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15 August 1994

CLOSURE OF A FLOOR DRAIN AND APPURTENANT SUBSURFACE PIPING ALAMEDA RED HANGER KLEANERS HARBOR BAY LANDING SHOPPING CENTER ALAMEDA, CALIFORNIA

Prepared for:

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Staff Geologist

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Project No. A932789B

APPLIED GEOSCIENCES INC.
Environmental Consultants

1641 North First Street
Suite 235
San Jose, CA 95112
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15 August 1994
A932789B

Alameda County Health Care Services Agency
Division of Hazardous Materials, Department of Environmental Health
1131 Harbor Bay Parkway, 2nd Floor
Alameda, California 94502

Attention: Madhulla Logan, M.S.

SUBJECT: CLOSURE OF A FLOOR DRAIN AND APPURTENANT SUBSURFACE PIPING, ALAMEDA RED HANGER KLEANERS, HARBOR BAY LANDING SHOPPING CENTER, ALAMEDA, CALIFORNIA

Dear Madhulla:

Applied Geosciences Inc. is pleased to submit this report summarizing the work conducted at the Alameda Red Hanger Kleaners (ARHK) facility located in the Harbor Bay Landing Shopping Center (HBLSC) at Island Drive and Mecartney Road in the city of Alameda, California (Figure 1). This report summarizes the removal of floor drain F1 and the redirection of associated piping to obtain the closure of floor drain F1 and appurtenant subsurface piping (Figure 2).

Based on our previous conversation with you and Mr. Sumadhy Arigala of the RWQCB, it is our understanding that, since the analytical results of the soil sample analyses indicate the presence of VOCs in concentrations similar to the levels previously reported on-site, which are judged to be low, additional investigation and/or remedial measures will <u>not</u> be required by the ACHA and the RWQCB, and the "case" (with respect to the presence of VOCs in the subsurface) will be considered closed.

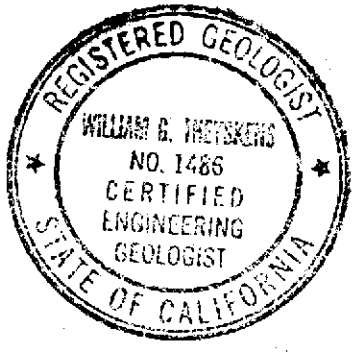
We will be contacting you shortly to discuss the attached report. If you have any questions or comments in the interim, please feel free to call.

Very truly yours,
APPLIED GEOSCIENCES INC.

WILLIAM G. THEYSKENS, CEG 1486
Project Engineering Geologist

DANIEL C. ROGERS
Staff Geologist

cc: Sumadhy Arigala, Regional Water Quality Control Board, San Francisco Bay Region
Dennis M. Klimmek, Esq., Vice President and General Counsel, Kemper Real Estate Management Company
Jeff Van De Wyngaerde, Kemper Real Estate Management Company
Jonathan Winslow, Senior Development Manager, Kemper Real Estate Managment Company
Craig S. Davey, Vice President, Acquisitions, RREEF



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CLOSURE OF A FLOOR DRAIN AND APPURTENANT SUBSURFACE PIPING ALAMEDA RED HANGER KLEANERS HARBOR BAY LANDING SHOPPING CENTER ALAMEDA, CALIFORNIA

1.0 INTRODUCTION

Subsurface investigations were recently performed by Applied Geosciences Inc. in the vicinity of the Alameda Red Hanger Kleaners (ARHK) facility (site), located in the Harbor Bay Landing Shopping Center (HBLSC) at Island Drive and Mecartney Road in the city of Alameda, California. A soil and groundwater investigation (Applied Geosciences Inc., 1993) and a soil gas survey (Applied Geosciences Inc., 1994) were recently performed by Applied Geosciences Inc. These reports were submitted to the Alameda County Health Care Services Agency (ACHA) and were discussed in a meeting on 26 May 1994. These reports were subsequently submitted to, and reviewed by, the California Regional Water Quality Control Board, San Francisco Bay Region (RWQCB).

Applied Geosciences Inc. discussed these investigations and the proposed closure of floor drain F1 and appurtenant piping with Ms. Madhulla Logan of ACHA and with Mr. Sumadhy Arigala of the RWQCB. We also discussed the likelihood that additional investigation and/or remediation of the site would be required by either the ACHA or the RWQCB. The RWQCB and the ACHA agreed that if the analytical results of the soil sample analyses indicated concentrations of volatile organic compounds (VOCs) similar to the levels previously reported (Applied Geosciences Inc., 1993 and 1994), which were judged to be low, additional investigation and/or additional remedial measures would not be required. It was further agreed that, if similar concentrations of VOCs to those previously reported were indicated as a results of the proposed sampling and analysis of soil samples, upon satisfactory completion of the work set forth in Sections 5.1 through 5.4 of the Workplan (Applied Geosciences Inc., 1994), ACHA would send a letter to Applied Geosciences Inc. stating that the work was satisfactorily completed and the file would be deemed closed by ACHA and the RWQCB.

The purpose of the work summarized in this report was to achieve "case" closure with respect to the presence of perchloroethylene (PCE) and related volatile organic compound (VOC) breakdown products in the subsurface in the vicinity of the ARHK facility. This report summarizes the approach, scope of work, and data collected by Applied Geosciences Inc. during the closure of a floor drain and appurtenant subsurface piping.

2.0 OBJECTIVE

The objective of the work conducted was the closure of floor drain F1 and appurtenant subsurface piping, to the extent feasible.

3.0 APPROACH

The approach developed by Applied Geosciences Inc. to meet the objective consisted of the removal of floor drain F1 and its associated "P-trap," the capping of the sewer line below the "P-trap", re-routing of the pipes discharging system cooling water into floor drain F1 into floor drain F2 (approximately 20 feet to the north), and the sampling and analysis of soils beneath floor drain F1 and its underlying "P-trap" for the presence of VOCs.

4.0 WORK DESCRIPTION

A summary of field procedures utilized by Applied Geosciences Inc. during the implementation of this workplan is presented in Appendix A.

4.1 Mobilization

A site specific Health and Safety Plan prepared prior to commencement of the preliminary site investigation activities was reviewed, and was judged to not require updating. This plan was designed to minimize the likelihood that exposure of Applied Geosciences Inc. personnel and their subcontractors to potentially hazardous materials would occur during the course of the field work. Threshold concentrations for worker exposure, work stoppage and protective procedures were given in the Health and Safety Plan.

4.2 Floor Drain Closure

Decon Environmental personnel (subcontractor to Applied Geosciences Inc.) redirected coolant water piping associated with dry cleaning operations from floor drain F1 to floor drain F2, and removed floor drain F1 on 24 July 1994. Floor drain F1 was removed along with the associated piping ("P-trap") beneath it. Soil located beneath the floor drain was excavated to a depth of approximately 1.25 feet BGS. The excavation measured approximately 1.5 feet by 1.5 feet. The sewer line previously draining floor drain F1 was capped. An Hnu organic vapor meter (OVM) and Draeger colorimetric indicator tubes were used to monitor for the presence of total VOCs and PCE, respectively, in the soils beneath the floor drain. One "grab" soil sample was collected from the excavation at approximately 1.25 feet BGS to assess the presence of PCE in the soil in the vicinity of floor drain F1 using field screening techniques. PCE was not indicated to be present using either of these techniques.

One soil sample was collected from the bottom of the floor drain excavation, which was located approximately 1.25 feet below ground surface (BGS). One soil sample was also collected in this manner at approximately 3.5 feet BGS following drilling to that depth using hand auger equipment. Sampling procedures are discussed in Section 5.3. Following the collection of soil samples, the boring and the bottom of the excavation

were backfilled with bentonite pellets. The remaining portion of the excavation was filled with concrete. The concrete contained an additive designed to reduce the permeability of the concrete.

5.0 LABORATORY ANALYSIS

The two soil samples collected beneath floor drain F1 were submitted to a State Certified laboratory for analysis for halogenated volatile organic compounds in accordance with the U.S. Environmental Protection Agency (EPA) Method 8010, on a twenty-four hour turnaround basis.

Methylene chloride, a commonly reported laboratory contaminant, was reported to be present in the soil samples F1-1-1.25 and F1-2-3.5 at 4.4 micrograms per kilogram (μg/kg) and 5.2 μg/kg, respectively. As indicated by the laboratory in their QA/QC summary, the amount of methylene chloride reported "is within normal laboratory background levels" (i.e. It is likely a laboratory contaminant).

PCE (reported as Tetrachloroethene) was reported in soil samples F1-1-1.25 and F1-2-3.5 at 14 μg/kg and 6.0 μg/kg, respectively. A summary of the analytical report is presented in Table 1. Laboratory reports and Chain-of-Custody forms are presented in Appendix B.

6.0 DISCUSSION

One floor drain (F1) was removed, the associated drain pipe was capped, and piping previously discharging into it was redirected to floor drain F2 on 24 July 1994. Soil below floor drain F1 was excavated to a depth of 1.25 feet BGS. One "grab" soil sample was collected and analyzed from the base of the excavation. PCE was not indicated to be present in the soil sample by the two field screening methods used. Two soil samples were collected; one from the base of the excavation and one from approximately 2.25 feet beneath the bottom of the excavation. PCE was reported to be present in low concentrations in the soil sample collected at 1.25 feet BGS (in the floor of the drain excavation). PCE was also reported to be present in low concentrations in a soil sample analyzed from 3.5 feet BGS in the former floor drain excavation. Based on both the historic and the most recent soil analytical results, it is the judgement of Applied Geosciences Inc. that low concentrations of PCE are present in the shallow soil in the immediate vicinity of former floor drain F1.

The presence of PCE in soil in the vicinity of floor drain F1 suggests a historic release. As a result of the closure of floor drain F1, it is the judgement of Applied Geosciences Inc. that there is a high likelihood that the most likely conduit for the introduction of PCE to the subsurface (floor drain F1) has been removed.

Two previous investigations were conducted at the site. During the first investigation, four soil borings were advanced to assess the likelihood that a release of PCE to the subsurface had occurred in the vicinity of the floor drains and existing sewer lines. Soil sampling was conducted to a maximum depth of 11.5 feet BGS. Soil samples were reported to contain relatively low concentrations of PCE (34 μg/Kg was the highest concentration reported). Water samples collected from each of the four borings were reported to contain PCE, trichloroethene (TCE) and cis-1,2-dichloroethene (cis-1,2-DCE). The highest concentrations were reported in the water collected from the boring located closest to floor drain F1 (PCE, TCE and cis-1,2-DCE were reported at 5.5, 9.0, and 19 μg/L, respectively).

During the second investigation, a soil gas survey, which included the collection of nine soil samples, was conducted to further characterize the site with respect to the presence of PCE. Twelve locations were sampled for soil gas as part of the soil gas survey. Low concentrations of PCE, ranging from 0.013 μg/L to 5 μg/L, were reported to be present in soil gas samples collected at the site. Low concentrations of PCE, ranging from below laboratory reporting limits to 14 μg/L, were also reported in soil samples collected in the vicinity of floor drain F1.

Site characterization has determined that relatively low concentrations of PCE are present in the soil gas, shallow soil and groundwater beneath the former floor drain F1, and in the site vicinity. Floor drain F1 has been removed and the associated sewer piping has been capped. Based on the relatively low concentrations of PCE reported on-site, and in consideration of the closure of floor drain F1, the most likely historic "source" of PCE to the subsurface, it is the judgement of Applied Geosciences Inc. that further investigation, or remediation of soil and groundwater, will likely not be required by the ACHA or the RWQCB.

The judgements, conclusions, and recommendations described in this report pertain to the conditions judged to be present or applicable at the time the work was performed. The future conditions may differ from those described herein and this report is not intended for use in future evaluations of the site unless an update is conducted by a consultant familiar with environmental assessments and/or subsurface investigations. Use of this report is provided to the Kemper Real Estate Management Company, solely for their exclusive use and shall be subject to the terms and conditions in the applicable contract between the Kemper Real Estate Management Company and Applied Geosciences Inc. Any third party use of this report shall also be subject to the terms and conditions governing the work in the contract between Kemper Real Estate Management Company and Applied Geosciences Inc. Any unauthorized release or misuse of this report shall be without risk or liability to Applied Geosciences Inc.

Certain information contained in this report may have been rightfully provided to Applied Geosciences Inc. by third parties or other outside sources. Applied Geosciences Inc. 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.

7.0 CONCLUSIONS

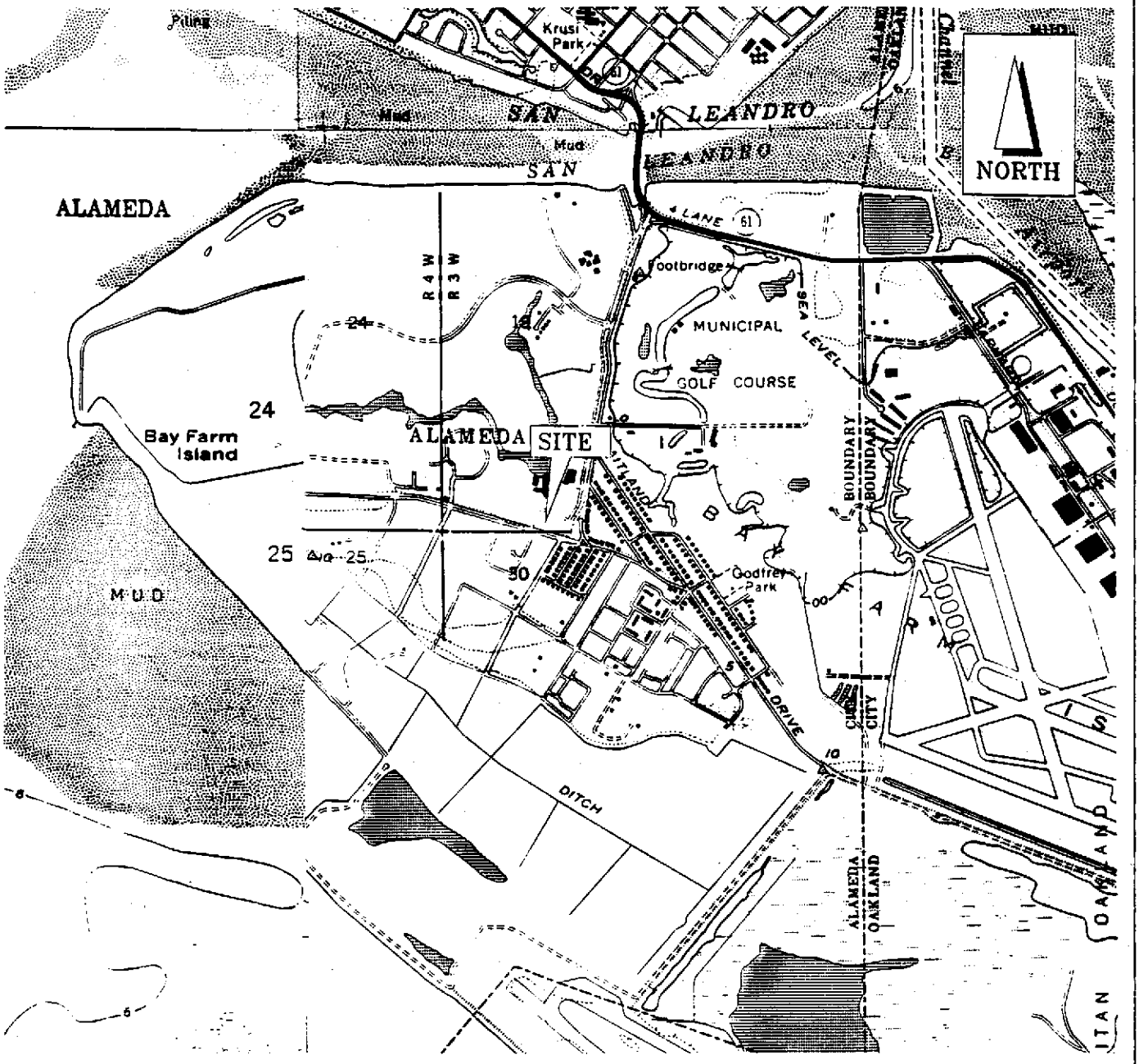
Based on the information presented in this report, current regulatory guidelines, and the judgment of Applied Geosciences Inc., the following conclusions are presented:

- Low concentrations of PCE are present in the shallow soil in the immediate vicinity of former floor drain F1.
- There is a high likelihood that the most likely conduit for the introduction of PCE to the subsurface (floor drain F1) has been removed.
- Further investigation, or remediation of soil and/or groundwater, will likely not be required by the ACHA or the RWQCB.

TABLE 1
FLOOR DRAIN CLOSURE
HARBOR BAY LANDING SHOPPING CENTER
SUMMARY OF ANALYTICAL RESULTS
(RESULTS REPORTED IN MICROGRAMS PER KILOGRAM)

Sample i.d.	Sample Date	Sample Depth	Methylene Chloride	Perchloroethylene
F1−1−1.25	24−July−94	1.25	4.4	14
F1−2−3.5	24−July−94	3.5	5.2	6.0

Notes:
1. Sample depth is reported in feet below the ground surface.
2. Methylene Chloride is reported likely to be a laboratory artifact.
3. Percholorethylene is analyzed for in general accordance with Environmental Protection Agency Method No. 8010.



Quadrangle Location

NOTES:

1) BASE MAP FROM USGS SAN LEANDRO (1959), OAKLAND EAST (1959), OAKLAND WEST (1959), AND HUNTERS POINT (1956) QUADRANGLES 7.5 MINUTE SERIES (TOPOGRAPHIC). PHOTOREVISED 1980, 1980, 1980, AND 1968 RESPECTIVELY.

2) ALL LOCATIONS AND DIMENSIONS ARE APPROXIMATE.

0 1/4 1/2 1

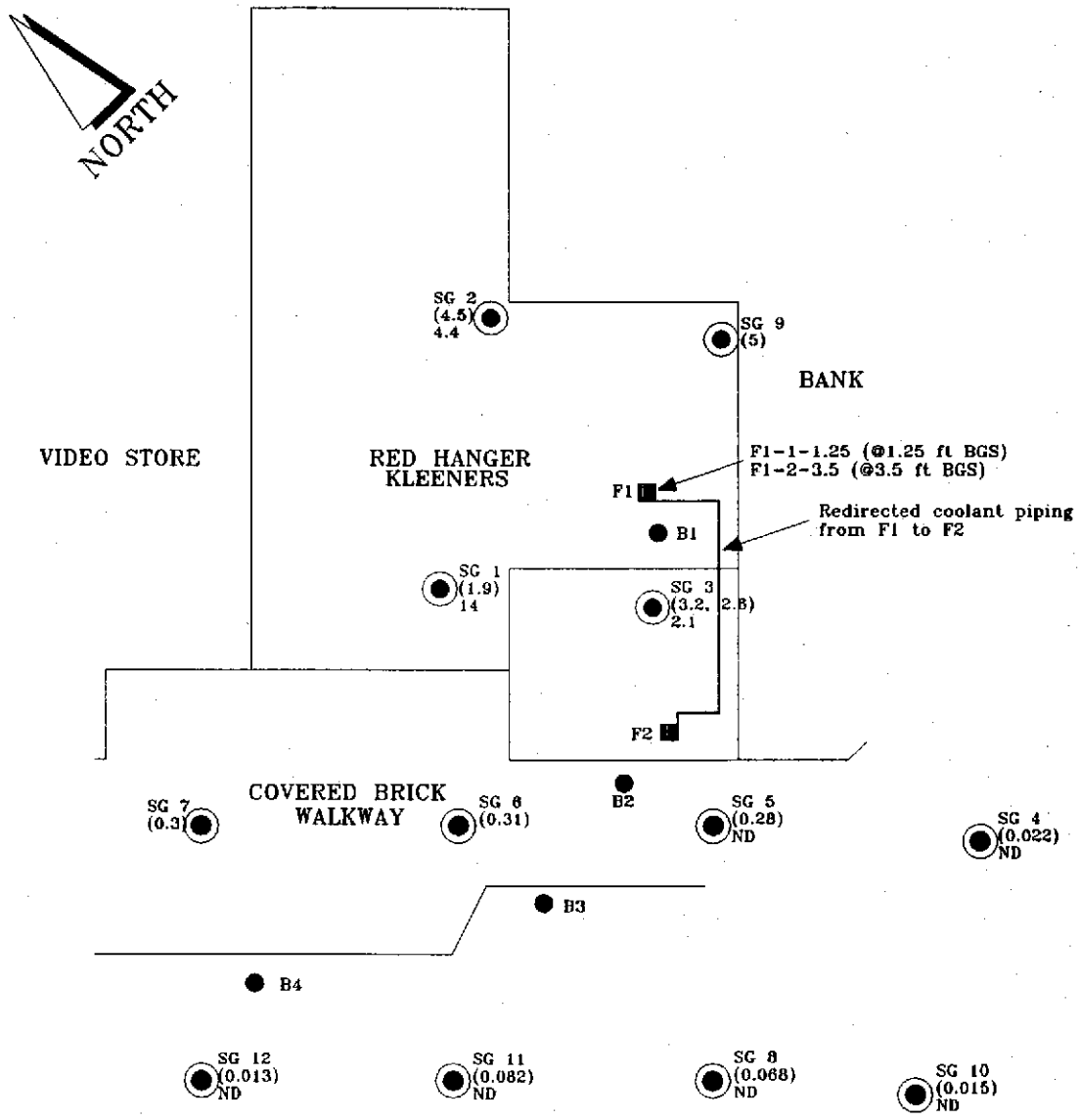
SCALE, MILES

APPLIED GEOSCIENCES INC.

Environmental Consultants

SITE LOCATION MAP

PROJECT NO. A932789 | FIGURE 1



EXPLANATION:

SG 10 (0.015) ND — DESIGNATION AND LOCATION OF SOIL GAS SURVEY POINTS AND REPORTED TETRACHLOROETHENE CONCENTRATIONS IN (SOIL GAS) AND SOIL SAMPLES COLLECTED.

B1 — DESIGNATION AND LOCATION OF SOIL BORINGS PREVIOUSLY INSTALLED BY APPLIED GEOSCIENCES INC.

F1 (F1-1-1.25) — DESIGNATION AND LOCATION OF FLOOR DRAIN, AND SOIL SAMPLE LOCATION AND DESIGNATION.

SCALE

0 5 10

NOTE

1) ALL LOCATIONS AND DIMENSIONS ARE APPROXIMATE.

2) SITE PLAN GENERATED FROM FIELD MEASUREMENTS PERFORMED BY APPLIED GEOSCIENCES INC. PERSONNEL.

APPLIED GEOSCIENCES INC.
Environmental Consultants

SITE PLOT PLAN

PROJECT NO. A932789 | FIGURE 2

APPENDIX A

SUMMARY OF FIELD PROCEDURES

SUMMARY OF FIELD PROCEDURES

A summary of the procedures that were used during the implementation of this workplan follows:

Soil Sampling

- All sampling equipment was either steam cleaned or washed using a non-phosphate detergent, rinsed in two tap water rinses, and final rinsed using deionized water, in general accordance with RWQCB guidelines, to minimize the likelihood of cross-contamination.

- Following the completion of excavation activities, a sampler was advanced to depths of approximately 6-inches below the ground surface (BGS) using slide hammer sampling apparatus. Soil samples were collected in 6-inch long stainless steel liners located inside the sampler.

- Following retrieval of the sampler, the sample was removed from the sampler, the ends covered with teflon sheets or aluminum foil, and capped with PVC end caps. Samples retained for laboratory analysis were placed in individual Zip lock bags and stored on ice in an insulated chest, pending transport to the laboratory.

- Each sample was labeled with the sample number, depth of collection, date, and project number. Soil sample designations were assigned as follows. The first number indicated the area from which the sample was collected (e.g., F1), the second the sequence in which the sample was collected in that area (although only two samples were collected), and the third number the approximate depth of the top of the sample with respect to the ground surface.

- Soil descriptions, sample type and depth, and related information were recorded on a daily field log using the Unified Soil Classification System (USCS). Work was performed under the supervision of a State-registered geologist or a State certified engineering geologist from Applied Geosciences Inc.

- Two soil samples were collected from beneath floor drain F1 and delivered to a State-accredited laboratory, using Chain-of-custody procedures, for analysis on a twenty-four hour turnaround basis.

- A "Grab"-type soil sample was collected from within the excavation, adjacent to the areas sampled for laboratory analysis. The grab sample was used to describe the stratigraphy encountered and to measure VOCs using the OVM and the colorimetric indicator tube for PCE. The grab sample was placed in a sealed Zip lock baggie. The baggie was set aside in approximately isothermal conditions to

allow organic vapors, if present, to accumulate in the baggie around the sampled soil. The air within the baggie was then sampled using an Hnu organic vapor meter (OVM) equipped with a 10.2 Ev probe calibrated for PCE. The probe was inserted through a hole made in the baggie; the highest measurement indicated was recorded on the boring log. The air within the baggie was subsequently sampled using a colorimetric tube designed to assess the presence of PCE.

Laboratory Analysis of Samples

- Two soil samples were be collected, labeled, and stored on ice in an insulated chest pending delivery to the laboratory for analysis on a twenty-four hour turnaround basis for halogenated organic compounds by EPA Method 8010.

- Chain-of-Custody procedures were used to document sample handling and transport from the time of sample collection to delivery within 24 hours of sampling to a State-certified hazardous waste laboratory for analysis.

Waste Disposal

- Soil waste generated during the excavation operations were be stored on-site in a sealed, labeled, 55-gallon drum pending receipt of laboratory results. Disposal of the soil in accordance with current regulatory guidelines, based on the laboratory results, is the responsibility of the client.

APPENDIX B

LABORATORY REPORTS AND CHAIN-OF-CUSTODY FORMS

Inchcape Testing Services
Anametrix Laboratories

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

MR. BILL THEYSKENS
APPLIED GEOSCIENCES INC
1641 NORTH FIRST STREET SUITE 235
SAN JOSE, CA 95112

Workorder # : 9407226
Date Received : 07/25/94
Project ID : A932789B
Purchase Order: N/A

The following samples were received at Anametrix for analysis :

ANAMETRIX ID	CLIENT SAMPLE ID
9407226- 1	F1-1-1.25
9407226- 2	F1-2-3.5

This report is organized in sections according to the specific Anametrix 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 Anametrix cannot be responsible for the detachment, separation, or otherwise partial use of this report.

Anametrix 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 Anametrix.

Corinne Chan for
Doug Robbins
Laboratory Director

07/26/94
Date

This report consists of 10 pages.

ANAMETRIX REPORT DESCRIPTION
GC

Organic Analysis Data Sheets (OADS)

OADS forms contain tabulated results for target compounds. The OADS are grouped by method and, within each method, organized sequentially in order of increasing Anametrix ID number.

Surrogate Recovery Summary (SRS)

SRS forms contain quality assurance data. An SRS form will be printed for each method, if the method requires surrogate compounds. They will list surrogate percent recoveries for all samples and any method blanks. Any surrogate recovery outside the established limits will be flagged with an "*", and the total number of surrogates outside the limits will be listed in the colum labelled "Total Out".

Matrix Spike Recovery Form (MSR)

MSR forms contain quality assurance data. They summarize percent recovery and relative percent difference information for matrix spikes and matrix spike duplicates. This information is a statement of both accuracy and precision. Any percent recovery or relative percent difference outside established limits will be flagged with an "*", and the total number outside the limits will be listed at the bottom of the page. Not all reports will contain an MSR form.

Qualifiers

Anametrix uses several data qualifiers (Q) in its report forms. These qualifiers give additional information on the compounds reported. They should help a data reviewer to verify the integrity of the analytical results. The following is a list of qualifiers and their meanings:

- U - Indicates that the compound was analyzed for, but was not detected at or above the specified reporting limit.
- B - Indicates that the compound was detected in the associated method blank.
- J - Indicates that the compound was detected at an amount below the specified reporting limit. Consequently, the amount should be considered an approximate value. Tentatively identified compounds will always have a "J" qualifier because they are not included in the instrument calibration.
- E - Indicates that the reported amount exceeded the linear range of the instrument calibration.
- D - Indicates that the compound was detected in an analysis performed at a secondary dilution.

Absence of a qualifier indicates that the compound was detected at a concentration at or above the specified reporting limit.

REPORTING CONVENTIONS

- Due to a size limitation in our data processing step, only the first eight (8) characters of your project ID and sample ID will be printed on the report forms. However, the report cover letter and report summary pages display up to twenty (20) characters of your project and sample IDs.
- Amounts reported are gross values, i.e., not corrected for method blank contamination.

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

MR. BILL THEYSKENS
APPLIED GEOSCIENCES INC
1641 NORTH FIRST STREET SUITE 235
SAN JOSE, CA 95112

Workorder # : 9407226
Date Received : 07/25/94
Project ID : A932789B
Purchase Order: N/A
Department : GC
Sub-Department: VOA

SAMPLE INFORMATION:

ANAMETRIX SAMPLE ID	CLIENT SAMPLE ID	MATRIX	DATE SAMPLED	METHOD
9407226- 1	F1-1-1.25	SOIL	07/24/94	8010
9407226- 2	F1-2-3.5	SOIL	07/24/94	8010

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

MR. BILL THEYSKENS
APPLIED GEOSCIENCES INC
1641 NORTH FIRST STREET SUITE 235
SAN JOSE, CA 95112

Workorder # : 9407226
Date Received : 07/25/94
Project ID : A932789B
Purchase Order: N/A
Department : GC
Sub-Department: VOA

QA/QC SUMMARY :

- The amount of methylene chloride reported for the samples and the method blank is within normal laboratory background levels.

M. Hcssini 7/26/94
Department Supervisor Date

7/26/94
Chemist Date

ORGANIC ANALYSIS DATA SHEET -- EPA METHOD 8010
ANAMETRIX, INC. (408)432-8192

Project ID : A932789B
Sample ID : F1-1-1.2
Matrix : SOIL
Date Sampled : 7/24/94
Date Analyzed : 7/25/94
Instrument ID : AD14

Anametrix ID : 9407226-01
Analyst :
Supervisor :

Dilution Factor : 1.0
Conc. Units : ug/Kg

CAS No.	COMPOUND NAME	REPORTING LIMIT	AMOUNT DETECTED	Q
75-71-8	Dichlorodifluoromethane	1.0	ND	U
74-87-3	Chloromethane	1.0	ND	U
75-01-4	Vinyl chloride	1.0	ND	U
74-83-9	Bromomethane	1.0	ND	U
75-00-3	Chloroethane	1.0	ND	U
75-69-4	Trichlorofluoromethane	1.0	ND	U
76-13-1	Trichlorotrifluoroethane	1.0	ND	U
75-35-4	1,1-Dichloroethene	1.0	ND	U
75-09-2	Methylene chloride	1.0	4.4	B
156-60-5	trans-1,2-Dichloroethene	1.0	ND	U
75-34-3	1,1-Dichloroethane	1.0	ND	U
156-59-2	cis-1,2-Dichloroethene	1.0	ND	U
67-66-3	Chloroform	1.0	ND	U
71-55-6	1,1,1-Trichloroethane	1.0	ND	U
56-23-5	Carbon tetrachloride	1.0	ND	U
107-06-2	1,2-Dichloroethane	1.0	ND	U
79-01-6	Trichloroethene	1.0	ND	U
78-87-5	1,2-Dichloropropane	1.0	ND	U
75-27-4	Bromodichloromethane	1.0	ND	U
10061-01-5	cis-1,3-Dichloropropene	1.0	ND	U
10061-02-6	trans-1,3-Dichloropropene	1.0	ND	U
79-00-5	1,1,2-Trichloroethane	1.0	ND	U
127-18-4	Tetrachloroethene	1.0	14.	
124-48-1	Dibromochloromethane	1.0	ND	U
108-90-7	Chlorobenzene	1.0	ND	U
75-25-2	Bromoform	1.0	ND	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	ND	U
541-73-1	1,3-Dichlorobenzene	1.0	ND	U
106-46-7	1,4-Dichlorobenzene	1.0	ND	U
95-50-1	1,2-Dichlorobenzene	1.0	ND	U

ORGANIC ANALYSIS DATA SHEET -- EPA METHOD 8010
ANAMETRIX, INC. (408)432-8192

Project ID : A932789B
Sample ID : F1-2-3.5
Matrix : SOIL
Date Sampled : 7/24/94
Date Analyzed : 7/25/94
Instrument ID : AD14

Anametrix ID : 9407226-02
Analyst : [signature]
Supervisor : [signature]

Dilution Factor : 1.0
Conc. Units : ug/Kg

CAS No.	COMPOUND NAME	REPORTING LIMIT	AMOUNT DETECTED	Q
75-71-8	Dichlorodifluoromethane	1.0	ND	U
74-87-3	Chloromethane	1.0	ND	U
75-01-4	Vinyl chloride	1.0	ND	U
74-83-9	Bromomethane	1.0	ND	U
75-00-3	Chloroethane	1.0	ND	U
75-69-4	Trichlorofluoromethane	1.0	ND	U
76-13-1	Trichlorotrifluoroethane	1.0	ND	U
75-35-4	1,1-Dichloroethene	1.0	ND	U
75-09-2	Methylene chloride	1.0	5.2	B
156-60-5	trans-1,2-Dichloroethene	1.0	ND	U
75-34-3	1,1-Dichloroethane	1.0	ND	U
156-59-2	cis-1,2-Dichloroethene	1.0	ND	U
67-66-3	Chloroform	1.0	ND	U
71-55-6	1,1,1-Trichloroethane	1.0	ND	U
56-23-5	Carbon tetrachloride	1.0	ND	U
107-06-2	1,2-Dichloroethane	1.0	ND	U
79-01-6	Trichloroethene	1.0	ND	U
78-87-5	1,2-Dichloropropane	1.0	ND	U
75-27-4	Bromodichloromethane	1.0	ND	U
10061-01-5	cis-1,3-Dichloropropene	1.0	ND	U
10061-02-6	trans-1,3-Dichloropropene	1.0	ND	U
79-00-5	1,1,2-Trichloroethane	1.0	ND	U
127-18-4	Tetrachloroethene	1.0	6.0	
124-48-1	Dibromochloromethane	1.0	ND	U
108-90-7	Chlorobenzene	1.0	ND	U
75-25-2	Bromoform	1.0	ND	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	ND	U
541-73-1	1,3-Dichlorobenzene	1.0	ND	U
106-46-7	1,4-Dichlorobenzene	1.0	ND	U
95-50-1	1,2-Dichlorobenzene	1.0	ND	U

ORGANIC ANALYSIS DATA SHEET -- EPA METHOD 8010
ANAMETRIX, INC. (408)432-8192

Project ID : A93278
Sample ID : VBLKC1
Matrix : SOIL
Date Sampled : 0/ 0/ 0
Date Analyzed : 7/25/94
Instrument ID : AD14

Anametrix ID : BL2502I1
Analyst :
Supervisor :

Dilution Factor : 1.0
Conc. Units : ug/Kg

CAS No.	COMPOUND NAME	REPORTING LIMIT	AMOUNT DETECTED	Q
75-71-8	Dichlorodifluoromethane	1.0	ND	U
74-87-3	Chloromethane	1.0	ND	U
75-01-4	Vinyl chloride	1.0	ND	U
74-83-9	Bromomethane	1.0	ND	U
75-00-3	Chloroethane	1.0	ND	U
75-69-4	Trichlorofluoromethane	1.0	ND	U
76-13-1	Trichlorotrifluoroethane	1.0	ND	U
75-35-4	1,1-Dichloroethene	1.0	ND	U
75-09-2	Methylene chloride	1.0	4.0	
156-60-5	trans-1,2-Dichloroethene	1.0	ND	U
75-34-3	1,1-Dichloroethane	1.0	ND	U
156-59-2	cis-1,2-Dichloroethene	1.0	ND	U
67-66-3	Chloroform	1.0	ND	U
71-55-6	1,1,1-Trichloroethane	1.0	ND	U
56-23-5	Carbon tetrachloride	1.0	ND	U
107-06-2	1,2-Dichloroethane	1.0	ND	U
79-01-6	Trichloroethene	1.0	ND	U
78-87-5	1,2-Dichloropropane	1.0	ND	U
75-27-4	Bromodichloromethane	1.0	ND	U
10061-01-5	cis-1,3-Dichloropropene	1.0	ND	U
10061-02-6	trans-1,3-Dichloropropene	1.0	ND	U
79-00-5	1,1,2-Trichloroethane	1.0	ND	U
127-18-4	Tetrachloroethene	1.0	ND	U
124-48-1	Dibromochloromethane	1.0	ND	U
108-90-7	Chlorobenzene	1.0	ND	U
75-25-2	Bromoform	1.0	ND	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	ND	U
541-73-1	1,3-Dichlorobenzene	1.0	ND	U
106-46-7	1,4-Dichlorobenzene	1.0	ND	U
95-50-1	1,2-Dichlorobenzene	1.0	ND	U

SURROGATE RECOVERY SUMMARY -- EPA METHOD 8010
ANAMETRIX, INC. (408)432-8192

Project ID : A932789B
Matrix : SOLID

Anametrix ID : 9407226
Analyst :
Supervisor :

	SAMPLE ID	SU1	SU2	SU3
1	VBLKC1	81	96	88
2	F1-1-1.2	64	63	44
3	F1-2-3.5	62	70	60
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
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22				
23				
24				
25				
26				
27				
28				
29				
30				

	QC LIMITS
SU1 = Bromochloromethane	(41-110)
SU2 = 1-Chloro-2-fluorobenze	(33-121)
SU3 = 2-Bromochlorobenzene	(30-125)

* Values outside of Anametrix QC limits

LABORATORY CONTROL SAMPLE
EPA METHOD 601/8010
ANAMETRIX, INC. (408)432-8192

Sample I.D. : LABORATORY CONTROL SAMPLE
Matrix : SOIL
SDG/Batch : 07226
Date analyzed : 07/2.51/94

Anametrix I.D. : ML2501I1
Analyst :
Supervisor :
Instrument I.D.: AD14

COMPOUND	SPIKE AMOUNT (ug/Kg)	AMOUNT RECOVERED (ug/Kg)	PERCENT RECOVERY	%RECOVERY LIMITS
Trichlorotrifluoroethane	10	8.7	87%	57 - 123
1,1-Dichloroethene	10	8.4	84%	56 - 118
trans-1,2-Dichloroethene	10	10.2	102%	60 - 116
1,1-Dichloroethane	10	10.6	106%	69 - 119
cis-1,2-Dichloroethene	10	9.8	98%	68 - 108
1,1,1-Trichloroethane	10	9.7	97%	65 - 111
Trichloroethene	10	10.2	102%	67 - 112
Tetrachloroethene	10	9.4	94%	55 - 124
Chlorobenzene	10	10.0	100%	67 - 124
1,3-Dichlorobenzene	10	10.3	103%	63 - 120
1,4-Dichlorobenzene	10	10.2	102%	65 - 120
1,2-Dichlorobenzene	10	10.3	103%	70 - 114

* Limits based on data generated by Anametrix, Inc., December, 1993.

9407226 (15) CR835

APPLIED GEOSCIENCES INC.

CHAIN-OF-CUSTODY RECORD

Project Number: A932780B

Project Name: HARBOR BAY

Send Report Attention of: BILL THEYSKENS

Analytical Laboratory: ANAMETRIX

	Sample Number	Date	Time	Matrix	Location	No. of Cntnrs	Type of Cntnrs	Preservative	Type of Analysis: EPA 8010	Condition of Samples	Initial
1	F1-1-1.25	7/24/94	1415	SOIL	F1	1	S.STUBE	—	✓	ok	CR
2	F1-2-3.5	"	1445	"	"	"	"	—	✓	↓	↓

Relinquished by:	Date/Time	Received by:	Date/Time
[signature]	7/25/94 8:19	[signature]	7-25-94 0819
[signature]	7-25-94 0835	Calvin Robinson	7-25-94 0835

Remarks: 24 hr T/A ($130/sample per Simon)

Company: Applied Geosciences Inc.
Address: 1641 N. First St., #235, San Jose, CA 95112
Phone: (408) 452-0262 Fax: (408) 452-0265