

**SUBSURFACE INVESTIGATION
1362 AND 1384 RUUS LANE
HAYWARD, CALIFORNIA**

Prepared for:

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Prepared by:



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Project Number S40109

November 17, 1994



November 17, 1994

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

Subject: Subsurface Investigation at 1362 and 1384 Ruus Lane, Hayward,
California (RECON project number S40109)

Dear Mr. Toschi:

Recon Environmental Corp. (RECON) is pleased to submit two copies of this report in general accordance with proposal number 13308A, dated June 16, 1994.

RECON appreciates the opportunity to assist Warmington Homes with their environmental projects. If you have any questions regarding this report, please contact either of us at your convenience at (415) 742-9900.

Sincerely,

Marc Papineau
Project Manager

Enclosure

Donald P. Bransford, R.G. 5621
Environmental Services Manager



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1.0 INTRODUCTION

Recon Environmental Corp. (RECON) has prepared this report to present the results of a subsurface investigation conducted at 1362 and 1384 Ruus Lane (site) in the city of Hayward, California (see Figure 1). The work was conducted by RECON during September and October 1994, in general accordance with proposal number 13308A submitted to Warmington Homes dated June 16, 1994. The work was conducted at the request and authorization of Mr. Gene Toschi of Warmington Homes. The investigation was conducted to assess the presence of elevated concentrations of hazardous substances and petroleum hydrocarbons at the site. The investigation was conducted in general accordance with the approach and procedures outlined in the work plan dated June 22, 1994 (CERTIFIED, 1994b), and modifications to the scope of work (CERTIFIED, 1994c; 1994d), prepared by RECON and approved by Mr. Eddie So of the California Regional Water Quality Control Board (RWQCB).

1.1 Historical and Current Site Usage

In a historical aerial photograph dated 1947, the site appears to have been tilled agricultural land. Interpretation of a 1968 historical aerial photograph indicated that heavy equipment was stored over an area that may have overlapped both the Tallyn and Hohener parcels, in the southern portion of both parcels (CERTIFIED, 1994a).

Previous uses of the Tallyn parcel included interim storage of chemical toilet waste and surface storage of 55-gallon drums of formaldehyde used in the toilet. Previous uses of the Hohener parcel included storage of a variety of hazardous materials, hazardous wastes, batteries, junk metal, tires, and equipment. Review of records indicates that over thirty 55-gallon drums containing waste oil, methyl ethyl ketone, and other materials, and numerous partially full drums and empty drums were present at the site on this parcel. Additionally, a variety of containers containing paints, shellacs, and chemical strippers were also present. These materials were reported to have been removed from the site (CERTIFIED, 1994a).

The Hohener parcel is not currently used and consists of mostly open field. The Tallyn parcel is currently used by A-1 Sanitation for its portable toilet business. In their hazardous materials business plan filed with the City of Hayward, A-1 Sanitation is reported to store up to three 55-gallon drums of waste oil, up to two 55-gallon drums of new oil, and up to 20 gallons of portable toilet chemical. Currently, the portable toilet chemical is reported to contain 1 to 5 percent n-alkyl dimethyl benzyl ammonium chlorides (CERTIFIED, 1994a).

1.2 Previous Site Investigations

Previous investigations of shallow subsurface soil and groundwater conditions were performed by Essenes Environmental, Inc. (Essenes, 1992a; 1992b; 1993), and CERTIFIED Engineering & Testing Company, Inc. (CERTIFIED, 1994a). The results of these investigations reported the presence of elevated concentrations of petroleum hydrocarbons as oil and grease in the soil in concentrations of up to 230 milligrams per kilogram (mg/kg). Based upon previous investigations, the petroleum oil-affected soil is generally located in the southern portion of the site, in the vicinity of the former junk pile and historical heavy equipment storage area.

Groundwater samples were collected from temporary screened borings generally located along the western property boundary of the Hohener parcel in February, 1993. Four groundwater samples were collected and analyzed for total petroleum hydrocarbons as kerosene, diesel, and petroleum oil, and halogenated volatile organic compounds (VOCs). These analytes were not reported to be detected in any of the four groundwater samples in concentrations exceeding the laboratory analytical method detection limits (Essenes, 1993).

1.3 Current Investigation

The investigation summarized in this report was conducted to provide additional information to be used for the development of a site mitigation plan to guide site remediation prior to development of the site for residential purposes.

2.0 OBJECTIVES

The objectives of this investigation summarized in this report were to 1) assess the presence and concentration of potentially hazardous materials in the shallow subsurface of the Tallyn parcel; 2) assess the lateral and vertical extent of total recoverable petroleum hydrocarbons (TRPH) in the shallow subsurface of the site; 3) assess the potential presence and concentration of petroleum hydrocarbons and formaldehyde in groundwater at the site; and 4) assess the potential need for mitigation measures consistent with the plan for residential development of the site.

Updated
pg 3

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3.0 SCOPE OF WORK

In order to meet the objectives, the scope of work included the following:

- Advancement of 11 hand auger borings on the site with collection of soil samples from depths of approximately 1.5 and 3 feet below the ground surface (BGS).
- Advancement of an additional 5 hand auger borings on the Tallyn parcel with collection of soil samples from one depth (approximately 1.5 feet BGS).
- Advancement of one soil boring (SB-12) to a depth of approximately 10 feet BGS with collection of soil samples from approximately 1.5, 3, 5, 7, and 10 feet BGS.
- Construction and development of 1 shallow groundwater monitoring well. Collection of groundwater samples from the monitoring well on 2 occasions. Collection and testing of one soil sample from approximately 12 feet BGS.
- Laboratory analysis of soil and groundwater samples collected.
- Evaluation of the data and preparation of this report.

4.0 SUBSURFACE INVESTIGATION

4.1 Shallow Soil Borings

The soil sampling program was conducted on September 12 and 15, 1994, and involved drilling hand auger borings in order to collect soil samples for chemical analyses. The locations of hand auger borings (Figure 4) were selected to provide chemical concentration data that could be used to assess the presence and extent of potentially hazardous materials in the shallow subsurface.

A deeper soil boring was advanced using a truck-mounted soil coring system. Coring services were provided by OnSite Services, Inc., of Woodside, California. The location of the deeper soil boring was selected to provide information on the vertical extent of TRPH in the area where the highest TRPH concentrations were reported in hand auger boring soil samples. The rationale for selection of hand auger boring and the deeper soil boring locations is presented below. A description of the field procedures used for drilling hand auger borings is presented in Appendix A.

3.0 SCOPE OF WORK

In order to meet the objectives, the scope of work included the following:

- Advancement of 14 hand auger borings over both parcels of the site with collection of soil samples from depths of approximately 1.5 and 2 feet below the ground surface (BGS). *Acerner*
- Advancement of 5 hand auger borings on the Tallyn parcel with collection of soil samples from approximately 1.5 and 2 feet BGS.
- Advancement of one soil boring to a depth of approximately 10 feet BGS with collection of soil samples from approximately 3, 5, 7, and 10 feet BGS.
- Construction and development of 1 shallow groundwater monitoring well. Collection of groundwater samples on several occasions.
- Laboratory analysis of soil and groundwater samples collected.
- Evaluation of data and preparation of this report.

4.0 SUBSURFACE INVESTIGATION

4.1 Shallow Soil Borings

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<u>Boring Designation</u>	<u>Location and Rationale</u>
SB1 - SB5 SB11 - SB16	Located on the Tallyn and Hohener parcels to assess the lateral and vertical extent of TRPH in the shallow subsurface.
SB6 - SB10	Located randomly on the Tallyn parcel to assess the presence and concentration of potentially hazardous materials on that parcel.
SB12, SB17	Located in the general area where the highest TRPH concentrations were reported in the soil samples collected from approximately 3 feet BGS.

4.2 Monitoring Well Installation

One hollow-stem auger boring was drilled on September 12, 1994, and converted to a groundwater monitoring well at the location shown in Figure 4. The soil boring/monitoring well was located in the interpreted general downgradient direction from the portable toilet wash out area and the area where elevated concentrations of petroleum hydrocarbons were previously reported to be located. The boring was drilled using a truck-mounted drill rig equipped with an 8-inch hollow-stem auger. Drilling services were provided by West Haz Mat Drilling Corp. of Newark, California. The drilling operation was performed under the supervision of a State-registered geologist from RECON. During the drilling operations, a summary of the materials and conditions encountered was recorded on a log for the boring.

The boring, designated MW-1, was advanced to a depth of approximately 20 feet BGS. Soil was generally sampled on approximately 5-foot depth intervals beginning at approximately 5 feet below the ground surface. Soil samples were collected using a California modified split-barrel sampler for evaluation of the soil lithology, field measurement of VOCs with an organic vapor meter (OVM), and laboratory analysis.

The monitoring well was constructed using 2-inch inner diameter (ID) polyvinyl chloride (PVC) well casing with a 0.010-inch width, machine slotted screen. The screened interval was selected based on the initial occurrence of groundwater. The well was developed on September 15, 1994, using surge and bail techniques. The well development method was designed to remove fine-grained materials from the well casing and to increase hydraulic communication between the formation and filter pack.

A permit to drill the soil boring and to install the monitoring well was obtained from the Zone 7 - Alameda County Flood Control and Water Conservation District by RECON. The well location and elevation was surveyed to second-order accuracy by Peri

Cosseboom Licensed Land Surveyors of San Francisco, California, on October 27, 1994.

Procedures used to drill and log the boring, collect soil samples, and install and develop the monitoring well are summarized in Appendix A. The boring log, monitoring well construction log, and well development/groundwater sampling log are also presented in Appendix A. The survey report is presented in Appendix A.

4.3 Groundwater Sample Collection

Following development of the monitoring well, groundwater samples were collected. A second set of groundwater samples were collected on October 27, 1994, following purging of at least three casing volumes of water from the well. Samples were collected using a disposable polyethylene bottom valve bailer. Groundwater samples were placed into laboratory-supplied containers and were retained on ice in an insulated chest prior to and during delivery to the laboratory. Chain of custody procedures, including the use of chain of custody forms, were used to document sample handling and transport from collection at the site to delivery to the laboratory. Groundwater sampling procedures and groundwater sample collection logs are presented in Appendix A.

4.4 Conditions Encountered

Lithologies encountered while drilling boring MW-1 included clayey sand and sand. Clayey sand was encountered from the ground surface to an approximate depth of eight feet BGS. From approximately 8 feet to 12.5 feet BGS, a clay to sandy clay was encountered. From approximately 12.5 feet to the terminal depth of the boring at approximately 20 feet BGS a clayey sand was again encountered.

Prior to well development and purging, groundwater was measured at approximately 10.5 feet below the ground surface. Water levels and corresponding elevations are presented below.

<u>Date</u>	<u>Depth to Water Below Top of Casing (ft)</u>	<u>Groundwater Elevation Above Mean Sea Level (ft)</u>
September 15, 1994	10.02	- 0.70
October 27, 1994	10.13	- 0.81

5.0 LABORATORY ANALYSES

Soil and groundwater samples collected and retained for chemical analysis were submitted to Aqua Air (A2) Analytical Corp. of Weymouth, Massachusetts; Inchcape Testing Services, Anametrix Laboratories of San Jose, California; Sequoia Analytical of Redwood City, California; and Superior Precision Analytical, Inc., of San Francisco, California. Each of the laboratories are a State-certified hazardous waste laboratory. Chain of custody procedures, including the use of chain of custody forms, were used to document sample handling and transport to the laboratory. Chain of custody forms and laboratory reports are presented in Appendix B.

5.1 Soil Samples

TRPH 418.1?

Soil samples were analyzed for TRPH in general accordance with EPA Method No. 418.1; aromatic volatile organic compounds in general accordance with EPA Method No. 8021; and formaldehyde in general accordance with a modified Air Pollution Control Association colorimetric method and ASTM D2216 modified. This analytical program was designed to detect the presence of potentially hazardous materials on the Tallyn parcel, the presence of formaldehyde on the site, and the vertical and lateral extent of TRPH at the site. The analyses conducted on specific soil samples and the reported results are presented in Table 1.

5.2 Groundwater Samples

Groundwater samples were analyzed for TRPH in general accordance with EPA Method No. 418.1; VOCs in general accordance with EPA Method No. 8010; formaldehyde in general accordance with Air Pollution Control Association Colorimetric Method and EPA Method No. 8315; and total petroleum hydrocarbons as gasoline, diesel, kerosene, and mineral spirits in general accordance with EPA Method No. 8015 modified. This analytical program was designed to detect the presence of hazardous materials potentially present in groundwater at the site. The analytical reported results are presented in Table 2.

6.0 DISCUSSION

6.1 Soil

Five soil samples were collected from the Tallyn parcel to assess the presence and concentration of potentially hazardous materials. Soil samples were collected from approximately 1.5 feet below the ground surface from borings SB-4, SB-5, SB-6, SB-7, SB-8, SB-9, and SB-10 (Figure 4 and Table 1). These soil samples were analyzed for

what happened to sheet?

TRPH, lead, VOCs, aromatic volatile organic compounds, and formaldehyde. The reported presence of TRPH is discussed in following paragraphs. VOCs and aromatic volatile organic compounds were not reported in concentrations exceeding the analytical method detection limits in the soil samples analyzed. Therefore, it is the judgment of RECON that there is a low likelihood that VOCs and aromatic hydrocarbons are present in the soil at the Tallyn parcel. The reported lead concentrations are judged to be low and represent natural background concentrations of lead within the soil. Formaldehyde was reported in the soil sample collected from boring SB-4 at a concentration of 8 mg/kg. This soil boring is located adjacent to the tank pad formerly used for an aboveground tank that stored wastes emptied from the portable toilets.

at what depth

The reported formaldehyde concentration approaches the preliminary remediation goal (PRG) for formaldehyde. The EPA's PRGs, which are health-based concentrations, can be used for risk screening purposes to evaluate the need for mitigative actions or further investigation. [REDACTED] is 8 mg/kg. The detection limit for formaldehyde in soil collected from the former wash-out area in the [REDACTED] is 0.5 mg/kg. [REDACTED] at SB-4 have the PRG. [REDACTED] soil samples are analyzed with lower detection limits.

To [REDACTED] from the Tallyn and Hohener parcels to assess the lateral and vertical extent of TRPH in soil. Soil samples were collected from the 1.5-foot and 3-foot depths BGS. Near surface soil [REDACTED] 1.5-foot BGS were analyzed for TRPH and six of the [REDACTED] 1,000 mg/kg or more TRPH (Table 1 and Figure 5). The interpreted area of soil containing TRPH concentrations at 1.5 feet BGS in excess of 1,000 mg/kg is presented in Figure 6. The interpreted area overlaps the Tallyn and Hohener parcels in the southern portion of the Site.

Soil samples collected from approximately 3 feet BGS were collected from borings SB-4, SB-5, SB-11, SB-12, SB-13, SB-14, and SB-17, and from approximately 5-foot, 7-foot and 10-foot BGS in a boring adjacent to SB-12. These soil samples were analyzed for TRPH to assess the vertical extent of TRPH. TRPH above 1,000 mg/kg in concentration extended vertically to 3 feet BGS at SB-5, SB-12, SB-13, and SB-14, but not at SB-4, SB-11, or SB-17. TRPH has not been reported in concentrations exceeding the analytical method detection limit in soil samples collected from approximately 5, 7, and 10 feet BGS from the boring adjacent to SB-12. Therefore, it is the judgment of RECON that there is a low likelihood of TRPH extending deeper than 3 to 5 feet BGS within the soil. The extent of TRPH concentrations exceeding 1,000 mg/kg at approximately 3 feet BGS is judged to generally be within the area shown in Figure 6 as exceeding 1,000 mg/kg at approximately 1.5 feet BGS.

why was SB-12 chosen one?

6.2 Groundwater

Based on reported flow direction measured in nearby off-site monitoring wells, the groundwater flow direction, is interpreted to slope to the west-southwest. Groundwater samples collected from the on-site monitoring well were not reported to contain the constituents analyzed for in concentrations exceeding the respective analytical method detection limits. Based on the reported results and the interpreted groundwater gradient, it is the judgment of RECON that there is a low likelihood that petroleum hydrocarbons, VOCs, and formaldehyde are present in the groundwater at the site.

7.0 CONCLUSIONS

Based on the information presented in this report, the following conclusions have been made:

- There is a low likelihood that VOCs and aromatic hydrocarbons are present in the shallow subsurface of the Tallyn parcel. The reported lead concentrations are judged to be representative of natural background lead concentrations for lead in soil at the site. The reported formaldehyde concentration in the soil sample collected from the area of the tank pad is below the EPA PRG.
- TRPH in near-surface soil extends laterally over the southern portion of the site, overlapping the Tallyn and Hohener parcels (Figure 6). There is a low likelihood of TRPH extending deeper than 3 to 5 feet BGS.
- There is a low likelihood that petroleum hydrocarbons, VOCs, and formaldehyde are present in the groundwater at the site.

8.0 RECOMMENDATIONS

Based on the information presented in this report, current regulatory guidelines, and the professional judgment of RECON, the following recommendations are presented:

- No Action. No Action is probably not feasible owing to the proposed development of the site for residential purposes.
- RECON recommends that feasibility of removal and relocation of affected soil beneath proposed paved roadways on the site be considered.

9.0 LIMITATIONS

Our professional services were performed, data evaluated, and recommendations prepared in accordance with generally-accepted geological/engineering principles and practices. The judgments, conclusions, and recommendations described in this report pertain to the conditions judged to be present or applicable at the time the work was performed. Future conditions may differ from those described herein and this report is not intended for use in future evaluations unless an update is conducted by a consultant familiar with subsurface investigations. Use of this report is provided to Warmington Homes for their exclusive use and shall be subject to the terms and conditions in the applicable contract between Warmington Homes and RECON. Any third party use of this report shall also be subject to the terms and conditions governing the work in the contract between Warmington Homes and RECON. Any unauthorized release or misuse of this report shall be without risk or liability to RECON.

Certain information contained in this report may have been rightfully provided to RECON by third parties or outside sources. RECON does not make any warranties or representations, whether expressed or implied, regarding the accuracy of such information, and shall not be held accountable or responsible in the event that any such inaccuracies are present.

**TABLE 1
SOIL ANALYTICAL RESULTS**

Sample No.	Date Collected	Sample Depth (1)	TRPH (2)	Lead (3)	VOCs (4)	BTXE (5)	Formaldehyde
SB1-1.5	9/12/94	1.5	687	NA (6)	NA	NA	NA
SB2-1.5	9/12/94	1.5	1,410	NA	NA	NA	NA
SB3-1.5	9/12/94	1.5	51	NA	NA	NA	NA
SB4-1.5	9/12/94	1.5	94	NA	NA	NA	2 (7)
SB4-3.0	9/12/94	3	190	NA	NA	NA	NA
SB5-1.5	9/12/94	1.5	1,300	NA	NA	NA	<1
SB5-3.0	9/12/94	3	1,500	NA	NA	NA	NA
SB-6-1.5	9/12/94	1.5	<5	33	ND (8)	ND	0.66 (9)
SB-7-1.5	9/12/94	1.5	30	23	ND	ND	0.96
SB-8-1.5	9/12/94	1.5	718	88	ND	ND	1.03
SB-9-1.5	9/12/94	1.5	233	21	ND	ND	0.22
SB-10-1.5	9/12/94	1.5	2,336	28	ND	ND	0.29
SB-11-1.5	9/12/94	1.5	239	NA	NA	NA	0.27
SB-11-3.0	9/12/94	3	<5	NA	NA	NA	NA
SB-12-1.5	9/12/94	1.5	1,648	NA	NA	NA	0.61
SB-12-3.0	9/12/94	3	2,679	NA	NA	NA	NA
SB12-5 (10)	11/2/94	5	<10	NA	NA	NA	NA
SB12-7 (10)	11/2/94	7	<10	NA	NA	NA	NA
SB12-10 (10)	11/2/94	10	<10	NA	NA	NA	NA
SB-13-1.5	9/12/94	1.5	464	NA	NA	NA	0.56
SB-13-3.0	9/12/94	3	3,182	NA	NA	NA	NA
SB-14-1.5	9/12/94	1.5	1,019	NA	NA	NA	0.40
SB-14-1.5 (11)	9/12/94	1.5	870	NA	NA	NA	NA
SB-14-3.0	9/12/94	3	1,019	NA	NA	NA	NA
SB-15-1.5	9/12/94	1.5	9,224	NA	NA	NA	0.62
SB17-3	11/2/94	3	160	NA	NA	NA	NA
MW1-12	9/12/94	12	<5.0	NA	NA	NA	NA

Notes:

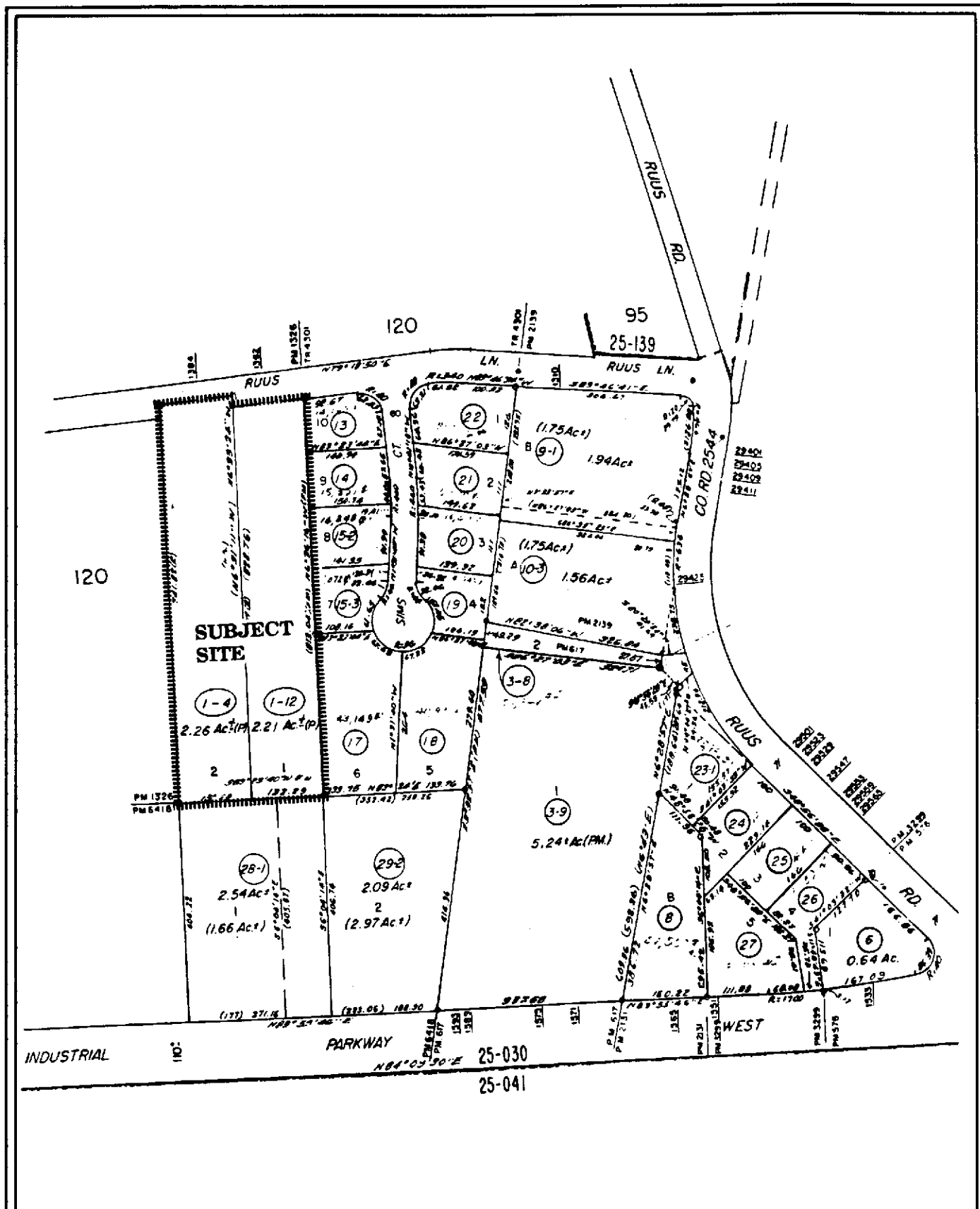
- Sample depth reported in approximate feet below the ground surface.
- Analyses conducted in general accordance with U.S. Environmental Protection Agency (EPA) Method No. 418.1. Concentrations reported in milligrams per kilogram (mg/kg).
TRPH = total recoverable petroleum hydrocarbons. "<" indicates TRPH not reported in concentrations exceeding the indicated amount.
- Analyses conducted in general accordance with EPA Method No. 7420. Concentrations reported in mg/kg.
- Analyses conducted in general accordance with EPA Method No. 8010. Concentrations reported in micrograms per kilogram (ug/kg). VOCs = halogenated volatile organic compounds.
- Analyses conducted in general accordance with EPA Method No. 8020. Concentrations reported in ug/kg.
BTXE = benzene, toluene, xylene, and ethylbenzene, and other aromatic volatile organic compounds.
- NA = not analyzed for the indicated constituents.
- Analyses conducted in general accordance with ASTM D2216 mod. Concentrations reported in mg/kg.
- ND = none detected in concentrations the analytical method detection limit. See Appendix B for specific detection limits.
- Analyses in general accordance with a modified Air Pollution Control Association colorimetric method. Concentrations reported in mg/kg.
- Separate boring located adjacent to boring SB-12.
- Duplicate sample submitted to a second laboratory.

TABLE 2
GROUNDWATER ANALYTICAL RESULTS (1)

Sample No.	Date Collected	TRPH (2)	VOCs (3)	Formaldehyde	TPHe (4)
GW 1	9/15/94		ND (5)		
GW 3	9/15/94			<0.1 (6)	
GW 4	9/15/94	<1			
GW 5 (7)	9/15/94		ND		
MW1-A	10/27/94			<0.10 (8)	
MW1-B	10/27/94				<50

Notes:

1. All water samples collected from monitoring well MW-1.
2. Analyses conducted in general accordance with U.S. Environmental Protection Agency (EPA) Method No. 418.1. Concentrations reported in milligrams per liter (mg/l). TRPH = total recoverable petroleum hydrocarbons. "<" indicates constituents not reported in concentrations exceeding the indicated amount.
3. Analyses conducted in general accordance with EPA Method No. 8010. Concentrations reported in micrograms per kilogram (ug/kg). VOCs = halogenated volatile organic compounds.
4. Analyses conducted in general accordance with EPA Method No. 8015 modified. Concentrations reported in micrograms per liter (ug/l). "<" indicates constituents not reported in concentrations exceeding the indicated amount. TPHe = total extractable petroleum hydrocarbons as diesel, kerosene, and mineral spirits.
5. ND = none detected in concentrations the analytical method detection limit. See Appendix B for specific detection limits.
6. Analyses conducted in general accordance with a modified Air Pollution Control Association colorimetric method. Concentrations reported in percent.
7. Duplicate sample.
8. Analyses conducted in general accordance with EPA Method No. 8315. Concentrations reported in mg/l.



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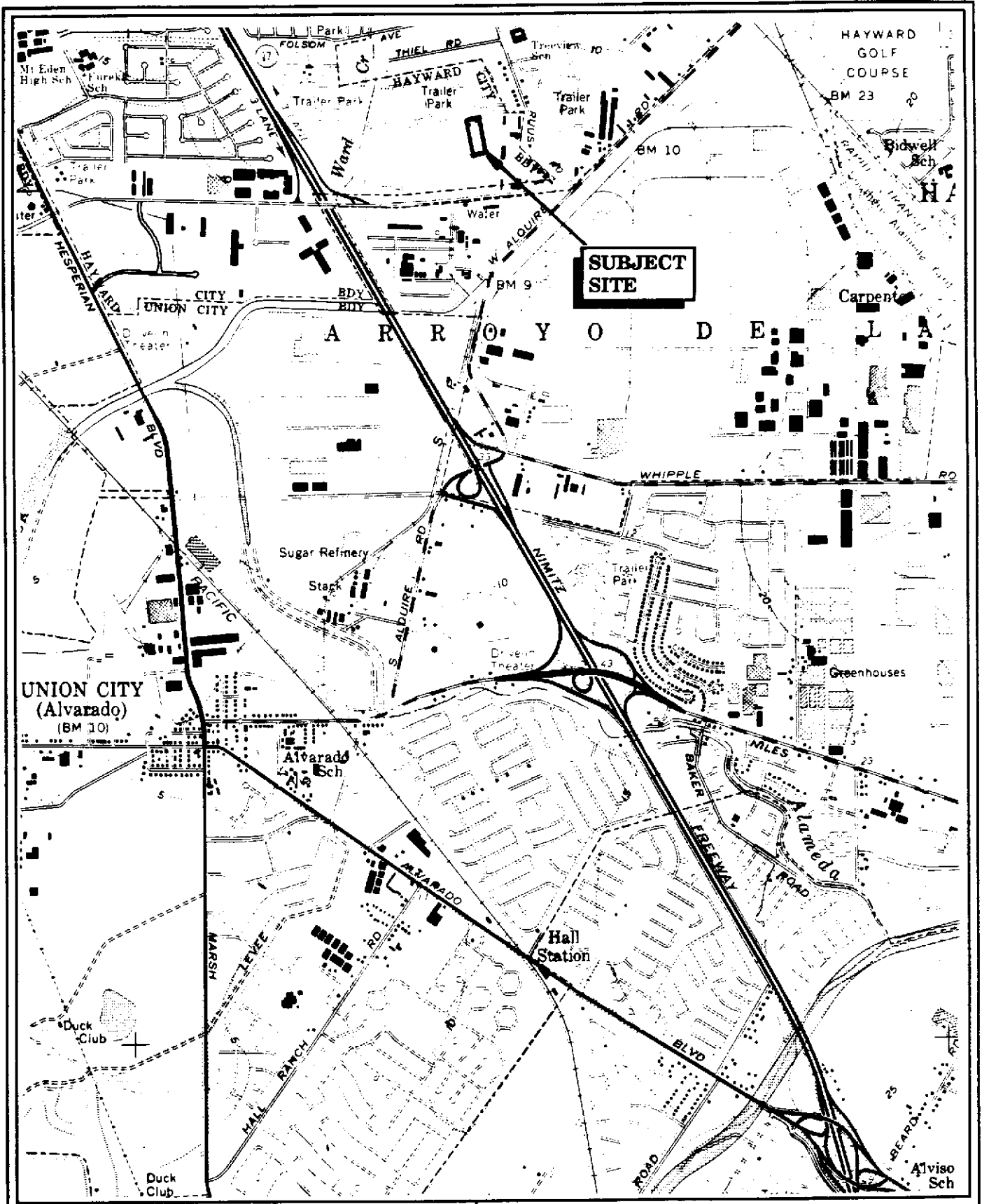
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7000 Marina Blvd. 4th Fl.
Brisbane, CA 94005



No Scale

FIGURE 2.
ASSESSOR'S PARCEL MAP



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7000 Marina Blvd. 4th Fl.
Brisbane, CA 94005

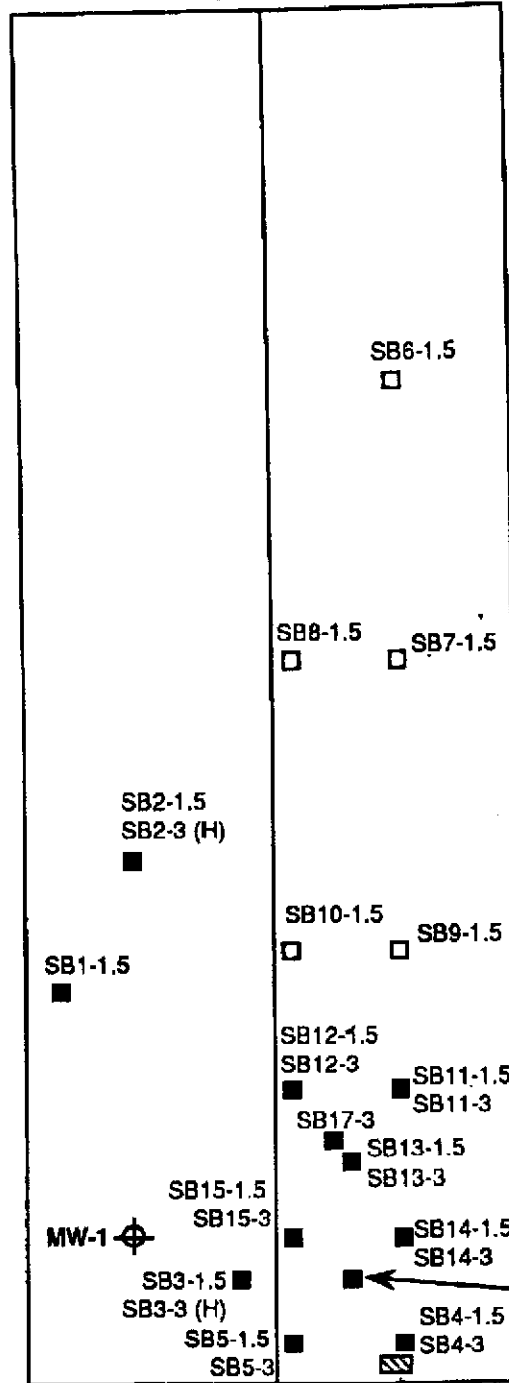


Scale: 1" = 2000'

FIGURE 3.
TOPOGRAPHIC MAP

Updated

Ruus Lane



KEY

- Eleven (11) soil samples proposed to test the vertical and or lateral extent of Total Recoverable Petroleum Hydrocarbon (TRPH)
- Five (5) random samples to characterize soil chemistry of Tallyn parcel.

NOTES:

- 1) Site structures and storage areas are not shown.
- 2) All locations and dimensions are approximate.
- 3) Hold (H). Sample was collected but not analyzed.

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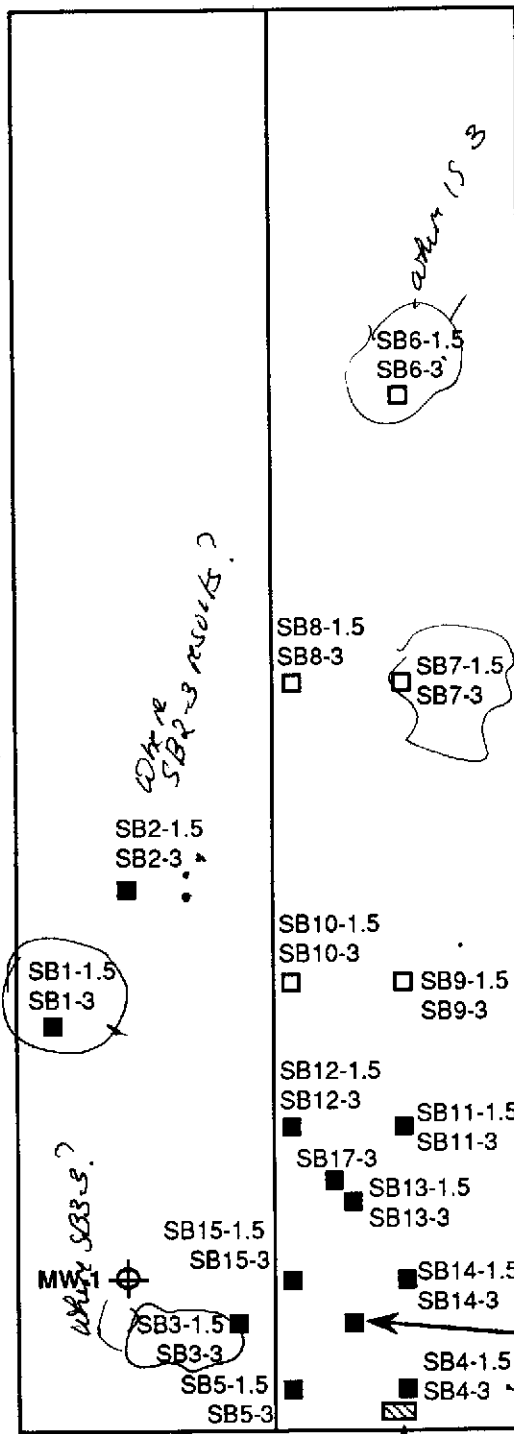
7000 Marina Blvd., 4th floor
Brisbane, CA 94005



Scale: 1" = 100'

FIGURE 4.
SAMPLING LOCATION MAP
1362 AND 1384 RUUS LANE
HAYWARD

Ruus Lane



KEY

- Eleven (11) soil samples proposed to test the vertical and or lateral extent of Total Recoverable Petroleum Hydrocarbon (TRPH)
- Five (5) random samples to characterize soil chemistry of Tallyn parcel.

NOTES:

- 1) Site structures and storage areas are not shown.
- 2) All locations and dimensions are approximate.

Existing

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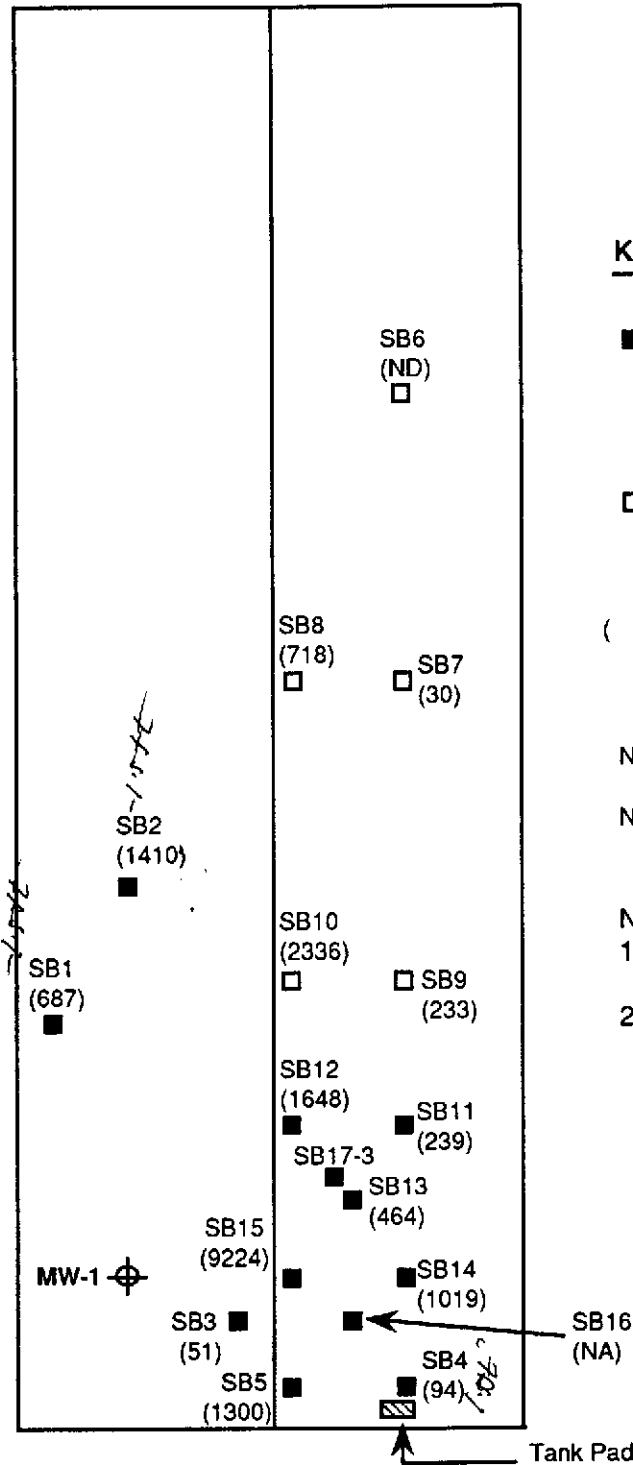
7000 Marina Blvd., 4th floor
Brisbane, CA 94005



Scale: 1" = 100'

**FIGURE 4.
SAMPLING LOCATION MAP
1362 AND 1384 RUUS LANE
HAYWARD**

Ruus Lane



KEY

- 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
- () Total Recoverable Petroleum Hydrocarbon (TRPH) Concentration in mg/kg
- ND Below Method Detection Level
- NA Not Analyzed

NOTES:

- 1) Site structures and storage areas are not shown.
- 2) All locations and dimensions are approximate.

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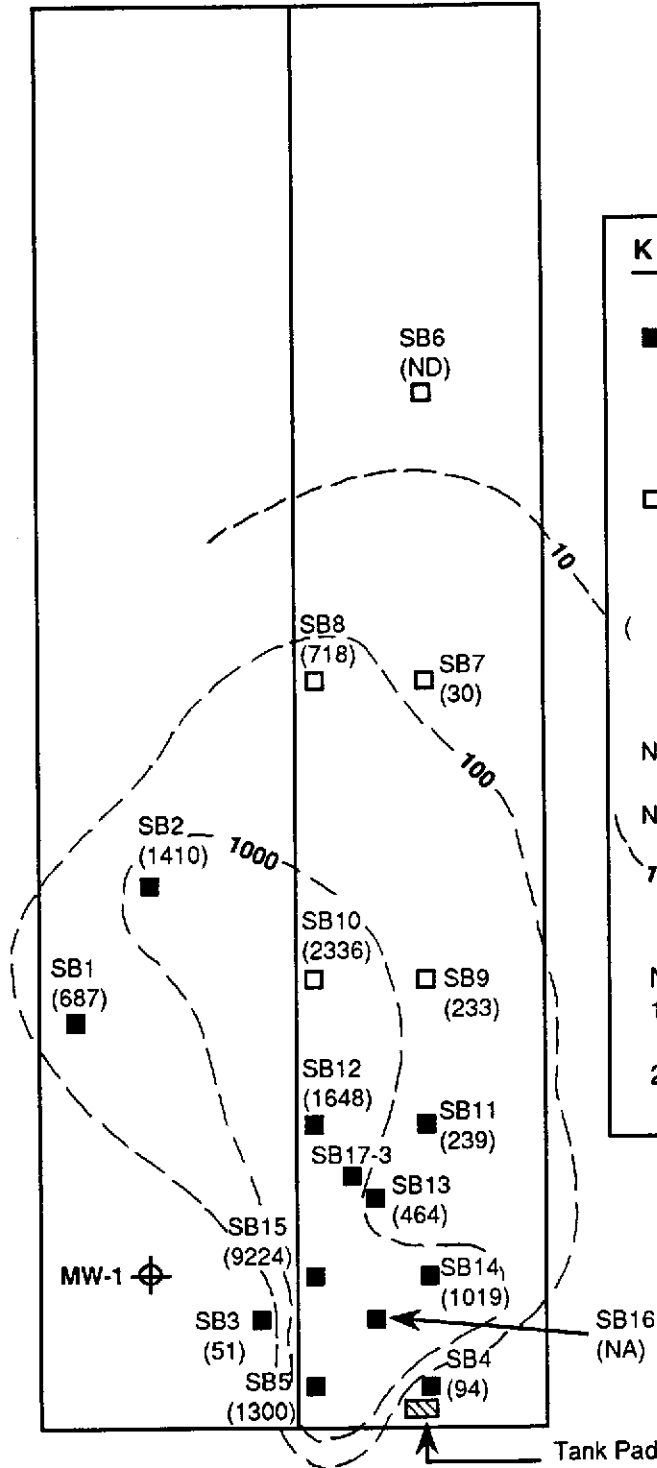
7000 Marina Blvd., 4th floor
Brisbane, CA 94005



Scale: 1" = 100'

FIGURE 5.
TOTAL PETROLEUM
HYDROCARBONS (EPA 418.1)
IN SHALLOW SOIL AT
1362 AND 1384 RUUS LANE
HAYWARD

Ruus Lane



KEY

- 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.
- () Total Recoverable Petroleum Hydrocarbon (TRPH) Concentration in mg/kg.
- ND Below Method Detection Level
- NA Not Analyzed
- 100, 1000, 10000 Approximate TRPH Iso-Concentration

NOTES:

- 1) Site structures and storage areas are not shown.
- 2) All locations and dimensions are approximate.

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7000 Marina Blvd., 4th floor
Brisbane, CA 94005



Scale: 1" = 100'

FIGURE 6.
ISO-CONCENTRATION FOR
1.5 FOOT DEPTH
1362 AND 1384 RUUS LANE
HAYWARD

APPENDIX A
DRILLING PROCEDURES
AND LOGS

DRILLING PROCEDURES

The procedures that were used for drilling the soil boring and collecting soil samples are presented below.

- Permits for drilling of the soil boring were obtained from the Alameda County Zone 7 Water District prior to drilling the soil boring for construction of monitoring well MW-1.
- Soil borings except MW-1, SB-17, and the boring adjacent to SB-12 were advanced to a depth of approximately 3 feet below the ground surface using a hand auger and slide hammer whose spoon was loaded with a 6-inch long x 2-inch diameter brass sleeve. MW-1 was drilled with a C-57 rig and hollow stem auger. SB-17 and the boring adjacent to SB-12 were driven with a hydraulic-driven probe sampler.
- The augers were washed with a hot water pressure washer prior to drilling.
- Soil descriptions, sample type and depth, and related sampling information were recorded on a boring log.
- Soil samples were generally collected at selected depth intervals (1.5- and 3-feet), at significant changes in lithology, or wherever lithologic information was desired, using barrel samplers. In the boring for MW-1, a California-modified split-barrel sampler was used. In boring SB-17 and the boring adjacent to SB-12 a hydraulic-driven sampler loaded with four 6-inch long x 1-inch diameter brass sleeves was used.
- The samplers were washed between sample intervals using a bristle brush with Alconox solution followed by two tap water rinses and a deionized water rinse. The samplers were dried by air or with paper towels prior to sampling.
- Soil samples were collected in brass sample tubes inserted inside the samplers. Prior to use, the sample tubes were washed and dried by air or with paper towels.
- Samplers were driven by hand-driven slide-hammer, C57 rig drop-hammer (MW-1), or hydraulic driven probe.
- Following retrieval of the sampler, the second sample tube (or first deepest sample tube if the second sample tube was not filled with soil) was removed from the sampler, the ends covered with aluminum foil and capped with PVC end caps. Each sample was labeled with the sample number, date, time, project number, and sampler's initials.

- Soil in the deepest sample tube (where available) was used to describe the lithology and measure volatile organic compound (VOC) concentrations.
- Samples retained for laboratory analysis were placed in ziplock bags and stored on ice in an insulated chest cooled to a temperature of approximately 4 degrees Celsius.
- Chain of custody procedures, including the use of chain of custody forms, were used to document sample handling and transport from collection to delivery to the laboratory for analysis.
- Soil from the drilling for MW-1 was placed on Visqueen plastic and covered with plastic and stored at the site.
- Boring SB-17 and the boring adjacent to SB-12 were filled with bentonite granules.

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Legend

	GP		ML
	GM		CL
	GC		OL
	SW		MH
	SP		CH
	SM		OH
	SC		Pt

Elevation: 4 feet AMSL

Job No.: S40109	Location: 1384 Russ Lane		
Drilling Method: Hollow Stem Auger		Boring # MW-1	
CME-75		Sheet # 1	
Drilling Company: West Haz Mat Drilling Corp		Drilling Time: 8:50 - 9:20	
Drilling Crew: Gene/Lawrence		Geologist: Fred Hayden	
Sampling Method: Calif Mod Sampler		Date 9/12/94	
Casing/Sand/Seal Depth: SCH40 2/12 6.5'		Depth to Water/Time: 13'	
Surface Conditions: Open field			
Soil Description:			

Recovery	Well Const.	Sample Depth	Blows/6 in.	PID	Sample	Depth in Feet	USCS Code	Soil Description
						1		Light brown (5 YR 5/6), dry, Clayey fine SAND.
				0	MW1-2	2		
						3		
						4		
			15/17/20	0	MW1-5	5	SC	Brownish gray (5 YR 4/1), dense, and slightly moist at 5 feet.
						6		Increase in clay at 7 feet.
						7		
						8		
						9		
			10/8/8			10		Light olive gray (5 YR 5/2), moist Sandy CLAY.
			5/7/7	0		11	CL	
					MW1-12	12		
						13		@ 9:40 am Light olive gray (5 YR 5/2), moist, Clayey fine SAND. Groundwater encountered at 13 feet. Dark yellowish brown (10 YR 4/2) and medium dense at 16 feet. No odor encountered during drilling.
						14	SC	
			6/6/7	0		15		
					MW1-16	16		
						17		Moderate olive brown (5 YR 4/4), moist, medium dense, SAND with Clay.
						18		
						19	SW	
			8/10/12	0	MW1-20	20		
								BOTTOM OF BORING AT 20 FEET

Project Number: S40109
 Project Name: Tallyn Pair
 County: Alameda
 Well Permit No.: #94504 ACFC & WCD

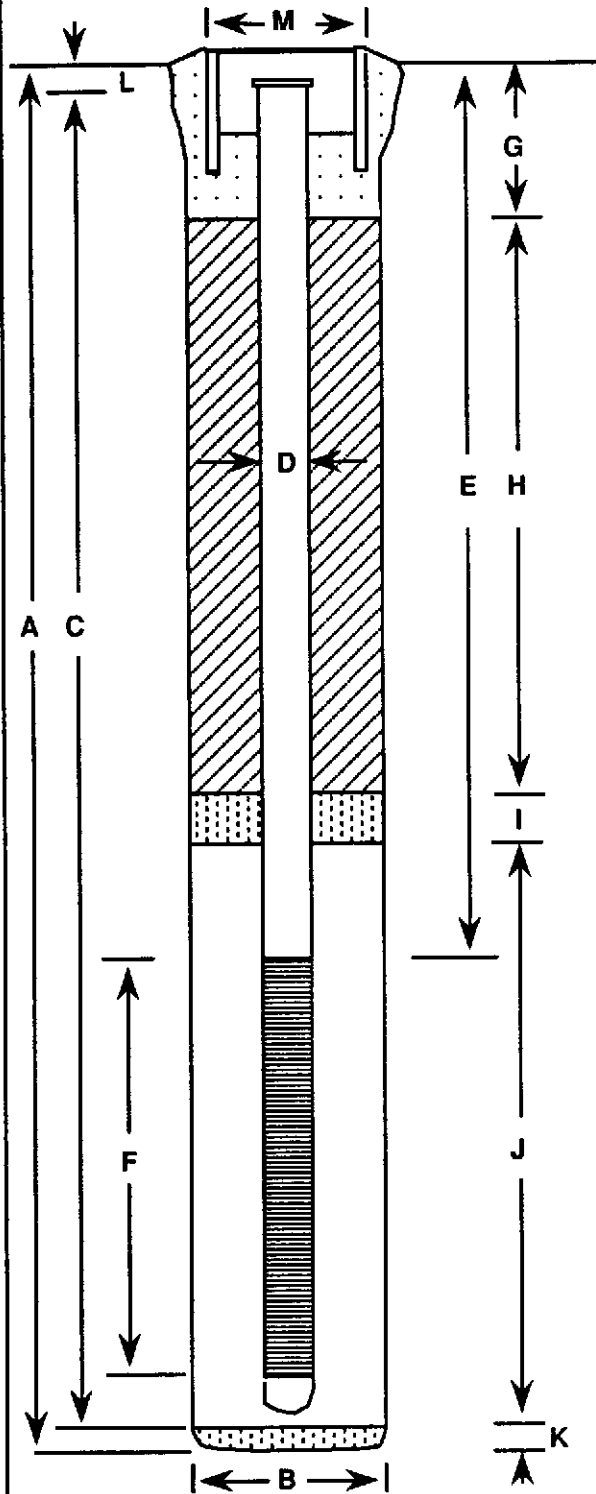
Boring/Well No.: MW-1
 Top of Casing Elev.: 9.32
 Ground Surface Elev.: 9.76
 Datum: Mean Sea Level

EXPLORATION BORING

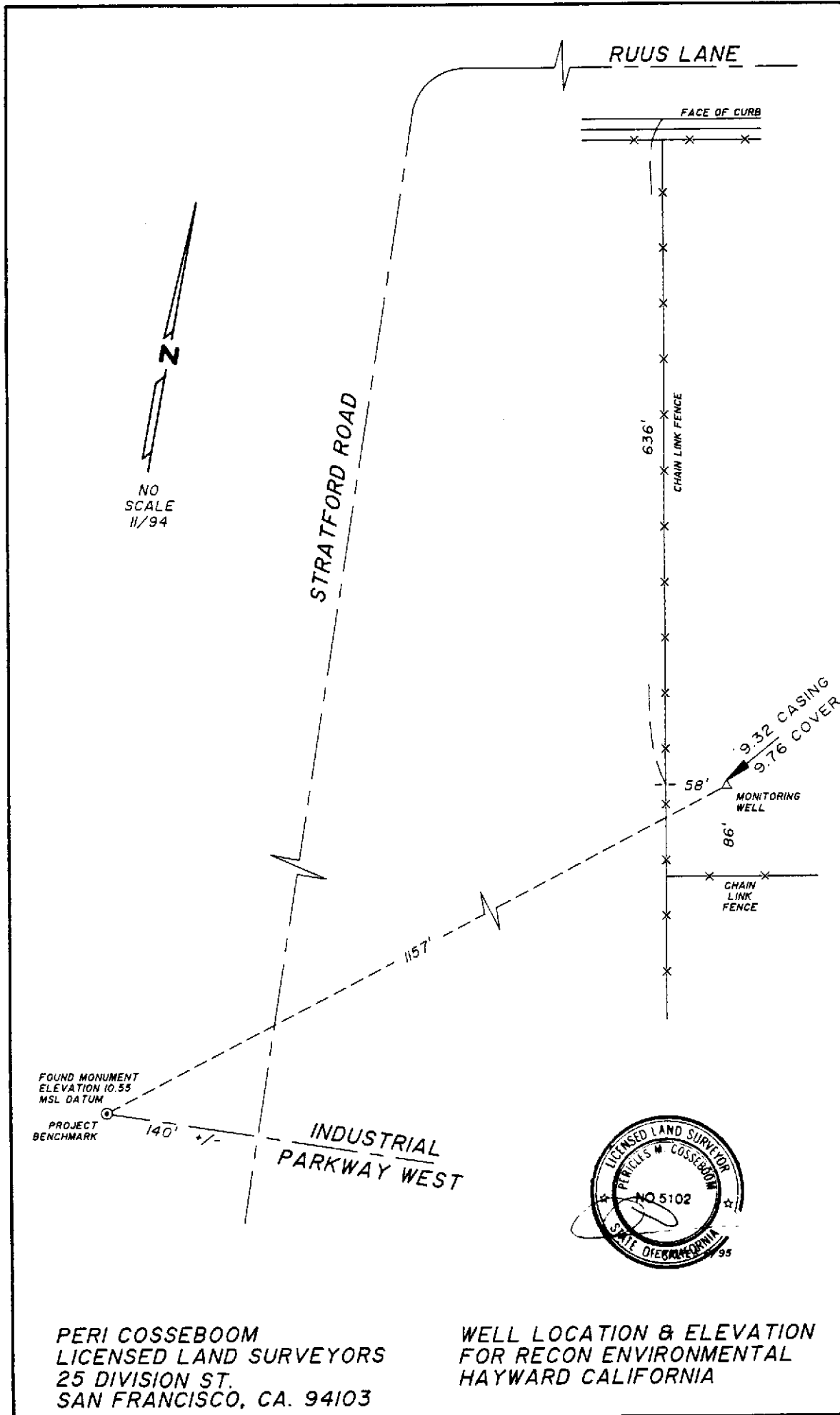
A. Total Depth 20.0 ft.
 B. Boring Diameter 8 in.
 Drilling Method Hollow-Stem Auger

WELL CONSTRUCTION

C. Casing Length 19.5 ft.
 Material Schedule 40 PVC
 D. Diameter 2 in.
 E. Depth to Top of Perforations 10.0 ft.
 F. Perforated Length 10.0 ft.
 Perforated Interval from 10.0 to 20.0 ft.
 Perforation Type Machine Slot
 Perforation Size 0.010 in.
 G. Surface Cap 0.5 ft.
 Cap Material Concrete
 H. Backfill 6.5 ft.
 Backfill Material Bentonite-Cement Grout
 I. Plug 1.0 ft.
 Plug Material Bentonite Pellets
 J. Filter Pack 12.0 ft.
 Material #2/12 Lonestar Sand
 K. Bottom Plug N/A ft.
 Material N/A
 L. Top of Casing Depth -0.5 ft.
 M. Protective Cover Diameter 12 in.



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 Environmental Corp.
 7000 Marina Boulevard
 Fourth Floor
 Brisbane, CA 94005



PERI COSSEBOOM
 LICENSED LAND SURVEYORS
 25 DIVISION ST.
 SAN FRANCISCO, CA. 94103

WELL LOCATION & ELEVATION
 FOR RECON ENVIRONMENTAL
 HAYWARD CALIFORNIA

GROUNDWATER COLLECTION LOG

WELL NO. MW-1

Project Name 1362 AND 1384 RUS TALLYN AND HONENER

Project Number S40109

Date 9/15/94

Sample Number GW1 through GW5

Depth to Well Bottom 19 feet

Depth to Water 10.02 feet below TOC

Purge Method Bailers

Sample Method Bailers

Time	Cumulative Volume of Water Purged	pH	Electrical Conductivity	Temperature	Comments
0835	5 gal	4.3	5600	62	
1000	10	4.3	5800	67	
1050	25	4.3	5900	67	

Sample Turbidity turbid

Total Number of Samples Collected

- 40 ml VOA Vials 3
- 200 ml Plastic Bottles
- 1 Liter Amber Bottles 1
- 1 Gal. Amber Bottles
- Other 6-L clean 3

Laboratory AQUA AIR ANALYTICAL

Date Shipped 9/15/94

Shipped Via FEDERAL EXPRESS

Sampled By FRED HAYDEN

Estimated Volume to Purge = $3.14 \times (5 \text{ casing vol.}) \times (7.5 \text{ gal. per cubic ft}) \times (\text{height of water in ft}) \times (\text{radius of well in ft squared})$
= $3.14 \times 5 \times 7.5 \times [] \times ([] \text{ squared}) =$

GROUNDWATER COLLECTION LOG

WELL NO. MW-1

Project Name 1362 and 1384 RUS
JALYN AND HÖHNER

Project Number SAG109

Date 10/27/94

Sample Number MW1-A, MW1-B,
19 feet TB-F, TB-FF

Depth to Well Bottom

Depth to Water 10.13 feet below TOC

Purge Method Bailer

Sample Method Bailer

Time	Cumulative Volume of Water Purged	pH	Electrical Conductivity	Temperature °F	Comments
1120	5 gal	7.04	5100	67	
1214	10	7.03	5800	65	
1220	16	7.03	5600	65	

Sample Turbidity turbid

Total Number of Samples Collected _____

40 ml VOA Vials _____

200 ml Plastic Bottles _____

1 Liter Amber Bottles 2

1 Gal. Amber Bottles _____

Other 2 travel blanks

Laboratory Sequoia Analytical

Date Shipped 10/27/94

Shipped Via HAND DELIVERED

Sampled By FRED HAYDEN

Estimated Volume to Purge = 3.14 x (5 casing vol.) x (7.5 gal. per cubic ft) x (height of water in ft) x (radius of well in ft squared)

= 3.14 x 5 x 7.5 x [] x ([] squared) =

APPENDIX B

**CHAIN OF CUSTODY FORMS AND
LABORATORY ANALYTICAL REPORTS**

Aqua Air (A2) Analytical Corp.
25 Mathewson Drive
Weymouth, Massachusetts 02189
Telephone (617)337-9334
Fax (617) 337-8237

MA-MA069, CT-PH0119, RI-A45, MD-MD194, NJ-59744, CA-1425

L a b o r a t o r y R e p o r t

----- Prepared for -----

CERTIFIED - SAN FRANCISCO
70000 Marina Blvd.

Report Date 10/19/94
Date Received 9/16/94

Brisbane CA 94005-0000
Fred Hayden

Customer No. 8888-0
Work Order No. 9409-00222
Invoice No. LB0000

Permit No.
Cust. P.O.
Project No. S40 09

Sampled Date 9/15/94
Sampled Time 00:00

Subject:

Quality Control Results

Test Performed	Method	Results	Units	MDL	Tech	Analy. Date	Dup %	Rec Spk %	Rec Std. %
1 SB-6-1.5									
Petroleum Hydrocarbons	41.1, EPA 1983	ND	ug/Kg		5 SB	9/29/94	0.00	0.00	81.30
Lead	74.0, EPA 1986	33.	ug/Kg		5.0 MAM	9/29/94	0.74	104.00	101.30
volatile halocarbons									
Chloromethane	EPA 8010	ND	ug/Kg		5 JJS	10/03/94			
Bromomethane	EPA 8010	ND	ug/Kg		5 JJS	10/03/94			
Vinyl Chloride	EPA 8010	ND	ug/Kg		5 JJS	10/03/94			
Dichlorodifluoromethane	EPA 8010	ND	ug/Kg		5 JJS	10/03/94			
Chloroethane	EPA 8010	ND	ug/Kg		5 JJS	10/03/94			
Methylene Chloride	EPA 8010	ND	ug/Kg		5 JJS	10/03/94			
Trichlorofluoromethane	EPA 8010	ND	ug/Kg		5 JJS	10/03/94			
1,1-Dichloroethane	EPA 8010	ND	ug/Kg		5 JJS	10/03/94			
1,1-Dichloroethane	EPA 8010	ND	ug/Kg		5 JJS	10/03/94			
Trans-1,2-Dichloroethane	EPA 8010	ND	ug/Kg		5 JJS	10/03/94			
Chloroform	EPA 8010	ND	ug/Kg		5 JJS	10/03/94			
1,2-Dichloroethane	EPA 8010	ND	ug/Kg		5 JJS	10/03/94			
1,1,1-Trichloroethane	EPA 8010	ND	ug/Kg		5 JJS	10/03/94			
Carbon Tetrachloride	EPA 8010	ND	ug/Kg		1 JJS	10/03/94			
Bromodichloromethane	EPA 8010	ND	ug/Kg		5 JJS	10/03/94			
1,2-Dichloropropane	EPA 8010	ND	ug/Kg		5 JJS	10/03/94			
Trans-1,3-Dichloropropane	EPA 8010	ND	ug/Kg		5 JJS	10/03/94			
Trichloroethene	EPA 8010	ND	ug/Kg		5 JJS	10/03/94			
Cis-1,3-Dichloropropene	EPA 8010	ND	ug/Kg		5 JJS	10/03/94			
1,1,2-Trichloroethane	EPA 8010	ND	ug/Kg		5 JJS	10/03/94			
Dibromochloromethane	EPA 8010	ND	ug/Kg		5 JJS	10/03/94			
2-Chloroethylvinyl ether	EPA 8010	ND	ug/Kg		5 JJS	10/03/94			

---- Continued on Next Page ----

Aqua Air (A2) Analytical Corp.

Page 2

Laboratory Report

CERTIFIED - SAN FRANCISCO
Work Order No. 9409-00222.

Report Date 10/19/94
Quality Control Results

Test Performed	Method	Results	Units	MDL	Tech	Analy. Date	Dup % Rec	Spk % Rec	Std. % Rec
1 SB-6-1.5									
Bromoform	EPA 8010	ND	ug/Kg		5 JJS	10/03/94			
1,1,2,2-Tetrachloroethane	EPA 8010	ND	ug/kg		5 JJS	10/03/94			
Tetrachloroethene	EPA 8010	ND	ug/kg		5 JJS	10/03/94			
Chlorobenzene	EPA 8010	ND	ug/Kg		5 JJS	10/03/94			
1,4-Dichlorobenzene	EPA 8010	ND	ug/Kg		5 JJS	10/03/94			
1,3-Dichlorobenzene	EPA 8010	ND	ug/Kg		5 JJS	10/03/94			
1,2-Dichlorobenzene	EPA 8010	ND	ug/Kg		5 JJS	10/03/94			
Volatile Aromatics 8020	EPA 8020, SW-846								
Methyl-T-butyl ether	EPA 8020	ND	ug/Kg		25 JJS	10/03/94			
Benzene	EPA 8020	ND	ug/Kg		5 JJS	10/03/94			
Toluene	EPA 8020	ND	ug/Kg		5 JJS	10/03/94			
Chlorobenzene	EPA 8020	ND	ug/Kg		5 JJS	10/03/94			
Total Xylenes	EPA 8020	ND	ug/Kg		5 JJS	10/03/94			
1,3-Dichlorobenzene	EPA 8020	ND	ug/Kg		5 JJS	10/03/94			
1,2-Dichlorobenzene	EPA 8020	ND	ug/Kg		5 JJS	10/03/94			
1,4-Dichlorobenzene	EPA 8020	ND	ug/Kg		5 JJS	10/03/94			
Ethylbenzene	EPA 8020	ND	ug/Kg		5 JJS	10/03/94			
Formaldehyde	MBE, HACH	0.66	ug/Kg		0.1 SH	11/10/94			
2 SB-7-1.5									
Petroleum Hydrocarbons	41.1, EPA 1983	30	ug/Kg		5 SH	9/29/94	0.00	0.00	81.30
Lead	74.0, EPA 1986	23.	ug/Kg		5.0 MAH	9/29/94	0.74	104.00	101.30
volatile halocarbons									
Chloromethane	EPA 8010	ND	ug/Kg		5 JJS	10/03/94			
Bromomethane	EPA 8010	ND	ug/Kg		5 JJS	10/03/94			
Vinyl Chloride	EPA 8010	ND	ug/Kg		5 JJS	10/03/94			
Dichlorodifluoromethane	EPA 8010	ND	ug/Kg		5 JJS	10/03/94			
Chloroethane	EPA 8010	ND	ug/Kg		5 JJS	10/03/94			
Methylene Chloride	EPA 8010	ND	ug/Kg		5 JJS	10/03/94			
Trichlorofluoromethane	EPA 8010	ND	ug/Kg		5 JJS	10/03/94			
1,1-Dichloroethane	EPA 8010	ND	ug/Kg		5 JJS	10/03/94			
1,1-Dichloroethane	EPA 8010	ND	ug/Kg		5 JJS	10/03/94			
Trans-1,2-Dichloroethane	EPA 8010	ND	ug/Kg		5 JJS	10/03/94			
Chloroform	EPA 8010	ND	ug/Kg		5 JJS	10/03/94			
1,2-Dichloroethane	EPA 8010	ND	ug/Kg		5 JJS	10/03/94			
1,1,1-Trichloroethane	EPA 8010	ND	ug/Kg		5 JJS	10/03/94			
Carbon Tetrachloride	EPA 8010	ND	ug/Kg		1 JJS	10/03/94			
Bromodichloromethane	EPA 8010	ND	ug/Kg		5 JJS	10/03/94			
1,2-Dichloropropane	EPA 8010	ND	ug/Kg		5 JJS	10/03/94			
Trans-1,3-Dichloropropane	EPA 8010	ND	ug/Kg		5 JJS	10/03/94			
Trichloroethene	EPA 8010	ND	ug/Kg		5 JJS	10/03/94			
Cis-1,3-Dichloropropene	EPA 8010	ND	ug/Kg		5 JJS	10/03/94			
1,1,2-Trichloroethane	EPA 8010	ND	ug/Kg		5 JJS	10/03/94			

---- Continued on Next Page ----

Aqua Air (A2) Analytical Corp.

Page 3

Laboratory Report

CERTIFIED - SAN FRANCISCO
Work Order No. 9409-00222.

Report Date 10/19/94
Quality Control Results

Test Performed	Method	Results	Units	MDL	Tech	Analy. Date	Dup % Rec	Spk % Rec	Std. % Rec
2 SB-7-1.5									
Dibromochloromethane	EPA 8010	ND	ug/Kg		5 JJS	10/03/94			
2-Chloroethylvinyl ether	EPA 8010	ND	ug/Kg		5 JJS	10/03/94			
Bromoform	EPA 8010	ND	ug/Kg		5 JJS	10/03/94			
1,1,2,2-Tetrachloroethane	EPA 8010	ND	ug/kg		5 JJS	10/03/94			
Tetrachloroethene	EPA 8010	ND	ug/kg		5 JJS	10/03/94			
Chlorobenzene	EPA 8010	ND	ug/Kg		5 JJS	10/03/94			
1,4-Dichlorobenzene	EPA 8010	ND	ug/Kg		5 JJS	10/03/94			
1,3-Dichlorobenzene	EPA 8010	ND	ug/Kg		5 JJS	10/03/94			
1,2-Dichlorobenzene	EPA 8010	ND	ug/Kg		5 JJS	10/03/94			
Volatile Aromatics 8020	EPA 8020, SW-846								
Methyl-T-butyl ether	EPA 8020	ND	ug/Kg		25 JJS	10/03/94			
Benzene	EPA 8020	ND	ug/Kg		5 JJS	10/03/94			
Toluene	EPA 8020	ND	ug/Kg		5 JJS	10/03/94			
Chlorobenzene	EPA 8020	ND	ug/Kg		5 JJS	10/03/94			
Total Xylenes	EPA 8020	ND	ug/Kg		5 JJS	10/03/94			
1,3-Dichlorobenzene	EPA 8020	ND	ug/Kg		5 JJS	10/03/94			
1,2-Dichlorobenzene	EPA 8020	ND	ug/Kg		5 JJS	10/03/94			
1,4-Dichlorobenzene	EPA 8020	ND	ug/Kg		5 JJS	10/03/94			
Ethylbenzene	EPA 8020	ND	ug/Kg		5 JJS	10/03/94			
Formaldehyde	NB H, HACH	0.96	ug/Kg		0.1 SH	11/10/94			
3 SB-8-1.5									
Petroleum Hydrocarbons	41:1, EPA 1983	718	ug/Kg		5 SH	9/29/94	0.00	0.00	81.30
Lead	74:3, EPA 1986	88.	ug/Kg		5.0 NAM	9/29/94	0.74	104.00	101.30
volatile halocarbons									
Chloromethane	EPA 8010	ND	ug/Kg		5 JJS	10/03/94			
Bromomethane	EPA 8010	ND	ug/Kg		5 JJS	10/03/94			
Vinyl Chloride	EPA 8010	ND	ug/Kg		5 JJS	10/03/94			
Dichlorodifluoromethane	EPA 8010	ND	ug/Kg		5 JJS	10/03/94			
Chloroethane	EPA 8010	ND	ug/Kg		5 JJS	10/03/94			
Methylene Chloride	EPA 8010	ND	ug/Kg		5 JJS	10/03/94			
Trichlorofluoromethane	EPA 8010	ND	ug/Kg		5 JJS	10/03/94			
1,1-Dichloroethene	EPA 8010	ND	ug/Kg		5 JJS	10/03/94			
1,1-Dichloroethane	EPA 8010	ND	ug/Kg		5 JJS	10/03/94			
Trans-1,2-Dichloroethene	EPA 8010	ND	ug/Kg		5 JJS	10/03/94			
Chloroform	EPA 8010	ND	ug/Kg		5 JJS	10/03/94			
1,2-Dichloroethane	EPA 8010	ND	ug/Kg		5 JJS	10/03/94			
1,1,1-Trichloroethane	EPA 8010	ND	ug/Kg		5 JJS	10/03/94			
Carbon Tetrachloride	EPA 8010	ND	ug/Kg		1 JJS	10/03/94			
Bromodichloromethane	EPA 8010	ND	ug/Kg		5 JJS	10/03/94			
1,2-Dichloropropane	EPA 8010	ND	ug/Kg		5 JJS	10/03/94			
Trans-1,3-Dichloropropane	EPA 8010	ND	ug/Kg		5 JJS	10/03/94			
Trichloroethene	EPA 8010	ND	ug/Kg		5 JJS	10/03/94			

---- Continued on Next Page ----

Aqua Air (A2) Analytical Corp.

Page 4

Laboratory Report

CERTIFIED - SAN FRANCISCO
Work Order No. 9409-00222.

Report Date 10/19/94
Quality Control Results

Test Performed	Method	Results	Units	MDL	Tech	Analy. Date	Dup % Rec	Spk % Rec	Std. % Rec
3 SB-8-1.5									
Cis-1,3-Dichloropropene	E A 8010	ND	ug/Kg	5	JJS	10/03/94			
1,1,2-Trichloroethane	E A 8010	ND	ug/Kg	5	JJS	10/03/94			
Dibromochloromethane	E A 8010	ND	ug/Kg	5	JJS	10/03/94			
2-Chloroethylvinyl ether	E A 8010	ND	ug/Kg	5	JJS	10/03/94			
Bromoform	E A 8010	ND	ug/Kg	5	JJS	10/03/94			
1,1,2,2-Tetrachloroethane	E A 8010	ND	ug/Kg	5	JJS	10/03/94			
Tetrachloroethene	E A 8010	ND	ug/Kg	5	JJS	10/03/94			
Chlorobenzene	E A 8010	ND	ug/Kg	5	JJS	10/03/94			
1,4-Dichlorobenzene	E A 8010	ND	ug/Kg	5	JJS	10/03/94			
1,3-Dichlorobenzene	E A 8010	ND	ug/Kg	5	JJS	10/03/94			
1,2-Dichlorobenzene	E A 8010	ND	ug/Kg	5	JJS	10/03/94			
Volatile Aromatics 8020	E A 8020, SW-846								
Methyl-T-butyl ether	EP. 8020	ND	ug/Kg	25	JJS	10/03/94			
Benzene	EP. 8020	ND	ug/Kg	5	JJS	10/03/94			
Toluene	EP. 8020	ND	ug/Kg	5	JJS	10/03/94			
Chlorobenzene	EP. 8020	ND	ug/Kg	5	JJS	10/03/94			
Total Xylenes	EP. 8020	ND	ug/Kg	5	JJS	10/03/94			
1,3-Dichlorobenzene	EP. 8020	ND	ug/Kg	5	JJS	10/03/94			
1,2-Dichlorobenzene	EP. 8020	ND	ug/Kg	5	JJS	10/03/94			
1,4-Dichlorobenzene	EP. 8020	ND	ug/Kg	5	JJS	10/03/94			
Ethylbenzene	EP. 8020	ND	ug/Kg	5	JJS	10/03/94			
Formaldehyde	MB E, HACH	1.03	ug/Kg	0.1	SH	11/10/94			
4 SB-9-1.5									
Petroleum Hydrocarbons	411.1, EPA 1983	233	ug/Kg	5	SE	9/29/94	0.00	0.00	81.30
Lead	7430, EPA 1986	21.	ug/Kg	5.0	HAM	9/29/94	0.74	104.00	101.30
volatile halocarbons									
Chloromethane	EPA 8010	ND	ug/Kg	5	JJS	10/03/94			
Bromomethane	EPA 8010	ND	ug/Kg	5	JJS	10/03/94			
Vinyl Chloride	EPA 8010	ND	ug/Kg	5	JJS	10/03/94			
Dichlorodifluoromethane	EPA 8010	ND	ug/Kg	5	JJS	10/03/94			
Chloroethane	EPA 8010	ND	ug/Kg	5	JJS	10/03/94			
Methylene Chloride	EPA 8010	ND	ug/Kg	5	JJS	10/03/94			
Trichlorofluoromethane	EPA 8010	ND	ug/Kg	5	JJS	10/03/94			
1,1-Dichloroethene	EPA 8010	ND	ug/Kg	5	JJS	10/03/94			
1,1-Dichloroethane	EPA 8010	ND	ug/Kg	5	JJS	10/03/94			
Trans-1,2-Dichloroethene	EPA 8010	ND	ug/Kg	5	JJS	10/03/94			
Chloroform	EPA 8010	ND	ug/Kg	5	JJS	10/03/94			
1,2-Dichloroethane	EPA 8010	ND	ug/Kg	5	JJS	10/03/94			
1,1,1-Trichloroethane	EPA 8010	ND	ug/Kg	5	JJS	10/03/94			
Carbon Tetrachloride	EPA 8010	ND	ug/Kg	1	JJS	10/03/94			
Bromodichloromethane	EPA 8010	ND	ug/Kg	5	JJS	10/03/94			
1,2-Dichloropropane	EPA 8010	ND	ug/Kg	5	JJS	10/03/94			

---- Continued on Next Page ----

Aqua Air (A2) Analytical Corp.

Page 5

Laboratory Report

CERTIFIED - SAN FRANCISCO
Work Order No. 9409-00222.

Report Date 10/19/94
Quality Control Results

Test Performed	Method	Results	Units	MDL	Tech	Analy. Date	Dup % Rec	Spk % Rec	Std. % Rec
4 SB-9-1.5									
Trans-1,3-Dichloropropane	EPA 8010	ND	ug/Kg		5 JJS	10/03/94			
Trichloroethene	EPA 8010	ND	ug/Kg		5 JJS	10/03/94			
Cis-1,3-Dichloropropene	EPA 8010	ND	ug/Kg		5 JJS	10/03/94			
1,1,2-Trichloroethane	EPA 8010	ND	ug/Kg		5 JJS	10/03/94			
Dibromochloromethane	EPA 8010	ND	ug/Kg		5 JJS	10/03/94			
2-Chloroethylvinyl ether	EPA 8010	ND	ug/Kg		5 JJS	10/03/94			
Bromoform	EPA 8010	ND	ug/Kg		5 JJS	10/03/94			
1,1,2,2-Tetrachloroethane	EPA 8010	ND	ug/kg		5 JJS	10/03/94			
Tetrachloroethene	EPA 8010	ND	ug/kg		5 JJS	10/03/94			
Chlorobenzene	EPA 8010	ND	ug/Kg		5 JJS	10/03/94			
1,4-Dichlorobenzene	EPA 8010	ND	ug/Kg		5 JJS	10/03/94			
1,3-Dichlorobenzene	EPA 8010	ND	ug/Kg		5 JJS	10/03/94			
1,2-Dichlorobenzene	EPA 8010	ND	ug/Kg		5 JJS	10/03/94			
Volatile Aromatics 8020	EPA 8020, SW-846								
Methyl-T-butyl ether	EPA 8020	ND	ug/Kg		25 JJS	10/03/94			
Benzene	EPA 8020	ND	ug/Kg		5 JJS	10/03/94			
Toluene	EPA 8020	ND	ug/Kg		5 JJS	10/03/94			
Chlorobenzene	EPA 8020	ND	ug/Kg		5 JJS	10/03/94			
Total Xylenes	EPA 8020	ND	ug/Kg		5 JJS	10/03/94			
1,3-Dichlorobenzene	EPA 8020	ND	ug/Kg		5 JJS	10/03/94			
1,2-Dichlorobenzene	EPA 8020	ND	ug/Kg		5 JJS	10/03/94			
1,4-Dichlorobenzene	EPA 8020	ND	ug/Kg		5 JJS	10/03/94			
Ethylbenzene	EPA 8020	ND	ug/Kg		5 JJS	10/03/94			
Formaldehyde	NBS H, HACH	0.22	ug/Kg		0.1 SE	11/10/94			
5 SB-10-1.5									
Petroleum Hydrocarbons	416.1, EPA 1983	2336	ug/Kg		5 SE	9/29/94	0.00	0.00	\$1.30
Lead	7420, EPA 1986	28.	ug/Kg		5.0 MAM	9/29/94	0.74	104.00	101.30
volatile halocarbons									
Chloromethane	EPA 8010	ND	ug/Kg		5 JJS	10/03/94			
Bromomethane	EPA 8010	ND	ug/Kg		5 JJS	10/03/94			
Vinyl Chloride	EPA 8010	ND	ug/Kg		5 JJS	10/03/94			
Dichlorodifluoromethane	EPA 8010	ND	ug/Kg		5 JJS	10/03/94			
Chloroethane	EPA 8010	ND	ug/Kg		5 JJS	10/03/94			
Methylene Chloride	EPA 8010	ND	ug/Kg		5 JJS	10/03/94			
Trichlorofluoromethane	EPA 8010	ND	ug/Kg		5 JJS	10/03/94			
1,1-Dichloroethene	EPA 8010	ND	ug/Kg		5 JJS	10/03/94			
1,1-Dichloroethane	EPA 8010	ND	ug/Kg		5 JJS	10/03/94			
Trans-1,2-Dichloroethene	EPA 8010	ND	ug/Kg		5 JJS	10/03/94			
Chloroform	EPA 8010	ND	ug/Kg		5 JJS	10/03/94			
1,2-Dichloroethane	EPA 8010	ND	ug/Kg		5 JJS	10/03/94			
1,1,1-Trichloroethane	EPA 8010	ND	ug/Kg		5 JJS	10/03/94			
Carbon Tetrachloride	EPA 8010	ND	ug/Kg		1 JJS	10/03/94			

---- Continued on Next Page ----

Aqua Air (A2) Analytical Corp.

Page 6

Laboratory Report

CERTIFIED - SAN FRANCISCO
Work Order No. 9409-00222.

Report Date 10/19/94
Quality Control Results

Test Performed	Method	Results	Units	MDL	Tech	Analy. Date	Dup % Rec	Spk % Rec	Std. % Rec
5 SB-10-1.5									
Bromodichloromethane	E A 8010	ND	ug/Kg		5 JJS	10/03/94			
1,2-Dichloropropane	E A 8010	ND	ug/Kg		5 JJS	10/03/94			
Trans-1,3-Dichloropropane	E A 8010	ND	ug/Kg		5 JJS	10/03/94			
Trichloroethene	E A 8010	ND	ug/Kg		5 JJS	10/03/94			
Cis-1,3-Dichloropropene	E A 8010	ND	ug/Kg		5 JJS	10/03/94			
1,1,2-Trichloroethane	E A 8010	ND	ug/Kg		5 JJS	10/03/94			
Dibromochloromethane	E A 8010	ND	ug/Kg		5 JJS	10/03/94			
2-Chloroethylvinyl ether	E A 8010	ND	ug/Kg		5 JJS	10/03/94			
Bromoform	E A 8010	ND	ug/Kg		5 JJS	10/03/94			
1,1,2,2-Tetrachloroethane	E A 8010	ND	ug/Kg		5 JJS	10/03/94			
Tetrachloroethene	EF 8010	ND	ug/kg		5 JJS	10/03/94			
Chlorobenzene	EF 8010	ND	ug/Kg		5 JJS	10/03/94			
1,4-Dichlorobenzene	EF 8010	ND	ug/Kg		5 JJS	10/03/94			
1,3-Dichlorobenzene	EP 8010	ND	ug/Kg		5 JJS	10/03/94			
1,2-Dichlorobenzene	EP 8010	ND	ug/Kg		5 JJS	10/03/94			
Volatile Aromatics 8020	EP 8020, SW-846								
Methyl-T-butyl ether	EP 8020	ND	ug/Kg		25 JJS	10/03/94			
Benzene	EP 8020	ND	ug/Kg		5 JJS	10/03/94			
Toluene	EP 8020	ND	ug/Kg		5 JJS	10/03/94			
Chlorobenzene	EP 8020	ND	ug/Kg		5 JJS	10/03/94			
Total Xylenes	EP 8020	ND	ug/Kg		5 JJS	10/03/94			
1,3-Dichlorobenzene	EP 8020	ND	ug/Kg		5 JJS	10/03/94			
1,2-Dichlorobenzene	EP 8020	ND	ug/Kg		5 JJS	10/03/94			
1,4-Dichlorobenzene	EP 8020	ND	ug/Kg		5 JJS	10/03/94			
Ethylbenzene	EP 8020	ND	ug/Kg		5 JJS	10/03/94			
Formaldehyde	MBT 1, EACH	0.29	ug/Kg		0.1 SB	11/10/94			
6 SB-11-1.5									
Petroleum Hydrocarbons	418.1, EPA 1983	239	ug/Kg		5 SH	9/29/94	0.00	0.00	81.30
Formaldehyde	MBT 1, EACH	0.27	ug/Kg		0.1 SH	11/10/94			
7 SB-11-3.0									
Petroleum Hydrocarbons	418.1, EPA 1983	ND	ug/Kg		5 SH	10/12/94	0.00	0.00	68.00
8 SB-12-1.5									
Petroleum Hydrocarbons	418.1, EPA 1983	1648	ug/Kg		5 SH	9/29/94	0.00	0.00	81.30
Formaldehyde	MBT 1, EACH	0.61	ug/Kg		0.1 SH	11/10/94			
9 SB-12-3.0									
Petroleum Hydrocarbons	418.1, EPA 1983	2679	ug/Kg		5 SH	10/12/94	0.00	0.00	68.00

---- Continued on Next Page ----

Aqua Air (A2) Analytical Corp.

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Laboratory Report

CERTIFIED - SAN FRANCISCO
Work Order No. 9409-00222.

Report Date 10/19/94
Quality Control Results

Test Performed	Method	Results	Units	MDL	Tech	Analy. Date	Dup % Rec	Spk % Rec	Std. % Rec
10 SB-13-1.5									
Petroleum Hydrocarbons	418.1, EPA 1983	464	ug/Kg		5 SH	9/29/94	0.00	0.00	81.30
Formaldehyde	ME TH, HACH	0.56	ug/Kg		0.1 SH	11/10/94			
11 SB-13-3.0									
Petroleum Hydrocarbons	418.1, EPA 1983	3182	ug/Kg		5 SH	10/12/94	0.00	0.00	68.00
12 SB-14-1.5									
Petroleum Hydrocarbons	418.1, EPA 1983	1019	ug/Kg		5 SH	9/29/94	0.00	0.00	81.30
Formaldehyde	ME TH, HACH	0.4	ug/Kg		0.1 SH	11/10/94			
13 SB-14-3.0									
Petroleum Hydrocarbons	418.1, EPA 1983	ND	ug/Kg		5 SH	10/12/94	0.00	0.00	68.00
14 SB-15-1.5									
Petroleum Hydrocarbons	418.1, EPA 1983	9224	ug/Kg		5 SH	9/29/94	0.00	0.00	81.30
Formaldehyde	ME TH, HACH	0.62	ug/Kg		0.1 SH	11/10/94			
15 GW 1									
volatile halocarbons									
Chloromethane	EPA 8010	ND	ug/L		5 JJS	10/03/94			
Bromomethane	EPA 8010	ND	ug/L		5 JJS	10/03/94			
Vinyl Chloride	EPA 8010	ND	ug/L		5 JJS	10/03/94			
Dichlorodifluoromethane	EPA 8010	ND	ug/L		5 JJS	10/03/94			
Chloroethane	EPA 8010	ND	ug/L		5 JJS	10/03/94			
Methylene Chloride	EPA 8010	ND	ug/L		5 JJS	10/03/94			
Trichlorofluoromethane	EPA 8010	ND	ug/L		5 JJS	10/03/94			
1,1-Dichloroethene	EPA 8010	ND	ug/L		5 JJS	10/03/94			
1,1-Dichloroethane	EPA 8010	ND	ug/L		5 JJS	10/03/94			
Trans-1,2-Dichloroethene	EPA 8010	ND	ug/L		5 JJS	10/03/94			
Chloroform	EPA 8010	ND	ug/L		5 JJS	10/03/94			
1,2-Dichloroethane	EPA 8010	ND	ug/L		5 JJS	10/03/94			
1,1,1-Trichloroethane	EPA 8010	ND	ug/L		5 JJS	10/03/94			
Carbon Tetrachloride	EPA 8010	ND	ug/L		1 JJS	10/03/94			
Bromodichloromethane	EPA 8010	ND	ug/L		5 JJS	10/03/94			
1,2-Dichloropropane	EPA 8010	ND	ug/L		5 JJS	10/03/94			
Trans-1,3-Dichloropropane	EPA 8010	ND	ug/L		5 JJS	10/03/94			
Trichloroethene	EPA 8010	ND	ug/L		5 JJS	10/03/94			
Cis-1,3-Dichloropropene	EPA 8010	ND	ug/L		5 JJS	10/03/94			
1,1,2-Trichloroethane	EPA 8010	ND	ug/L		5 JJS	10/03/94			

---- Continued on Next Page ----

Aqua Air (A2) Analytical Corp.

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Laboratory Report

CERTIFIED - SAN FRANCISCO
 Work Order No. 9409-00222.

Report Date 10/19/94
 Quality Control Results

Test Performed	Method	Results	Units	MDL	Tech	Analy. Date	Dup % Rec	Spk % Rec	Std. % Rec
15 GW 1									
Dibromochloromethane	E A 8010	ND	ug/L		5 JJS	10/03/94			
2-Chloroethylvinyl ether	E A 8010	ND	uh/L		5 JJS	10/03/94			
Bromoform	E A 8010	ND	uh/L		5 JJS	10/03/94			
1,1,2,2-Tetrachloroethane	E A 8010	ND	ug/L		5 JJS	10/03/94			
Tetrachloroethene	E A 8010	ND	ug/L		5 JJS	10/03/94			
Chlorobenzene	E A 8010	ND	ug/L		5 JJS	10/03/94			
1,4-Dichlorobenzene	E A 8010	ND	ug/L		5 JJS	10/03/94			
1,3-Dichlorobenzene	E A 8010	ND	ug/L		5 JJS	10/03/94			
1,2-Dichlorobenzene	E A 8010	ND	ug/L		5 JJS	10/03/94			
16 GW 2									
17 GW 3									
Formaldehyde	MB H, HACH	<0.1	%		0.1 SE	10/11/94			
18 GW 4									
Petroleum Hydrocarbons	411.1, EPA 1983	ND	mg/L		1 CJP	9/30/94	0.00	0.00	0.00
19 GW 5									
volatile halocarbons									
Chloromethane	EPA 8010	ND	ug/L		5 JJS	10/03/94			
Bromomethane	EPA 8010	ND	ug/L		5 JJS	10/03/94			
Vinyl Chloride	EPA 8010	ND	ug/L		5 JJS	10/03/94			
Dichlorodifluoromethane	EPA 8010	ND	ug/L		5 JJS	10/03/94			
Chloroethane	EPA 8010	ND	ug/L		5 JJS	10/03/94			
Methylene Chloride	EPA 8010	ND	ug/L		5 JJS	10/03/94			
Trichlorofluoromethane	EPA 8010	ND	ug/L		5 JJS	10/03/94			
1,1-Dichloroethene	EPA 8010	ND	ug/L		5 JJS	10/03/94			
1,1-Dichloroethane	EPA 8010	ND	ug/L		5 JJS	10/03/94			
Trans-1,2-Dichloroethene	EPA 8010	ND	ug/L		5 JJS	10/03/94			
Chloroform	EPA 8010	ND	ug/L		5 JJS	10/03/94			
1,2-Dichloroethane	EPA 8010	ND	ug/L		5 JJS	10/03/94			
1,1,1-Trichloroethane	EPA 8010	ND	ug/L		5 JJS	10/03/94			
Carbon Tetrachloride	EPA 8010	ND	ug/L		1 JJS	10/03/94			
Bromodichloromethane	EPA 8010	ND	ug/L		5 JJS	10/03/94			
1,2-Dichloropropane	EPA 8010	ND	ug/L		5 JJS	10/03/94			
Trans-1,3-Dichloropropane	EPA 8010	ND	ug/L		5 JJS	10/03/94			
Trichloroethene	EPA 8010	ND	ug/L		5 JJS	10/03/94			
Cis-1,3-Dichloropropene	EPA 8010	ND	ug/L		5 JJS	10/03/94			
1,1,2-Trichloroethane	EPA 8010	ND	ug/L		5 JJS	10/03/94			

---- Continued on Next Page ----

Aqua Air (A2) Analytical Corp.

L a b o r a t o r y R e p o r t

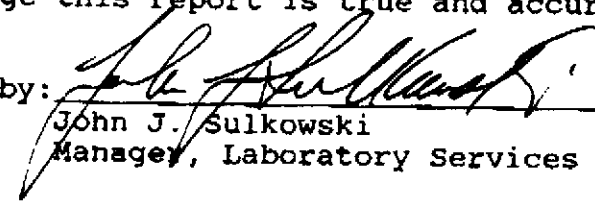
CERTIFIED - SAN FRANCISCO
 Work Order No. 9409-00222.

Report Date 10/19/94
 Quality Control Results

Test Performed	Method	Results	Units	MDL	Tech	Analy. Date	Dup & Rec	Spk & Rec	Std. & Rec
19 GW 5									
Dibromochloromethane	E A 8010	ND	ug/L	5	JJS	10/03/94			
2-Chloroethylvinyl ether	E A 8010	ND	ug/L	5	JJS	10/03/94			
Bromoform	E A 8010	ND	ug/L	5	JJS	10/03/94			
1,1,2,2-Tetrachloroethane	E A 8010	ND	ug/L	5	JJS	10/03/94			
Tetrachloroethene	E A 8010	ND	ug/L	5	JJS	10/03/94			
Chlorobenzene	E A 8010	ND	ug/L	5	JJS	10/03/94			
1,4-Dichlorobenzene	E A 8010	ND	ug/L	5	JJS	10/03/94			
1,3-Dichlorobenzene	E A 8010	ND	ug/L	5	JJS	10/03/94			
1,2-Dichlorobenzene	E A 8010	ND	ug/L	5	JJS	10/03/94			
Petroleum Hydrocarbons	MC DIFIED 8015	ND	mg/l	2	LS	10/05/94			

SAMPLE #222.16 ((W2) WAS DESTROYED IN THE LABORATORY.

To the best of my knowledge this report is true and accurate.

Authorized by: 
 John J. Sulkowski
 Manager, Laboratory Services

L a b o r a t o r y R e p o r t

CERTIFIED - SAN FRANCISCO
Work Order No. 9409-00218.

Report Date 9/28/94
Quality Control Results

John J. Sulkowski
Manager, Laboratory Services

CHAIN OF CUSTODY RECORD



Environmental Consultants & Laboratory Services
A **ENV** GROUP COMPANY

Certified Engineering & Testing® Company
25 Mathewson Drive • Weymouth, MA 02189
(617) 337-7887 • Fax (617) 337-8237

SAMPLE SERIES: 89-09-222
DUE DATE: 9-30-94

COMPANY: RECON ENVIRONMENTAL CON
2000 Marina Blvd #17
Brownsmead CA 94005
PHONE #: (415) 942 9900 FAX #: (415) 942 1033
P.O. #: _____
CLIENT CONTACT: Marc Popineau / Fred Hepler
CERTIFIED PROJECT #: 540109

- SAMPLE TYPE**
1. WATER
2. SOIL
3. SLUDGE
4. OIL
- CONTAINER TYPE**
P - PLASTIC
G - GLASS
V - VOA

PRESERVATIVES

ANALYSES

4700-1-1227
 TRIPLE
 ROWS & INCL. 80%
 FUEL (FUEL FILTRATION)
 FUEL (FUEL FILTRATION)
 FUEL (FUEL FILTRATION)
 FUEL (FUEL FILTRATION)

CERTIFIED SAMPLE #	CLIENT SAMPLE IDENTIFICATION	SAMPLE TYPE	CONTAINER			SAMPLING		PRESERVATIVES	ANALYSES	COMMENTS
			SIZE	TYPE	#	DATE	TIME			
15	GW1	water	L	Glass	1	9/15/94				
16	GW2	water	L	Plastic	1			X		
17	GW3	water	L	Plastic	1			X		
18	GW4	water	L	Glass	1					
19	GW5	water	40ml	glass	3					
	Blank	water	40ml	glass	1					

54 SEP 16 AM 11 14

RELINQUISHED BY: <u>[Signature]</u>	DATE: <u>9/15/94</u>	RECEIVED BY: <u>[Signature]</u>	DATE: _____
RELINQUISHED BY: _____	DATE: _____	RECEIVED BY: <u>[Signature]</u>	DATE: _____

SPECIAL INSTRUCTIONS:

RUSH DATE REQUIRED (ADDITIONAL COST MAY APPLY)

REGULAR (10 BUSINESS DAYS)

Shade areas for laboratory use only
 1. White, Pink copy and submit White and Yellow copies to the Laboratory

Aqua Air (A2) Analytical Corp.
 25 Mathewson Drive
 Weymouth, Massachusetts 02189
 Telephone (617)337-9334
 Fax (617) 337-8237

MA-MA069, CT-PH0119, RI-A45, MD-MD194, NJ-59744, CA-1425

L a b o r a t o r y R e p o r t

----- Prepared for -----

CERTIFIED - SAN FRANCISCO
 70000 Marina Blvd.

Report Date 9/28/94
 Date Received 9/22/94

Brisbane CA 94005-0000
 Fred Hayden

Customer No. 8888-0
 Work Order No. 9409-00218.
 Invoice No. LB0000

Permit No.
 Cust. P.O.
 Project No. S40109


Sampled Date 9/12/94
 Sampled Time 00:00

Subject:

Quality Control Results

Test Performed	Method	Results	Units	MDL	Tech	Anal. Date	Dup %	Rec Spk %	Rec Std. %
SB2-1.5									
Petroleum Hydrocarbons	418.1, EPA 1983	1410	mg/Kg		5 SH	9/26/94	14.81	90.00	89.20
SB2-3.0 HOLD									
SB1-1.5									
Petroleum Hydrocarbons	418.1, EPA 1983	687	mg/Kg		5 SH	9/26/94	14.81	90.00	89.20
SB3-1.5									
Petroleum Hydrocarbons	418.1, EPA 1983	51	mg/Kg		5 SH	9/26/94	14.81	90.00	89.20
SB3-3.0 HOLD									

To the best of my knowledge this report is true and accurate.

Authorized by: 

----- Continued on Next Page -----

CHAIN OF CUSTODY RECORD



Environmental Consultants & Laboratory Services
A **ETP** GROUP COMPANY

Certified Engineering & Testing Company

25 Mathewson Drive • Weymouth, MA 02189
(617) 337-7887 • Fax (617) 337-8237

SAMPLE SERIES #: 94-09-218

DUE DATE: 9-22-94

COMPANY: RECON ENVIRONMENTAL CORP
70018 Marina Blvd 4/F
Braintree MA 01905
PHONE #: (415) 742-9900 FAX #: (415) 742-0333
P.O. #: _____
CLIENT CONTACT: Fred Hayden
CERTIFIED PROJECT #: S40109

- SAMPLE TYPE
1. WATER
 2. SOIL
 3. SLUDGE
 4. OIL

ANALYSES

- CONTAINER TYPE
- P - PLASTIC
 - G - GLASS
 - V - VOA

HIGH TRAP

CERTIFIED SAMPLE #	CLIENT SAMPLE IDENTIFICATION	SAMPLE TYPE	CONTAINER			SAMPLING		PRESERVATIVES	COMMENTS
			SIZE	TYPE	#	DATE	TIME		
1	SB2-1.5	soil	2x6	brass	1	9/12/94		X	
2	SB2-3.0							X	SEP 10
3	SB1-1.5							X	SEP 14
4	SB3-1.5							X	SEP 17
5	SB3-3.0								SEP 20 AM 9 22

RELINQUISHED BY: Fred Hayden

DATE: 9/14/94
TIME: 10:30

RECEIVED BY: X. B. KIM

DATE: 9/14/94
TIME: 10:30

RELINQUISHED BY:

DATE:
TIME:

RECEIVED BY:

DATE:
TIME:

SPECIAL INSTRUCTIONS:
 RUSH DATE REQUIRED
(ADDITIONAL COST MAY APPLY)
 REGULAR
(10 BUSINESS DAYS)

Shade areas for laboratory use only
Retain Pink copy and submit White and Yellow copies to the Laboratory



Inchcape Testing Services

Anametrix Laboratories

1961 Concourse Drive
Suite E
San Jose, CA 95131
Tel: 408-432-8192
Fax: 408-432-8198

October 24, 1994

Mr. Don Bransford
RECON ENVIRONMENTAL CORP.
7000 Marina Blvd.
Brisbane, CA 94005

Dear Mr. Bransford:

Enclosed is the analytical report for your project ID: TALLYN PAIR, we received on October 7, 1994. The enclosed work was performed by Inchcape Testing Services, NDRC Laboratories, a state certified laboratory.

<u>I.T.S. Anametrix ID:</u>	<u>Client ID:</u>
9410058-1	SB4-1.5
9410058-2	SB5-1.5

If you have any questions regarding this workorder, please give me a call at (408)432-8192.

Sincerely,

INCHCAPE TESTING SERVICES
ANAMETRIX LABORATORIES

Cristina Velasquez Rayburn
Project Manager



Inchcape Testing Services

NDRC Laboratories

1089 E. Collins Blvd.
Richardson, TX 75081
Tel. 214-238-5591
Fax. 214-238-5592

DATE RECEIVED: 8-OCT-1994

REPORT NUMBER: D94-10555
REPORT DATE: 11-OCT-1994

SAMPLE SUBMITTED BY : Anametrix, Inc.
ADDRESS : 1961 Concourse Drive, Ste. E
San Jose, CA 96131
ATTENTION : Ms. Cristina Rayburn

PROJECT : 9410058
DATE SAMPLED : 7-OCT-1994

CASE NARRATIVE COMMENTS:

No problems were encountered with the analysis for this job.

Pease refer to the attached Case Narrative Summary for sample identifications and analytical requests.

If you have any questions, please call Mr. John Todd or Ms. Belinda Feuerbacher at (214) 238-5591.

Jacqueline Mayhew
Jacqueline Mayhew
Data Review Coordinator

CASE NARRATIVE SUMMARY - PAGE 1

JOB ID : D94-10555
 CUSTOMER : Anamatrix, Inc.
 PROJECT : 9410058

SAMPLE ID : D94-10555-1 DATE SAMPLED : 7-OCT-1994
 ID MARKS : SB4-1.5

ANALYSIS	PRP	PRP DATE	ANL	ANL DATE	QC BATCH NUMBER
FORMALD_S /1			P_F	10-OCT-1994	958023A
SOLID_TPER /1			PSS	10-OCT-1994	29141C

SAMPLE ID : D94-10555-2 DATE SAMPLED : 7-OCT-1994
 ID MARKS : SB5-1.5

ANALYSIS	PRP	PRP DATE	ANL	ANL DATE	QC BATCH NUMBER
FORMALD_S /1			P_F	10-OCT-1994	958023A
SOLID_TPER /1			PSS	10-OCT-1994	29141C

ANALYSIS	DESCRIPTION
FORMALD_S	Formaldehyde, Solid, Colorimetric
SOLID_TPER	Total Solids, Soil/Sludge, %



Inchcape Testing Services

NDRC Laboratories

1089 E. Collins Blvd.
Richardson, TX 75081
Tel. 214 258 5591
Fax. 214 258 5592

DATE RECEIVED : 8-OCT-1994

REPORT NUMBER : D94-10555-1
REPORT DATE : 11-OCT-1994

SAMPLE SUBMITTED BY : Anametrix, Inc.
ADDRESS : 1961 Concourse Drive, Ste. E
: San Jose, CA 96131
ATTENTION : Ms. Cristina Rayburn

SAMPLE MATRIX : Soil
ID MARKS : SB4-1.5
PROJECT : 9410058
DATE SAMPLED : 7-OCT-1994

MISCELLANEOUS ANALYSES		
TEST REQUESTED	DETECTION LIMIT	RESULTS
Formaldehyde /1	1 mg/Kg	2 mg/Kg
Dilution Factor : 10 Analyzed using AOAC 20.079 on 10-OCT-1994 by P_F QC Batch No : 958023A		
Total Solids /1	0.01 %	86.9 %
Analyzed using ASTM D2216 mod. on 10-OCT-1994 by PSS QC Batch No : 29141C		

Martin Jeffus jm
 Martin Jeffus
 General Manager



Inchcape Testing Services

NDRC Laboratories

10801 E. Collins Blvd.
Richardson, TX 75081
Tel. 214 258 5591
Fax. 214 258 5592

DATE RECEIVED : 8-OCT-1994

REPORT NUMBER : D94-10555-2
REPORT DATE : 11-OCT-1994

SAMPLE SUBMITTED BY : Anametrix, Inc.
ADDRESS : 1961 Concourse Drive, Ste. E
: San Jose, CA 96131
ATTENTION : Ms. Cristina Rayburn

SAMPLE MATRIX : Soil
ID MARKS : SB5-1.5
PROJECT : 9410058
DATE SAMPLED : 7-OCT-1994

MISCELLANEOUS ANALYSES		
TEST REQUESTED	DETECTION LIMIT	RESULTS
Formaldehyde /1	1 mg/Kg	< 1 mg/Kg
Dilution Factor : 10 Analyzed using AOAC 20.079 on 10-OCT-1994 by P_F QC Batch No : 958023A		
Total Solids /1	0.01 %	93.8 %
Analyzed using ASTM D2216 mod. on 10-OCT-1994 by PSS QC Batch No : 29141C		

Martin Jeffus jm
 Martin Jeffus
 General Manager



Inchcape Testing Services

NDRC Laboratories

1089 E. Collins Blvd.
Richardson, TX 75081
Tel. 214-258-5591
Fax. 214-258-5592

DATE RECEIVED: 8-OCT-1994

REPORT NUMBER: D94-10555

REPORT DATE: 11-OCT-1994

SUBMITTED BY: Anamatrix, inc.

LABORATORY QUALITY CONTROL REPORT

ANALYTE	Formaldehyde
BATCH No.	958023A
LCS LOT No.	----
PREP METHOD	----
PREP DATE	----
PREP TECHNICIAN	----
ANALYSIS METHOD	AOAC 20.079
ANALYSIS DATE	10/10/94
ANALYST	PF
METHOD BLANK	< 0.10 mg/Kg
MS % RECOVERY	111
MSD % RECOVERY	107
LCS % RECOVERY	----
DUPLICATE RPD	NC
MS/MSD RPD	3.67
SPIKE LEVEL	7.40 mg/Kg
SPIKED SAMPLE ID No.	D94-10555-2
DUPLICATE SAMPLE ID No.	D94-10555-2

----: Not Applicable
NC: Not Calculable

MS: Matrix Spike
MSD: Matrix Spike Duplicate


LCS: Laboratory Control Sample
RPD: Relative Percent Difference

COMMENTS:



ANAMETRIX INC
 Environmental & Analytical Chemistry
 1961 Concourse Drive, Suite E, San Jose, CA 95131
 (408) 432-8192 • Fax (408) 432-8198

CHAIN-OF-CUSTODY RECORD

PROJECT NUMBER		PROJECT NAME				Number of Cntrs	Type of Containers	Type of Analysis						Condition of Samples	Initial
9410058										Formaldehyde					
Send Report Attention of:			Report Due	Verbal Due											
CRISTINA V. RAYBURN			10/10/94	/ /											
Sample Number	Date	Time	Comp	Matrix	Station Location										
9410058	10-7-94	10:15		SOIL	SB4-1.5	1	1xBL	X					10555-1		
9410058	10-7-94	10:26		SOIL	SB5-1.5	1	1xBL	X					2		
<p><i>DUE 10-10-94</i></p> <p><i>WIC</i></p> <p>Level II QC</p> <p>ORIGINAL</p> <p>PRI 3</p>															
Relinquished by: (Signature)		Date/Time		Received by: (Signature)		Date/Time		Remarks: PLEASE SEND ORIGINAL CHAIN OF CUSTODY ALONG WITH THE REPORT. SUBBED TO ITS-DALLAS							
<i>Calvin Pender</i>		10-7-94 12:30													
Relinquished by: (Signature)		Date/Time		Received by: (Signature)		Date/Time									
Relinquished by: (Signature)		Date/Time		Received by Lab:		Date/Time		 <p>ANAMETRIX INC Environmental & Analytical Chemistry 1961 Concourse Drive, Suite E, San Jose, CA 95131 (408) 432-8192 • Fax (408) 432-8198</p>							
				<i>Doraly Conzill</i>		10.8.94/10am									



Inchcape Testing Services

Anametrix Laboratories

1961 Concourse Drive
Suite E
San Jose, CA 95131
Tel: 408-432-8192
Fax: 408-432-8196

October 7, 1994

Mr. Fred Hayden
Recon Environmental Corporation
7000 Marina Blvd.
Brisbane, CA 94005

Project ID: Former Bank
Anametrix Workorder: 9409103

Dear Fred:

After review of your request, we are reissuing this report because it was lost/not received.

If there is anything more that we can do, please contact our Client Services Department immediately. Thank you for using Inchcape Testing Services, Anametrix Laboratories.

Sincerely,

INCHCAPE TESTING SERVICES
ANAMETRIX LABORATORIES

Lance Wakida
Project Manager

Encl.



Inchcape Testing Services

Anamatrix Laboratories

1961 Concourse Drive
 Suite F
 San Jose, CA 95131
 Tel: 408-432-8192
 Fax: 408-432-8198

MR. DON BRANSFORD
 RECON ENVIRONMENTAL CORP.
 7000 MARINA BLVD.
 BRISBANE, CA 94005

Workorder # : 9409103
 Date Received : 09/13/94
 Project ID : ~~FORMER BANK~~
 Purchase Order: N/A *Russ Lane*

The following samples were received at Anamatrix for analysis :

ANAMATRIX ID	CLIENT SAMPLE ID
9409103- 1	MW1-5
9409103- 2	MW1-12
9409103- 3	MW1-20
9409103- 4	SB4-1.5
9409103- 5	SB4-3.0
9409103- 6	SB5-1.5
9409103- 7	SB5-3.0

This report is organized in sections according to the specific Anamatrix laboratory group which performed the analysis(es) and generated the data.

The results contained within this report relate to only the sample(s) tested. Additionally, these data should be considered in their entirety and Anamatrix cannot be responsible for the detachment, separation, or otherwise partial use of this report.

Anamatrix is certified by the California Department of Health Services (DHS) to perform environmental testing under Certificate Number 1234.

If you have any further questions or comments on this report, please call us as soon as possible. Thank you for using Anamatrix.

Doug Robbins

 Doug Robbins
 Laboratory Director

10-7-94

 Date

This report consists of 7 pages.

REPORT SUMMARY
ANAMETRIX, INC. (408)432-8192

MR. DON BRANSFORD
RECON ENVIRONMETAL CORP.
7000 MARINA BLVD.
BRISBANE, CA 94005

Workorder # : 9409103
Date Received : 09/13/94
Project ID : FORMER BANK
Purchase Order: N/A
Department : PREP
Sub-Department: PREP

SAMPLE INFORMATION:

ANAMETRIX SAMPLE ID	CLIENT SAMPLE ID	MATRIX	DATE SAMPLED	METHOD
9409103- 2	MW1-12	SOIL	09/12/94	418.1
9409103- 4	SB4-1.5	SOIL	09/12/94	418.1
9409103- 6	SB5-1.5	SOIL	09/12/94	418.1

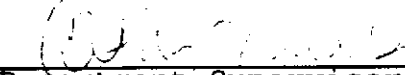
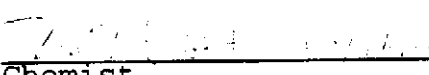
REPORT SUMMARY
ANAMETRIX, INC. (408)432-8192

MR. DON BRANSFORD
RECON ENVIRONMETAL CORP.
7000 MARINA BLVD.
BRISBANE, CA 94005

Workorder # : 9409103
Date Received : 09/13/94
Project ID : FORMER BANK
Purchase Order: N/A
Department : PREP
Sub-Department: PREP

QA/QC SUMMARY :

- No QA/QC problems were encountered for these samples.

	
_____ Department Supervisor	_____ Chemist
_____	_____
Date	Date

ANALYSIS DATA SHEET - TOTAL RECOVERABLE PETROLEUM HYDROCARBONS
EPA METHOD 418.1

INCHCAPE TESTING SERVICES - ANAMETRIX LABORATORIES (408) 432-8192

PROJECT # : ~~FORMER BANK~~ ANAMETRIX I.D. : 9409103
MATRIX : SOIL ANALYST : *JK*
DATE SAMPLED : 09/12/94 SUPERVISOR : *JK*
DATE EXTRACTED : 09/14/94 DATE RELEASED : 10/07/94
DATE ANALYZED : 09/14/94

WORKORDER #	SAMPLE I.D.	REPORTING LIMIT (mg/Kg)	AMOUNT FOUND (mg/Kg)
9409103-02	MW1-12	5.0	ND
9409103-04	SB4-1.5	10	94
9409103-06	SB5-1.5	100	1,300
BS14HIWN	METHOD BLANK	5.0	ND

ND - Not detected above the reporting limit for the method.

Reference - Methods for Chemical Analysis of Water and Wastes, 3rd edition,
US EPA-600/4-79-020, March 1983.

- All testing procedures follow California Department of Health
Services (Cal-DHS) approved methods.

LAB CONTROL SAMPLE REPORT - TOTAL RECOVERABLE PETROLEUM HYDROCARBONS
EPA METHOD 418.1

INCHCAPE TESTING SERVICES - ANAMETRIX LABORATORIES (408) 432-8192

SAMPLE I.D. : LAB CONTROL SAMPLE ANAMETRIX I.D. : MS14H1WN
MATRIX : SOIL ANALYST :
DATE EXTRACTED : 09/14/94 SUPERVISOR :
DATE ANALYZED : 09/14/94 DATE RELEASED : 10/07/94

COMPOUND	SPIKE AMT. (mg/Kg)	LCS (mg/Kg)	% REC LCS	%REC LIMITS
PETROLEUM HYDROCARBONS	33	31	94	81-119

#3759

9409103

(1012)

CHAIN OF CUSTODY RECORD



SAMPLE SERIES #: _____

Environmental Consultants & Laboratory Services
A **ENV** GROUP COMPANY

Certified Engineering & Testing[®] Company
7000 Marina Blvd
25 Matthews Drive Weymouth, MA 02189
(617) 337-7887 • Fax (617) 337-8237

BRISBANE CA, 94005

DUE DATE: 9-24-94

COMPANY: **RELOW ENVIRONMENTAL CORP**
7000 MARINA BLVD Y/F
BRISBANE CA 94005

PHONE #: () FAX #: ()

P.O. #: _____

CLIENT CONTACT: _____

CERTIFIED PROJECT #: _____

- SAMPLE TYPE
1. WATER
 2. SOIL
 3. SLUDGE
 4. OIL

- CONTAINER TYPE
- P - PLASTIC
 - G - GLASS
 - V - VOA

PRESERVATIVES

ANALYSES

*EPA 8215
418.1 TRPH*

CERTIFIED SAMPLE #	CLIENT SAMPLE IDENTIFICATION	SAMPLE TYPE	CONTAINER			SAMPLING		PRESERVATIVES	ANALYSES	COMMENTS
			SIZE	TYPE	#	DATE	TIME			
①	MW1-5	SOIL	2x6	BY	1	9/12/94				HOLD
②	MW1-12	SOIL						X		HOLD
③	MW1-20	SOIL						XX		HOLD
④	SB4-1.5	SOIL						XX		HOLD
⑤	SB4-3.0	SOIL								
⑥	SB5-1.5	SOIL								
⑦	SB5-3.0	SOIL								HOLD

RELINQUISHED BY: *[Signature]*

RELINQUISHED BY: *[Signature]*

DATE: 9/13/94
TIME: 1645

DATE: 9/13/94
TIME: 1810

RECEIVED BY: *[Signature]*

RECEIVED BY: *[Signature]*

DATE: 9/13/94
TIME: 1645

DATE: 9/13/94
TIME: 1810

SPECIAL INSTRUCTIONS:

RUSH DATE REQUIRED (ADDITIONAL COST MAY APPLY)

REGULAR (10 BUSINESS DAYS)



Inchcape Testing Services

Anamatrix Laboratories

1961 Concourse Drive
 Suite E
 San Jose, CA 95131
 Tel: 408-432-8192
 Fax: 408-432-8198

MR. DON BRANSFORD
 RECON ENVIRONMENTAL CORP.
 7000 MARINA BLVD.
 BRISBANE, CA 94005

Workorder # : 9409127
 Date Received : 09/16/94
 Project ID : ~~FORMER BANK~~
 Purchase Order: N/A *Row's Line*

The following samples were received at Anamatrix for analysis :

ANAMATRIX ID	CLIENT SAMPLE ID
9409127- 1	SB14-1.5

This report is organized in sections according to the specific Anamatrix laboratory group which performed the analysis(es) and generated the data.

The results contained within this report relate to only the sample(s) tested. Additionally, these data should be considered in their entirety and Anamatrix cannot be responsible for the detachment, separation, or otherwise partial use of this report.

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If you have any further questions or comments on this report, please call us as soon as possible. Thank you for using Anamatrix.

Douglas Robbins

 Doug Robbins
 Laboratory Director

10/24/94
 Date

This report consists of 8 pages.

REPORT SUMMARY
ANAMETRIX, INC. (408)432-8192

MR. DON BRANSFORD
RECON ENVIRONMETAL CORP.
7000 MARINA BLVD.
BRISBANE, CA 94005

Workorder # : 9409127
Date Received : 09/16/94
Project ID : ~~FORMER-BANK~~
Purchase Order: N/A *Rev. Lane*
Department : PREP
Sub-Department: PREP

SAMPLE INFORMATION:

ANAMETRIX SAMPLE ID	CLIENT SAMPLE ID	MATRIX	DATE SAMPLED	METHOD
9409127- 1	SB14-1.5	SOIL	09/15/94	418.1

REPORT SUMMARY
ANAMETRIX, INC. (408)432-8192

MR. DON BRANSFORD
RECON ENVIRONMENTAL CORP.
7000 MARINA BLVD.
BRISBANE, CA 94005

Workorder # : 9409127
Date Received : 09/16/94
Project ID : ~~FORMER BANK~~
Purchase Order: N/A *Brisbane*
Department : PREP *mb*
Sub-Department: PREP

QA/QC SUMMARY :

- Due to the high concentration of Total Recoverable Petroleum Hydrocarbons in sample SB14-1.5, the percent recovery of the Matrix Spike is outside of Quality Control Limits.

Patricia M... 9/17/94
Department Supervisor Date

203 JHI 9/17/94
Chemist Date

ANALYSIS DATA SHEET - TOTAL RECOVERABLE PETROLEUM HYDROCARBONS
EPA METHOD 418.1

INCHCAPE TESTING SERVICES - ANAMETRIX LABORATORIES (408) 432-8192

PROJECT # : ^{Riv's Lane 2nd} ~~FORMER BANK~~ ANAMETRIX I.D. : 9409127
MATRIX : SOIL ANALYST : *JD*
DATE SAMPLED : 09/15/94 SUPERVISOR : *Ch*
DATE EXTRACTED : 09/21/94 DATE RELEASED : 09/26/94
DATE ANALYZED : 09/21/94

WORKORDER #	SAMPLE I.D.	REPORTING LIMIT (mg/Kg)	AMOUNT FOUND (mg/Kg)
9409127-01	SB14-1.5	100	870
BS21H1WN	METHOD BLANK	5.0	ND

ND - Not detected above the reporting limit for the method.

Reference - Methods for Chemical Analysis of Water and Wastes, 3rd edition,
US EPA-600/4-79-020, March 1983.

- All testing procedures follow California Department of Health
Services (Cal-DHS) approved methods.

MATRIX SPIKE REPORT - TOTAL RECOVERABLE PETROLEUM HYDROCARBONS
 EPA METHOD 418.1
 INCHCAPE TESTING SERVICES - ANAMETRIX LABORATORIES (408) 432-8192

SAMPLE I.D. : SB14-1.5MS ANAMETRIX I.D. : 9409127-01
 MATRIX : SOIL ANALYST : ~~BC~~
 DATE SAMPLED : 09/15/94 SUPERVISOR : ~~Q~~
 DATE EXTRACTED : 09/21/94 DATE RELEASED : 09/27/94
 DATE ANALYZED : 09/21/94

COMPOUND	SPIKE AMT. (mg/Kg)	SAMPLE CONC. (mg/Kg)	REC MS (mg/Kg)	% REC MS	%REC LIMITS
Petroleum Hydrocarbons	33	870	1500	1909	75-125

* Quality control limits established by Anamatrix Laboratories.

LAB CONTROL SAMPLE REPORT - TOTAL RECOVERABLE PETROLEUM HYDROCARBONS
 EPA METHOD 418.1
 INCHCAPE TESTING SERVICES - ANAMETRIX LABORATORIES (408) 432-8192

SAMPLE I.D. : LAB CONTROL SAMPLE ANAMETRIX I.D. : MS21H1WN
 MATRIX : SOIL ANALYST : *32*
 DATE EXTRACTED : 09/21/94 SUPERVISOR : *cm*
 DATE ANALYZED : 09/21/94 DATE RELEASED : 09/26/94

COMPOUND	SPIKE AMT. (mg/Kg)	LCS (mg/Kg)	% REC LCS	%REC LIMITS
PETROLEUM HYDROCARBONS	33	28	85	81-119

DUPLICATE ANALYSIS SUMMARY SHEET
 INCHCAPE TESTING SERVICES - ANAMETRIX LABORATORIES (408) 432 - 8192

PROJECT I.D. : *Rail's Lane mp* ~~FORMER BANK~~ SDG No : N/A
 METHOD : 418.1 DATE : 09/21/94
 MATRIX : SOIL UNITS : mg/Kg

SAMPLE I.D.	ANALYTICAL RESULTS		RPD	RPD LIMITS
	SAMPLE	DUPLICATE		
SB14-1.5	870	800	8	35



Inchcape Testing Services

Anamatrix Laboratories

1961 Concourse Drive
 Suite E
 San Jose, CA 95131
 Tel: 408-432-8192
 Fax: 408-432-8198

MR. DON BRANSFORD
 RECON ENVIRONMENTAL CORP.
 7000 MARINA BLVD.
 BRISBANE, CA 94005

Workorder # : 9410059
 Date Received : 10/07/94
 Project ID : TALLYN PAIR
 Purchase Order: N/A

The following samples were received at Anamatrix for analysis :

ANAMATRIX ID	CLIENT SAMPLE ID
9410059- 1	SB4-3.0
9410059- 2	SB5-3.0

This report is organized in sections according to the specific Anamatrix laboratory group which performed the analysis(es) and generated the data.

The results contained within this report relate to only the sample(s) tested. Additionally, these data should be considered in their entirety and Anamatrix cannot be responsible for the detachment, separation, or otherwise partial use of this report.

Anamatrix is certified by the California Department of Health Services (DHS) to perform environmental testing under Certificate Number 1234.

If you have any further questions or comments on this report, please call us as soon as possible. Thank you for using Anamatrix.

Susan Kraska Yeager
 Susan Kraska Yeager
 Laboratory Director

10/14/94
 Date

This report consists of 6 pages.

REPORT SUMMARY
ANAMETRIX, INC. (408)432-8192

MR. DON BRANSFORD
RECON ENVIRONMETAL CORP.
7000 MARINA BLVD.
BRISBANE, CA 94005

Workorder # : 9410059
Date Received : 10/07/94
Project ID : TALLYN PAIR
Purchase Order: N/A
Department : PREP
Sub-Department: PREP

SAMPLE INFORMATION:

ANAMETRIX SAMPLE ID	CLIENT SAMPLE ID	MATRIX	DATE SAMPLED	METHOD
9410059- 1	SB4-3.0	SOIL	09/12/94	418.1
9410059- 2	SB5-3.0	SOIL	09/12/94	418.1

REPORT SUMMARY
ANAMETRIX, INC. (408)432-8192

MR. DON BRANSFORD
RECON ENVIRONMETAL CORP.
7000 MARINA BLVD.
BRISBANE, CA 94005

Workorder # : 9410059
Date Received : 10/07/94
Project ID : TALLYN PAIR
Purchase Order: N/A
Department : PREP
Sub-Department: PREP

QA/QC SUMMARY :

- No QA/QC problems were encountered for these samples.

Cathy Muller 10/13/94
Department Supervisor Date

J.B. White 10/13/94
Chemist Date

ANALYSIS DATA SHEET - TOTAL RECOVERABLE PETROLEUM HYDROCARBONS
EPA METHOD 418.1
INCHCAPE TESTING SERVICES - ANAMETRIX LABORATORIES (408) 432-8192

PROJECT # : TALLYN PAIR ANAMETRIX I.D. : 9410059
MATRIX : SOIL ANALYST : HE
DATE SAMPLED : 09/12/94 SUPERVISOR : CW
DATE EXTRACTED : 10/10/94 DATE RELEASED : 10/14/94
DATE ANALYZED : 10/10/94

WORKORDER #	SAMPLE I.D.	REPORTING LIMIT (mg/Kg)	AMOUNT FOUND (mg/Kg)
9410059-01	SB4-3.0	25	190
9410059-02	SB5-3.0	200	1,500
BO10H1WN	METHOD BLANK	5.0	ND

ND - Not detected above the reporting limit for the method.

Reference - Methods for Chemical Analysis of Water and Wastes, 3rd edition,
US EPA-600/4-79-020, March 1983.

- All testing procedures follow California Department of Health
Services (Cal-DHS) approved methods.

LAB CONTROL SAMPLE REPORT - TOTAL RECOVERABLE PETROLEUM HYDROCARBONS
 EPA METHOD 418.1
 INCHCAPE TESTING SERVICES - ANAMETRIX LABORATORIES (408) 432-8192

SAMPLE I.D. : LAB CONTROL SAMPLE ANAMETRIX I.D. : MO10H1WN
 MATRIX : SOIL ANALYST : *JD*
 DATE EXTRACTED : 10/10/94 SUPERVISOR : *CM*
 DATE ANALYZED : 10/10/94 DATE RELEASED : 10/12/94

COMPOUND	SPIKE AMT. (mg/Kg)	LCS (mg/Kg)	% REC LCS	%REC LIMITS
PETROLEUM HYDROCARBONS	33	33	100	81-119



Inchcape Testing Services
Anamatrix Laboratories

1761 Concourse Drive, Suite E
San Jose, CA 95131
(408) 432-8192 • Fax (408) 432-8198

CHAIN-OF-CUSTODY RECORD

PROJECT NUMBER		PROJECT NAME				Number of Cntrs	Type of Containers	Type of Analysis								Condition of Samples	Initial
Send Report Attention of:		Report Due		Verbal Due													
Sample Number		Date	Time	Comp	Matrix	Station Location											
		Former Bank															
Mr. Don Bransford		10/14/94		10/14/94				418.1									
S34-3.0	9/12/94				S			1	BL	X							
S35-3.0	9/12/94				S			1	BL	X							
Relinquished by: (Signature)		Date/Time	Received by: (Signature)		Date/Time		Remarks: These samples were previously on workorder 9409103. COMPANY: Recon Environmental Corp ADDRESS: 2000 Marina Boulevard, 4th Floor B. 15000, CA 94005 PHONE: (415) 742-9900 FAX: (415) 742-1083										
Relinquished by: (Signature)		Date/Time	Received by: (Signature)		Date/Time												
Relinquished by: (Signature)		Date/Time	Received by Lab:		Date/Time												
			<i>Recon</i>		10/7/94 CRSS												



Superior Precision Analytical, Inc.

A member of ESSCON Environmental Support Service Consortium

RECON
Attn: Marc Papineau

Project S40109
Reported 04-November-1994

TOTAL PETROLEUM HYDROCARBONS BY EPA METHOD 418.1

Chronology		Laboratory Number 58904				
Identification	Sampled	Received	Extracted	Analyzed	Run #	Lab #
SB17-3	11/02/94	11/02/94	11/03/94	11/03/94		3
SB12-5	11/02/94	11/02/94	11/03/94	11/03/94		4
SB12-7	11/02/94	11/02/94	11/03/94	11/03/94		5
SB12-10	11/02/94	11/02/94	11/03/94	11/03/94		6



Superior Precision Analytical, Inc.

A member of ESSCON Environmental Support Service Consortium

RECON
Attn: Marc Papineau

Project S40109
Reported 04-November-1994

TOTAL PETROLEUM HYDROCARBONS BY EPA METHOD 418.1

Laboratory Number	Sample Identification	Matrix
58904- 3	SB17-3	Soil
58904- 4	SB12-5	Soil
58904- 5	SB12-7	Soil
58904- 6	SB12-10	Soil

RESULTS OF ANALYSIS

Laboratory Number: 58904- 3 58904- 4 58904- 5 58904- 6

PETROLEUM HYDROCARBONS:160	ND<10	ND<10	ND<10
Concentration:	mg/kg	mg/kg	mg/kg



Superior Precision Analytical, Inc.

A member of ESSCON Environmental Support Service Consortium

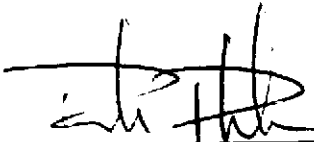
TOTAL PETROLEUM HYDROCARBONS BY EPA METHOD 418.1 Quality Assurance and Control Data - Soil

Laboratory Number 58904

Compound	Method Blank (mg/kg)	RL (mg/kg)	Spike Recovery (%)	Limits (%)	RPD (%)
PETROLEUM HYDROCARBONS:	ND<10	10	100/97	50-137	3%

Definitions:

- ND = Not Detected
- RPD = Relative Percent Difference
- RL = Reporting Limit
- mg/kg = Parts per million (ppm)
- QC File No. 58904

 11/4/94
 Senior Chemist
 Account Manager

58104

RECON ENVIRONMENTAL CORP.

7000 Marina Boulevard, 4th Floor, Brisbane, California 94005
 Phone: 415-742-9900; Fax: 415-742-1033

CHAIN OF CUSTODY RECORD

Project Name		Project Number		Type of Analysis				Condition of Samples
Send Report Attention of:		Analytical Laboratory:		No. of Containers	Type of Containers	Preservative		
TALLYN PARCEL 1362 RUUS LN HAYWARD		S40109						
M. PAPINEAU		SUPERIOR PRECISION ANALYTICAL						
Sample Number	Date	Time	Matrix	Location	No. of Containers	Type of Containers	Preservative	
SB13-3	11/2/94	0935	SOIL		1	1x6 Brass	No	HOLD
SB13-5	11/2/94	0945	SOIL		1	1x6 Brass	No	HOLD
SB17-3	11/2/94	0959	SOIL		1	1x6 Brass	No	X
SB12-5	11/2/94	1020	SOIL		1	1x6 Brass	No	X
SB12-7	11/2/94	1028	SOIL		1	1x6 Brass	No	X
SB12-10	11/2/94	1035	SOIL		1	1x6 Brass	No	X

PETROLEUM OIL
EPA 418.1

TR
yes
300
no
N/A
6. soil

Relinquished by: [Signature] Date/Time: 11/2/94 2:15 PM Received by: [Signature] Date/Time: 11-2-94

Relinquished by: [Signature] Date/Time: 11-2-94 3:00 PM Received by: [Signature] Date/Time: 11-2-94 3:00 PM

Relinquished by: [Signature] Date/Time: 11-2-94 3:00 PM Received by: [Signature] Date/Time: 11-2-94 3:00 PM

Remarks: 48-HOUR TURNAROUND RESULTS BY FRIDAY 11/11/94



Sequoia Analytical

680 Chesapeake Drive
1900 Bates Avenue, Suite L
819 Striker Avenue, Suite B

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Concord, CA 94520
Sacramento, CA 95834

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(510) 686-9600
(916) 921-9600

FAX (415) 364-9233
FAX (510) 686-9689
FAX (916) 921-0100

Racon Environmental Corp. 7000 Marina Blvd Brisbane, CA 94005	Client Proj. ID: Tallyn Pair	Sampled: 10/27/94
Attention: Marc Papineau	Lab Proj. ID: 9410H27	Received: 10/27/94
		Analyzed: see below
		Reported: 11/08/94

LABORATORY ANALYSIS

Analyte	Units	Date Analyzed	Detection Limit	Sample Results
Lab No: 9410H27-01 Sample Desc: LIQUID, MW1-A				
197 Formaldehyde	mg/L	11/03/94	0.10	N.D.
Lab No: 9410H27-02 Sample Desc: LIQUID, TB-F				
1197 Formaldehyde	mg/L	11/03/94	0.10	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

ELAP Number
SEQUOIA ANALYTICAL - ELAP #1210

Todd Olive
Project Manager





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Recon Environmental Corp.
7000 Marina Blvd
Brisbane, CA 94005

Client Proj. ID: Tallyn Pair
Sample Descript: MW1-B
Matrix: LIQUID
Analysis Method: EPA 8015 Mod
Lab Number: 9410H27-03

Sampled: 10/27/94
Received: 10/27/94
Extracted: 11/01/94
Analyzed: 11/01/94
Reported:

Attention: Marc Papineau

Instrument ID: GCHP-5A

Fuel Fingerprint

Analyte	Detection Limit ug/L	Sample Results ug/L
Extractable Hydrocarbons Chromatogram Pattern:	50	N.D.
Surrogates n-Pentacosane (C25)	Control Limits % 50 150	% Recovery 103

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Todd Olive
Project Manager





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FAX (916) 921-0100

Recon Environmental Corp.
7000 Marina Blvd
Brisbane, CA 94005

Client Proj. ID: Tallyn Pair
Sample Descript: TB-FF
Matrix: LIQUID
Analysis Method: EPA 8015 Mod
Lab Number: 9410H27-04

Sampled: 10/27/94
Received: 10/27/94
Extracted: 11/01/94
Analyzed: 11/01/94
Reported:

Attention: Marc Papineau

Instrument ID: GCHP-5A

Fuel Fingerprint

Analyte	Detection Limit ug/L	Sample Results ug/L
Extractable Hydrocarbons Chromatogram Pattern:	50	N.D.

Surrogates	Control Limits %	% Recovery
n-Pentacosane (C25)	50 150	112

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Todd Olive
Project Manager





Sequoia Analytical

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FAX (916) 921 0100

Recon Environmental Corp. Client Project ID: Tallyn Pair
7000 Marina Blvd. Matrix: Liquid
Brisbane, CA 94005
Attention: Marc Papineau Work Order #: 9410H27 03, 04 Reported: Nov 4, 1994

COC #:

QUALITY CONTROL DATA REPORT

Analyte: Diesel
QC Batch#: GC1031940HBPEXA
Analy. Method: EPA 8015 Mod
Prep. Method: EPA 3510

Analyst: B. Ali
MS/MSD #: 9410E9003
Sample Conc.: N.D.
Prepared Date: 10/31/94
Analyzed Date: 10/31/94
Instrument I.D.#: GCHP5A
Conc. Spiked: 600 µg/L

Result: 489
MS % Recovery: 82

Dup. Result: 470
MSD % Recov.: 78

RPD: 4.0
RPD Limit:

LCS #:

Prepared Date:
Analyzed Date:
Instrument I.D.#:
Conc. Spiked:

LCS Result:
LCS % Recov.:

MS/MSD
LCS 38-122
Control Limits

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

** MS = Matrix Spike, MSD = MS Duplicate, RPD = Relative % Difference

9410H27.RRR 11 >



**Sequoia
Analytical**680 Chesapeake Drive
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(510) 686-9600
(916) 921-9600FAX (415) 364-9233
FAX (510) 686-9689
FAX (916) 921-0100Recon Environmental Corp.
1000 Marina Blvd
Berkeley, CA 94705
Attention: Marc Papineau

Client Proj. ID: Tallyn Pair

Received: 10/27/94

Lab Proj. ID: 9410H27

Reported: 11/09/94

LABORATORY NARRATIVE

The fuel fingerprint analysis consisted of sample preparation for extractable hydrocarbons via EPA method 3510 and for TPH-Gas by purge and trap; the

samples were analyzed by EPA 8015 mod. The chromatograms were then compared and quantitated against standards for diesel, gasoline, jet fuel, kerosene, and lubricating oil.

SEQUOIA ANALYTICALTodd Olive
Project Manager



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: **RECON / CERTIFIED** Project Name: **Tallyn Bir**

Address: **7000 Marina Blvd** Billing Address (if different):

City: **Pleasanton** State: **CA** Zip Code: **94005**

Telephone: **(415) 742-9900** FAX #: P.O. #:

Report To: **Fred Hayden** Sampler: **FH** QC Data: Level A (Standard) Level B Level C Level D

Turnaround: 10 Working Days 3 Working Days 2 - 8 Hours

Time: 7 Working Days 2 Working Days 5 Working Days 24 Hours

Drinking Water Waste Water Other

Analyses Requested

Client Sample I.D.	Date/Time Sampled	Matrix Desc.	# of Cont.	Cont. Type	Sequoia's Sample #	Analyses Requested										Comments				
1. MWI-A	10/27/94	Water	1	1 L / gal amber		X														Please see Todd Olive
2. TB-F			1			X														
3. MWI-B			1				X													
4. TB-FF			1				X													
5.																				
6.																				
7.																				
8.																				
9.																				
10.																				

Relinquished By: <i>Paul Hays</i>	Date: <i>10/27/94</i>	Time: <i>1503</i>	Received By: _____	Date: _____	Time: _____
Relinquished By: _____	Date: _____	Time: _____	Received By: _____	Date: _____	Time: _____
Relinquished By: _____	Date: _____	Time: _____	Received By: <i>Alan</i>	Date: <i>10/27/94</i>	Time: <i>1503</i>

NOV 07 '94 12:45PM SEQUOIA ANALYTICAL
 Pink - Client
 Yellow - Sequoia
 White - Sequoia
 P.5