE ASSESSMENT
ADDRESS**

COPY NO. ____

Copy No.

1 copy: Rassier Properties
201 N. Hartz Avenue, Suite 0
Danville, California 94526

Attention: Mr. John Rassier

1 copy: East Hartford

1 copy: Project File

8565P710.500

FEB 14 1994

HAYWARD FIRE DEPARTMENT

CERTIFICATION

1994

1088

POSTED

HAZARDOUS MATERIALS INVENTORY STATEMENT (HMIS)

I hereby certify that I have reviewed the last Hazardous Materials Management Plan submitted to the Hayward Fire Department for

A-1 SANITATION

(Name of Facility)

1356 RVUS LANE HAYWARD

(Address of Facility)

and have determined that:

the hazardous materials inventory has not substantially changed, and the last Hazardous Materials Management Plan submitted, including the Hazardous Materials Inventory Statement, is still accurate.

I certify further that, under penalty of perjury, the information contained in this certification and any documents referred thereto is, to the best of my knowledge and belief, true, accurate, and complete.

Signature

B. Tally

Printed Name & Title

~~JEFFREY~~ B. TALLYN PRES

Date signed

2-10-94

1002

H M M P

Posed 52
9-7-93

(HAZARDOUS MATERIALS MANAGEMENT PLAN)

Prepared and submitted to the Hayward Fire Department in fulfillment of reporting requirements contained in the following laws, codes, and ordinance:

- (a) Federal Superfund Amendments and Reauthorization Act of 1986 (SARA Title III);
- (b) Chapter 6.95 of the California Health and Safety Code;
- (c) Title 19 of the California Code of Regulations;
- (d) Chapter 3, Article 8 of the Hayward Municipal Code; and
- (e) Article 80 of the Uniform Fire Code as adopted by the State of California and the City of Hayward.

RECEIVED BY
HAZARDOUS MATERIALS OFFICE
SEP 03 1993
HAYWARD FIRE DEPARTMENT

REPORTING YEAR 1993
for

FACILITY ADDRESS: 1356 RUDS LANE

Hayward, CA ZIP: _____

FACILITY NAME: A-1 SANITATION CO

Section I - CERTIFICATION

I hereby certify under penalty of perjury that the information contained in this Hazardous Materials Management Plan is, to the best of my knowledge, true, accurate, and correct. I understand that I may be required to show proof of compliance with all City, County, State, and federal laws and regulations during any facility inspection conducted by City, County, State, or Federal authorities.

I further certify that I am duly authorized to execute this certification on behalf of the business or facility named above.

Authorized Signature:

Printed Name and Title: G B TALLYN

Date Signed: 9-3-93

HAZARDOUS MATERIALS MANAGEMENT PLAN

Section II FACILITY IDENTIFICATION

1. Enter the full name of the business, as registered.	1. Name of Facility <u>A-1 SANITATION CO</u>
2. Enter actual location of facility including suite number(s) and zip code. Do not give P.O. Box address.	2. Facility Address <u>1356 RUSSELL LANE</u> <u>HAYWARD</u>
3. Complete only if different from "Facility Address."	3. Mailing Address <u>SAME</u>
4. Enter telephone number for the facility, at the actual address given in #2 above.	4. Facility Telephone Numbers <u>1 800 752 6966</u>
5. Enter name of business owner, general manager, or chief executive officer, and his/her telephone numbers.	5. Executive/Administrative Contact <u>G B TALLYN</u> Telephone No. <u>1 800 752 6966</u> (During business hours) Telephone No. <u>769 2031</u> (After business hours)

Section III BUSINESS INFORMATION

1. Give a brief description of products, processes and other business/industrial activities done in this facility.	1. Nature of Business <u>PORTABLE TOILETS</u>															
2. Operating Hours: Circle the days and enter the hours the facility is open for business and the total number of employees in the facility during those hours.																
Days Open	<table style="width: 100%; text-align: center;"> <tr> <td style="border-bottom: 1px solid black;"><u>Day Shift</u></td> <td style="border-bottom: 1px solid black;"><u>Swing Shift</u></td> <td style="border-bottom: 1px solid black;"><u>Night Shift</u></td> </tr> <tr> <td style="border-bottom: 1px solid black;"><u>MTWTFSS</u></td> <td style="border-bottom: 1px solid black;"><u>NONE</u></td> <td style="border-bottom: 1px solid black;"><u>NONE</u></td> </tr> <tr> <td style="border-bottom: 1px solid black;"><u>7 to 5</u></td> <td style="border-bottom: 1px solid black;"><u>to</u></td> <td style="border-bottom: 1px solid black;"><u>to</u></td> </tr> <tr> <td style="border-bottom: 1px solid black;"><u>4 ON SITE</u></td> <td style="border-bottom: 1px solid black;"><u>to</u></td> <td style="border-bottom: 1px solid black;"><u>to</u></td> </tr> <tr> <td style="border-bottom: 1px solid black;"><u>11 OFF SITE (DRIVE TRUCKS)</u></td> <td style="border-bottom: 1px solid black;"><u>to</u></td> <td style="border-bottom: 1px solid black;"><u>to</u></td> </tr> </table>	<u>Day Shift</u>	<u>Swing Shift</u>	<u>Night Shift</u>	<u>MTWTFSS</u>	<u>NONE</u>	<u>NONE</u>	<u>7 to 5</u>	<u>to</u>	<u>to</u>	<u>4 ON SITE</u>	<u>to</u>	<u>to</u>	<u>11 OFF SITE (DRIVE TRUCKS)</u>	<u>to</u>	<u>to</u>
<u>Day Shift</u>	<u>Swing Shift</u>	<u>Night Shift</u>														
<u>MTWTFSS</u>	<u>NONE</u>	<u>NONE</u>														
<u>7 to 5</u>	<u>to</u>	<u>to</u>														
<u>4 ON SITE</u>	<u>to</u>	<u>to</u>														
<u>11 OFF SITE (DRIVE TRUCKS)</u>	<u>to</u>	<u>to</u>														

2. Check the appropriate box to answer the question. The materials referred to are listed in the attached Appendix A - List of Extremely Hazardous Substances and their threshold quantities as published and amended by the Federal EPA. This is the same list referred to as "Acutely Hazardous Materials" by the State of California in Section 25533, Chapter 6.95 of the Health and Safety Code.

2. Do you handle or store Federally-listed Extremely Hazardous Substances or State-listed Acutely Hazardous Materials in quantities greater than the Threshold Planning Quantities (TPQ) given in Appendix A?

Yes No

3. Check the appropriate box to answer the question.

3. Is there any school, hospital, or extended-care facility within 1,000 feet (straight line distance) of your facility?

Yes No

4. Check the appropriate box to answer the question. (Comparable installations refer to halon systems, foam systems, etc. Portable fire extinguishers are NOT considered comparable to sprinkler systems.)

4. Is your building equipped with a sprinkler system, or other comparable fire protection installation?

Yes No

Section V - PROPERTY AND LAND USE INFORMATION

1. Enter property owner's name.

~~G B TALLYN~~

1. Property Owner's Name

G B TALLYN

2. Enter property owner's mailing address.

2. Property Owner's Mailing Address

P.O. Box 7166

SOUTH SAN FRANCISCO CA 94068

3. Enter property owner's telephone number

3. Property Owner's Telephone Number

769 2031

4. Adjacent Properties

Enter names of businesses, contacts, and telephone numbers on adjacent properties.

(a) NORTH

(b) EAST

Business: GEORGIA MANDA MOBIL HOME
 Contact: _____
 Phone: _____

DRIVE WAY + PARKING
TIMER
 Business: RENE MAXIATE REAL ESTATE
 Contact: _____
 Phone: _____

(c) SOUTH

(d) WEST

Business: VACANT LAND
 Contact: _____
 Phone: _____

Business: VACANT LAND
 Contact: _____
 Phone: _____

<p>3. Enter Standard Industrial Classification (SIC) code number for the primary process/activity done in this facility - A copy of the 1987 SIC Manual is available in the Hayward Library.</p>	<p>3. SIC Code <u>4952</u></p>												
<p>4. Enter the Dun and Bradstreet number for this business. If not known, call Dun and Bradstreet in Pennsylvania at (215) 391-1886</p>	<p>4. Dun and Bradstreet Number <u>DO NOT RELEASE INFO TO THEM</u></p>												
<p>5. Enter Business License number issued by the City of Hayward to this business.</p>	<p>5. Hayward Business License Number <u>113399</u></p>												
<p>6. List all other permits issued to this business facility by other regulatory agencies and the Hayward Fire Department. Examples of these agencies are: County Health Department; Water Pollution Control Facility; Environmental Protection Agency; Regional Water Quality Control Board; and Bay Area Air Quality Management District.</p>	<p>6. Permits relating to generation, storage, handling, treatment, transport, and disposal of hazardous materials and/or hazardous wastes:</p> <table border="1"> <thead> <tr> <th data-bbox="900 691 1230 734">Agency</th> <th data-bbox="1329 691 1528 734">Permit No.</th> </tr> </thead> <tbody> <tr> <td data-bbox="900 744 1230 808"><u>HAYWARD FIRE</u></td> <td data-bbox="1329 744 1528 808"><u>1088</u></td> </tr> <tr> <td>_____</td> <td>_____</td> </tr> <tr> <td>_____</td> <td>_____</td> </tr> <tr> <td>_____</td> <td>_____</td> </tr> <tr> <td>_____</td> <td>_____</td> </tr> </tbody> </table>	Agency	Permit No.	<u>HAYWARD FIRE</u>	<u>1088</u>	_____	_____	_____	_____	_____	_____	_____	_____
Agency	Permit No.												
<u>HAYWARD FIRE</u>	<u>1088</u>												
_____	_____												
_____	_____												
_____	_____												
_____	_____												
<p>7. If you have underground storage tanks, the Hazardous Materials Office has assigned you a Facility ID Number. Call (510) 293-8695 to confirm your Facility ID Number or obtain it from your underground storage tank registration forms.</p>	<p>7. Facility I.D. Number <u>NO UG TANKS</u></p>												

Section IV - FACILITY CONTACTS AND PLANNING INFORMATION

1. Emergency Contacts:

List names, titles, and contact telephone numbers of at least two individuals to notify in case of an emergency involving hazardous materials on this facility. The Primary Contact will be contacted first; and if he or she can not be reached, the Secondary Contact will be contacted instead.

(a) Primary Contact

Name G B TALLYN

Title PRES

Telephone No. 1 800 282 8988
(During business hours)

Telephone No. 769 2031
(After business hours)

(b) Secondary Contact

Name ARLENE GIBBLE

Title CLERICAL

Telephone No. 1 800 282 8988
(During business hours)

Telephone No. 732 9082
(After business hours)

Section VI - GENERAL SITE PLAN

On the space provided, or on a separate 8½ x 11 paper, draw a diagram that shows the location of the facility relative to adjacent streets, properties, and other buildings.

As a minimum, the map should contain the following features:

1. Indicate North direction on the top right hand corner of the page.
2. Draw to a legible scale, and indicate scale used.
3. Fill in facility name, address, and date that the map is prepared.

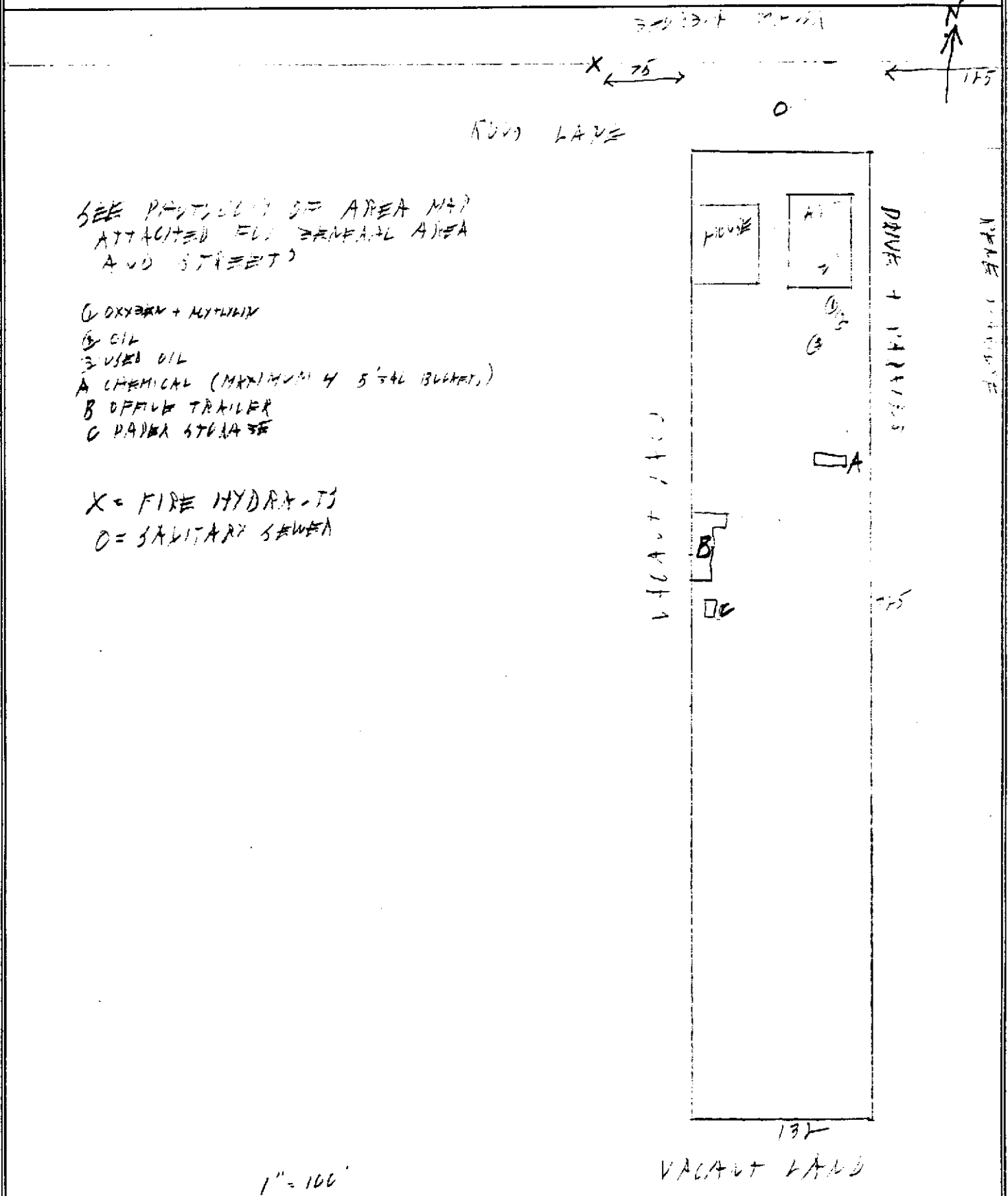
(If a separate page is submitted, it should also contain all the required information at the bottom of the page.)

4. Use additional, separate pages if a one-page map proves too complicated, cluttered, or cramped. Each additional page must be identified. Indicate how each part fits in to form the whole General Site Plan.
5. Show and label the locations of the following structures.

(A LEGEND may be included in the map in lieu of labels.):

- a. Buildings and other aboveground structures.
(Identify each building as a reference, using alphabets, starting with A, B, C, etc.)
- b. Underground storage tank locations. *NONE*
- c. On-site hydrants. *NONE*
- d. Off-site hydrants within 500 feet of facility boundaries. *SEE MAP*
- e. Fire protection systems auxiliary connections. *?*
- f. Emergency equipment.
- g. Permanent access ways and evacuation routes.
- h. Secondary containment areas outside any building.
- i. Equipment clearing areas.
- j. Loading areas.
- k. Internal roads.
- l. Parking lots.
- m. Property line.
- n. Adjacent properties/facilities.
- o. Adjacent streets.
- p. All groundwater wells. *NONE*
- q. Sanitary sewer drains. *SEE MAP*
- r. Storm drains.

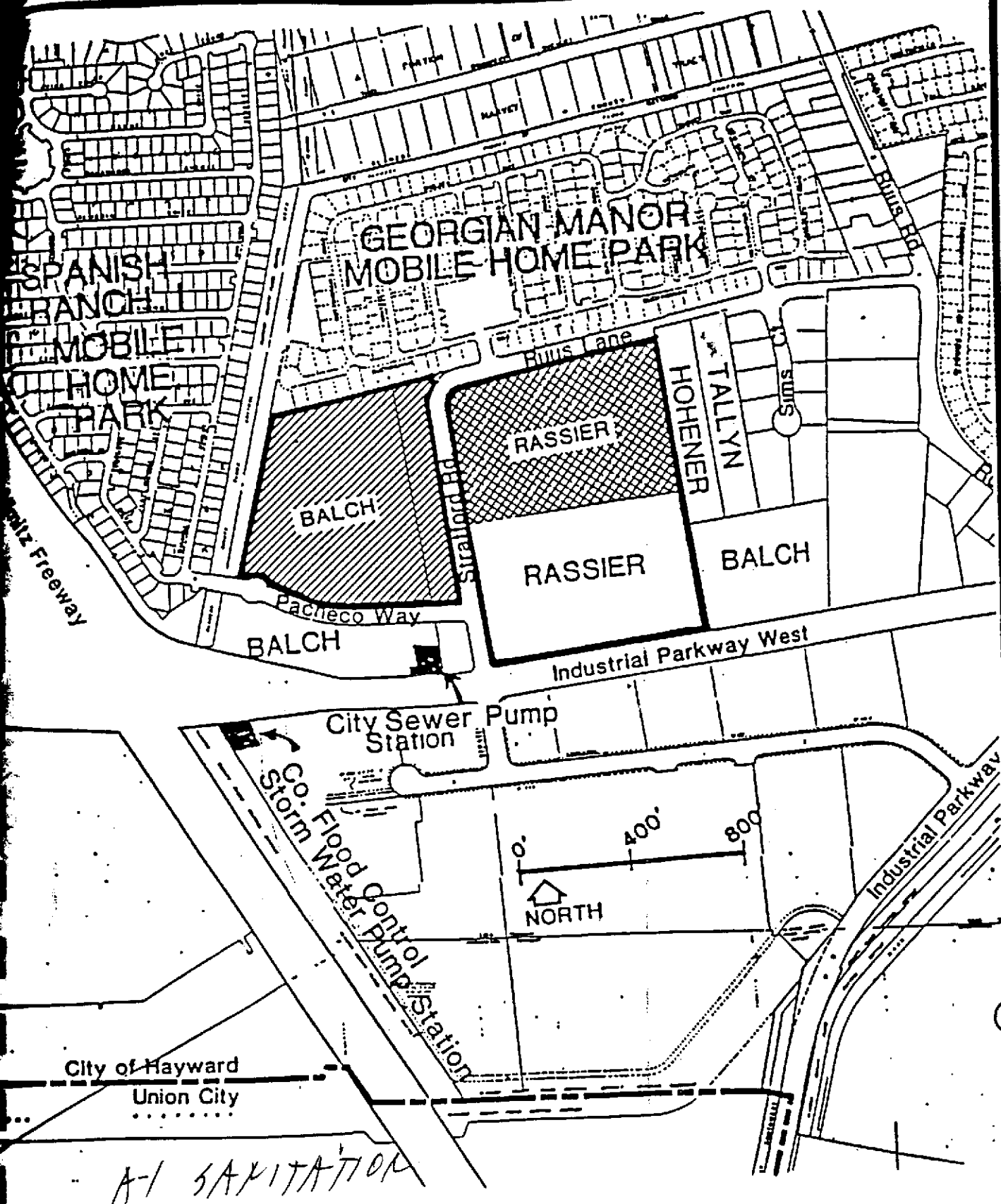
Section VI - GENERAL SITE PLAN



Address: 1356 RUVS LANE

Date Prepared: 9-2-93

Facility Name: A-1 SALVATIDE 10



A-1 SANITATION



AREA MAP TRACT 6472

Section VII - FACILITY STORAGE MAP

On the space provided, or on a separate 8½ x 11 paper, draw a diagram that shows hazardous materials storage areas inside and outside buildings. The Facility Storage Map should contain the following features: ~~NOTE~~ ~~TABLE~~

1. Designate each storage location with a letter corresponding to the building where it is located (or adjacent to) and a number (e.g., A-1, A-2, B-1, B-2, etc.). This location code should correspond to the location code entered in the Hazardous Materials Inventory Statement (HMIS).
2. Indicate North direction on the upper right hand corner of the page.
3. Draw to a legible scale and indicate scale use.
4. Fill in facility name, address, and date that the storage map is prepared.

(If separate pages are submitted, each page should also contain the required information at the bottom of the page.)

5. Use additional, separate pages if a one-page map proves too complicated, cluttered, or cramped. Each page must be identified. Indicate Building Numbers that correspond to those in the General Site Plan. Indicate also how each page fits in to form the whole Facility Storage Map.
6. Show and label the locations of the following features:
 - a. Aboveground and belowground tanks and pipelines containing hazardous materials. Indicate direction of flow and location of shut-off points. *NOTE*
 - b. Walls, rooms, doorways, corridors, exits, windows, and other access points. *N/A*
 - c. Production or process areas where hazardous materials are used. Indicate hazard class and quantity present in each area.
 - d. Emergency response apparatus equipment like foam generating equipment, SCBA, hoses, etc.
7. If known, indicate occupancy rating or classification of each room. (e.g., B1, B2, H1, H2, H7.) *N/A*
8. If applicable, label the drawing "**Confidential - Not for Disclosure.**"

**Section IX - SEPARATION, SECONDARY CONTAINMENT, AND
MONITORING OF STORAGE AREAS**

Part B - Underground Storage Tanks

NONE

Make copies of this page and complete one for each underground storage tank area defined in the facility storage map. Supply all information required in the boxes below. If you do not have underground storage tanks, write "NONE" after "Underground tank area location code."

Page _____ of _____

Underground tank area location code: _____
(as shown on facility map)

Storage area description or name: _____

1. Main monitoring method for tanks

- | | |
|--|--|
| <input type="checkbox"/> Groundwater monitoring wells | <input type="checkbox"/> Inventory Reconciliation |
| <input type="checkbox"/> Backfill vapor wells | <input type="checkbox"/> Secondary containment vault |
| <input type="checkbox"/> Precision test (<input type="checkbox"/> Monthly; <input type="checkbox"/> Annually) | <input type="checkbox"/> Continuous |
| <input type="checkbox"/> Annular space | <input type="checkbox"/> Daily |
| <input type="checkbox"/> Manual/mechanical | <input type="checkbox"/> Other: _____ |
| <input type="checkbox"/> Electronic | |

2. Main monitoring methods for piping

- | | |
|--|--|
| <input type="checkbox"/> Suction type system | <input type="checkbox"/> Pressurized piping |
| <input type="checkbox"/> In-line leak detector for piping | <input type="checkbox"/> Double-wall piping |
| <input type="checkbox"/> Tightness test (<input type="checkbox"/> Monthly; <input type="checkbox"/> Annually) | <input type="checkbox"/> Electronic leak-detection mode for complete tank and piping system. |

3. Additional comments on the monitoring program, if necessary:

Section IX - SEPARATION, SECONDARY CONTAINMENT, AND MONITORING OF STORAGE AREAS

Part A - Aboveground Storage Areas

Make copies of this page and complete one for each storage area defined in the facility storage maps. Check all applicable information given in the boxes below:

Page 1 of 1

Storage area location code: 1 J
(as shown on facility map)

Storage area description or name: 02-512E

1. Type of storage containers found in this area

- | | |
|---|--|
| <input type="checkbox"/> Original containers | <input type="checkbox"/> Safety cans |
| <input type="checkbox"/> Inside machinery | <input type="checkbox"/> Bulk tanks, storage |
| <input checked="" type="checkbox"/> 55-gallon drums <u>oil</u> | <input type="checkbox"/> Process tanks |
| <input checked="" type="checkbox"/> Pressurized vessels <u>OXYS₂</u> | <input type="checkbox"/> Other: _____ |

2. Describe storage area/location

- | | | |
|--|---|---------------------------------------|
| <input type="checkbox"/> Inside building | <input type="checkbox"/> Secured | <input type="checkbox"/> Storage shed |
| <input checked="" type="checkbox"/> Outside building | <input checked="" type="checkbox"/> Not secured | <input type="checkbox"/> Cabinets |
| <input type="checkbox"/> Other: _____ | | |

3. Separation of incompatible materials

- | | |
|---|--|
| <input type="checkbox"/> 20-ft. separation | <input checked="" type="checkbox"/> All materials compatible |
| <input type="checkbox"/> Approved cabinets | <input type="checkbox"/> Other: _____ |
| <input type="checkbox"/> One-hour separation wall/partition | |

4. Secondary containment

- | | |
|---|---|
| <input type="checkbox"/> None | <input type="checkbox"/> Secondary drums |
| <input type="checkbox"/> Approved cabinet | <input type="checkbox"/> Bermed, coated floor |
| <input type="checkbox"/> Tray/trough | <input type="checkbox"/> Double-wall tank |
| <input type="checkbox"/> Vaulted tank | <input type="checkbox"/> Other: _____ |

5. Monitoring

- | | |
|--|---|
| <input type="checkbox"/> None | <input type="checkbox"/> Periodic/regular |
| <input checked="" type="checkbox"/> Visual | <input type="checkbox"/> Continuous monitoring device |
| <input type="checkbox"/> Mechanical/electronic | <input type="checkbox"/> Other: _____ |

6. Monitoring frequency

- | | |
|---|---------------------------------------|
| <input checked="" type="checkbox"/> Daily | <input type="checkbox"/> Monthly |
| <input type="checkbox"/> Weekly | <input type="checkbox"/> Other: _____ |

Section X - WASTE DISPOSAL

List the types of wastes generated from this facility under each category. Enter 3-digit waste identification numbers from Appendix C - List of Common Wastes Regulated in California. Briefly describe the nature of the waste, and estimate quantity generated in one year.

A. Waste discharged directly to the sanitary sewer without pretreatment:

None

<u>California Waste ID No.</u>	<u>Description</u>	<u>Generated Per Year</u>	
		<u>Quantity</u>	<u>Units</u>
_____	_____	_____	_____
_____	_____	_____	_____

B. Waste discharged to the sanitary sewer after being processed through a facility treatment system:

None

<u>California Waste ID No.</u>	<u>Description</u>	<u>Generated Per Year</u>	
		<u>Quantity</u>	<u>Units</u>
_____	_____	_____	_____
_____	_____	_____	_____

C. Waste hauled off-site with Uniform Hazardous Waste Manifest, for treatment and/or disposal:

None

<u>California Waste ID No.</u>	<u>Description</u>	<u>Generated Per Year</u>	
		<u>Quantity</u>	<u>Units</u>
_____	_____	_____	_____
_____	_____	_____	_____

D. Waste recycled on-site or off-site:

<u>California Waste ID No.</u>	<u>Description</u>	<u>Generated Per Year</u>	
		<u>Quantity</u>	<u>Units</u>
<i>221</i>	<i>USED OIL</i>	<i>875</i>	<i>34L</i>
_____	_____	_____	_____
_____	_____	_____	_____

E. Other waste generated/disposal method:

<u>California Waste ID No.</u>	<u>Description</u>	<u>Generated Per Year</u>	
		<u>Quantity</u>	<u>Units</u>
_____	_____	_____	_____
_____	_____	_____	_____

Disposal Method: (Describe) _____

F. No waste generated:

- This facility does not generate hazardous waste, or other regulated wastes other than domestic sanitary waste.

Section XI - RECORD KEEPING

Check the applicable boxes to indicate record-keeping practices and records maintenance done in the monitoring of hazardous materials storage in this facility. These records should be made available to Hazardous Materials Investigators upon request.

- Inspection logs
- Recordable discharge logs
- Spill reports
- Cleanup reports
- Instrument printouts
- Test reports
- Hazardous waste manifests
- Waste shipping documents
- Wastewater discharge monitoring reports
- Inventory reconciliation
- Other: _____

ADDITIONAL COMMENTS, IF ANY: _____

Section XII - EMERGENCY RESPONSE PLAN AND PROCEDURES

State regulations (Title 19, CCR, Chapter 2, Subchapter 3, Article 4, Section 2731) require that business plans include emergency response procedures for a release or threatened release of hazardous materials, "scaled appropriately for the size and nature of the business, the nature of damage potential of the hazardous materials handled, and the proximity of the business to residential areas and other populations."

For this section, check the box that indicates your answer to each of the following questions:

1. Does this facility have a written emergency response or contingency plan? Yes No

2. If you answered "yes" to (1) above, review the following list. For each item, check "Yes" if your written plan contains the element listed. Check "No" if it does not. (Consider amending the plan to include all elements in the list.)

If you do not have a written plan, it would be advisable for you to prepare one that will contain at least all the elements listed below. A written plan is required if you generate hazardous waste (at least 55-gal per year) or if you handle acutely hazardous materials. This written plan should be made available to inspectors upon request. Presently, however, without a written plan, assess the knowledge of all of your employees who handle hazardous materials, regarding emergency response. Check "Yes" if your employees know the emergency response plan elements listed.

2a. Notification

- | | | | | | |
|---|-------------------------------------|-----|--|-------------------------------------|----|
| * Call 911 - Hayward Fire Department | <input checked="" type="checkbox"/> | Yes | | <input type="checkbox"/> | No |
| * Call 911 - Medical Emergency | <input checked="" type="checkbox"/> | Yes | | <input type="checkbox"/> | No |
| * Notify on-site responders | <input type="checkbox"/> | Yes | | <input checked="" type="checkbox"/> | No |
| * Call designated local emergency medical facility | <input checked="" type="checkbox"/> | Yes | | <input type="checkbox"/> | No |
| * Notify State Office of Emergency Services
(1-800-852-7550) | <input type="checkbox"/> | Yes | | <input checked="" type="checkbox"/> | No |

2b. Evacuation

- | | | | | | |
|--|-------------------------------------|-----|--|-------------------------------------|----|
| * Activate local alarm system for evacuation | <input type="checkbox"/> | Yes | | <input checked="" type="checkbox"/> | No |
| * Assembly areas designated | <input checked="" type="checkbox"/> | Yes | | <input type="checkbox"/> | No |
| * Evacuation route maps posted | <input type="checkbox"/> | Yes | | <input checked="" type="checkbox"/> | No |
| * Reentry procedures defined | <input type="checkbox"/> | Yes | | <input checked="" type="checkbox"/> | No |

2c. Equipment

- | | | | | | |
|--|-------------------------------------|-----|--|-------------------------------------|----|
| * Location and description of on-site emergency response equipment | <input checked="" type="checkbox"/> | Yes | | <input type="checkbox"/> | No |
| * Use and operation of on-site emergency response equipment | <input checked="" type="checkbox"/> | Yes | | <input type="checkbox"/> | No |
| * Location and description of monitoring devices such as toxic gas detectors | <input type="checkbox"/> | Yes | | <input checked="" type="checkbox"/> | No |
| * Use and operation of monitoring devices | <input type="checkbox"/> | Yes | | <input checked="" type="checkbox"/> | No |

2d. Emergency Response Procedures

- | | | | | | |
|--|-------------------------------------|-----|--|--------------------------|----|
| * Procedures for the handling of a release or a threatened release of any hazardous material listed in the inventory | <input checked="" type="checkbox"/> | Yes | | <input type="checkbox"/> | No |
|--|-------------------------------------|-----|--|--------------------------|----|

2e. Emergency Contact Persons

The persons listed in this Hazardous Materials Management Plan as "Emergency Contact Persons" possess the following:

- | | | |
|--|---|-----------------------------|
| * Technical knowledge concerning the facility and its operations | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |
| * Familiarity with the site | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |
| * Full access to the facility (locks, keys, codes, and security clearance) | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |
| * Authority to make decisions for the facility in case of an emergency | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |

Section XIII - EMERGENCY RESPONSE TRAINING PLAN

State regulations also require that business plans include a training program which is reasonable and appropriate for the size of the business and the nature of the hazardous materials handled. The training program shall take into account the responsibility of the employees to be trained. It shall also include provisions for ensuring that all appropriate personnel receive initial and refresher training.

1. Does this facility have a written emergency response training plan? Yes No

2. If you answered "Yes" to (1) above, review the following list of training requirements and training records that need to be maintained. For each item, check "yes" if your written plan contains the element listed. Check "No" if it does not. (Consider amending the training program to include all elements in the list.)

If you do not have a written training program, it would be advisable for you to prepare one that will contain, at least, all the elements listed below. Presently, however, without a written program, assess your current practices on the training of employees who handle hazardous materials. Check "Yes" if your employees have some degree of training in the elements listed.

2a. Training Requirements

For all employees:

- | | | |
|--|------------------------------|-----------------------------|
| * Procedures for internal alarms | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| * Procedures for notification of proper agencies | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| * Procedures for notification of on-site emergency responders | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| * Procedures for notification of external emergency responders | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| * Location and content of emergency response plan | <input type="checkbox"/> Yes | <input type="checkbox"/> No |

For chemical handlers:

- | | | |
|---|------------------------------|-----------------------------|
| * Safe methods for handling and storage of hazardous materials | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| * Proper use of personal protective equipment | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| * Locations and proper use of fire and spill control equipment | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| * Specific hazards of each chemical to which employee may be exposed, including routes of exposure; i.e., skin absorption, inhalation, ingestion. | <input type="checkbox"/> Yes | <input type="checkbox"/> No |

For members of the Emergency Response Team:

- * Procedures for shutdown of operations Yes No
- * Procedures for using, maintaining, and replacing facility's emergency and monitoring equipment Yes No
- * All employees are trained in emergency response procedures within 6 months of hiring Yes No
- * Refresher training is provided at least annually Yes No

2b. Training records

Training records should be maintained for all employees:

- * Verification that training was completed by employee Yes No
- * Description of type and amount of introductory and continuing training Yes No
- * Training records of current and former employees, retained for at least three years. Yes No
- * Documentation on facility emergency response drills conducted during the year Yes No
- * All training documentation and records are maintained and are available for review Yes No

2c. Person responsible for training of employees on emergency response:

Name: _____ Title: _____

Contact Telephone: _____

Section XIV - MAINTENANCE, REVISION, AND UPDATE OF HMMP

At least once a year, the entire Hazardous Materials Management Plan must be reviewed by a responsible company officer to determine if a revision is needed. He or she must then certify in writing to the administrating agency that a review was made and that any necessary changes were made to the HMMP. A copy of the revised plan and certification must be sent to the Hayward Fire Department, Hazardous Materials Office. If the review determines that no changes are necessary, a certification to that effect must be sent instead.

The HMMP must also be amended as a whole or in sections if any of the following occurs:

- a) any change in the nature of chemicals or other hazardous materials stored at the facility;
- b) substantial change in the quantities of chemicals or other hazardous materials stored at the facility;
- c) change in ownership of business or facility;
- d) change in business name and/or nature of operations conducted in the facility;
- e) change in building occupancy classification;
- f) change in structure and/or layout of facility and buildings; or
- g) any other substantial change in any piece of information contained in the HMMP.

Section XV - ACKNOWLEDGEMENT

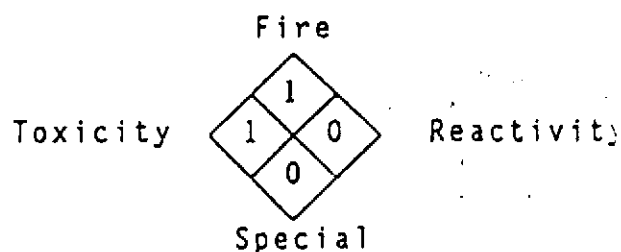
I have read Section XIV and hereby agree to keep this HMMP current and accurate by submitting to the Hayward Fire Department any amendment within 30 days of a change requiring such an amendment.

Signature: 

Printed Name and Title: G B TALLYN

Date Signed: 9-3-95

HAZARD RATING
 N 4 - Extreme
 F 3 - High
 P 2 - Moderate
 A 1 - Slight
 0 - Insignificant



=====

DIVISION AND LOCATION---SECTION I

=====

Division: KENDALL REFINING COMPANY

Location: BRADFORD, PENNSYLVANIA

77 N. KENDALL AVE., BRADFORD, PA, 16701

Emergency Telephone Number: (814) 368-6111

Transportation Emergency: CHEM TREC 1-(800) 424-9300 (U.S. and Canada)

=====

CHEMICAL AND PHYSICAL PROPERTIES---SECTION II

=====

Chemical Name:

petroleum hydrocarbon plus additives

Formula: not applicable

Hazardous Decomposition Products:

carbon monoxide and carbon dioxide from burning.

oxides of phosphorous

oxides of sulfur

Incompatibility (Keep away from):

strong oxidizers such as hydrogen peroxide, bromine, and chromic acid.

Toxic and Hazardous Ingredients:

none

Form: liquid

Odor: motor oil

Appearance: liquid

Color: dark green-brown

Specific Gravity (water=1): .86 to .89

Boiling Point: greater than 330°C (625°F)

Melting Point: less than -12°C (10°F)

Solubility in Water (by weight %): 0 at 20°C

Volatile (by weight %): 0

Evaporation Rate: 0

Vapor Pressure (mm Hg at 20°C): 0

Vapor Density (air=1): not volatile

pH (as is): not applicable

Stability: Product is stable under normal conditions

Viscosity SUS at 100°F: Greater than or = to 100

=====

FIRE AND EXPLOSION DATA---SECTION III

=====

Special Fire Fighting Procedures:

Do not use water except as fog

Unusual Fire and Explosion Hazards:

none

(Continued on next page)

(Section III continued)

Flashpoint: (Method Used) Cleveland open cup greater than 190°C (380°F)

Flammable limits %: not applicable

Extinguishing agents:

Drychemical or Waterfog or CO₂ or Foam
Exposed material may be cooled with water.

HEALTH HAZARD DATA---SECTION IV

Permissible concentrations (air):

If used in applications where a mist may be generated, observe a TWA/PEL of 5 mg/m³ for mineral oil mist (OSHA and ACGIH).

Chronic effects of overexposure:

Prolonged or repeated skin contact may cause dermatitis (skin irritation)

Acute toxicological properties:

no data available

Emergency First Aid Procedures:

Eyes: Immediately flush with large quantities of water for at least 15 minutes and call a physician.

Skin Contact: Remove excess with cloth or paper. Wash thoroughly with soap and water.

Inhalation: Remove victim to fresh air. Call a physician.

If Swallowed: Contact a physician immediately.

SPECIAL PROTECTION INFORMATION---SECTION V

Ventilation Type Required (Local, mechanical, special):

Local if necessary to maintain allowable PEL(permissible exposure limit) or TLV(threshold limit value)

Respiratory Protection (Specify type):

Use NIOSH/OSHA approved respirator with organic vapor cartridge if vapor concentration exceeds permissible exposure limit

Protective Gloves: neoprene type

Eye Protection: chemical safety goggles.

Other Protective Equipment:

none

HANDLING OF SPILLS OR LEAKS---SECTION VI

Procedures for Clean-Up:

Transfer bulk of mixture into another container. Absorb residue with an inert material such as earth, sand, or vermiculite. Sweep up and dispose as solid waste in accordance with local, state, and federal regulations.

Waste Disposal:

Dispose of in accordance with all applicable federal, state and local regulations.

(Continued on next page)

W I T C O M A T E R I A L S A F E T Y D A T A S H E E T

KENDALL NON-DETERGENT MOTOR OIL, ALL SAE GRADES

PAGE 3

SPECIAL PRECAUTIONS---SECTION VII

Precautions to be taken in handling and storage:

Do not handle or store at temperatures over
Maximum Storage Temperature: 38°C (100°F)

TRANSPORTATION DATA---SECTION VIII

D.O.T.: Not Regulated

Reportable Quantity: not applicable

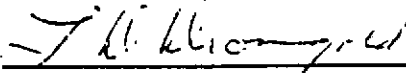
Freight Classification: Petroleum Lubricating Oil

Special Transportation Notes:

none

COMMENTS---SECTION IX

Signature: Luther Dromgold



Title:

MANAGER, NEW PRODUCTS

Original Date: 05/18/81 Sent to:

Date: _____

Revision Date: 06/20/86

Supersedes: 11/08/83

We believe the statements, technical information and recommendations contained herein are reliable, but they are given without warranty or guarantee of any kind, express or implied, and we assume no responsibility for any loss, damage, or expense, direct or consequential, arising out of their use.

MATERIAL SAFETY DATA SHEET

Per 29 CFR 1910.1200

DATE PREPARED: 1/1/90

SECTION I.

COLIN & COMPANY, INC. P.O. BOX 270, INDIANAPOLIS, IN 46206-0270 (317) 923-3211

WEST COAST FACTORY
Richmond, California

SOUTHEASTERN FACTORY
Tampa, Florida

24 HOUR EMERGENCY NUMBER (317) 923-3233
CHEMTREC 1-800-424-9300

IDENTITY (As Listed On Label) PORT-A-FRESH SUPER Q

Health: 2
HMIS HAZARD RATINGS: Flammability: 0
Reactivity: 0

SECTION II. HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

Hazardous Components Specific Chemical Identity: Common Name(s)	CAS #	OSHA PEL	ACGIH TLV-TWA	OTHER LIMITS RECOMMENDED	PERCENT
Alkyl dimethyl benzyl ammonium chlorides	68391-01-5	Not Estab.	Not Estab.	None	1-5
n-Alkyl dimethyl ethylbenzyl ammonium chlorides	68956-79-6	Not Estab.	Not Estab.	None	1-5

SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS

Boiling Point: 212 F
Vapor Pressure (mm Hg.): Approx. 17 @ 68 F
Vapor Density (Air=1): Approx. 0.6
Solubility in Water: Complete
Appearance and Odor: Dark blue liquid, floral odor.

Specific Gravity (H2O = 1): 1.00
Melting Point: Approx. 30 F
Evaporation Rate (Water =1): 1

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used): None
Extinguishing Media: Not Applicable
Special Fire Fighting Procedures: None
Usual Fire and Explosion Hazards: None

Flammable Limits LEL NA UEL NA

SECTION V - REACTIVITY DATA

Stability Unstable Stable Conditions to Avoid: None
Incompatibility (Materials to Avoid): Strong oxidizers, anionic materials
Hazardous Decomposition or Byproducts: Carbon monoxide, carbon dioxide, nitrogen oxides
Hazardous Polymerization May Occur May Not Occur Conditions to Avoid: None

