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Report on

PHASE II REMEDIAL INVESTIGATION
Seabreeze Yacht Center, Inc.
Oakland, California

Prepared for:

Port of Oakland
Oakland, California

March 1992

Prepared by:

BASELINE ENVIRONMENTAL CONSULTING
5900 Hollis Street, Suite D
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S9-171

BASELINE

ENVIRONMENTAL CONSULTING

5 March 1992
S9-171

Mr. Dan Schoenholz
Port of Oakland
530 Water Street
Oakland, CA 94607

Subject: Report on Phase II Remedial Investigation, Seabreeze Yacht Center, Inc., 280 Sixth Avenue, Oakland, California

Dear Mr. Schoenholz:

BASELINE Environmental Consulting is pleased to submit this report on Phase II of remedial investigation activities being conducted at Seabreeze Yacht Center, Inc., 280 Sixth Avenue, Oakland, California. The purpose of this report is to document site remedial investigation activities completed from November 1990 through December 1991, and to present recommendations and a proposed work plan for Phase III of the remedial investigation. Should you have any questions, please do not hesitate to contact us at your convenience.

Sincerely,

Yane Nordhav
Principal
Reg. Geologist No. 4009

Teresa Anaya
Associate

YN:TA:ic
Enclosure

cc: Michele Heffes, Port of Oakland
Craig Meredith, Meredith & Whitt
Deborah Bellati, Farella, Braun & Martel

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TABLE OF CONTENTS

FIGURES

TABLES

APPENDICES

Report on
PHASE II REMEDIAL INVESTIGATION
Seabreeze Yacht Center, Inc.
280 Sixth Avenue, Oakland

INTRODUCTION

This report documents Phase II of remedial investigation activities conducted for the Port of Oakland at Seabreeze Yacht Center, Inc. (Seabreeze), 280 Sixth Avenue, Oakland, California. The purpose of the remedial investigation is to characterize the extent of soil contamination previously identified in soil samples collected by the Alameda County Hazardous Materials Division (County) and by BASELINE, assess groundwater conditions at the site, assess surface water discharge at the site, and implement remediation, as appropriate.

The remedial investigation activities documented in this report were conducted from November 1990 through December 1991, in accordance with a work plan prepared by BASELINE in November 1990. The work plan was prepared based on data obtained in a preliminary remedial investigation at the site (BASELINE report entitled *Preliminary Remedial Investigation,* dated November 1990). The work plan was approved by the County in a 1 March 1991 letter (Appendix A), provided that the water samples from the groundwater monitoring wells be analyzed for volatile organics, total oil and grease, lead, and copper.

The scope-of-work for Phase II activities, as outlined in the November 1990 work plan, included: collection and analyses of soil samples from selected locations; installation of two groundwater monitoring wells; collection and analysis of groundwater samples; removal and disposal of hazardous waste stored at the site; and documentation of investigation and remedial activities. This progress report provides: documentation of site activities performed to date; a summary of analytical results of soil, groundwater, and surface water sampling; and recommendations for further sampling as part of Phase III of the remedial investigation. In addition, this report describes excavation at the location of a former aboveground tank at the northern portion of the Seabreeze site and management of the excavated soil.

BACKGROUND

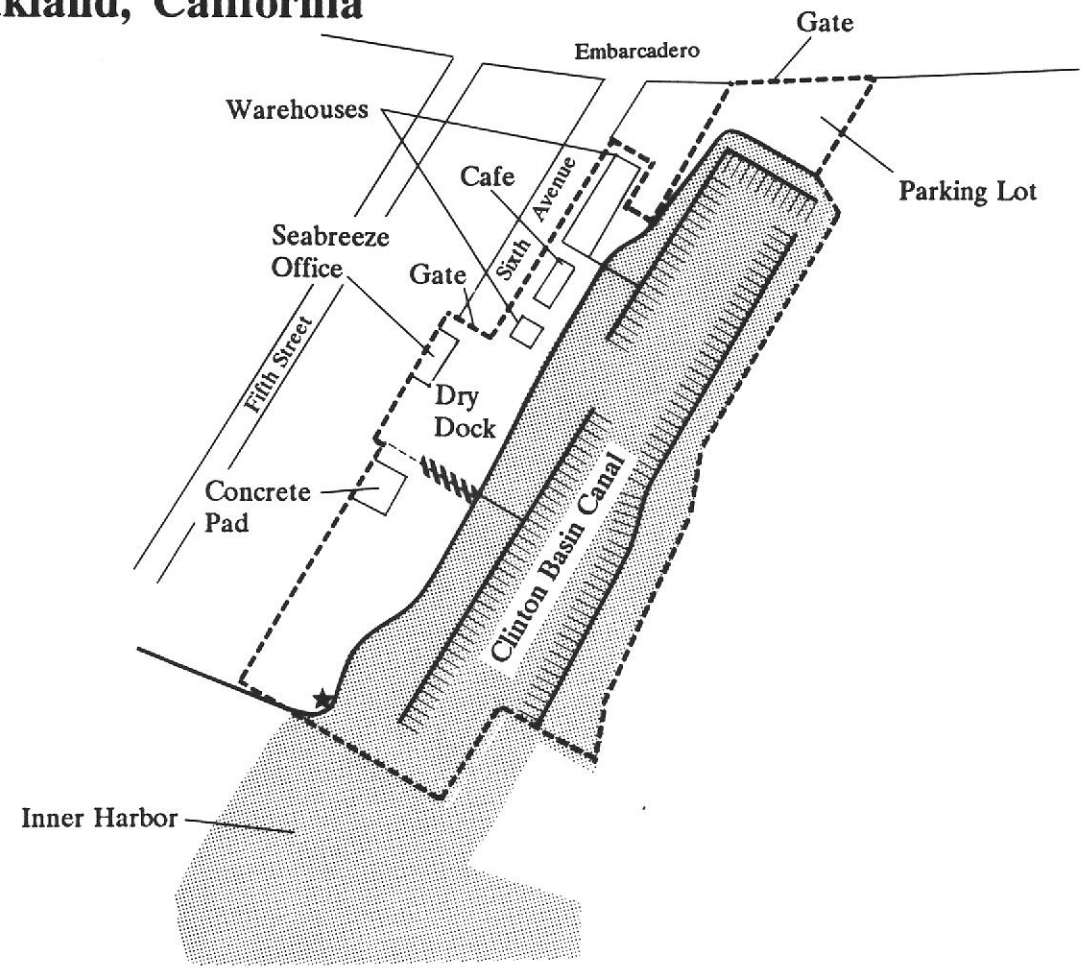
Site Description

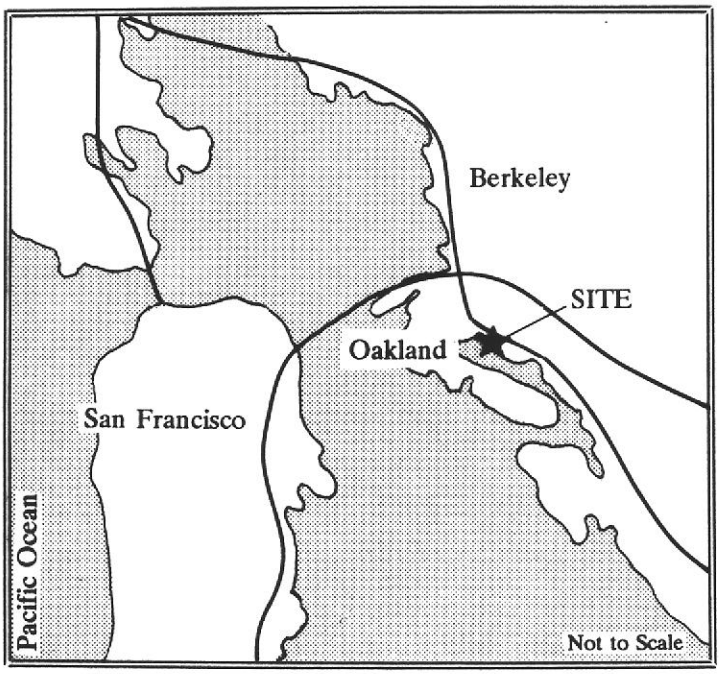
The site consists of approximately nine acres of land, located at the southern terminus of Sixth Avenue, along the Oakland Inner Harbor (Figure 1). A dry dock, previously used for small boat repair and maintenance, occupies approximately two acres of the site. Six and one-half acres is occupied by the Clinton Basin Canal, where approximately 100 boats are berthed. A parking lot, adjacent to Embarcadero, occupies the remaining one-half acre of the site.

SITE PLAN AND REGIONAL LOCATION

Figure 1

Seabreeze Yacht Center
Oakland, California





Legend

- Site Boundary
- ★ Location of Former Aboveground Tank
- Drainage Swale
- Buried Line

0 300 Feet

BASELINE

Discharges into the Clinton Basin Canal from the site include surface water and groundwater seepage. A drainage swale is located in the central portion of the site (Figure 1). The swale and an associated buried pipe convey surface water runoff from portions of the site into the Clinton Basin Canal. During high tide, water from the Clinton Basin Canal has been observed to flow through the discharge pipe and into the swale on the site. Surface water runoff from those portions of the site which are not drained by the swale and the pipe, flow as sheet wash into the Clinton Basin Canal or ponds on the site.

County Actions

A Notice of Violation was issued by the County to Seabreeze in October 1988 and a second Notice of Violation was issued by the County to Seabreeze in May 1989. The first Notice of Violation was issued after soil samples, collected by the County, revealed high levels of metals in the surface soils. Based on the analytical results from the soil samples, the County requested Seabreeze to conduct an investigation to characterize the extent of contamination at the site. Seabreeze failed to respond to both Notices of Violation.

Seabreeze, a Port of Oakland tenant at the site from 1961 to 1989, declared bankruptcy in 1988. Because the Port of Oakland owns the property, the County required the Port of Oakland to comply with the Notices of Violation in August 1989, after Seabreeze's lease had been terminated.

Preliminary Remedial Investigation Activities

In September 1990, following County approval of a work plan to conduct a preliminary investigation, BASELINE collected soil samples from fifteen locations on the Seabreeze property (Figure 2). Sampling activities, including laboratory analytical results, were documented in BASELINE's November 1990 *Preliminary Remedial Investigation* report. Analytical results indicated hazardous levels of lead and copper, as defined by Title 26, Division 22 of the California Code of Regulations (CCR), at four locations (SB-6, 9, 12 and 14) (Figure 3).

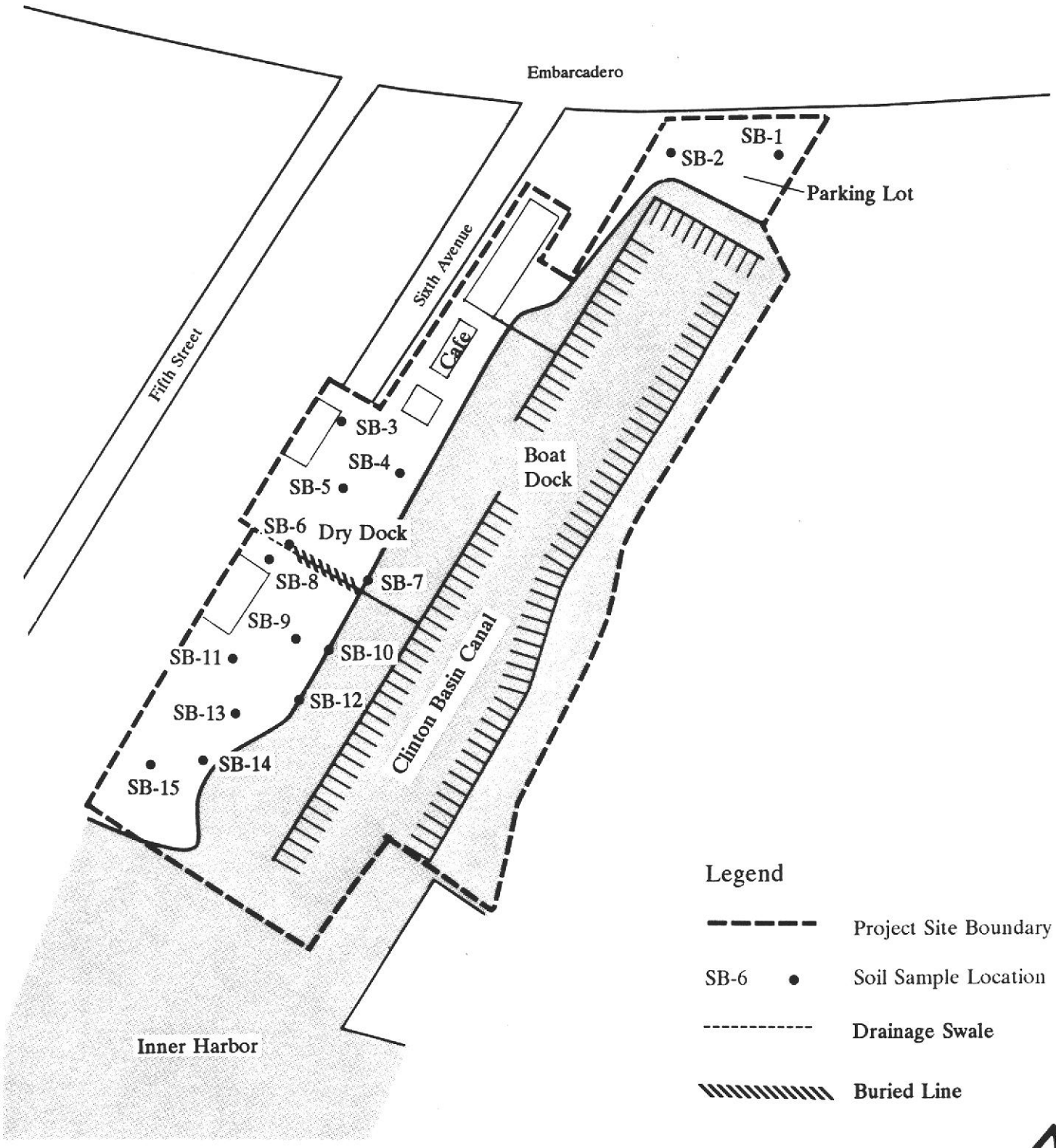
Based on the analytical results of soil sampling, BASELINE included recommendations and a work plan for the conduct of further subsurface investigation in the *Preliminary Remedial Investigation* report. BASELINE also provided recommendations concerning the removal and disposal of containerized hazardous waste.

Former Aboveground Fuel Oil Tank

In April 1991, the Port of Oakland was notified by the United States Coast Guard that an oily substance was seeping from the seam of a circular concrete containment located on the southwestern portion of the Seabreeze property (Figure 4). The oily substance was being released into the Oakland Inner Harbor. Inspection of Port of Oakland records revealed that in 1947 the concrete containment contained an aboveground fuel oil tank. The aboveground tank was removed sometime after 1947, and the concrete containment was presumably backfilled with fill material. In response to the Coast Guard's request, the Port of Oakland arranged to stop the discharge by excavating the fill materials from the concrete containment and sealing the seams of the containment.

SOIL SAMPLING LOCATIONS
September 1990

Figure 2



Seabreeze Yacht Center, Inc.
280 Sixth Avenue
Oakland, California

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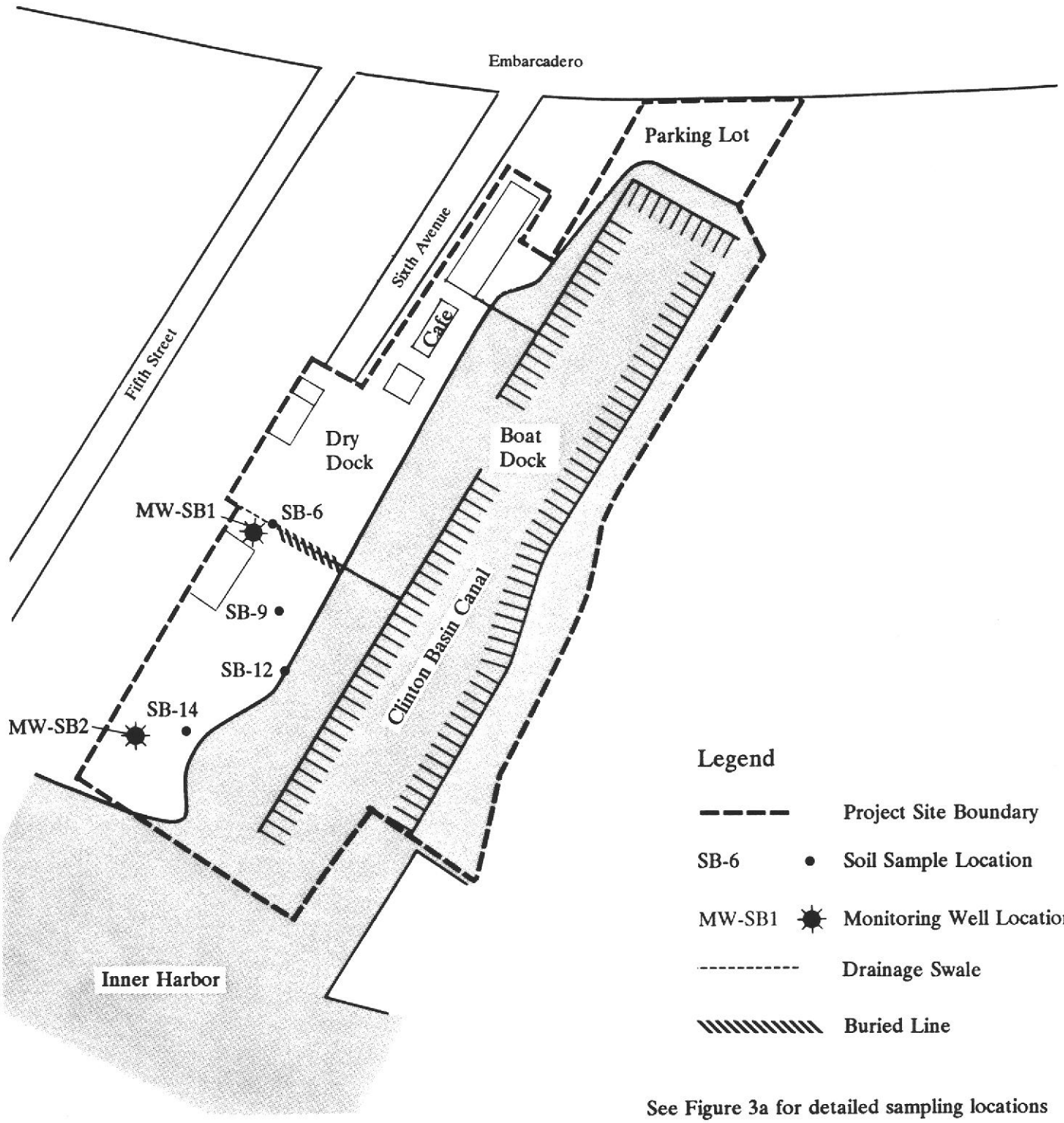
SOIL SAMPLING LOCATIONS
April 1991

Figure 3



See Figure 3a for detailed sampling locations

0 200 Feet

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Seabreeze Yacht Center, Inc.
280 Sixth Avenue
Oakland, California

SAMPLING ACTIVITIES

Site Safety Plan

All field activities were conducted in accordance with a site-specific safety plan, which was prepared by BASELINE's health and safety officer (Appendix B). The site safety plan was reviewed by BASELINE staff prior to commencement of field activities, and an on-site safety tailgate meeting was conducted by the BASELINE health and safety officer on 8 April 1991.

Permit Procurement

Drilling activities were conducted in accordance with an Alameda County Flood Control and Water Conservation District Zone 7 permit (Appendix C). In addition, the Port of Oakland obtained a permit from the San Francisco Bay Conservation and Development Commission (BCDC) for the on-site activities conducted within the jurisdiction of BCDC (Appendix D).

Soil Sampling Methods and Procedures

The purpose of soil sampling activities was to further define the lateral and vertical extent of lead and copper contamination identified during the preliminary remedial investigation. Based on the presence of lead and/or copper at hazardous levels at four locations (SB-6, SB-9, SB-12, and SB-14 on Figures 2 and 3), BASELINE collected a total of 59 soil samples from 30 soil borings on 9 April 1991. The borings were drilled at 5-foot and 10-foot intervals around SB-6, SB-9, SB-12, and SB-14 (Figure 3) in the north, south, east, and west direction from each of the four locations, except for east of SB-12 and west of SB-14, where samples were collected at only the 5-foot interval. (Figure 3A). Each boring was drilled to a total depth of two feet below ground surface. Samples were collected from each boring at depth intervals of 0.5 to 1.0 feet and 1.0 to 1.5 feet.

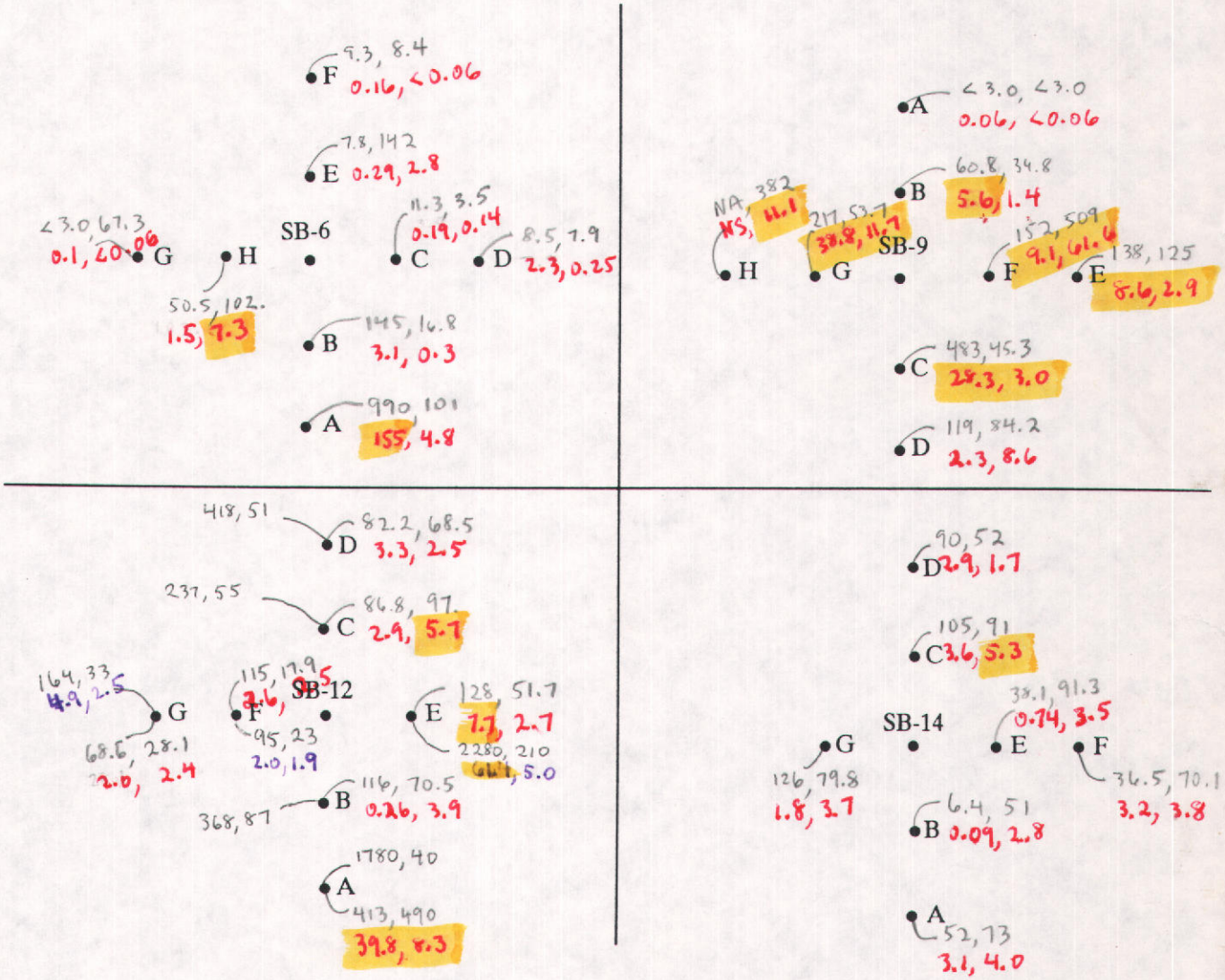
The soil borings were completed by Aqua Science Engineers of San Ramon, using an eight-inch hollow stem auger. After each boring, the drilling equipment was steam cleaned on-site and the rinsate was stored in a labeled 55-gallon drum. Drill cuttings were also stored in labeled 55-gallon drums. Each borehole was backfilled to grade using a cement/bentonite grout. Logs from the shallow soil borings are included in Appendix E.

Samples were collected from each boring using a California Modified sampler (2-inch diameter) fitted with 6-inch brass liners. The sampler was driven into the ground by a 140-lb hammer. The filled brass liners were removed from the sampler, capped with aluminum foil and plastic caps, labeled, placed in a zip-lock bag, and placed in a refrigerated cooler. The sampling equipment was decontaminated using trisodiumphosphate, water, and deionized water prior to each sampling event. The samples were submitted under chain-of-custody to Curtis and Tompkins, Ltd., a laboratory certified by the Department of Health Services. Laboratory report and chain-of-custody forms are included in Appendix F.

All soil samples were analyzed for total and soluble concentrations of lead (EPA Method 7420 and Title 26 CCR §22-66700 Waste Extraction Test), and samples SB-12A through SB-12G were also analyzed for total and soluble copper (EPA Method 7210 and Title 26 CCR §22-66700 Waste Extraction Test). Analytical results are summarized in Table 1.

DETAIL OF SOIL SAMPLING LOCATIONS
April 1991

Figure 3A



Seabreeze Yacht Center, Inc.
280 Sixth Avenue
Oakland, California

Pb TTLC values 0.5'-1.0', 1.0-1.5'
Pb STLC 0.5-1.0', 1.0-1.5'
Cu TTLC 0.5-1.0', 1.0-1.5'
Cu STLC 0.5-1.0', 1.0-1.5'

allowable T22 limits

	STLC	TTLC
Pb	5	1000
Cu	25	2500

Notes: Samples were collected at 5-foot and 10-foot intervals from the SB-6, SB-9, SB-12 and SB-14 locations, except for east of SB-12 and west of SB-14, where samples were collected at only the 5-foot interval. See Table 1 for analytical results.

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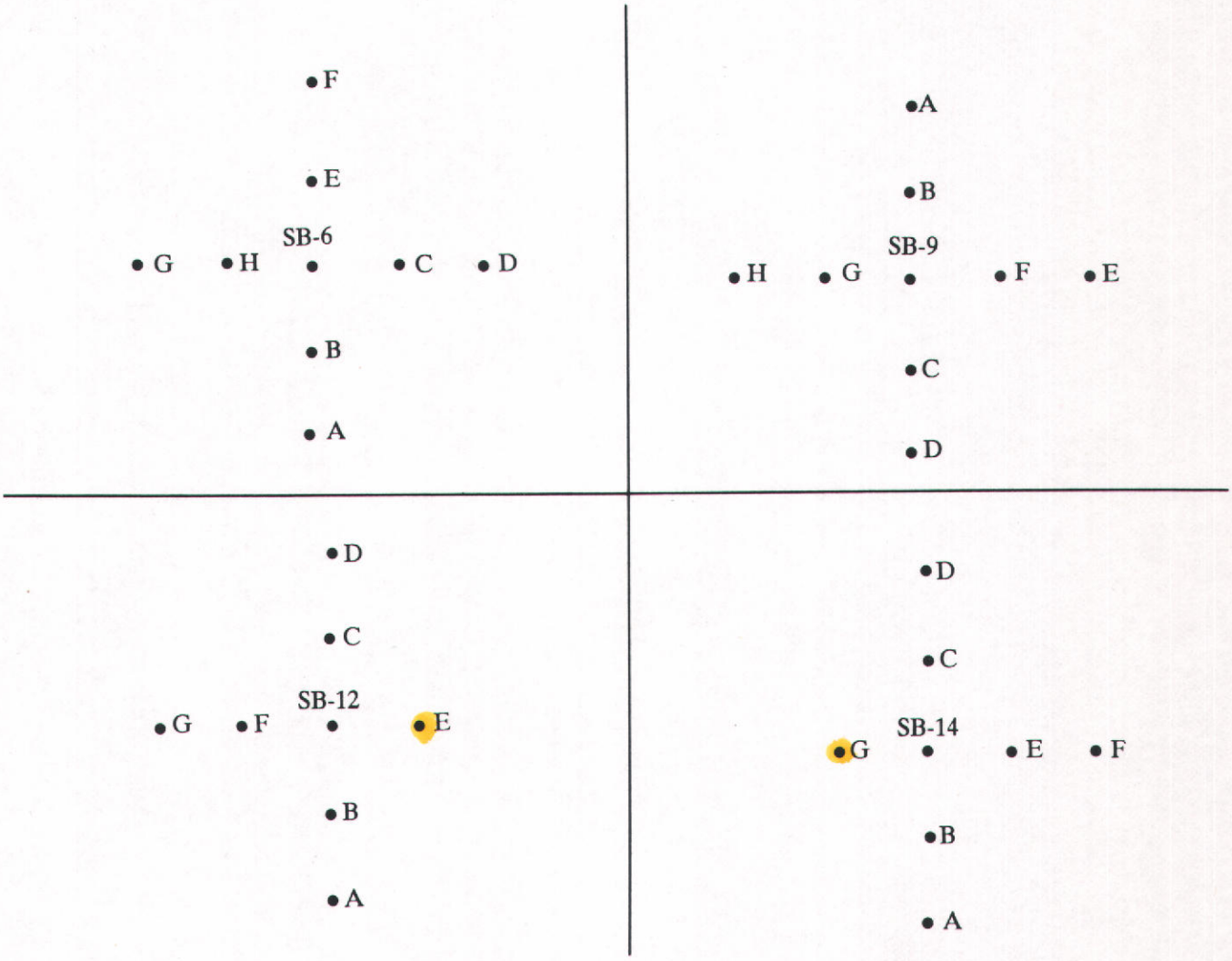
DETAIL OF SOIL SAMPLING LOCATIONS
April 1991

Figure 3A



Seabreeze Yacht Center, Inc.
280 Sixth Avenue
Oakland, California

Notes: Samples were collected at 5-foot and 10-foot intervals from the SB-6, SB-9, SB-12 and SB-14 locations, except for east of SB-12 and west of SB-14, where samples were collected at only the 5-foot interval. See Table 1 for analytical results.

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NA = not analyzed

Table 1

SUMMARY OF ANALYTICAL RESULTS, SOIL
Seabreeze Yacht Center, Oakland, California
April 1991

Sample ID	Depth (feet)	Total Lead[1] (mg/kg)	Soluble Lead[2] (mg/L)	Total Copper[3] (mg/kg)	Soluble Copper[4] (mg/L)
SB-6A	0.5-1.0	990	**155**	NA	NA
	1.0-1.5	101	4.8	NA	NA
SB-6B	0.5-1.0	145	3.1	NA	NA
	1.0-1.5	16.8	0.27	NA	NA
SB-6C	0.5-1.0	11.3	0.19	NA	NA
	1.0-1.5	3.5	0.14	NA	NA
SB-6D	0.5-1.0	8.5	2.3	NA	NA
	1.0-1.5	7.9	0.25	NA	NA
SB-6E	0.5-1.0	7.8	0.29	NA	NA
	1.0-1.5	142	2.8	NA	NA
SB-6F	0.5-1.0	9.3	0.16	NA	NA
	1.0-1.5	8.4	<0.06	NA	NA
SB-6G	0.5-1.0	<3.0	0.10	NA	NA
	1.0-1.5	67.3	<0.06	NA	NA
SB-6H	0.5-1.0	50.5	1.5	NA	NA
	1.0-1.5	102	**7.3**	NA	NA
SB-9A	0.5-1.0	<3.0	0.06	NA	NA
	1.0-1.5	<3.0	<0.06	NA	NA
SB-9B	0.5-1.0	60.8	**5.6**	NA	NA
	1.0-1.5	34.8	1.4	NA	NA
SB-9C	0.5-1.0	483	**28.3**	NA	NA
	1.0-1.5	45.3	3.0	NA	NA
SB-9D	0.5-1.0	119	2.3	NA	NA
	1.0-1.5	82.4	**8.6**	NA	NA
SB-9E	0.5-1.0	138	**8.6**	NA	NA
	1.0-1.5	125	2.9	NA	NA
SB-9F	0.5-1.0	152	**9.1**	NA	NA
	1.0-1.5	509	**61.6**	NA	NA

Table 1 - *(continued)*

Sample ID	Depth (feet)	Total Lead[1] (mg/kg)	Soluble Lead[2] (mg/L)	Total Copper[3] (mg/kg)	Soluble Copper[4] (mg/L)
SB-9G	0.5-1.0	217	**38.8**	NA	NA
	1.0-1.5	53.7	**11.7**	NA	NA
SB-9H	0.5-1.0	NS[5]	NS	NS	NS
	1.0-1.5	382	**11.1**	NA	NA
SB-12A	0.5-1.0	413	**39.8**	1,780	21.2
	1.0-1.5	490	**8.3**	40	9.2
SB-12B	0.5-1.0	116	0.26	368	7.6
	1.0-1.5	70.5	3.9	87	4.6
SB-12C	0.5-1.0	86.8	2.9	237	11.9
	1.0-1.5	97	**5.7**	55	1.7
SB-12D	0.5-1.0	82.2	3.3	418	11.0
	1.0-1.5	68.5	2.5	51	1.2
SB-12E	0.5-1.0	128	**7.7**	2,280	**61.4**
	1.0-1.5	51.7	2.7	210	5.0
SB-12F	0.5-1.0	115	2.6	95	2.0
	1.0-1.5	17.9	2.5	23	1.9
SB-12G	0.5-1.0	68.6	2.0	164	4.9
	1.0-1.5	28.1	2.4	33	2.5
SB-14A	0.5-1.0	52	3.1	NA	NA
	1.0-1.5	73	4.0	NA	NA
SB-14B	0.5-1.0	6.4	0.09	NA	NA
	1.0-1.5	51	2.8	NA	NA
SB-14C	0.5-1.0	105	3.6	NA	NA
	1.0-1.5	91	**5.3**	NA	NA
SB-14D	0.5-1.0	90	2.9	NA	NA
	1.0-1.5	52	1.7	NA	NA

(continued)

Table 1 - *(continued)*

Sample ID	Depth (feet)	Total Lead[1] (mg/kg)	Soluble Lead[2] (mg/L)	Total Copper[3] (mg/kg)	Soluble Copper[4] (mg/L)
SB-14E	0.5-1.0	38.1	0.74	NA	NA
	1.0-1.5	91.3	3.5	NA	NA
SB-14F	0.5-1.0	36.5	3.2	NA	NA
	1.0-1.5	70.1	3.8	NA	NA
SB-14G	0.5-1.0	126	1.8	NA	NA
	1.0-1.5	79.8	3.7	NA	NA

[1] EPA Method 7420
[2] EPA Method 7420; extraction by Waste Extraction Test, Title 26 CCR §22-66700
[3] EPA Method 7210
[4] EPA Method 7210; extraction by Waste Extraction Test, Title 26 CCR §22-66700
[5] No sample recovery from sampler

Notes: NA = Not analyzed for.
NS = No sample.
Sampling locations are shown on Figures 3 and 3A.
Laboratory reports are included in Appendix F.
Bolding indicates sampling results exceeding the Soluble Threshold Limit Concentrations in Title 26 CCR.

Applicable Regulatory Action Levels

Title 26 CCR Division 22 includes criteria for determination of a hazardous material or waste. For certain heavy metals, Title 26 CCR specifies concentrations above which a solid material or waste is considered hazardous. The concentrations are listed in terms of Total Threshold Limit Concentrations (TTLC) and Soluble Threshold Limit Concentrations (STLC). If the total concentration of a listed metal in a solid or waste is above the TTLC, the solid material or waste is defined as a hazardous waste. If the soluble concentration of a listed metal in a solid or waste is above the STLC, the solid is defined as a hazardous waste. The STLC for copper is 25 mg/L and the TTLC is 2,500 mg/kg. The STLC for lead is 5 mg/L and the TTLC is 1,000 mg/kg.

Analytical Results of Soil Sampling

Lead

All 59 soil samples were analyzed for total and soluble concentrations of lead (Table 1). None of the soil samples analyzed contained levels of total lead above the TTLC.

Of the 16 soil samples collected around location SB-6 (Figures 3 and 3A), two samples, SB-6A (at a depth of 0.5 to 1.0 ft., 10 ft. south of SB-6) and SB-6H (at a depth of 1.0 to 1.5, 5 ft. west of SB-6), contained soluble concentrations of lead at levels which exceed the STLC.

Fifteen of the 59 soil samples were collected around location SB-9 (Figures 3 and 3A). Of the 15 soil samples, nine samples contained levels of soluble lead greater than the STLC (Table 1):

- SB-9B at a depth of 0.5 to 1.0 ft., 5 ft. north of SB-9.
- SB-9C at a depth of 0.5 to 1.0 ft., 5 ft. south of SB-9.
- SB-9D at a depth of 1.0 to 1.5 ft., 10 ft. south of SB-9.
- SB-9E at a depth of 0.5 to 1.0 ft., 10 ft. east of SB-9.
- SB-9F at depths of 0.5 to 1.0 ft. and 1.0 ft. to 1.5 ft., 5 ft. east of SB-9.
- SB-9G at depths of 0.5 to 1.0 ft. and 1.0 ft. to 1.5 ft., 5 ft. west of SB-9.
- SB-9H at a depth of 1.0 to 1.5 ft., 10 ft. west of SB-9.

three?

Of the 14 soil samples collected around location SB-12 (Figures 3 and 3A), four samples, SB-12A (at 0.5 to 1.0 ft. and 1.0 to 1.5 ft. depths, 10 ft. south of SB-12), SB-12C (at a depth of 1.0 to 1.5 ft., 5 ft. north of SB-12), and SB-12E (at a depth of 0.5 to 1.0 ft., 5 ft. east of SB-12), contained soluble concentrations of lead at levels exceeding the STLC.

Fourteen of the 59 soil samples were collected around location SB-14 (Figures 3 and 3A). One of the 14 soil samples contained a soluble concentration of lead at a level exceeding the STLC (SB-14C at 1.0 to 1.5 ft., 5 ft. north of SB-14) (Table 1).

Copper

Of the 59 soil samples collected, 14 soil samples collected around location SB-12 (Figures 3 and 3A) were analyzed for total and soluble concentrations of copper (Table 1). None of the 14 samples contained levels of total copper above the TTLC. One of the 14 samples, SB-12E (at a depth of

0.5 to 1.0 ft., 5 ft. east of SB-12), contained a soluble concentration of copper greater than the STLC.

Monitoring Well Installation

On 8 April 1991, two groundwater monitoring wells were installed on the site by Aqua Science Engineers under the supervision of a BASELINE geologist. The monitoring wells were installed in 8-inch boreholes using a hollow-stem auger. The casing material was 2-inch, Schedule 40 PVC, and the screen material was 2-inch, 0.020-inch machine-slotted PVC. The wells, MW-SB1 and MW-SB2 (Figure 3), were completed to depths of 9 and 10.5 feet below the ground surface, respectively. After well completion, groundwater was encountered at depths of about 7 and 7.5 feet below the ground surface, respectively. Well construction summaries and drilling logs are included in Appendix G. The monitoring wells were developed on 11 April 1991 using a double diaphragm pump. Well development records are included in Appendix G.

Groundwater Sampling Methods and Procedures

Groundwater samples were collected by BASELINE from monitoring wells MW-SB1 and MW-SB2 on 17 and 19 April 1991, respectively. The purpose of groundwater sampling and analyses was to determine whether groundwater underlying the Seabreeze site has been affected by oil and grease, organics, and metals in the unsaturated soils. Prior to sample collection, the wells were checked for floating product using a dual-interface probe, calibrated to the nearest 1/100th of a foot; no floating product was identified. Water levels were then measured with the probe. Each well was then purged of three to five well volumes using a disposable, plastic bailer. The purged well water was placed in a labeled, 55-gallon drum and temporarily stored on-site. Appendix G includes groundwater sampling forms for the two wells. ← what happened to this ?

The groundwater samples were collected using a disposable, bottom-valve, plastic bailer and transferred into glass or plastic containers. Groundwater samples to be analyzed for volatile organics were placed into glass containers and samples to be analyzed for metals were placed in plastic bottles. The containers were labeled, placed in a refrigerated plastic cooler, and submitted under chain-of-custody to Curtis and Tompkins, Ltd. A duplicate sample was collected from MW-SB1 and submitted to the laboratory for analyses in conjunction with the two other samples on the day of collection. The samples were analyzed for volatile organic compounds (EPA Method 624), oil and grease (SMWW 17:5520BF), and lead and copper (EPA Method 6010). The samples for metal analyses were filtered and preserved in the laboratory prior to analysis. Laboratory reports and chain-of-custody forms are included in Appendix H. Analytical results of the groundwater sampling are summarized in Table 2.

The groundwater samples collected on 17 and 19 April 1991, were not analyzed using the methods specified by the County for lead and copper analyses; therefore, the two wells were resampled on 9 July 1991, using the procedures described above, including collection of the duplicate sample. The samples were filtered in the field, prior to placement in the plastic sample containers. The samples were submitted to Curtis and Tompkins, Ltd. for analyses of lead and copper using EPA Methods 7420 and 7210, respectively. Analytical results are shown in Table 2, and the groundwater sampling forms, laboratory reports, and chain-of-custody are included in Appendix I. ?

Table 2

SUMMARY OF ANALYTICAL RESULTS, GROUNDWATER
Seabreeze Yacht Center, Oakland, California
April and July 1991
(mg/L)

Sample ID	Date	Lead	Copper	Oil & Grease[2]	Volatile Organic Compounds[3]
MW-SB1	4/17/91	<0.070[1] / <0.070[1]	0.0198[1] / 0.0144[1]	<5 / <5	<0.010 / <0.010
	7/9/91	<0.060[4] / <0.060[4]	<0.020[5] / <0.020[5]	NA / NA	NA / NA
MW-SB2	4/19/91	<0.070[1]	0.0481[1]	<5	<0.010
	7/9/91	<0.060[4]	<0.020[5]	NA	NA

[1] EPA Method 6010; detection limits of 0.010 mg/L for copper and 0.070 mg/L for lead.
[2] Method SMWW 17:5520BF
[3] EPA Method 624
[4] EPA Method 7420
[5] EPA Method 7210

Notes: xx / xx = Duplicate sample
Well locations are shown on Figure 3.
Laboratory reports are included in Appendix H and I.
NA = not analyzed.

Analytical Results of Groundwater Samples

The April 1991 groundwater samples did not contain levels of volatile organic compounds, oil and grease, or lead, above laboratory detection limits (Table 2). Copper was detected in the samples collected on 17 and 19 April 1991 (MW-SB1, MW-SB1A, and MW-SB2 in Table 2) at levels of 0.0198 mg/L, 0.0144 mg/L, and 0.0481 mg/L, respectively. On 9 July 1991 the wells were resampled and the samples analyzed for lead and copper using EPA Method 7420 for lead and EPA Method 7210 for copper. Lead and copper were not detected above laboratory reporting limits (Table 2).

There are no regulatory action levels for copper in water delineated in Title 26 CCR; the regulations provide Maximum Contaminant Levels (MCLs) for primary and secondary drinking water standards for certain constituents. The MCL for copper, listed as a secondary drinking water standard, is 1.0 mg/L.

The Environmental Protection Agency (EPA) has established acute and chronic water quality criteria for copper for freshwater and marine aquatic species.[1] The acute and chronic criteria for freshwater species for copper are 0.018 mg/L and 0.012 mg/L, respectively. The acute and chronic criteria for marine species for copper is 0.0029 mg/L. These values are intended to be used as guidelines for evaluating impacts to surface water quality.

Surface Water Runoff Sampling Methods and Procedures

The water quality of the Clinton Basin Canal could be affected by surface water runoff from the site discharging from the drainage pipe/swale or surface water runoff discharging directly into the Canal from those portions of the site not drained by the drainage pipe/swale. In addition, surface water seeping through the contaminated soils to the groundwater would discharge into the Canal.

To evaluate whether soil contaminated with lead and copper were affecting the quality of the surface water runoff discharging to the Clinton Basin Canal through the discharge pipe/swale, BASELINE collected one sample at the discharge point of the drainage pipe/swale to the Clinton Basin Canal on 28 December 1991. The sample was collected on a rainy day during low tide. The sample was collected in a plastic container, labeled, and placed in a plastic cooler containing blue ice. The sample was not filtered prior to placement in the plastic container. The sample was picked up by the laboratory at BASELINE's office on 30 December 1991. The sample was analyzed for copper (EPA Method 7210) and lead (EPA Method 7420). These are the analytical methods requested by Alameda County for water analysis at the Seabreeze site. Appendix J includes the laboratory reports and chain-of-custody form.

Analytical Results of Surface Water Runoff Sampling

The surface water sample contained copper at a concentration of 0.140 mg/L. This concentration is above the Environmental Protection Agency (EPA) acute and chronic criteria for freshwater species for copper (0.018 mg/L and 0.012 mg/L, respectively). The identified concentration also exceeds the EPA acute and chronic criteria for marine species for copper (0.0029 mg/L). The EPA criteria were published in the EPA Publication 440/5-86-001, Quality Criteria for Water, dated 1986 and updated 1987. The EPA values are intended to be used as guidelines for evaluating impacts to surface water quality.

The level of copper does not appear to exceed the reportable quantity of one pound of copper within 24 hours specified in the Code of Federal Regulations (CFR), Title 40, Part 302, assuming that the identified concentration could be extrapolated to be maintained at a constant rate for 24 hours and that the observed flow rate of a 0.5 liter per minute were sustainable for 24 hours. The regulation provides notification requirements for releases of certain hazardous substances in excess of specified reportable quantities.

The copper concentration in the surface water sample exceeds the San Francisco Bay Regional Water Quality Control Board's (RWQCB) Effluent Limitation for Selected Toxic Pollutants for Discharge to Surface Waters (0.020 mg/L for copper in shallow water, as a daily average) contained in the Water Quality Control Plan for the San Francisco Bay Basin, dated December 1986, assuming the identified concentration were representative of a daily average. The limitation

[1]EPA, Publication 440/5-86-001, Quality Criteria for Water, 1986, updated 1987.

generally applies to discharges that are allowed under a National Pollutant Discharge Elimination System (NPDES) permit.

The run-off sample did not contain lead above the laboratory detection limit of 0.060 mg/L. However, this detection limit exceeds the EPA chronic criteria for freshwater and marine species (0.0032 mg/L and 0.0056 mg/L, respectively). The detection limit (0.060 mg/L) is also above the CCR Title 26 Maximum Contaminant Level (MCL) of 0.050 mg/L for lead. In addition, the detection limit exceeds the RWQCB's effluent limitation for discharges of lead, 0.0056 mg/L. The detection limit does not exceed the EPA acute criteria for freshwater or marine species (0.082 mg/L and 0.140 mg/L, respectively).

HAZARDOUS WASTE REMOVAL ACTIVITIES

BASELINE coordinated the removal and disposal of wastes abandoned at the site by the former tenant at the property and other boat owners. Documentation of waste disposal activities from January 1990 through November 1990 was provided in the *Preliminary Remedial Investigation* report prepared by BASELINE in November 1990. As of November 1990, eleven 55-gallon drums containing various waste, including soil cuttings and steam-cleaning rinsate from September 1990 drilling activities, remained at the site.

On 23 January 1991, the eleven drums were transported by North State Environmental of South San Francisco and disposed of at Solvent Services in San Jose, Envirosafe Services of Idaho, and Gonzales Bucket and Drum Company in San Francisco. The January 1991 waste removal activities were documented in a letter from BASELINE to the Port of Oakland, dated 4 February 1991. A copy of the letter, including copies of the Uniform Hazardous Waste Manifests, are included in Appendix K.

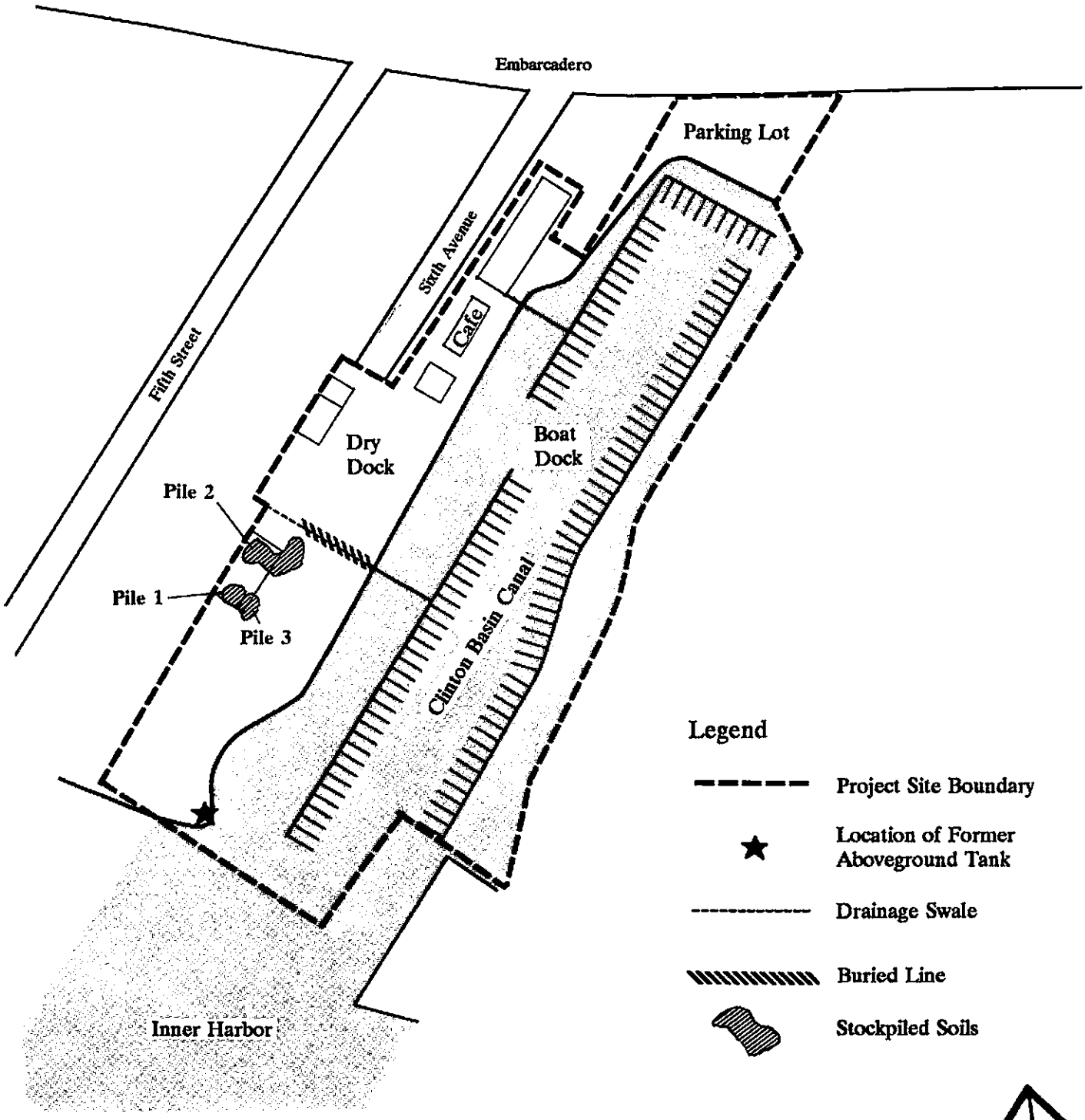
EXCAVATION OF CONCRETE CONTAINMENT (FORMER ABOVEGROUND TANK LOCATION)

In June 1991, excavation was initiated at the location of the former aboveground tank (Figure 4) by Bay Area Tank and Marine under the supervision of BASELINE. Approximately 500 cubic yards (cy) of fill material from the circular concrete containment were excavated and stockpiled on-site. Figures 5 through 7 show photographs of the concrete containment prior to, during, and following excavation. Figure 8 shows photographs of the stockpiled material. Following excavation of the concrete containment, the seam of the containment was sealed with cement grout along the inside and the outside of the containment. Solidified seepage material at the base of the outer wall of the concrete containment was placed into a 55-gallon drum and temporarily stored on-site.

The excavated fill material was separated and stockpiled into three piles (Piles 1, 2, and 3 on Figure 4). Pile 1, approximately 120 cubic yards (cy), consisted of material which was not visibly contaminated with the oily substance that presumably had leaked from the former aboveground tank containment. Piles 2 and 3, approximately 300 cy and 80 cy, respectively, contained visibly stained materials. To determine management options for stockpiled materials, samples were collected from the piles by BASELINE on 25 June 1991. The samples were collected from

LOCATIONS OF FORMER ABOVEGROUND TANK AND STOCKPILED SOILS

Figure 4



Seabreeze Yacht Center, Inc.
280 Sixth Avenue
Oakland, California

BASELINE

PHOTOGRAPHS A AND B

Figure 5

A. View of former aboveground tank location from the northwest, prior to excavation of the concrete containment.

B. View of southeast sidewall of concrete containment, prior to excavation activities.

Seabreeze Yacht Center, Inc.
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Oakland, California

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PHOTOGRAPHS C AND D

Figure 6

C. View of northwest portion of concrete containment, prior to excavation activities.

D. View of southeast portion of concrete containment during excavation activities.

Seabreeze Yacht Center, Inc.
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Oakland, California

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PHOTOGRAPHS E AND F

Figure 7

E. View of northern portion of excavated concrete containment.

F. View of southern portion of excavated concrete containment.

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PHOTOGRAPHS G AND H

Figure 8

G. View of stockpiled soil (piles 1 and 3).

H. View of stockpiled soils (pile 2).

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Oakland, California

randomly-selected locations; three samples were collected from Pile 1, two samples were collected from Pile 2, and one was collected from Pile 3. The samples were analyzed to determine:

- Whether the material could be placed back into the concrete containment. The three samples from Pile 1 were analyzed for total extractable hydrocarbons (EPA Method 8015M).

- Whether the material was hazardous, as defined by Title 26 CCR. The samples from Piles 2 and 3 were analyzed for total extractable hydrocarbons (EPA Method 8015M), volatile organic compounds (EPA Method 8240), semi-volatile organic compounds (EPA Method 8270), Title 26 metals, Ph, and ignitability. In addition, aquatic bioassay were conducted on the samples from Pile 2.

The samples were collected using a steel corer attached to a slide hammer and filled with a 6-inch brass liner. The corer was driven into the pile, and the filled brass liner was removed from the corer, capped with aluminum foil and plastic caps, labeled, placed in plastic zip-lock bags, and cooled, in a refrigerated plastic cooler. The sampling equipment was decontaminated using trisodiumphosphate, water, and deionized water prior to each sampling event. The samples were submitted under chain-of-custody to Curtis & Tompkins, Ltd. for analyses. Laboratory reports and chain-of-custody forms are included in Appendix L.

Analytical Results of Stockpile Soil Sampling

Pile 1

The three soil samples collected from Pile 1 and analyzed for total extractable hydrocarbons, contained diesel[2] at concentrations of 120 mg/kg, 500 mg/kg, and 68 mg/kg, respectively.

Pile 2

The two soil samples collected from Pile 2, contained concentrations of diesel[2] at 150 mg/kg and 990 mg/kg. The samples also contained detectable concentrations of various metals; the total concentrations did not exceed the TTLC or ten times the STLC for those metals.[3] The samples did not contain levels of volatile or semi-volatile organic compounds above laboratory detection limits, and the samples were not ignitable. The samples contained Ph values of 8.5 and 9.1. The results of the aquatic bioassay indicated a 96-hour LC_{50} of greater than 750 mg/L.

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[2] The laboratory noted that the hydrocarbon detected was heavier than diesel.

[3] According to Title 26 CCR, when the total concentration of a sample is greater than the STLC, a Waste Extraction Test (WET) must be performed to determine the soluble concentration of the metal in the sample for comparison to the STLC. The laboratory procedure for preparation of the sample to perform the WET requires that the sample be diluted by ten. Therefore, a WET is performed when the total concentration of a metal in a sample is equal to or greater than ten times the STLC.

Pile 3

The soil sample collected from Pile 3 contained diesel[2] at 5,900 mg/kg, and various metals at levels not exceeding the TTLC or ten times the STLC. Volatile and semi-volatile organic compounds were not detected at levels greater than laboratory reporting limits. The sample was not ignitable, and had a pH value of 8.3.

Management of Stockpiled Soils

The analytical results of sampling of the stockpiled soils indicated that the soils were not hazardous, as defined by 26 CCR, Division 22. Based on these analytical results, on-site bioremediation of the soils commenced on 18 October 1991. Approximately 165 cubic yards of microbiological mulch were supplied by X-19 Biological Products of San Jose. The mulch was mixed with the contaminated soils at a ratio of 1 to 3, using a front end loader operated by Aqua Science Engineers of San Ramon. The mixed soils were placed on visquene sheeting in rows approximately 20 feet in width and 4 feet in height. Following placement of the soils, each row was covered by visquene sheeting. The edges of the visquene sheeting overlying and underlying each row were folded together and weights were placed on the folded edges to prevent rainwater or surface run-off from contacting the soils.

FINDINGS

Groundwater

- The July 1991 groundwater samples did not contain lead or copper above the level of detection.
- The April 1991 groundwater samples did not contain lead, oil and grease, or volatile organic compounds.
- The April 1991 groundwater samples contained copper exceeding the EPA acute and chronic criteria for freshwater and marine species.[4]

Soils

- Sixteen of the 59 soil samples collected during the April 1991 sampling event contained soluble concentrations of lead above the STLC, at depths ranging from 0.5 to 1.5 ft. below the ground surface.
- One of the 59 soil samples collected during the April 1991 sampling event contained soluble copper at a level greater than the STLC for copper at a depth of 0.5 to 1.0 ft.
- None of the soil samples contained total concentrations of lead or copper above the TTLC for lead and copper.

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[4]EPA, Publication 440/5-86-001, Quality Criteria for Water, 1986, updated 1987.

Surface Water Runoff

- The surface water runoff sample contained copper at a level exceeding the EPA acute and chronic criteria for freshwater and marine species.
- The surface water runoff sample contained copper at a level exceeding the San Francisco Bay RWQCB effluent limitation for sites that discharge in accordance with an NPDES permit, assuming that the identified concentration were representative of a daily average.
- The surface water runoff sample did not contain lead at a level above laboratory detection.

On-Site Drums

- Hazardous waste remaining on the site as of November 1990 was removed in January 1991. Currently, six 55-gallon drums containing soil cuttings, steam-cleaning rinsate, and purged well water from April 1991 drilling and well installation activities are being temporarily stored on-site.

Concrete Containment

- The concrete containment, formerly containing an aboveground fuel oil tank, was excavated and the discharge of oily substance from the containment was stopped.
- Stockpiled, excavated fill material from the concrete containment is currently undergoing bioremediation on-site; bioremediation is expected to be completed by July 1992.
- One 55-gallon drum containing solidified seepage from the concrete containment is being temporarily stored on-site.

RECOMMENDATIONS AND PROPOSED WORK PLAN

Recommendations are provided for further definition of the lateral and vertical extent of soil containing lead and copper in excess of Title 26 CCR concentrations in the subsurface soils; one year of quarterly groundwater monitoring for the purpose of evaluating the potential presence of lead and copper in the groundwater; surface water management; soil management; drum management; and disposal of the concrete containment. The scope of work for implementing these recommendations is outlined in detail below. The activities described in this proposed work plan would be conducted as part of Phase III of the remedial investigation.

Site Safety and Permit Procurement

Proposed field activities would be conducted in accordance with a site health and safety plan prepared by BASELINE's health and safety officer. In addition, field activities would be conducted in accordance with permits procured from the San Francisco Bay Conservation and Development Commission and the Alameda County Flood Control and Water Conservation District Zone 7. Field activities would commence following site utility clearance secured through Underground Service Alert (USA).

Collection of Subsurface Soil Samples

To further define the extent of soils containing lead and copper at the site for the purpose of determining soil remediation strategies, a total of 51 soil samples should be collected from 35 locations, at about 5-foot distances from the April 1991 soil boring locations (Figure 3), where soluble lead and/or copper were detected at levels exceeding the STLC and where the lateral and/or vertical extent of the lead and copper was not defined (Figure 9 shows a schematic of the proposed soil sampling plan). The soil samples should be collected from depths ranging between 0.5 feet and 2.0 feet below ground surface. Of the 51 soil samples, 36 samples should be analyzed for total lead (EPA Method 7420), and two of the 36 samples should be analyzed for total copper (EPA Method 7210). Fifteen of the 51 soil samples should be held at the laboratory for analyses pending the analytical results of the 36 samples.

The subsurface soil samples should be collected from soil borings. The borings should be drilled using a hollow-stem auger. Drilling equipment should be steam-cleaned on-site between each boring location. Rinsate and soil cuttings should be temporarily stored on-site in labeled 55-gallon drums.

Soil samples should be collected using a California Modified sampler (2-inch diameter) fitted with 6-inch stainless steel liners. The sampler should be driven into the ground through the hollow-stem auger by a 140-pound hammer. Following sample retrieval, the liners should be removed from the sampler, capped with teflon and plastic caps, taped, labeled, and placed in a zip-lock bag. The samples should be placed in a plastic cooler refrigerated with Blue Ice. The samples should then be submitted under chain-of-custody to Curtis and Tompkins, Ltd., a laboratory certified with the Department of Toxic Substances Control. Sampling equipment should be decontaminated using water, trisodiumphosphate, and deionized water between each sampling event. Following collection of samples, the boreholes should be backfilled to grade using a cement/bentonite grout.

Groundwater Sampling groundwater gradient

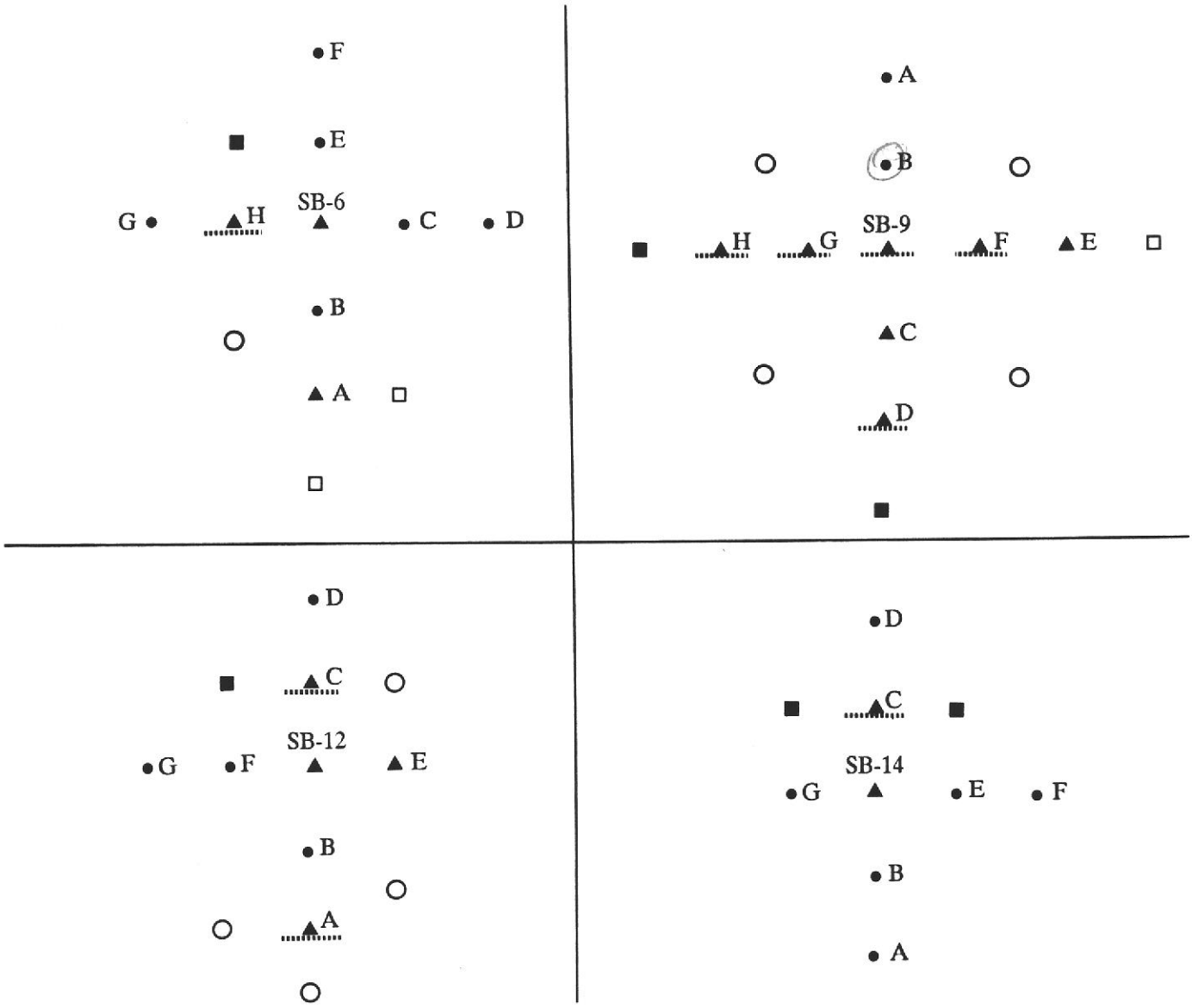
To assess the potential for the groundwater to have been affected by lead and copper in the soils, groundwater samples should be collected from the two monitoring wells on a quarterly basis for one year at low tide. At the end of one year, the collected data should be evaluated and a future monitoring program determined, if necessary. plan of action ?

During each quarter, one groundwater sample should be collected from each well; a duplicate sample should also be collected from one well for quality assurance. Prior to groundwater sample collection, the water level in each well should be measured using a dual-interface probe, calibrated to the nearest 1/100th of a foot. Each well should be then be purged of five well volumes using a disposable, plastic bailer. The purged well water should be temporarily stored on-site in a labeled 55-gallon drums.

Groundwater samples should be collected using a clean disposable, bottom-valve, plastic bailer, filtered, and transferred directly into plastic containers. The containers should be labeled, placed in a plastic cooler refrigerated with blue ice, and submitted under chain-of-custody to Curtis and Tompkins, Ltd. The groundwater samples, including the duplicate sample, should be analyzed for lead (EPA Method 7420) and copper (EPA Method 7210).

SCHEMATIC OF PROPOSED SOIL SAMPLING

Figure 9



Legend

April 1991 Sample Locations:

- ● Hazardous Levels of Metals not Present
- ▲ Hazardous Levels of Metals, Present; Further Characterization Required

Proposed Sample Locations and Depths:

- □ 0.5 - 1.0 Feet
- ■ 1.0 - 1.5 Feet (1.5 -2.0 Feet, Hold)
- ..... 1.5 - 2.0 Feet
- ○ 0.5 - 1.0 Feet, 1.0 - 1.5 Feet (1.5 - 2.0 Feet, Hold)

Note: See Figure 3 for locations of SB-6, SB-9, SB-12, and SB-14.

Seabreeze Yacht Center, Inc.
280 Sixth Avenue
Oakland, California

BASELINE

will dewatering occur?

Management of Surface Water Runoff

It is expected that removal of contaminated soils from the site will remediate surface water runoff discharge containing contaminants. Prior to commencement of soil removal activities, an NPDES Non-point Source permit may be required for the site.

Management of Bioremediated Soils

Commencing May 1992, samples should be collected from the soils undergoing bioremediation to monitor the progress of the treatment. To verify that treatment has been completed, one sample should be collected per 20 cubic yards of soil, for a total of 25 samples. The samples should be collected using the sampling procedure described earlier, and should be analyzed for total extractable petroleum hydrocarbons (EPA Method 8015 modified). Upon completion of bioremediation, the treated soils should be either used on-site (or another Port of Oakland site) as fill, or disposed of off-site at a Class III disposal facility.

Management of Concrete Containment

from what pet hydrocarbons or deteriorating cement?

To prevent potential future discharge from contaminated concrete remaining in the concrete containment, the concrete structure should be demolished, removed from the site, and disposed of at an appropriate disposal facility.

Ten sample beneath ★

Management of Drums

Samples should be collected and analyzed from each of the drums containing soil cuttings, rinsate, purged water, and solidified seepage. The purpose of sampling is to determine disposal options for the drums. Upon receipt of sample analytical results, the drums should be either profiled for disposal at an appropriate off-site disposal facility, or disposed of on-site, if appropriate.

Reporting

Upon receipt of the analytical results of soil and groundwater sampling, a report documenting Phase III of the remedial investigation should be submitted to the County. The report should include a description of field activities and laboratory analytical results, and provide recommendations for remedial actions.

LIMITATIONS

The conclusions presented in this report are professional opinions based on the indicated data described in this report. They are intended only for the purpose, site, and project indicated. Opinions and recommendations presented herein apply to site conditions existing at the time of our study. Changes in the conditions of the subject property can occur with time, because of natural processes or the works of man, on the subject sites or on adjacent properties. Changes in applicable standards can also occur as the result of legislation or from the broadening of knowledge. Accordingly, the findings of this report may be invalidated, wholly or in part, by changes beyond our control.

APPENDIX A

LETTER FROM ALAMEDA COUNTY TO PORT OF OAKLAND 1 MARCH 1991

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
DAVID J. KEARS, Agency Director

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

March 1, 1991

Mr. Dan Schoenholz
Port of Oakland
Environmental Department
530 Waters St.
Oakland CA 94607

Re: Seabreeze Yacht Center- 280 6th Ave., Oakland 94606

Dear Mr. Schoenholz:

First let me inform you that due to redistricting, Ariu Levi will no longer be your contact concerning remediation at the above referenced site. Mr. Barney Chan has been assigned this duty and any future communications should be through him. It is apparent that considerable time has been provided and more will be necesarry to oversee this remediation. You are therefore requested to send a check for $500.00 for the continuance of the County's oversight of this project. Please be advised that Section 3-140-5 of the Alameda County Ordinance Code provides that a fee may be charged for the reviewing of plans. It is consumed at a rate of $67.00 per hour and any unused monies will be refunded to you.

Alameda County has reviewed the work plan for further work subsequent to the initial soil borings performed in September 1990. The County finds the work plan acceptable with the following condition:

1. The water samples from the monitoring wells should be analyzed for volatile organics, method 624 or 8240 and total oil and grease, method 5520E and F in addition to soluble lead, method 7420 and soluble copper, method 7120.

Enclosed please find as requested a County checklist for items required for underground tank permitting.
You may contact me at 271-4320 should you have any questions regarding this letter.

Sincerely,

Barney M Chan

Barney M. Chan, Hazardous Materials Specialist

enclosure

cc: Gil Jensen, District Attorney Office, Consumer and Environmental Protection Division
Lester Feldman, RWQCB
Yane Nordhav, Baseline Environmental Consulting
Edgar Howell, Chief, Hazardous Materials Division

OE

APPENDIX B

SITE SAFETY PLAN

SITE SAFETY PLAN

Project No.: S9-171

Field Activities Date: 8-11 April 1991

Client: Port of Oakland

Address: 530 Water Street, Oakland, CA

Contact Person: Dan Schoenholz

Telephone No.: (415) 272-1220

Job Location: Seabreeze Yacht Center, 280 6th Avenue, Oakland, CA

Project Description: Installation of two monitoring wells by Aqua Science Engineers (ASE) and collection of soil samples from 32 borings by BASELINE. BASELINE will notify ASE of site chemical hazards and will be responsible for site safety related to exposure to hazardous materials on-site (e.g., air monitoring).

Project Manager: Teresa Anaya

Site Health & Safety Manager: Bill Scott

Site History: Site has been a boat yard since the early 1900s. Numerous containers of waste had been stored on the site. The wastes were profiled and the majority disposed of as hazardous waste. Boat owners continue to generate waste oils and used paints and thinners that are abandoned (and possibly spilled) on the site. Site characterization activities by BASELINE in September 1990 indicated the presence of metals, organics, and oil and grease in the subsurface at depths ranging from 0.5 to 4 feet.

Chemical Hazards:

CHEMICAL NAME	DESCRIPTION	HEALTH & SAFETY STANDARDS[1]	PERSONS EXPOSED[2] AND POTENTIAL ROUTES OF EXPOSURE	SYMPTOMS OF ACUTE EXPOSURE
Tin	May be component of tributyl tin, an organic compound	NIOSH recommended TWA=0.1 mg/m^3	Inhalation (inorganic tin)	Skin and eye irritation
Lead	Inorganic metal, suspected carcinogen	PEL=0.05 mg/m^3; use high efficiency filter with respirator	Low risk of exposure through ingestion or inhalation	Malaise, eye irritation, and palpitations
Acetone, methyl ethyl ketone, xylenes	Solvents	Chemical-specific; use organic vapor cartridge with respirator if air monitoring action level exceeded	Inhalation, dermal	Dizziness, headache, disorientation, nausea
Copper	Metal	TLV=1 mg/m^3	Low risk of exposure through ingestion, inhalation, and dermal	Skin, respiratory, and eye irritation
Oil and grease	Generic	None	Dermal	Skin irritation

[1] Standards refer to airborne concentrations to which nearly all workers may be repeatedly exposed daily without harmful effects. The concentrations are time-weighted averages for a normal 8-hour work period.

[2] Contractor and sampling personnel.

Physical Hazards: Heavy equipment, scrap metal and debris, noise.

Personal Protective Equipment Required: Tyvek coveralls, nitrile gloves, rubber boots, first aid kit, air-purifying respirator with organic vapor cartridge, hard hat, noise protection.

Air Monitoring Strategy (including action levels): Monitor borings every 5 feet with combustible gas meter and HNu At greater than 20% LEL in boring, stop work and identify source of combustible vapors. Continue drilling when LEL meter records <0%. If HNu reading ≥100 ppm (in boring), don respirator with organic vapor cartridge; if ≥200 ppm (in boring), stop work and let boring air out.

Site Control Measures: Store soil cuttings, decontamination rinse water, and contaminated personal protective gear (e.g., Tyveks) in labeled drums. Arrange for disposal of same upon receipt of lab analyses for corresponding samples. Underground Service Alert will be contacted to get clearance before sampling. Site is fenced and gate will be locked during nonworking hours. Public will be restricted from sampling areas. All soil borings will be grouted after samples are collected. Drinking water located at Seabreeze warehouse and cafe. Clean area and contaminated area will be designated. Copy of Site Safety Plan will be supplied to ASE. No smoking within 50 feet of borings during drilling. Wash hands before eating or smoking to avoid ingestion of contaminated soils.

Decontamination Procedures (personal and equipment): Steam clean drilling augers between each boring; decontaminate soil sampling equipment with TSP; rinse equipment with deionized water. Contain rinse waters in temporary basin; store in labeled drums pending disposal. Store disposable sampling equipment in separate labeled drum. Place disposable personal protective gear in plastic bag in drum at end of each day. Wash boots, respirators, safety glasses with TSP and rinse. Store rinse water in same drum as equipment rinse water. Wash hands before leaving site.

Hospital/Clinic: Peralta Hospital **Phone**: (415) ~~491-4900~~ 420-6080

Hospital Address: 450 30th Street, Oakland, CA

Paramedic: 911 **Fire/Police Dept.**: 911

Emergency Procedures: Notify Yane Nordhav or Irene Kan in an emergency: (415) 420-8686.

Prepared by: Irene Kan Irene Kan **Reviewed/Approved by**:

Date: 4/2/91 ~~**Date**~~:

Read by: William E. Scott **Date**: 4-3-91

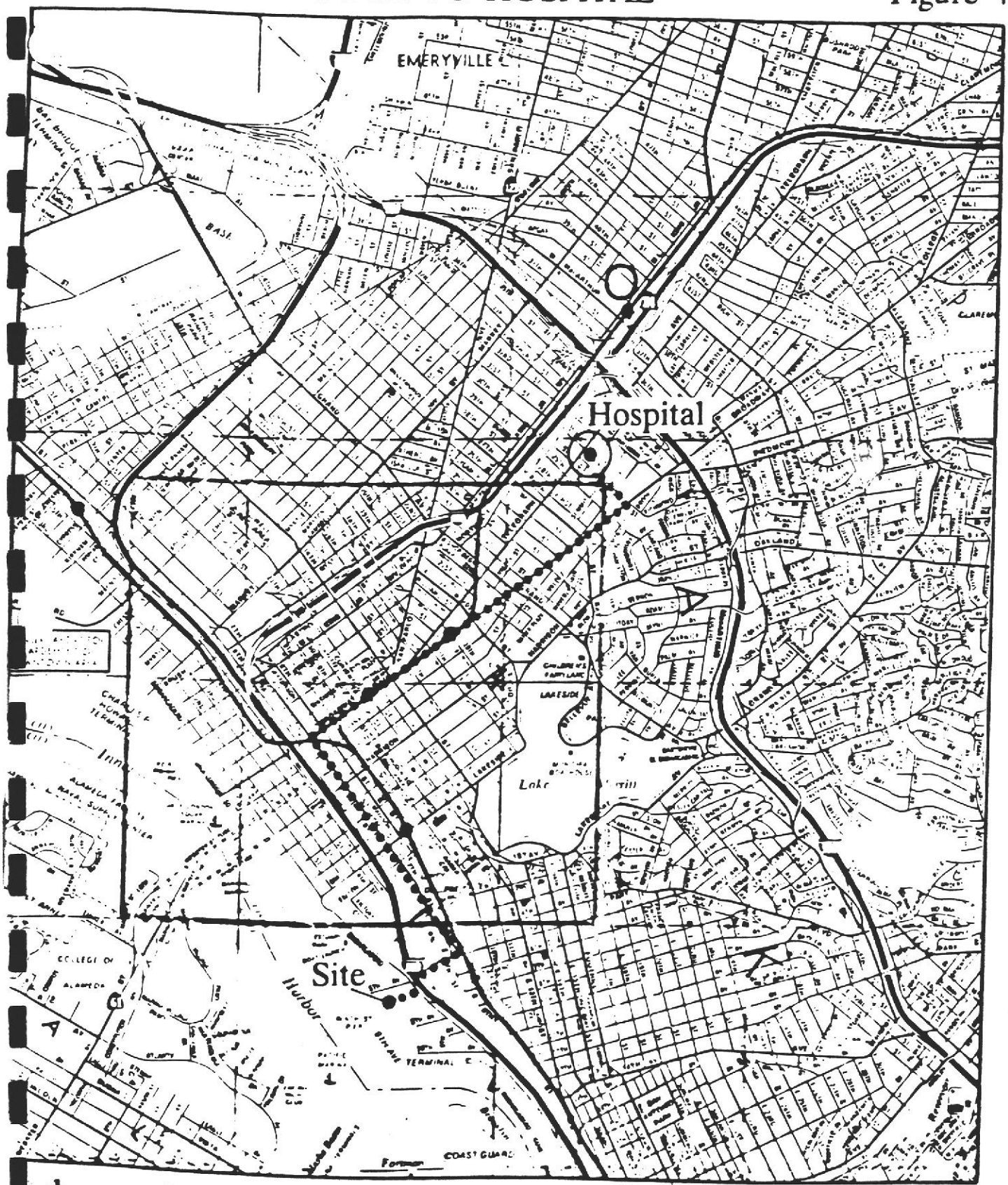
Read by: Teresa Amaya **Date**: 4-2-91

Read by: [signature] **Date**: 7/2/91

Yane Nordhav 7/2/91

EMERGENCY ROUTE TO HOSPITAL

Figure 4



ıbreeze Yacht Center
Oakland, California

0 3000 Feet

BASELINE

APPENDIX C

ALAMEDA COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT ZONE 7 WELL INSTALLATION PERMIT

ALAMEDA COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT

5997 PARKSIDE DRIVE • PLEASANTON, CALIFORNIA 94566 • (415) 484-2600

GROUNDWATER PROTECTION ORDINANCE PERMIT APPLICATION

FOR APPLICANT TO COMPLETE

LOCATION OF PROJECT 280 6th Ave.
Oakland Ca

CLIENT
Name Port of Oakland
Address 530 Water St. Phone 272-1100
City Oakland Ca Zip 94607

APPLICANT
Name Baseline Environmental
Address 5900 Hollis St. "D" Phone 420-8686
City Emeryville Ca Zip 94608

TYPE OF PROJECT

Well Construction		Geotechnical Investigation	
Cathodic Protection	___	General	___
Water Supply	___	Contamination	X
Monitoring	X	Well Destruction	___

PROPOSED WATER SUPPLY WELL USE
Domestic ___ Industrial ___ Other Mont.
Municipal ___ Irrigation ___

DRILLING METHOD:
Mud Rotary ___ Air Rotary ___ Auger ___
Cable ___ Other Hollow stem

DRILLER'S LICENSE NO. 487000

WELL PROJECTS
Drill Hole Diameter 8 in. Maximum
Casing Diameter 2 in. Depth 15 ft.
* Surface Seal Depth 1.5ft. Number 2
*Groundwater expected at 3.0 ft

GEOTECHNICAL PROJECTS
Number of Borings 32 Maximum
Hole Diameter 8 in. Depth 15 ft.

ESTIMATED STARTING DATE 4-9-91
ESTIMATED COMPLETION DATE 4-12-91

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

APPLICANT'S SIGNATURE Jane Vandlund Date 3/20/91

FOR OFFICE USE

PERMIT NUMBER 91158
LOCATION NUMBER

PERMIT CONDITIONS

Circled Permit Requirements Apply

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

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

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

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

E. WELL DESTRUCTION. See attached.

Approved Wyman Hong Date 21 Mar 91
Wyman Hong

121989

APPENDIX D

SAN FRANCISCO BAY CONSERVATION AND DEVELOPMENT COMMISSION PERMIT

PORT OF OAKLAND

August 8, 1991

Ms. Joan Lundstrom
San Francisco Bay Conservation
and Development Commission
30 Van Ness Ave. -- Suite 2011
San Francisco, CA 94102

Re: BCDC Permit No. M90-6, Amendment No. One

Dear Ms. Lundstrom:

Enclosed please find the signed BCDC Original of the above-referenced permit amendment.

Thank you for your cooperation in obtaining this permit amendment. If you have any questions concerning this project, feel free to contact me at (415) 272-1220.

Sincerely,

Dan Schoenholz
Assistant Environmental Scientist

DS

Enclosures

pc/dsbcdc7ltr/wp51

530 Water Street ■ Jack London's Waterfront ■ P.O. Box 2064 ■ Oakland, California 94604-2064
Telephone (415) 272-1100 ■ Fax 272-1172 ■ Telex 336-334 ■ Cable address, PORTOFOAK, Oakland

have been modified by the terms of the amended permit and any plans approved in writing by or on behalf of the Commission.

D. Work must be performed in a manner so as to minimize muddying of waters, and if diking is involved, dikes shall be waterproof. If any seepage returns to the Bay, the permittee will be subject to the regulations of the Regional Water Quality Control Board in that region.

E. The rights derived from this amended permit are assignable as provided herein. An assignment shall not be effective until the assignee shall have executed and the Commission shall have received an acknowledgment that the assignee has read and understood the application and amendment request for this amended permit and the amended permit itself and agrees to be bound by the terms and conditions of the amended permit, and the assignee is accepted by the Executive Director as being reasonably capable of complying with the terms of the amended permit.

F. Unless otherwise provided in this amended permit, all the terms and conditions of this amended permit shall remain effective for so long as the amended permit remains in effect or for so long as any use or construction authorized by this amended permit exists, whichever is longer.

G. Unless otherwise provided in this amended permit, the terms and conditions of this amended permit shall bind all future owners and future possessors of any legal interest in the land and shall run with the land.

H. Unless otherwise provided in this amended permit, any work authorized herein shall be completed within the time limits specified in this amended permit, or, if no time limits are specified in the amended permit, within three years. If the work is not completed by the date specified in the amended permit, or if no date is specified, within three years from the date of the amended permit, the amended permit shall become null and void. If this amended permit becomes null and void for a failure to comply with these time limitations, any fill placed in reliance on this amended permit shall be removed by the permittee or its assignee upon receiving written notification by or on behalf of the Commission to remove the fill.

I. Except as otherwise noted, violation of any of the terms of this amended permit shall be grounds for revocation. The Commission may revoke any amended permit for such violation after a public hearing held on reasonable notice to the permittee or its assignee if the amended permit has been effectively assigned. If the amended permit is revoked, the Commission may

determine, if it deems appropriate, that all or part of any fill or structure placed pursuant to this amended permit shall be removed by the permittee or its assignee if the amended permit has been assigned.

J. This amended permit shall not take effect unless the permittee executes the original of this amended permit and returns it to the Commission within ten days after the date of the issuance of the amended permit. No work shall be done until the acknowledgment is duly executed and returned to the Commission.

K. Any area subject to the jurisdiction of the San Francisco Bay Conservation and Development Commission under either the McAteer-Petris Act or the Suisun Marsh Preservation Act at the time the permit is granted or thereafter shall remain subject to that jurisdiction notwithstanding the placement of any fill or the implementation of any substantial change in use authorized by this amended permit.

L. Any area not subject to the jurisdiction of the San Francisco Bay Conservation and Development Commission that becomes, as a result of any work or project authorized in this amended permit, subject to tidal action shall become subject to the Commission's "bay" jurisdiction up to the line of highest tidal action.

M. Unless the Commission directs otherwise, this amended permit shall become null and void if any term, standard condition, or special condition of this amended permit shall be found illegal or unenforceable through the application of statute, administrative ruling, or court determination. If this amended permit becomes null and void, any fill or structures placed in reliance on this amended permit shall be subject to removal by the permittee or its assignee if the amended permit has been assigned to the extent that the Commission determines that such removal is appropriate. Any uses authorized shall be terminated to the extent that the Commission determines that such uses should be terminated.

Executed at San Francisco, California, on behalf of the San Francisco Bay Conservation and Development Commission on the date first above written.

Alan R. Pendleton

ALAN R. PENDLETON
Executive Director

Enc. 0317r--07/31/91
ARP/JLL/rr
cc: U. S. Army Corps of Engineers, Attn: Regulatory Functions Branch
San Francisco Bay Regional Water Quality Control Board,
Attn: Certification Section
Environmental Protection Agency, Attn: Clyde Morris, W-7-2
Baykeeper, Attn: Mike Herz
Alameda County Department of Environmental Health

* * * * * * * * * * *

Receipt acknowledged, contents understood and agreed to:

Executed at Oakland, California

Port of Oakland
Applicant

On August 6, 1991 By: J L Lambert

Acting Director of Engineering
Title

APPENDIX E

SOIL BORING LOGS

BASELINE
5900 Hollis Street, Suite D
Emeryville, CA 94608
(415) 420-8686

DRILLING LOG

Location	280 6th Avenue	Boring No.	SB-6A
Driller	ASE	Project No.	S9-171
Method	Hollow-stem cont. flight	Date	4/9/91
Logger	WKS Datum _____ Bore size 8-inch	Casing size	2-inch

Depth	Graphic	Lithology	Notes
0	SW	Gray, gravelly SAND, fine grained, damp-dry. Subangular clasts, 1/2-inch.	50 ppm GasTech 0 ppm HNu 26-28-34 (blow count)
1	CL	Dark greenish gray, sandy gravelly CLAY, medium plasticity, fine-grained, damp-moist. Subangular clasts, 1/2 - 3/4 inch diameter.	
2			
3		Total Depth = 2.0 feet	
4			
5			
6			
7			
8			
9			
10			

Scale: 1 inch = 1.5 feet

(5/15/91)

Signature _____

DRILLING LOG

BASELINE
5900 Hollis Street, Suite D
Emeryville, CA 94608
(415) 420-8686

Location	280 6th Avenue	Boring No.	SB-6B
Driller	ASE	Project No.	S9-171
Method	Hollow-stem cont. flight	Date	4/9/91
Logger	WKS Datum ____ Bore size 8-inch	Casing size	2-inch

Depth	Graphic	Lithology	Notes
0	GW	Dark brown, gray,sandy GRAVEL, fine- to medium-grained sand, moist. Subangular clasts, 3/4-inch diameter.	20 ppm GasTech 0 ppm HNu 12-15-10 (blow count)
1	GC	Yellowish brown, sandy, clayey GRAVEL, medium plasticity, fine- to medium-grained, moist. Subangular clasts, 1/2 - 3/4 inch diameter.	≈10% sand ≈20% clay
2			
3		Total Depth = 2.0 feet	
4			
5			
6			
7			
8			
9			
10			

Scale: 1 inch = 1.5 feet

(5/15/91)

Signature _____

BASELINE
5900 Hollis Street, Suite D
Emeryville, CA 94608
(415) 420-8686

DRILLING LOG

Location 280 6th Avenue
Driller ASE
Method Hollow-stem cont. flight
Logger WKS Datum _____ Bore size 8-inch

Boring No. SB-6C
Project No. S9-171
Date 4/9/91
Casing size 2-inch

Depth	Graphic	Lithology	Notes
0	SW	Yellowish brown, gravelly SAND, damp, increase in moisture till wet. Subangular casts, 1/2 inch diameter.	0 ppm GasTech 0 ppm HNu ≈40% gravel 9-12-20 (blow count)
1			
2			
3		Total Depth = 2.0 Feet	
4			
5			
6			
7			
8			
9			
10			

(5/15/91)

Scale: 1 inch = 1.5 feet

Signature _____

BASELINE
5900 Hollis Street, Suite D
Emeryville, CA 94608
(415) 420-8686

DRILLING LOG

Location 280 6th Avenue
Driller ASE
Method Hollow-stem cont. flight
Logger WKS Datum _____ Bore size 8-inch

Boring No. SB-6D
Project No. S9-171
Date 4/9/91
Casing size 2-inch

Depth	Graphic	Lithology	Notes
0	GW	Yellowish brown, sandy GRAVEL, fine-grained sand, damp. Angular clasts, 1/2 - 1 inch diameter.	0 ppm GasTech 0 ppm HNu ≈40% sand 10-19-19 (blow count)
1			
2	GC	Yellowish brown, clayey GRAVEL, 1/2 - 3/4 inch diameter, medium plasticity, moist-wet.	
3		Total Depth = 2.0 Feet	
4			
5			
6			
7			
8			
9			
10			

(5/15/91)

Scale: 1 inch = 1.5 feet

Signature _____

BASELINE
5900 Hollis Street, Suite D
Emeryville, CA 94608
(415) 420-8686

DRILLING LOG

Location	280 6th Avenue	Boring No.	SB-6E
Driller	ASE	Project No.	S9-171
Method	Hollow-stem cont. flight	Date	4/9/91
Logger	WKS Datum _____ Bore size 8-inch	Casing size	2-inch

Depth	Graphic	Lithology	Notes
0	GW	Yellowish brown, sandy GRAVEL, fine-grained, damp. Angular clasts, 1/2 - 1 inch diameter.	0 ppm GasTech 0 ppm HNu 11-17-16 (blow count)
1			
2	GC	Yellowish brown, clayey GRAVEL, medium plasticity, moist-wet. Angular clasts, 1/2 inch diameter.	
3		Total Depth = 2.0 feet	
4			
5			
6			
7			
8			
9			
10			

Scale: 1 inch = 1.5 feet

(5/15/91)

Signature _____

BASELINE
5900 Hollis Street, Suite D
Emeryville, CA 94608
(415) 420-8686

DRILLING LOG

Location	280 6th Avenue	Boring No.	SB-6F
Driller	ASE	Project No.	S9-171
Method	Hollow-stem cont. flight	Date	4/9/91
Logger	WKS Datum _____ Bore size 8-inch	Casing size	2-inch

Depth	Graphic	Lithology	Notes
0	GW	Yellowish brown, sandy GRAVEL, fine-grained sand, damp. Angular clasts, 1/2 - 1 inch diameter.	15 ppm GasTech 0 ppm HNu 9-14-19 (blow count)
1	GC	Yellowish brown, clayey GRAVEL, medium plasticity, moist-wet. Angular clasts, 1/2 inch diameter.	
2			
3		Total Depth = 2.0 feet	
4			
5			
6			
7			
8			
9			
10			

Scale: 1 inch = 1.5 feet

(5/15/91)

Signature _____

BASELINE
5900 Hollis Street, Suite D
Emeryville, CA 94608
(415) 420-8686

DRILLING LOG

Location	280 6th Avenue	Boring No.	SB-6G
Driller	ASE	Project No.	S9-171
Method	Hollow-stem cont. flight	Date	4/9/91
Logger	WKS Datum _____ Bore size 8-inch	Casing size	2-inch

Depth	Graphic	Lithology	Notes
0	SW	Dark brown, gravelly SAND, fine-grained, damp-dry. Angular clasts, 1/2 inch diameter.	0 ppm GasTech 0 ppm HNu 5-5-5 (blow count)
1	CL	Yellowish brown, gravelly CLAY, medium plasticity moist. Angular clasts, 1/4 - 1/2 inch diameter.	
2	CL	Dark gray, sandy CLAY, medium plasticity, fine-grained, moist-wet.	≈25% sand
3		Total Depth = 2.0 feet	
4			
5			
6			
7			
8			
9			
10			

Scale: 1 inch = 1.5 feet

(5/15/91)

Signature _____

BASELINE
5900 Hollis Street, Suite D
Emeryville, CA 94608
(415) 420-8686

DRILLING LOG

Location	280 6th Avenue	Boring No.	SB-6H
Driller	ASE	Project No.	S9-171
Method	Hollow-stem cont. flight	Date	4/9/91
Logger	WKS Datum _____ Bore size 8-inch	Casing size	2-inch

Depth	Graphic	Lithology	Notes
0	GW	Yellowish brown, sandy GRAVEL, fine- to medium-grained, moist.	
		Angular clasts, 1/2 inch diameter.	1-1-1 (blow count)
1		Increase clay at depth.	
	CH	Dark greenish gray, silty CLAY, high plasticity, rootlets, moist-wet.	≈20% silt
2			
3		Total Depth = 2.0 feet	
4			
5			
6			
7			
8			
9			
10			

Scale: 1 inch = 1.5 feet

(5/15/91)

Signature _____

BASELINE
5900 Hollis Street, Suite D
Emeryville, CA 94608
(415) 420-8686

DRILLING LOG

Location	280 6th Avenue	Boring No.	SB-9A
Driller	ASE	Project No.	S9-171
Method	Hollow-stem cont. flight	Date	4/9/91
Logger	WKS Datum _____ Bore size 8-inch	Casing size	2-inch

Depth	Graphic	Lithology	Notes
0	SW	Yellowish brown, gravelly SAND, some minor clay, fine-grained sand, moist-damp. Subangular clasts, 1/2 inch diameter.	0 ppm GasTech 0 ppm HNu 24-25-18 (blow count)
1		Yellowish brown, silty SAND, fine-grained, damp.	≈15% silt
2	SM	Total Depth = 2.0 feet	
3			
4			
5			
6			
7			
8			
9			
10			

Scale: 1 inch = 1.5 feet

(5/15/91)

Signature _____

BASELINE
5900 Hollis Street, Suite D
Emeryville, CA 94608
(415) 420-8686

DRILLING LOG

Location	280 6th Avenue	Boring No.	SB-9A
Driller	ASE	Project No.	S9-171
Method	Hollow-stem cont. flight	Date	4/9/91
Logger	WKS Datum ____ Bore size 8-inch	Casing size	2-inch

Depth	Graphic	Lithology	Notes
0	SW	Yellowish brown, gravelly SAND, some minor clay, fine-grained sand, moist-damp. Subangular clasts, 1/2 inch diameter.	0 ppm GasTech 0 ppm HNu 24-25-18 (blow count)
1	SM	Yellowish brown, silty SAND, fine-grained, damp.	≈15% silt
2		Total Depth = 2.0 feet	
3			
4			
5			
6			
7			
8			
9			
10			

Scale: 1 inch = 1.5 feet

(5/15/91)

Signature _____

BASELINE
5900 Hollis Street, Suite D
Emeryville, CA 94608
(415) 420-8686

DRILLING LOG

Location	280 6th Avenue	Boring No.	SB-9B
Driller	ASE	Project No.	S9-171
Method	Hollow-stem cont. flight	Date	4/9/91
Logger	WKS Datum _____ Bore size 8-inch	Casing size	2-inch

Depth	Graphic	Lithology	Notes
0	SW	Dark yellowish brown, gravelly SAND, some minor clay, fine-grained sand, moist-damp. Subangular clasts, 1/2 inch diameter.	0 ppm GasTech 0 ppm HNu 17-18-20 (blow count)
1		Gray gravelly silty SAND, fine-grained, moist-damp. Subangular clasts, 1/2 inch diameter.	≈10% Gravel ≈15% Silt
2	SM		
3		Total Depth = 2.0 feet	
4			
5			
6			
7			
8			
9			
10			

Scale: 1 inch = 1.5 feet

(5/15/91)

Signature _____

BASELINE
5900 Hollis Street, Suite D
Emeryville, CA 94608
(415) 420-8686

DRILLING LOG

Location 280 6th Avenue
Driller ASE
Method Hollow-stem cont. flight
Logger WKS Datum _____ Bore size 8-inch

Boring No. SB-9C
Project No. S9-171
Date 4/9/91
Casing size 2-inch

Depth	Graphic	Lithology	Notes
0	SW	Yellowish brown, gravelly SAND, some minor clay, fine-grained sand, moist-damp. Subangular clasts, 1/2 inch diameter.	0 ppm GasTech 0 ppm HNu 22-29-29 (blow count) for 4"
1			
	SP	Gray SAND, fine-grained, damp.	
2	SM	Yellowish brown, silty SAND, fine-grained, damp-moist.	≈10% silt
3		Total Depth = 2.0 feet	
4			
5			
6			
7			
8			
9			
10			

Scale: 1 inch = 1.5 feet

(5/15/91)

Signature _____

BASELINE
5900 Hollis Street, Suite D
Emeryville, CA 94608
(415) 420-8686

DRILLING LOG

Location	280 6th Avenue	Boring No.	SB-9F
Driller	ASE	Project No.	S9-171
Method	Hollow-stem cont. flight	Date	4/9/91
Logger	WKS Datum _____ Bore size 8-inch	Casing size	2-inch

Depth	Graphic	Lithology	Notes
0	SC	Dark brown, clayey gravelly SAND, fine-grained, damp. Subangular clasts, 1/2 - 3/4 inch diameter.	40 ppm GasTech 0 ppm HNu 21-20-19 (blow count)
1	SM	Yellowish brown, silty SAND, fine-grained, damp-moist.	
2	CL	Dark greenish gray, sandy gravelly CLAY, medium plasticity, fine-grained sand, damp. Subangular clasts, 1/2 inch diameter.	≈10% sand ≈20% gravel
3		Total Depth = 2.0 feet	
4			
5			
6			
7			
8			
9			
10			

Scale: 1 inch = 1.5 feet

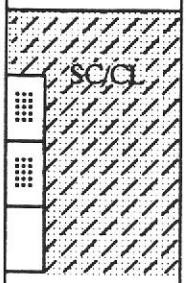
(5/15/91)

Signature _____

DRILLING LOG

BASELINE
5900 Hollis Street, Suite D
Emeryville, CA 94608
(415) 420-8686

Location	280 6th Avenue	Boring No.	SB-12A
Driller	ASE	Project No.	S9-171
Method	Hollow-stem cont. flight	Date	4/9/91
Logger	WKS Datum ____ Bore size 8-inch	Casing size	NA

Depth	Graphic	Lithology	Notes
0		Dark brown, sandy clay-clayey SAND, fine-grained, medium-low plasticity, moist. Increase in gravel content up to 10%.	0 ppm GasTech 0 ppm HNu 9-13-9 (blow count) Asphalt pieces
1			
2			
3		Total Depth = 2.0 feet	
4			
5			
6			
7			
8			
9			
10			

Scale: 1 inch = 1.5 feet

(5/15/91)

Signature _____

DRILLING LOG

BASELINE
5900 Hollis Street, Suite D
Emeryville, CA 94608
(415) 420-8686

Location	280 6th Avenue	Boring No.	SB-12B
Driller	ASE	Project No.	S9-171
Method	Hollow-stem cont. flight	Date	4/9/91
Logger	WKS Datum ____ Bore size 8-inch	Casing size	NA

Depth	Graphic	Lithology	Notes
0		Light brown, SAND, fine-grained, dry.	0 ppm GasTech 0 ppm HNu 7-17-39 (blow count)
1	SC/CL	Dark brown, sandy clay-clayey SAND, fine-grained, medium-low plasticity, damp-moist. Increase in gravel content, subangular clasts, 1/2 inch diameter.	
2			
3		Total Depth = 2.0 feet	
4			
5			
6			
7			
8			
9			
10			

Scale: 1 inch = 1.5 feet

(5/15/91)

Signature _____

DRILLING LOG

BASELINE
5900 Hollis Street, Suite D
Emeryville, CA 94608
(415) 420-8686

Location	280 6th Avenue	Boring No.	SB-9F
Driller	ASE	Project No.	S9-171
Method	Hollow-stem cont. flight	Date	4/9/91
Logger	WKS Datum _____ Bore size 8-inch	Casing size	2-inch

Depth	Graphic	Lithology	Notes
0	SC	Dark brown, clayey gravelly SAND, fine-grained, damp. Subangular clasts, 1/2 - 3/4 inch diameter.	40 ppm GasTech 0 ppm HNu 21-20-19 (blow count)
1	SM	Yellowish brown, silty SAND, fine-grained, damp-moist.	
2	CL	Dark greenish gray, sandy gravelly CLAY, medium plasticity, fine-grained sand, damp. Subangular clasts, 1/2 inch diameter.	≈10% sand ≈20% gravel
3		Total Depth = 2.0 feet	
4			
5			
6			
7			
8			
9			
10			

Scale: 1 inch = 1.5 feet

(5/15/91)

Signature _____

DRILLING LOG

BASELINE
5900 Hollis Street, Suite D
Emeryville, CA 94608
(415) 420-8686

Location	280 6th Avenue	Boring No.	SB-9E
Driller	ASE	Project No.	S9-171
Method	Hollow-stem cont. flight	Date	4/9/91
Logger	WKS Datum _____ Bore size 8-inch	Casing size	2-inch

Depth	Graphic	Lithology	Notes
0	SC	Dark brown, clayey gravelly SAND, fine-grained, damp. Subangular clasts, 1/2 - 3/4 inch diameter.	25 ppm GasTech 0 ppm HNu 18-22-17 (blow count)
1	SM	Yellowish brown, silty SAND, fine-grained, damp-moist.	≈5% clay Increase clay
2	CL	Dark greenish gray, sandy CLAY, low-medium plasticity, fine-grained sand, moist.	≈15% gravel
3		Total Depth = 2.0 feet	
4			
5			
6			
7			
8			
9			
10			

Scale: 1 inch = 1.5 feet

(5/15/91)

Signature _____

DRILLING LOG

BASELINE
5900 Hollis Street, Suite D
Emeryville, CA 94608
(415) 420-8686

Location	280 6th Avenue	Boring No.	SB-9G
Driller	ASE	Project No.	S9-171
Method	Hollow-stem cont. flight	Date	4/9/91
Logger	WKS Datum ____ Bore size 8-inch	Casing size	2-inch

Depth	Graphic	Lithology	Notes
0	SW	Yellowish brown, silty gravelly SAND, fine-grained damp. Subangular clasts, 1/2 inch diameter.	≈5% silt ≈10% gravel 24-27-17 (blow count)
1	GC/CL	Dark gray, sandy clayey GRAVEL, sandy gravelly CLAY, medium-low plasticity, moist. Subangular clasts, 1/2 inch diameter.	150 ppm peaked 50 ppm stabilized]GasTech
2	SM	Dark gray, silty SAND, fine-grained, moist.	0.2 ppm HNu ≈10% silt
3		Total Depth = 2.0 feet	
4			
5			
6			
7			
8			
9			
10			

Scale: 1 inch = 1.5 feet

(5/15/91)

Signature _____

BASELINE
5900 Hollis Street, Suite D
Emeryville, CA 94608
(415) 420-8686

DRILLING LOG

Location	280 6th Avenue	Boring No.	SB-12A
Driller	ASE	Project No.	S9-171
Method	Hollow-stem cont. flight	Date	4/9/91
Logger	WKS Datum _____ Bore size 8-inch	Casing size	NA

Depth	Graphic	Lithology	Notes
0	SC/CL	Dark brown, sandy clay-clayey SAND, fine-grained, medium-low plasticity, moist.	0 ppm GasTech 0 ppm HNu 9-13-9 (blow count)
1		Increase in gravel content up to 10%.	Asphalt pieces
2			
3		Total Depth = 2.0 feet	
4			
5			
6			
7			
8			
9			
10			

Scale: 1 inch = 1.5 feet

(5/15/91)

Signature _____

BASELINE
5900 Hollis Street, Suite D
Emeryville, CA 94608
(415) 420-8686

DRILLING LOG

Location 280 6th Avenue
Driller ASE
Method Hollow-stem cont. flight
Logger WKS Datum _____ Bore size 8-inch

Boring No. SB-12B
Project No. S9-171
Date 4/9/91
Casing size NA

Depth	Graphic	Lithology	Notes
0		Light brown, SAND, fine-grained, dry.	0 ppm GasTech 0 ppm HNu 7-17-39 (blow count)
1	SC/CL	Dark brown, sandy clay-clayey SAND, fine-grained, medium-low plasticity, damp-moist. Increase in gravel content, subangular clasts, 1/2 inch diameter.	
2			
3		Total Depth = 2.0 feet	
4			
5			
6			
7			
8			
9			
10			

Scale: 1 inch = 1.5 feet

(5/15/91)

Signature _____

BASELINE
5900 Hollis Street, Suite D
Emeryville, CA 94608
(415) 420-8686

DRILLING LOG

Location	280 6th Avenue	Boring No.	SB-12C
Driller	ASE	Project No.	S9-171
Method	Hollow-stem cont. flight	Date	4/9/91
Logger	WKS Datum _____ Bore size 8-inch	Casing size	NA

Depth	Graphic	Lithology	Notes
0		Light brown SAND, fine-grained, dry.	0 ppm GasTech 0 ppm HNu 8-9-11 (blow count)
1	SC/CL	Dark brown, sandy clay-clayey SAND, fine-grained, medium-low plasticity, damp. Increase in gravel content, subangular clasts, 1/2 inch diameter, moist.	
2			
3		Total Depth = 2.0 feet	
4			
5			
6			
7			
8			
9			
10			

Scale: 1 inch = 1.5 feet

(5/15/91)

Signature _____

DRILLING LOG

BASELINE
5900 Hollis Street, Suite D
Emeryville, CA 94608
(415) 420-8686

Location	280 6th Avenue	Boring No.	SB-12D
Driller	ASE	Project No.	S9-171
Method	Hollow-stem cont. flight	Date	4/9/91
Logger	WKS Datum ____ Bore size 8-inch	Casing size	NA

Depth	Graphic	Lithology	Notes
0		Light brown, SAND, fine-grained, dry	0 ppm GasTech 0 ppm HNu
	SC/CL	Dark brown, sandy clay-clayey SAND, fine-grained, medium-low plasticity, damp.	5-20-20 (blow count)
1		Increase in gravel content, subangular clasts, 1/2 inch diameter, moist.	
	CH	Dark brown, silty gravelly CLAY, stiff, high plasticity, damp-moist.	Wood chips
2			
3		Total Depth = 2.0 feet	
4			
5			
6			
7			
8			
9			
10			

Scale: 1 inch = 1.5 feet

(5/15/91)

Signature _____

DRILLING LOG

BASELINE
5900 Hollis Street, Suite D
Emeryville, CA 94608
(415) 420-8686

Location	280 6th Avenue	Boring No.	SB-12E
Driller	ASE	Project No.	S9-171
Method	Hollow-stem cont. flight	Date	4/9/91
Logger	WKS Datum ____ Bore size 8-inch	Casing size	NA

Depth	Graphic	Lithology	Notes
0		Light brown SAND, fine-grained, dry.	25 ppm GasTech 0.1 ppm HNu
1	SC/CL	Dark brown, sandy clay-clayey SAND, fine-grained, medium plasticity, damp-moist.	5-13-Refusal (blow count) With concrete pieces Wood chips
2			Wood chips
3		Total Depth = 2.0 feet	
4			
5			
6			
7			
8			
9			
10			

Scale: 1 inch = 1.5 feet

(5/15/91)

Signature_____

DRILLING LOG

BASELINE
5900 Hollis Street, Suite D
Emeryville, CA 94608
(415) 420-8686

Location	280 6th Avenue	Boring No.	SB-12F
Driller	ASE	Project No.	S9-171
Method	Hollow-stem cont. flight	Date	4/9/91
Logger	WKS Datum _____ Bore size 8-inch	Casing size	NA

Depth	Graphic	Lithology	Notes
0		Light brown SAND, fine-grained, dry.	15 ppm GasTech 0 ppm HNu
1	CL	Dark brown, sandy gravelly CLAY, fine- to medium-grained, damp-moist. Subangular clasts, 1/2 inch diameter.	7-9-12 (blow count) ≈20% sand ≈35% gravel
2			
3		Total Depth = 2.0 feet	
4			
5			
6			
7			
8			
9			
10			

Scale: 1 inch = 1.5 feet

(5/15/91)

Signature _____

BASELINE
5900 Hollis Street, Suite D
Emeryville, CA 94608
(415) 420-8686

DRILLING LOG

Location	280 6th Avenue	Boring No.	SB-12G
Driller	ASE	Project No.	S9-171
Method	Hollow-stem cont. flight	Date	4/9/91
Logger	WKS Datum _____ Bore size 8-inch	Casing size	NA

Depth	Graphic	Lithology	Notes
0		Light brown, SAND, fine-grained, dry.	0 ppm GasTech 0 ppm HNu 7-12-7 (blow count)
1	CL	Dark brown, gravelly CLAY, medium plasticity, damp-moist. Subangular clasts, 1/2 - 3/4 inch diameter.	Top sample asphalt debris 0.5-1.0 foot
2			Some asphalt in bottom sample
3		Total Depth = 2.0 feet	
4			
5			
6			
7			
8			
9			
10			

Scale: 1 inch = 1.5 feet

(5/15/91)

Signature _____

DRILLING LOG

BASELINE
5900 Hollis Street, Suite D
Emeryville, CA 94608
(415) 420-8686

Location	280 6th Avenue	Boring No.	SB-14A
Driller	ASE	Project No.	S9-171
Method	Hollow-stem cont. flight	Date	4/9/91
Logger	WKS Datum ____ Bore size 8-inch	Casing size	NA

Depth	Graphic	Lithology	Notes
0	SW	Yellowish brown, clayey gravelly SAND, fine-grained, damp. Subangular clasts, 1/2 inch diameter.	≈25 ppm GasTech 0 ppm HNu 8-7-5 (blow count)
1			
	CL	Dark brown, sandy gravelly CLAY, fine-grained sand, low plasticity clay, damp. Subangular clasts, 1/2 inch diameter.	≈15% sand ≈20% gravel Hit rock moved 0.5 ft towards 14B.
2			
3		Total Depth = 2.0 feet	
4			
5			
6			
7			
8			
9			
10			

Scale: 1 inch = 1.5 feet

(5/15/91)

Signature _____

BASELINE
5900 Hollis Street, Suite D
Emeryville, CA 94608
(415) 420-8686

DRILLING LOG

Location	280 6th Avenue	Boring No.	SB-14B
Driller	ASE	Project No.	S9-171
Method	Hollow-stem cont. flight	Date	4/9/91
Logger	WKS Datum _____ Bore size 8-inch	Casing size	NA

Depth	Graphic	Lithology	Notes
0	SW	Yellowish brown, clayey gravelly SAND, fine-grained, damp. Subangular clasts, 1/2 inch diameter.	25 ppm GasTech 0 ppm HNu 6-24-15 (blow count) Hit concrete
1			
2	CL	Dark brown, sandy gravelly CLAY, fine-grained sand, low plasticity clay, damp. Subangular clasts, 1/2 inch diameter.	
3		Total Depth = 2.0 feet	
4			
5			
6			
7			
8			
9			
10			

Scale: 1 inch = 1.5 feet

(5/15/91)

Signature _____

DRILLING LOG

BASELINE
5900 Hollis Street, Suite D
Emeryville, CA 94608
(415) 420-8686

Location	280 6th Avenue	Boring No.	SB-14C
Driller	ASE	Project No.	S9-171
Method	Hollow-stem cont. flight	Date	4/9/91
Logger	WKS Datum _____ Bore size 8-inch	Casing size	NA

Depth	Graphic	Lithology	Notes
0	SW	Yellowish brown-gray, clayey gravelly SAND, damp. Subangular clasts, 1/2 - 3/4 inch diameter.	50 ppm GasTech 0 ppm HNu 8-12-13 (blow count)
1	SP	Gray, silty SAND, fine-grained, moist.	
2			
3		Total Depth = 2.0 feet	
4			
5			
6			
7			
8			
9			
10			

Scale: 1 inch = 1.5 feet

(5/153/91)

Signature _____

DRILLING LOG

BASELINE
5900 Hollis Street, Suite D
Emeryville, CA 94608
(415) 420-8686

Location	280 6th Avenue	Boring No.	SB-14D
Driller	ASE	Project No.	S9-171
Method	Hollow-stem cont. flight	Date	4/9/91
Logger	WKS Datum ____ Bore size 8-inch	Casing size	NA

Depth	Graphic	Lithology	Notes
0	SW	Yellowish brown-gray, clayey gravelly SAND, grained, damp. Subangular clasts, 1/2 - 3/4 inch diameter.	50 ppm GasTech 0 ppm HNu 8-20-12 (blow count)
1	SP	Gray, silty SAND, fine-grained, moist.	
2			
3		Total Depth = 2.0 feet	
4			
5			
6			
7			
8			
9			
10			

Scale: 1 inch = 1.5 feet

(5/15/91)

Signature _____

DRILLING LOG

BASELINE
5900 Hollis Street, Suite D
Emeryville, CA 94608
(415) 420-8686

Location	280 6th Avenue	Boring No.	SB-14E
Driller	ASE	Project No.	S9-171
Method	Hollow-stem cont. flight	Date	4/9/91
Logger	WKS	Datum	Bore size 8-inch	Casing size NA

Depth	Graphic	Lithology	Notes
0	SW	Yellowish brown-gray silty gravelly SAND, fine-grained, damp. Subangular clasts, 1/2 inch diameter.	75 ppm GasTech 0 ppm HNu 5-7-7 (blow count)
1	SP	Dark gray, silty clayey SAND, fine-grained, damp.	Possibly hit tire, bouncing hammer
2			
3		Total Depth = 2.0 feet	
4			
5			
6			
7			
8			
9			
10			

Scale: 1 inch = 1.5 feet

(5/15/91)

Signature _____

BASELINE
5900 Hollis Street, Suite D
Emeryville, CA 94608
(415) 420-8686

DRILLING LOG

Location	280 6th Avenue	Boring No.	SB-14F
Driller	ASE	Project No.	S9-171
Method	Hollow-stem cont. flight	Date	4/9/91
Logger	WKS Datum _____ Bore size 8-inch	Casing size	NA

Depth	Graphic	Lithology	Notes
0	SW	Yellowish brown-gray silty gravelly SAND, fine-grained, damp. Subangular clasts, 1/2 inch diameter.	75 ppm GasTech 0 ppm HNu 7-10 (blow count)
1	SP	Dark gray, silty clayey SAND, fine-grained, damp.	Hit tire
2			
3		Total Depth = 2.0 feet	
4			
5			
6			
7			
8			
9			
10			

Scale: 1 inch = 1.5 feet

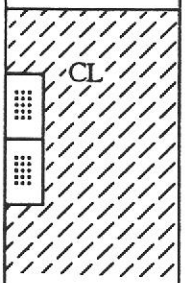
(5/15/91)

Signature _____

DRILLING LOG

BASELINE
5900 Hollis Street, Suite D
Emeryville, CA 94608
(415) 420-8686

Location	280 6th Avenue	Boring No.	SB-14G
Driller	ASE	Project No.	S9-171
Method	Hollow-stem cont. flight	Date	4/9/91
Logger	WKS Datum ____ Bore size 8-inch	Casing size	NA

Depth	Graphic	Lithology	Notes
0		Dark brown, sandy gravelly CLAY, medium-low plasticity, moist. Subangular clasts, 1/4 - 1/2 inch diameter.	Used manual slide hammer ≈20% sand ≈25% gravel
1			
2			
3		Total Depth = 2.0 feet	
4			
5			
6			
7			
8			
9			
10			

Scale: 1 inch = 1.5 feet

(5/15/91)

Signature _____

APPENDIX F

LABORATORY REPORTS FOR SOIL SAMPLING

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710, Phone (415) 486-0900

DATE RECEIVED: 04/10/91
DATE REPORTED: 04/23/91

LAB NUMBER: 103493

CLIENT: BASELINE ENVIRONMENTAL

PROJECT ID: S9-171
LOCATION: SEA BREEZE, OAKLAND

RESULTS: SEE ATTACHED

QA/QC Approval

Final Approval

Curtis & Tompkins, Ltd.

LABORATORY NUMBER: 103493
CLIENT: BASELINE ENVIRONMENTAL
PROJECT ID: S9-171
LOCATION: SEA BREEZE, OAKLAND

DATE RECEIVED: 04/10/91
DATE ANALYZED: 04/16-22/91
DATE REPORTED: 04/23/91

ANALYSIS: COPPER
ANALYSIS METHOD: EPA 7210

LAB ID	SAMPLE ID	RESULT	UNITS	REPORTING LIMIT
103493-19	SB-12G@0.5'-1.0'	164	mg/Kg	1.0
103493-20	SB-12G@1.0'-1.5'	33	mg/Kg	1.0
103493-34	SB-12A@0.5'-1.0'	1,780	mg/Kg	10
103493-35	SB-12A@1.0'-1.5'	40	mg/Kg	1.0
103493-36	SB-12B@0.5'-1.0'	368	mg/Kg	1.0
103493-37	SB-12B@1.0'-1.5'	87	mg/Kg	1.0
103493-38	SB-12C@0.5'-1.0'	237	mg/Kg	1.0
103493-39	SB-12C@1.0'-1.5'	55	mg/Kg	1.0
103493-40	SB-12D@0.5'-1.0'	418	mg/Kg	1.0
103493-41	SB-12D@1.0'-1.5'	51	mg/Kg	1.0
103493-42	SB-12E@0.5'-1.0'	2,280	mg/Kg	5.0
103493-43	SB-12E@1.0'-1.5'	210	mg/Kg	1.0
103493-44	SB-12F@0.5'-1.0'	95	mg/Kg	1.0
103493-45	SB-12F@1.0'-1.5'	23	mg/Kg	1.0

QA/QC SUMMARY

RPD, %	<1
Recovery, %	100

Curtis & Tompkins, Ltd.

LABORATORY NUMBER: 103493
CLIENT: BASELINE ENVIRONMENTAL
PROJECT ID: S9-171
LOCATION: SEA BREEZE, OAKLAND

DATE RECEIVED: 04/10/91
DATE ANALYZED: 04/16-18/91
DATE REPORTED: 04/23/91

ANALYSIS: SOLUBLE COPPER
EXTRACTION BY WASTE EXTRACTION TEST: CCR TITLE 26 SECTION 22-66700
ANALYSIS METHOD: EPA 7210

LAB ID	CLIENT ID	RESULT	UNITS	REPORTING LIMIT
103493-19	SB-12G@0.5'-1.0'	4.9	mg/L	0.02
103493-20	SB-12G@1.0'-1.5'	2.5	mg/L	0.02
103493-34	SB-12A@0.5'-1.0'	21.2	mg/L	0.1
103493-35	SB-12A@1.0'-1.5'	9.2	mg/L	0.02
103493-36	SB-12B@0.5'-1.0'	7.6	mg/L	0.02
103493-37	SB-12B@1.0'-1.5'	4.6	mg/L	0.02
103493-38	SB-12C@0.5'-1.0'	11.9	mg/L	0.1
103493-39	SB-12C@1.0'-1.5'	1.7	mg/L	0.02
103493-40	SB-12D@0.5'-1.0'	11.0	mg/L	0.04
103493-41	SB-12D@1.0'-1.5'	1.2	mg/L	0.02
103493-42	SB-12E@0.5'-1.0'	61.4	mg/L	0.2
103493-43	SB-12E@1.0'-1.5'	5.0	mg/L	0.02
103493-44	SB-12F@0.5'-1.0'	2.0	mg/L	0.02
103493-45	SB-12F@1.0'-1.5'	1.9	mg/L	0.02

QA/QC SUMMARY

RPD, %	4
RECOVERY, %	102

Curtis & Tompkins, Ltd.

LABORATORY NUMBER: 103493
CLIENT: BASELINE ENVIRONMENTAL
PROJECT ID: S9-171
LOCATION: SEA BREEZE, OAKLAND

DATE RECEIVED: 04/10/91
DATE ANALYZED: 04/11-22/91
DATE REPORTED: 04/23/91

ANALYSIS: LEAD
ANALYSIS METHOD: EPA 7420

LAB ID	SAMPLE ID	RESULT	UNITS	REPORTING LIMIT
103493-1	SB-6D@1.0'-1.5'	7.9	mg/Kg	3.0
103493-2	SB-6E@0.5'-1.0'	7.8	mg/Kg	3.0
103493-3	SB-6E@1.0'-1.5'	142	mg/Kg	3.0
103493-4	SB-6F@0.5'-1.0'	9.3	mg/Kg	3.0
103493-5	SB-6F@1.0'-1.5'	8.4	mg/Kg	3.0
103493-6	SB-6G@0.5'-1.0'	ND	mg/Kg	3.0
103493-7	SB-6G@1.0'-1.5'	67.3	mg/Kg	3.0
103493-8	SB-6H@0.5'-1.0'	50.5	mg/Kg	3.0
103493-9	SB-6H@1.0'-1.5'	102	mg/Kg	3.0
103493-10	SB-9A@0.5'-1.0'	ND	mg/Kg	3.0
103493-11	SB-9A@1.0'-1.5'	ND	mg/Kg	3.0
103493-12	SB-9B@0.5'-1.0'	60.8	mg/Kg	3.0
103493-13	SB-9B@1.0'-1.5'	34.8	mg/Kg	3.0
103493-14	SB-9C@0.5'-1.0'	483	mg/Kg	3.0
103493-15	SB-9C@1.0'-1.5	45.3	mg/Kg	3.0
103493-16	SB-9D@0.5'-1.0'	119	mg/Kg	3.0
103493-17	SB-9D@1.0'-1.5'	82.4	mg/Kg	3.0
103493-18	SB-9E@0.5'-1.0'	138	mg/Kg	3.0
103493-19	SB-12G@0.5'-1.0'	68.6	mg/Kg	3.0
103493-20	SB-12G@1.0'-1.5'	28.1	mg/Kg	3.0

ND = Not detected at or above reporting limit.

QA/QC SUMMARY

RPD, %	<1
RECOVERY, %	95

Curtis & Tompkins, Ltd

LABORATORY NUMBER: 103493
CLIENT: BASELINE ENVIRONMENTAL
PROJECT ID: S9-171
LOCATION: SEA BREEZE, OAKLAND

DATE RECEIVED: 04/10/91
DATE ANALYZED: 04/16-22/91
DATE REPORTED: 04/23/91

ANALYSIS: LEAD
ANALYSIS METHOD: EPA 7420

LAB ID	SAMPLE ID	RESULT	UNITS	REPORTING LIMIT
103493-41	SB-12D@1.0'-1.5'	68.5	mg/Kg	3.0
103493-42	SB-12E@0.5'-1.0'	128	mg/Kg	3.0
103493-43	SB-12E@1.0'-1.5'	51.7	mg/Kg	3.0
103493-44	SB-12F@0.5'-1.0'	115	mg/Kg	3.0
103493-45	SB-12F@1.0'-1.5'	17.9	mg/Kg	3.0
103493-46	SB-14G@0.5'-1.0'	126	mg/Kg	3.0
103493-47	SB-14G@1.0'-1.5'	79.8	mg/Kg	3.0

QA/QC SUMMARY

RPD, %	<1
RECOVERY, %	94

Curtis & Tompkins, Ltd.

LABORATORY NUMBER: 103493
CLIENT: BASELINE ENVIRONMENTAL
PROJECT ID: S9-171
LOCATION: SEA BREEZE, OAKLAND

DATE RECEIVED: 04/10/91
DATE ANALYZED: 04/15/91
DATE REPORTED: 04/23/91

ANALYSIS: SOLUBLE LEAD
EXTRACTION BY WASTE EXTRACTION TEST: CCR TITLE 26 SECTION 22-66700
ANALYSIS METHOD: EPA 7420

LAB ID	CLIENT ID	RESULT	UNITS	REPORTING LIMIT
103493-1	SB-6D@1.0'-1.5'	0.25	mg/L	0.06
103493-2	SB-6E@0.5'-1.0'	0.29	mg/L	0.06
103493-3	SB-6E@1.0'-1.5'	2.8	mg/L	0.06
103493-4	SB-6F@0.5'-1.0'	0.16	mg/L	0.06
103493-5	SB-6F@1.0'-1.5'	ND	mg/L	0.06
103493-6	SB-6G@0.5'-1.0'	0.10	mg/L	0.06
103493-7	SB-6G@1.0'-1.5'	ND	mg/L	0.06
103493-8	SB-6H@0.5'-1.0'	1.5	mg/L	0.06
103493-9	SB-6H@1.0'-1.5'	7.3	mg/L	0.06
103493-10	SB-9A@0.5'-1.0'	0.06	mg/L	0.06
103493-11	SB-9A@1.0'-1.5'	ND	mg/L	0.06
103493-12	SB-9B@0.5'-1.0'	5.6	mg/L	0.06
103493-13	SB-9B@1.0'-1.5'	1.4	mg/L	0.06
103493-14	SB-9C@0.5'-1.0'	28.3	mg/L	0.06
103493-15	SB-9C@1.0'-1.5	3.0	mg/L	0.06
103493-16	SB-9D@0.5'-1.0'	2.3	mg/L	0.06
103493-17	SB-9D@1.0'-1.5'	8.6	mg/L	0.06
103493-18	SB-9E@0.5'-1.0'	8.6	mg/L	0.06
103493-19	SB-12G@0.5'-1.0'	2.0	mg/L	0.06
103493-20	SB-12G@1.0'-1.5'	2.4	mg/L	0.06

ND = Not detected at or above reporting limit.

QA/QC SUMMARY

RPD, %	<1
RECOVERY, %	90

Curtis & Tompkins, Ltd

LABORATORY NUMBER: 103493
CLIENT: BASELINE ENVIRONMENTAL
PROJECT ID: S9-171
LOCATION: SEA BREEZE, OAKLAND

DATE RECEIVED: 04/10/91
DATE ANALYZED: 04/15-16/91
DATE REPORTED: 04/23/91

ANALYSIS: SOLUBLE LEAD
EXTRACTION BY WASTE EXTRACTION TEST: CCR TITLE 26 SECTION 22-66700
ANALYSIS METHOD: EPA 7420

LAB ID	CLIENT ID	RESULT	UNITS	REPORTING LIMIT
103493-21	SB-6A@0.5'-1.0'	155	mg/L	0.6
103493-22	SB-6A@1.0'-1.5'	4.8	mg/L	0.06
103493-23	SB-6B@0.5'-1.0'	3.1	mg/L	0.06
103493-24	SB-6B@1.0'-1.5'	0.27	mg/L	0.06
103493-25	SB-6C@0.5'-1.0'	0.19	mg/L	0.06
103493-26	SB-6C@1.0'-1.5'	0.14	mg/L	0.06
103493-27	SB-6D@0.5'-1.0'	0.16	mg/L	0.06
103493-28	SB-9E@1.0'-1.5'	2.9	mg/L	0.06
103493-29	SB-9F@0.5'-1.0'	9.1	mg/L	0.06
103493-30	SB-9F@1.0'-1.5'	61.6	mg/L	0.3
103493-31	SB-9G@0.5'-1.0'	38.8	mg/L	0.3
103493-32	SB-9G@1.0'-1.5'	11.7	mg/L	0.06
103493-33	SB-9H@1.0'-1.5'	11.1	mg/L	0.06
103493-34	SB-12A@0.5'-1.0'	39.8	mg/L	0.3
103493-35	SB-12A@1.0'-1.5'	8.3	mg/L	0.06
103493-36	SB-12B@0.5'-1.0'	0.26	mg/L	0.06
103493-37	SB-12B@1.0'-1.5'	3.9	mg/L	0.06
103493-38	SB-12C@0.5'-1.0'	2.9	mg/L	0.06
103493-39	SB-12C@1.0'-1.5'	5.7	mg/L	0.06
103493-40	SB-12D@0.5'-1.0'	3.3	mg/L	0.06

QA/QC SUMMARY

RPD, %	1
RECOVERY, %	96

Curtis & Tompkins, Ltd

LABORATORY NUMBER: 103493
CLIENT: BASELINE ENVIRONMENTAL
PROJECT ID: S9-171
LOCATION: SEA BREEZE, OAKLAND

DATE RECEIVED: 04/10/91
DATE ANALYZED: 04/16-18/91
DATE REPORTED: 04/23/91

ANALYSIS: SOLUBLE LEAD
EXTRACTION BY WASTE EXTRACTION TEST: CCR TITLE 26 SECTION 22-66700
ANALYSIS METHOD: EPA 7420

LAB ID	CLIENT ID	RESULT	UNITS	REPORTING LIMIT
103493-41	SB-12D@1.0'-1.5'	2.5	mg/L	0.06
103493-42	SB-12E@0.5'-1.0'	7.7	mg/L	0.06
103493-43	SB-12E@1.0'-1.5'	2.7	mg/L	0.06
103493-44	SB-12F@0.5'-1.0'	2.6	mg/L	0.06
103493-45	SB-12F@1.0'-1.5'	2.5	mg/L	0.06
103493-46	SB-14G@0.5'-1.0'	1.8	mg/L	0.06
103493-47	SB-14G@1.0'-1.5'	3.7	mg/L	0.06

QA/QC SUMMARY

RPD, %	7
RECOVERY, %	101

[redacted] Holl[redacted]treet, [redacted]ile D[redacted]
Emeryville, CA 94608
(415) 420-8686

CHAIN OF CUSTODY RECORD

Login # 103493

Lab Cadis + Tompkins
Contact Person Bill Scott

Project No.	Project Name and Location
59-191	Sea Breeze, Oakland

Samplers: (Signature)
William K Scott

No. Station	Date	Time	Media	Depth	Composites	No. of Containers	Station Location	Analysis: 7420 total and soluble Pb (Ta 4/10/91)	Remarks	Detection Limits
SB-6D	4-9-91	12:55	SOIL	1.0-1.5		1		X		
SB-6E		13:07	SOIL	0.5-1.0		1		X		
SB-6E		13:07	SOIL	1.0-1.5		1		X		
SB-6F		13:21	SOIL	0.5-1.0		1		X		
SB-6F		13:21	SOIL	1.0-1.5		1		X		
SB-6G		13:40	SOIL	0.5-1.0		1		X		
SB-6G		13:40	SOIL	1.0-1.5		1		X		
SB-6H		13:48	SOIL	0.5-1.0		1		X		
SB-6H		13:48	SOIL	1.0-1.5		1		X		

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Date / Time	Condition of Samples upon Arrival at Laboratory:
William K Scott	4-9-91 16:30	Melinda Burry	4/9/91 16:30	Cold
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Date / Time	Remarks:
Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	
Melinda Burry	4/10/91 9:20	[signature]	4/10/91 9:30	

[redacted] Emeryville, CA 94608
(415) 428-8686

CHAIN OF CUSTODY RECORD

Lab Cadis & Associates
Contact Person Bill Scaff

Project No. 59-171
Project Name and Location Sea Breeze, Oakland
Samplers: (Signature) [signature]

No. Station	Date	Time	Media	Depth	Composites	No. of Containers	Station Location	Analysis: 7420 Total and Soluble Pb (by 4/10/91)	Remarks	Detection Limits
SB-9A	4-9-91	8:37	SOIL	0.5-1.0		1		X		
SB-9A		8:37	SOIL	1.0-1.5		1		X		
SB-9B		8:42	SOIL	0.5-1.0		1		X		
SB-9B		8:42	SOIL	1.0-1.5		1		X		
SB-9C		8:53	SOIL	0.5-1.0		1		X		
SB-9C		8:53	SOIL	1.0-1.5		1		X		
SB-9D		9:02	SOIL	0.5-1.0		1		X		
SB-9D		9:02	SOIL	1.0-1.5		1		X		
SB-9E		9:24	SOIL	0.5-1.0		1		X		

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Date / Time	Conditions of Samples upon Arrival at Laboratory:
[signature]	4-9-91 16:30	Melinda Berry	4/9/91 16:30	Cold
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Date / Time	Remarks:
Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	
Melinda Berry	4/10/91 9:20	[signature]	4/10/91 9:30	

P.6

APR 10 '91 09:04 [redacted] BERKELEY

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Emeryville, CA 94608
(415) 420-8686

CHAIN OF CUSTODY RECORD

Turn-Around Time: Normal

Lab: Curtis & Tompkins

Contact Person: Bill Scott

Project No.	Project Name and Location
59-171	Sea Breeze, Oakland

Samplers: (Signature)
William K Scott

No.	Station	Date	Time	Media	Depth	Composites	No. of Containers	Station Location	Analysis: 7420 total and soluble Pb	Analysis: 7130 total and soluble Cd (Ka 4/10/91)	Remarks	Detection Limits
	SB-12G	4-9-91	11:24	SOIL	0.5-1.0		1		X	X		
20	SB-12G	"	11:24	SOIL	1.0-1.5		1		X	X		
21	SB-6A	"	12:30	SOIL	0.5-1.0		1		X			
22	SB-6A	"	12:30	SOIL	1.0-1.5		1		X			
	SB-6B	"	12:40	SOIL	0.5-1.0		1		X			
	SB-6B	"	12:40	SOIL	1.0-1.5		1		X			
	SB-6C	"	12:46	SOIL	0.5-1.0		1		X			
24	SB-6C	"	12:46	SOIL	1.0-1.5		1		X			
27	SB-6D	"	12:55	SOIL	0.5-1.0		1		X			

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Date / Time	Condition of Samples upon Arrival at Laboratory:
William K Scott	4-9-91 16:30	Melinda Berry	4/9/91 16:30	Cold
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Date / Time	Remarks:
Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	
Melinda Berry	4/10/91 9:20	Kent Kellow	4/10/91 9:30	

APR 10 '91 09:04 CAT EMYVILLE

[redacted] Emeryville, CA 94608
(415) 420-8686

CHAIN OF CUSTODY RECORD

Turn Around Time [redacted]
Lab Curtis & Tompkins
Contact Person Bill Scott

Project No.	Project Name and Location
59-171	Sea Breeze, Oakland

Sampler: (Signature) William K Scott

No.	Station	Date	Time	Media	Depth	Composites	No. of Containers	Station Location	Analysis 7420 total and soluble Pb	Analysis 7210 total and soluble Cu (by 4/10/91)	Remarks	Detection Limits
	SB-9E	4-9-91	9:24	Soil	1.0-1.5		1		X			
	SB-9F		9:33	Soil	0.5-1.0		1		X			
	SB-9F		9:33	Soil	1.0-1.5		1		X			
	SB-9G		9:42	Soil	0.5-1.0		1		X			
	SB-9G		9:42	Soil	1.0-1.5		1		X			
	SB-9H		9:54	Soil	1.0-1.5		1		X			
	SB-12A		10:13	Soil	0.5-1.0		1		X	X		
35	SB-12A		10:13	Soil	1.0-1.5 0.5-1.0		1		X	X		
36	SB-12B		10:28	Soil	0.5-1.0		1		X	X		

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Date / Time	Condition of Samples upon Arrival at Laboratory:
William K Scott	4-9-91 16:30	Melinda Berry	4/9/91 16:30	Cold
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Date / Time	Remarks:
Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	
Melinda Berry	4/10/91 9:20	Scott Lutter	4/10/91 9:30	

APR 10 '91 09:00 C&T BERKELEY 415 420 1707 P.25 BASELINE P.2
04/10/91 10:44

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Emeryville, CA 94608
(415) 420-8686

CHAIN OF CUSTODY RECORD

Turnaround Time [redacted]

Lab Curtis & Tompkins

Contact Person Bill Scott

Project No.	Project Name and Location
59-171	SeaBreeze, Oakland

Samplers: (Signature) William F. Scott

No.	Station	Date	Time	Media	Depth	Composites	No. of Containers	Station Location	Analysis: 7420 total and soluble Pb	Analysis: 7120 total and soluble Cu (by 4/10/91)	Remarks	Detection Limits
SB-12B	4-9-91	10:21	Soil	1.0-1.5		1		X	X			
SB-12C		10:31	Soil	0.5-1.0		1		X	X			
SB-12C		10:31	Soil	1.0-1.5		1		X	X			
SB-12D		10:42	Soil	0.5-1.0		1		X	X			
SB-12D		10:42	Soil	1.0-1.5 0.5-1.0		1		X	X			
SB-12E		11:01	Soil	0.5-1.0		1		X	X			
SB-12E		11:01	Soil	1.0-1.5		1		X	X			
SB-12F		11:10	Soil	0.5-1.0		1		X	X			
SB-12F		11:10	Soil	1.0-1.5		1		X	X			

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Date / Time
William F. Scott	4-9-91 16:30	Melinda Berry	4/9/91 16:30
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Date / Time
Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time
Melinda Berry	4/10/91 9:20	[illegible]	4/10/91 9:30

Condition of Samples upon Arrival at Laboratory:

Cold

Remarks:

APR 10 '91 09:01 C&T BERKELEY F.3

Project No. 59-171

Project Name and Location: Sea Breeze, Oakland

Contact Person: Bill

Samplers: (Signature) William K Smith

No.	Station	Date	Time	Media	Depth	Composites	No. of Containers	Station Location
-16	SB-MG	4-9-91	11:08	Soil	05-10		1	
-17	SB-MG		14:15	Soil	10-15		1	

Analysis: 7420 total and soluble Pb (to 4/10/91)

No.	7420	Remarks	Detection Limits
-16	X		
-17	X		

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Date / Time
William K Smith	4-9-91 16:30	Melinda Berry	4/9/91 16:30
Melinda Berry	4/10/91 9:20		4/10/91 9:30

Received for Laboratory by: (Signature)

Condition of Samples upon Arrival at Laboratory: Cold

Remarks:

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710, Phone (415) 486-0900

DATE RECEIVED: 04/08/91
DATE REQUESTED: 04/24/91
DATE REPORTED: 04/29/91

BASELINE

LAB NUMBER: 103622

CLIENT: BASELINE ENVIRONMENTAL

PROJECT ID: 59-171
LOCATION: SEA BREEZE, 280 6TH AVE.

RESULTS: SEE ATTACHED

QA/QC Approval

Final Approval

Curtis & Tompkins, Ltd.

LABORATORY NUMBER: 103622
CLIENT: BASELINE ENVIRONMENTAL
PROJECT ID: 59-171
LOCATION: SEA BREEZE, 280 6TH AVE.

DATE RECEIVED: 04/08/91
DATE REQUESTED: 04/24/91
DATE ANALYZED: 04/26/91
DATE REPORTED: 04/29/91

ANALYSIS: LEAD
ANALYSIS METHOD: EPA 7420

LAB ID	SAMPLE ID	RESULT	UNITS	REPORTING LIMIT
103622-1	SB-14A 0.5-1.0	52	mg/Kg	3.0
103622-2	SB-14A 1.0-1.5	73	mg/Kg	3.0
103622-3	SB-14B 0.5-1.0	6.4	mg/Kg	3.0
103622-4	SB-14B 1.0-1.5	51	mg/Kg	3.0
103622-5	SB-14C 0.5-1.0	105	mg/Kg	3.0
103622-6	SB-14C 1.0-1.5	91	mg/Kg	3.0
103622-7	SB-14D 0.5-1.0	90	mg/Kg	3.0
103622-8	SB-14D 1.0-1.5	52	mg/Kg	3.0

QA/QC SUMMARY

RPD, %	<1
Recovery, %	98

[redacted]

5900 Hollis Street, Suite D
Emeryville, CA 94608
(415) 420-8686

103476

CHAIN OF CUSTODY RECORD

Turn-Around Time: Normal
Lab: Curtis & Tompkins
Contact Person: Bill Scott

Project No.	Project Name and Location
59-171	Sea Breeze, 280 6th Ave

Samplers: (Signature) William K Scott

Analysis: Soluble lead (7420) and total (7420 ca)

103622

	No. Station	Date	Time	Media	Depth	Composites	No. of Containers	Station Location	Soluble lead (7420) and total	Remarks	Detection Limits
-1	SB-14a	4-8-91	13:53	Soil	0.5 1.0		1		X		
-2	SB-14a	↓	13:55	↓	1.0 1.5		1		X		
-3	SB-14b		14:07		0.5 1.0		1		X		
-4	SB-14b		14:09		1.0 1.5	~~14:09~~	1		X		
-5	SB-14c		14:27		0.5 1.0		1		X		
-6	SB-14c		14:29		1.0 1.5		1		X		
-7	SB-14d		14:50		0.5 1.0		1		X		
-8	SB-14d	↓	14:51	↓	1.0 1.5		1		X		

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Date / Time
—		—	
—		—	
William K Scott	4-8-91 17:00	Received for Laboratory by: (Signature) [signature]	4/8/91 17:00

Condition of Samples upon Arrival at Laboratory: Cold

Remarks:

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710, Phone (415) 486-0900

DATE RECEIVED: 04/08/91
DATE REPORTED: 04/17/91

LAB NUMBER: 103476

CLIENT: BASELINE ENVIRONMENTAL

PROJECT ID: S9-171
LOCATION: SEA BREEZE, 280 6TH AVE.

RESULTS: SEE ATTACHED

QA/QC Approval

Final Approval

Curtis & Tompkins, Ltd

LABORATORY NUMBER: 103476
CLIENT: BASELINE ENVIRONMENTAL
PROJECT ID: S9-171
LOCATION: SEA BREEZE, 280 6TH AVE

DATE RECEIVED: 04/08/91
DATE ANALYZED: 04/15/91
DATE REPORTED: 04/17/91

ANALYSIS: SOLUBLE LEAD
EXTRACTION BY WASTE EXTRACTION TEST: CCR TITLE 26 SECTION 22-66700
ANALYSIS METHOD: EPA 7420

LAB ID	CLIENT ID		RESULT	UNITS	REPORTING LIMIT
103476-1	SB-14a	0.5-1.0	3.1	mg/L	0.06
103476-2	SB-14a	1.0-1.5	4.0	mg/L	0.06
103476-3	SB-14b	0.5-1.0	0.09	mg/L	0.06
103476-4	SB-14b	1.0-1.5	2.8	mg/L	0.06
103476-5	SB-14c	0.5-1.0	3.6	mg/L	0.06
103476-6	SB-14c	1.0-1.5	5.3	mg/L	0.06
103476-7	SB-14d	0.5-1.0	2.9	mg/L	0.06
103476-8	SB-14d	1.0-1.5	1.7	mg/L	0.06
103476-9	SB-14e	0.5-1.0	0.74	mg/L	0.06
103476-10	SB-14e	1.0-1.5	3.5	mg/L	0.06
103476-11	SB-14f	0.5-1.0	3.2	mg/L	0.06
103476-12	SB-14f	1.0-1.5	3.8	mg/L	0.06

QA/QC SUMMARY

RPD, %	1
RECOVERY, %	94

3900 Hollis Street, Suite D
Emeryville, CA 94608
(415) 420-8686

CHAIN OF CUSTODY RECORD

105470

Turn-Around Time Normal
Lab Curtis & Tompkins
Contact Person Bill Scott

Project No.	Project Name and Location
59-171	Sea Breeze, 280 6th Ave.

Samplers: (Signature) William K Scott

No.	Station	Date	Time	Media	Depth	Composites	No. of Containers	Station Location	Analysis: Soluble lead (7420)	Remarks	Detection Limits
9	SB-14e	4-8-91	15:04	Soil	0.5 1.0		1		X		
10	SB-14e	4-8-91	15:03	Soil	1.0 1.5		1		X		
11	SB-14f	4-8-91	15:25	Soil	0.5 1.0		1		X		
12	SB-14f	4-8-91	15:26	Soil	1.0 1.5		1		X		

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Date / Time
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Date / Time
Relinquished by: (Signature) William K Scott	Date / Time 4-8-91 17:00	Received for Laboratory by: (Signature) Nancy Wein	Date / Time 4/8/91 17:00

Condition of Samples upon Arrival at Laboratory: cold

Remarks:

BASELINE

5900 Hollis Street, Suite D
Emeryville, CA 94608
(415) 420-8686

CHAIN OF CUSTODY RECORD

103476

Turn-Around Time Normal
Lab Curtis & Tompkins
Contact Person Bill Scott

Project No.	Project Name and Location
59-171	Sea Breeze; 280 6TH Ave

Samplers: (Signature) William K Scott

No.	Station	Date	Time	Media	Depth	Composites	No. of Containers	Station Location	Analysis: Soluble Lead (7420)	Lead Total (7420)	Remarks	Detection Limits
1	SB-14a	4-8-91	13:53	Soil	0.5 1.0		1		X			
2	SB-14a		13:55		1.0 1.5		1		X			
3	SB-14b		14:07		0.5 1.0		1		X			
4	SB-14b		14:09		1.0 1.5		1		X			
5	SB-14c		14:27		0.5 1.0		1		X			
6	SB-14c		14:29		1.0 1.5		1		X			
7	SB-14d		14:50		0.5 1.0		1		X			
8	SB-14d		14:51		1.0 1.5		1		X			

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Date / Time	Condition of Samples upon Arrival at Laboratory:
				Cold
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Date / Time	Remarks:
Relinquished by: (Signature) William K Scott	Date / Time 4-8-91 17:00	Received for Laboratory by: (Signature) Nancy Wilson	Date / Time 4/8/91 17:00	

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710, Phone (415) 486-0900

DATE RECEIVED: 04/08/91
DATE REQUESTED: 05/10/91
DATE REPORTED: 05/14/91

LAB NUMBER: 103777

CLIENT: BASELINE ENVIRONMENTAL

PROJECT ID: S9-171

LOCATION: SEA BREEZE, 280 6TH AVENUE

RESULTS: SEE ATTACHED

QA/QC Approval

Final Approval

Curtis & Tompkins, Ltd.

LABORATORY NUMBER: 103777
CLIENT: BASELINE ENVIRONMENTAL
PROJECT ID: S9-171
LOCATION: SEA BREEZE, 280 6TH AVENUE

DATE RECEIVED: 04/08/91
DATE REQUESTED: 05/10/91
DATE ANALYZED: 05/13/91
DATE REPORTED: 05/14/91

ANALYSIS: LEAD
ANALYSIS METHOD: EPA 7420

LAB ID	SAMPLE ID	RESULT	UNITS	REPORTING LIMIT
103777-1	SB-14e 0.5-1.0	38.1	mg/Kg	3.0
103777-2	SB-14e 1.0-1.5	91.3	mg/Kg	2.9
103777-3	SB-14f 0.5-1.0	36.5	mg/Kg	3.0
103777-4	SB-14f 1.0-1.5	70.1	mg/Kg	2.9

QA/QC SUMMARY

RPD, %	1
Recovery, %	99

[redacted] Hol[redacted]eet, [redacted]e D [redacted]
Emeryville, CA 94608
(415) 420-8686

CHAIN OF CUSTODY RECORD

[redacted] n-A[redacted] J Time Normal

Lab Curtis & Tompkins

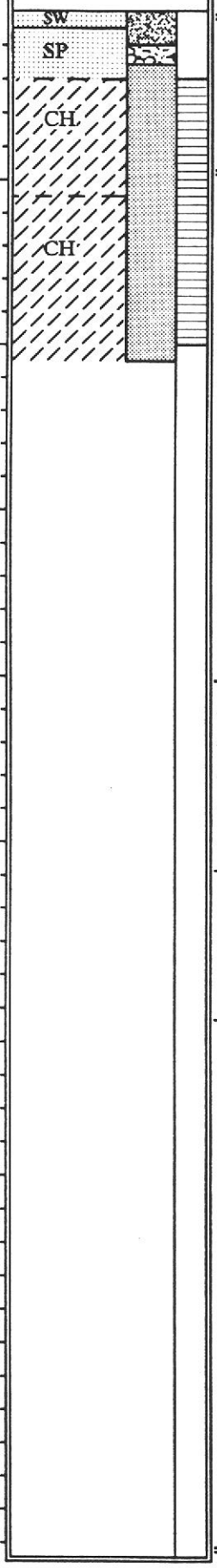
Contact Person Bill Scott

Project No.	Project Name and Location
59-171	Sea Breeze, 280 6th Ave.

Samplers: (Signature)
William K Scott

No. Station	Date	Time	Media	Depth	Composites	No. of Containers	Station Location	Soluble lead (7420)	Remarks	Detection Limits
SB-14e	4-8-91	15:04	Soil	0.5 1.0		1	new login #s: 103777-1	X		
SB-14e	4-8-91	15:03	Soil	1.0 1.5		1	-2	X		
SB-14f	4-8-91	15:25	Soil	0.5 1.0		1	-3	X		
SB-14f	4-8-91	15:26	Soil	1.0 1.5		1	-4	X		

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Date / Time	Condition of Samples upon Arrival at Laboratory:
				Cold
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Date / Time	
				Remarks :
Relinquished by: (Signature) William K Scott	Date / Time 4-8-91 17:00	Received for Laboratory by: (Signature) Nancy Wein	Date / Time 4/8/91 17:00	



WELL CONSTRUCTION SUMMARY

Project No.: S9-171 Well No: MW-SB2

Project Name: Seabreeze
Location: 280 6th Avenue
Oakland, CA

Date: 4-8-91
Personnel: WKS
Driller: ASE San Ramon

DRILLING SUMMARY

Drill Rig: B-57
Auger/Bits: Hollow-stem cont. flight
Drilling Fluid: None
Boring Diameter (inch): 8
Boring Depth (feet): 10.5
Surface Completion: Stove Pipe
Ground Surface Elevation (feet): NA
TOC Elevation (feet): NA

WELL DESIGN

Basis: X Geologic Log ___ Geophysical Log

Casing Diameter (inch)	Material + Length (feet)	Slot Size	Interval (feet bgs)
2	PVC 3.0	--	0 — 2.0
2	PVC 8.0	0.02	2.0 — 10.0
Centralizer None			
Filter Material Lonestar #2/16			1.5 — 10.5
Bentonite			1.0 — 1.5
Cement Neat			0 — 1.5

WATER LEVELS

	Date	Time	Depth (ft bgs)
During Drilling:	4/08/91	12:16	4.0
After completion:	4/11/91	10:40	7.46
Before development:	4/11/91	11:09	5.38

COMMENTS

2.5 bags sand

CONSTRUCTION TIME LOG

Task	Start Date	Start Time	Finish Date	Finish Time
Drilling:	4/8/91	12:11	4/8/91	12:35
Geophys Logging:				
Casing:	4/8/91	12:43	4/8/91	12:45
Filter Placement:	4/8/91	12:50	4/8/91	13:09
Cementing:	4/8/91	16:15	4/8/91	16:20
Development:	4/11/91	10:54	4/11/91	11:08
Other:				

WELL DEVELOPMENT

Method: Double diaphram pump Date: 4/8/91

Time	Gallons	Appearance
10:54	1	Clear-Slightly Turbid
11:02	2	Clear
11:08	2.5	Clear

BASELINE Environmental Consulting
5900 Hollis Street, Suite D
Emeryville, CA/ 94608
(415) 420-8686

Signature:

[Scale: 1 inch=5 feet]

(5/15/91)

WELL DEVELOPMENT

Project No: S9-171

Project Name: Seabreeze

Location: 280 6th Avenue, Oakland, CA

Recorded by: WKS

Weather Conditions: Windy

Precip. in last 5 days (inch): None

Well No.: MW-SB2 Date: 4/11/91

Depth of Well from TOC (feet): 11.0

Well Diameter (inch): 2

Screened Interval (feet bgs): 2 — 10

TOC Elevation (feet): NA

Water Level from TOC (feet): 7.46 Time: 10:40

Product Level from TOC (feet): None Time: 10:40

Water Level Measurement: NA

FIELD MEASUREMENTS

Time	Gallons Removed	Appearance
10:54	1	Clear — Slightly Turbid
11:02	2	Clear
11:08	2.5	Clear

Recharge:

Time	Water Level (feet)
11:13:57	10.9
11:20:38	10.8
11:44:33	10.7

Total Gallons Removed: 2.5

Development Method: Double diaphragm pump

Decontamination Method: TSP & DI rinse

Average Recharge Rate (foot/minute): <0.01/min

Purged Water Disposal: Drum # SB-W1

Number of Drums: Drum # SB-W1

Rinsate Disposal: Drum # SB-W1

(5/15/91)

GROUNDWATER SAMPLING

Project No: S9-171 **Well No.:** MW-SB2 Date: 4/19/91

Project Name: Seabreeze Depth of Well from TOC (feet): 11.0

Location: 280 6th Avenue, Oakland, CA Well Diameter (inch): 2

Screened Interval (feet): 2.0 — 10.0

Recorded by: WKS TOC Eleveation (feet): NA

Weather Conditions: Sunny, Slight Breeze Water Level from TOC (feet): 5.38 Time: 11:09

Precip. in last 5 days (inch): None Product Level from TOC (feet): None Time: 11:09

Water Level Measurement: NA

VOLUME OF WATER TO BE REMOVED BEFORE SAMPLING:

[(11.0 ft) − (5.38 ft)] x (.083 ft)^2 x 3.14 x 7.48 =

(Well Depth; Water Level; Well radius)

0.92 gallons on one well volume.
4.6 gallons in 5 well volumes.
3.0 total gallons removed.

CALIBRATION:

	Time	Temp (°F)	pH	EC
Calibration Standard:	10:41	67.2	7.0	1,000
Before Purging:	10:42	67.2	7.02	1,008
After Purging:	15:55	69.0	7.04	1,010

FIELD MEASUREMENTS:

Time	Temp (°F)	pH	EC	Cumulative Gallons Removed	Appearance
11:17	60.5	6.77	<20,000	0.25	Clear
11:27	63.3	6.61	<20,000	2.0	Clear
11:33*	63.0	6.60	<20,000	3.0	Clear

*Well ran dry, very slow recharge rate.

Water Level After Purging Prior to Sampling (feet)**: 10.21 Time: 15:45

Appearance of Sample: Clear Time: 15:50

Duplicate/Blank No.: None Time: NA

Purge Method: Double diaphragm pump

Sampling Equipment: Disposable PVC bailer VOC Attachment: Yes

Sample Containers: 1 liter Amberg glass, 2 40ml VOAs, 250ml plastic bottles

Sample Analyses: 624, 5520 E&F, 7420,7110 Laboratory: Curtis & Tompkins

Decontamination Method: TSP and water, DI water rinse Rinsate Disposal: Drum # MW-SB1

**Recharge rate too slow to allow for full recharge.

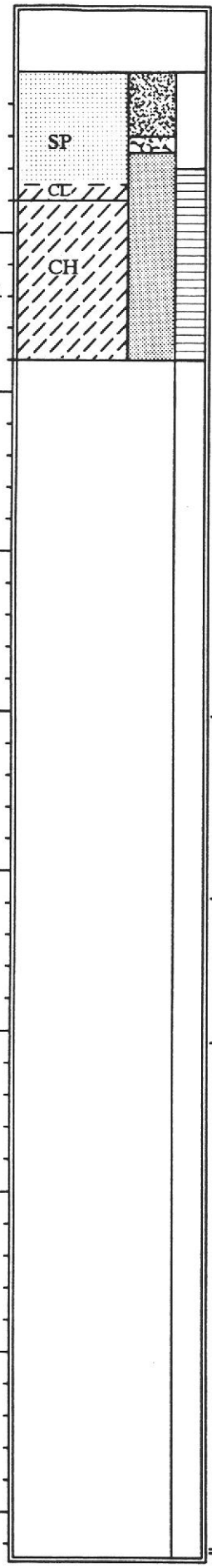
(5/15/91)

WELL CONSTRUCTION SUMMARY

Project No.: S9-171 Well No: MW-SB1

Project Name: Seabreeze
Location: 280 6th Avenue
Oakland, CA

Date: 4-8-91
Personnel: WKS
Driller: ASE San Ramon



DRILLING SUMMARY

Drill Rig: B-57
Auger/Bits: Hollow-stem cont. flight
Drilling Fluid: None
Boring Diameter (inch): 8
Boring Depth (feet): 9.0
Surface Completion: Stove Pipe
Ground Surface Elevation (feet): NA
TOC Elevation (feet): NA

WELL DESIGN

Basis: X Geologic Log ____ Geophysical Log

Casing Diameter (inch)	Material + Length (feet)	Slot Size	Interval (feet bgs)
2	PVC 4.3	——	+1.5 — 2.8
2	PVC 6.2	0.020	2.8 — 9.0

Centralizer	None	
Filter Material	Lonestar #2/16	2.5 — 9.0
Bentonite		2.0 — 2.5
Cement	Neat	0 — 2.0

WATER LEVELS

	Date	Time	Depth (ft bgs)
During Drilling:	4/08/91	9:15	4.0
After completion:	4/11/91	9:20	7.0
Before development:	4/17/91	10:36	7.53

COMMENTS

2.5 bags sand

CONSTRUCTION TIME LOG

Task	Start Date	Start Time	Finish Date	Finish Time
Drilling:	4/8/91	8:35	4/8/91	10:46
Geophys Logging:				
Casing:	4/8/91	10:42	4/8/91	10:45
Filter Placement:	4/8/91	10:49	4/8/91	11:10
Cementing:	4/8/91	16:00	4/8/91	16:03
Development:	4/11/91	9:30	4/11/91	12:07
Other:				

WELL DEVELOPMENT

Method: Double diaphram pump Date: 4/8/91

Time	Gallons	Appearance
9:30	1.5	Turbid
9:39	2.0	Slightly turbid
12:00	3.0	Turbid
12:07	4.0	Very slightly turbid-clear

BASELINE Environmental Consulting
5900 Hollis Street, Suite D
Emeryville, CA 94608
(415) 420-8686

Signature:

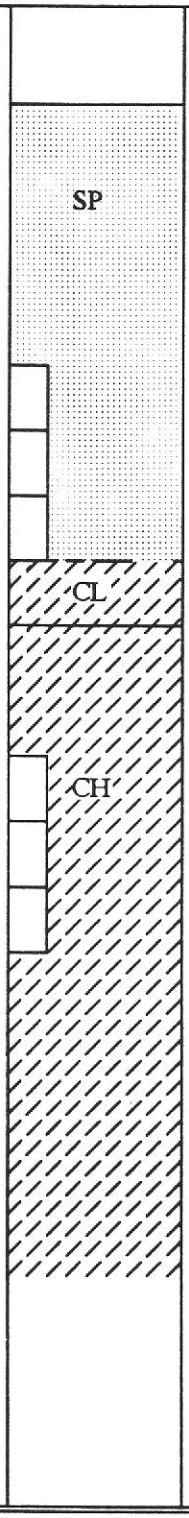
[Scale: 1 inch=5 feet]

(5/15/91)

BASELINE
5900 Hollis Street, Suite D
Emeryville, CA 94608
(415) 420-8686

DRILLING LOG

Location	280 6th Avenue	Boring No.	MS-SB1
Driller	ASE	Project No.	S9-171
Method	Hollow-stem cont. flight	Date	4/8/91
Logger	WKS Datum ____ Bore size 8-inch	Casing size	2-inch

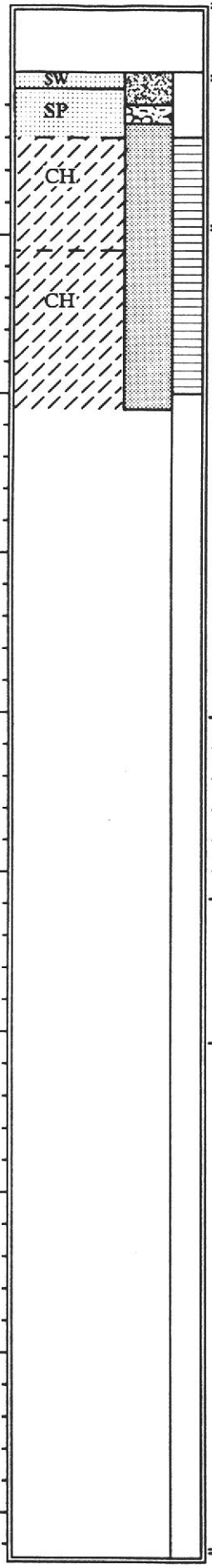


Depth	Lithology	Notes
0	Very dark brown, gravelly SAND, medium-fine grained, moist (fill). Subrounded gravel. 3/4-1/2 inch diameter.	5 ppm GasTech 0 ppm HNu ≈30% Gravel ≈10% Sand
2		5-6-6 (blow count) STP
4	Very dark gray, sandy silty CLAY, medium-low plasticity, fine-grained sand, very moist.	
4	Dark greenish gray, silty CLAY, medium-high plasticity, rootlets, wet.	
5		1-1-0 STP Hit wood pier drilling through center, moved 1.5 feet.
9	Total Depth = 9.0 Feet	Hit something very hard moved 1.5 ft

Scale: 1 inch = 1.5 feet

(5/15/91)

Signature _____



[Scale: 1 inch=5 feet]

WELL CONSTRUCTION SUMMARY

Project No.: S9-171 Well No: MW-SB2

Project Name: Seabreeze
Location: 280 6th Avenue
Oakland, CA

Date: 4-8-91
Personnel: WKS
Driller: ASE San Ramon

DRILLING SUMMARY

Drill Rig: B-57
Auger/Bits: Hollow-stem cont. flight
Drilling Fluid: None
Boring Diameter (inch): 8
Boring Depth (feet): 10.5
Surface Completion: Stove Pipe
Ground Surface Elevation (feet): NA
TOC Elevation (feet): NA

WELL DESIGN

Basis: X Geologic Log ___ Geophysical Log

Casing Diameter (inch)	Material + Length (feet)	Slot Size	Interval (feet bgs)
2	PVC 3.0	--	0 — 2.0
2	PVC 8.0	0.02	2.0 — 10.0
Centralizer None			
Filter Material Lonestar #2/16			1.5 — 10.5
Bentonite			1.0 — 1.5
Cement Neat			0 — 1.5

WATER LEVELS

	Date	Time	Depth (ft bgs)
During Drilling:	4/08/91	12:16	4.0
After completion:	4/11/91	10:40	7.46
Before development:	4/11/91	11:09	5.38

COMMENTS

2.5 bags sand

CONSTRUCTION TIME LOG

Task	Start Date	Start Time	Finish Date	Finish Time
Drilling:	4/8/91	12:11	4/8/91	12:35
Geophys Logging:				
Casing:	4/8/91	12:43	4/8/91	12:45
Filter Placement:	4/8/91	12:50	4/8/91	13:09
Cementing:	4/8/91	16:15	4/8/91	16:20
Development:	4/11/91	10:54	4/11/91	11:08
Other:				

WELL DEVELOPMENT

Method: Double diaphram pump Date: 4/8/91

Time	Gallons	Appearance
10:54	1	Clear-Slightly Turbid
11:02	2	Clear
11:08	2.5	Clear

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5900 Hollis Street, Suite D
Emeryville, CA 94608
(415) 420-8686

Signature:

(5/15/91)

WELL DEVELOPMENT

Project No: S9-171

Project Name: Seabreeze

Location: 280 6th Avenue, Oakland, CA

Recorded by: WKS

Weather Conditions: Very windy, high tide

Precip. in last 5 days (inch): None

Well No.: MW-SB1 Date: 4/11/91

Depth of Well from TOC (feet): 10.0

Well Diameter (inch): 2

Screened Interval (feet bgs): 2.8 — 9.0

TOC Elevation (feet): NA

Water Level from TOC (feet): 7.0 Time: 9:20

Product Level from TOC (feet): None Time: 9:20

Water Level Measurement: NA

FIELD MEASUREMENTS

Time	Gallons Removed	Appearance
9:30	1.5	Turbid
9:39	2.0	Slightly turbid
Stopped purge, well ran dry, waited to recharge		
Surge blocked well		
12:00	3.0	Turbid
12:07	4.0	Very slightly turbid-clear

Recharge:

Time	Water Level (feet)
9:45:0	9.8
9:46:09	9.7
9:48:25	9.5
9:50:45	9.4
9:53:19	9.3
9:56:04	9.2

Total Gallons Removed: 4.0

Development Method: Double diaphragm pump

Decontamination Method: TSP & DI rinse

Average Recharge Rate (foot/minute): 0.067/1 min

Purged Water Disposal: Drum # SB-W1

Number of Drums: Drum # SB-W1

Rinsate Disposal: Drum # SB-W1

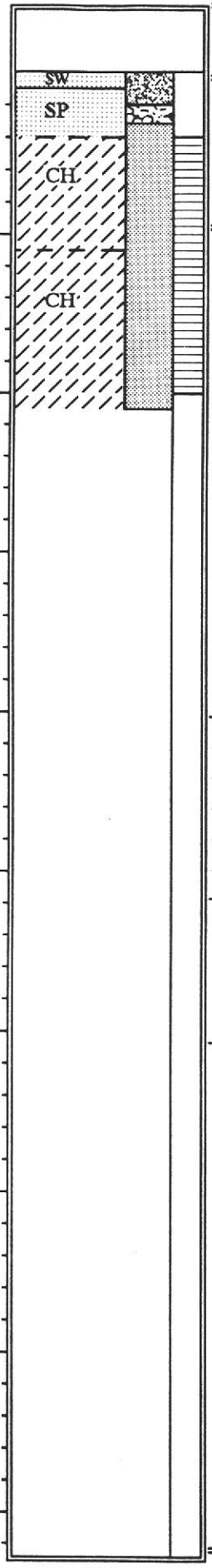
(5/15/91)

WELL CONSTRUCTION SUMMARY

Project No.: S9-171 Well No: MW-SB2

Project Name: Seabreeze
Location: 280 6th Avenue
Oakland, CA

Date: 4-8-91
Personnel: WKS
Driller: ASE San Ramon



[Scale: 1 inch=5 feet]

DRILLING SUMMARY

Drill Rig: B-57
Auger/Bits: Hollow-stem cont. flight
Drilling Fluid: None
Boring Diameter (inch): 8
Boring Depth (feet): 10.5
Surface Completion: Stove Pipe
Ground Surface Elevation (feet): NA
TOC Elevation (feet): NA

WELL DESIGN

Basis: X Geologic Log ___ Geophysical Log

Casing Diameter (inch)	Material + Length (feet)	Slot Size	Interval (feet bgs)
2	PVC 3.0	--	0 — 2.0
2	PVC 8.0	0.02	2.0 — 10.0
Centralizer None			
Filter Material Lonestar #2/16			1.5 — 10.5
Bentonite			1.0 — 1.5
Cement Neat			0 — 1.5

WATER LEVELS

	Date	Time	Depth (ft bgs)
During Drilling:	4/08/91	12:16	4.0
After completion:	4/11/91	10:40	7.46
Before development:	4/11/91	11:09	5.38

COMMENTS

2.5 bags sand

CONSTRUCTION TIME LOG

Task	Start Date	Start Time	Finish Date	Finish Time
Drilling:	4/8/91	12:11	4/8/91	12:35
Geophys Logging:				
Casing:	4/8/91	12:43	4/8/91	12:45
Filter Placement:	4/8/91	12:50	4/8/91	13:09
Cementing:	4/8/91	16:15	4/8/91	16:20
Development:	4/11/91	10:54	4/11/91	11:08
Other:				

WELL DEVELOPMENT

Method: Double diaphram pump Date: 4/8/91

Time	Gallons	Appearance
10:54	1	Clear-Slightly Turbid
11:02	2	Clear
11:08	2.5	Clear

BASELINE Environmental Consulting
5900 Hollis Street, Suite D
Emeryville, CA/ 94608
(415) 420-8686

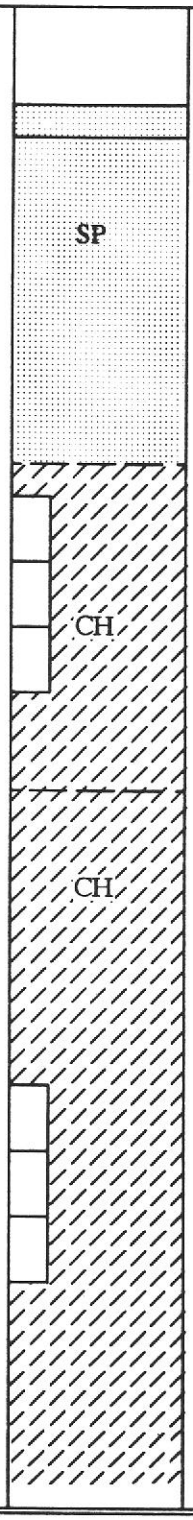
Signature:

(5/15/91)

DRILLING LOG

BASELINE
5900 Hollis Street, Suite D
Emeryville, CA 94608
(415) 420-8686

Location	280 6th Avenue	Boring No.	MS-SB2
Driller	ASE	Project No.	S9-171
Method	Hollow-stem cont. flight	Date	4/8/91
Logger	WKS Datum _____ Bore size 8-inch	Casing size	2-inch



Depth	Lithology	Notes
0	Dark gray, silty gravelly SAND, dry-damp.	
	Very dark olive, silty SAND, fine-grained, very moist.	≈10% silt Slight petroleum odor
3	Mottled yellowish-brown, gray, sandy, silty CLAY, high plasticity, minor gravel, moist-wet	1.0 ppm HNu 5.0 ppm GasTech 2-3-3 (blow count) <5% sand <5% silt
5	Dark greenish, gray, silty CLAY, rootlets, wet. Some thin interbedding of sand, fine-grained.	≈10% silt
8		1-0-0 STP
10	Total depth = 10.5 feet	

Scale: 1 inch = 1.5 feet

(5/15/91)

Signature _____

WELL DEVELOPMENT

Project No: S9-171

Project Name: Seabreeze

Location: 280 6th Avenue, Oakland, CA

Recorded by: WKS

Weather Conditions: Very windy, high tide

Precip. in last 5 days (inch): None

Well No.: MW-SB1 Date: 4/11/91

Depth of Well from TOC (feet): 10.0

Well Diameter (inch): 2

Screened Interval (feet bgs): 2.8 — 9.0

TOC Elevation (feet): NA

Water Level from TOC (feet): 7.0 Time: 9:20

Product Level from TOC (feet): None Time: 9:20

Water Level Measurement: NA

FIELD MEASUREMENTS

Time	Gallons Removed	Appearance
9:30	1.5	Turbid
9:39	2.0	Slightly turbid
Stopped purge, well ran dry, waited to recharge		
Surge blocked well		
12:00	3.0	Turbid
12:07	4.0	Very slightly turbid-clear

Recharge:

Time	Water Level (feet)
9:45:0	9.8
9:46:09	9.7
9:48:25	9.5
9:50:45	9.4
9:53:19	9.3
9:56:04	9.2

Total Gallons Removed: 4.0

Development Method: Double diaphragm pump

Decontamination Method: TSP & DI rinse

Average Recharge Rate (foot/minute): 0.067/1 min

Purged Water Disposal: Drum # SB-W1

Number of Drums: Drum # SB-W1

Rinsate Disposal: Drum # SB-W1

(5/15/91)

WELL DEVELOPMENT

Project No: S9-171

Project Name: Seabreeze

Location: 280 6th Avenue, Oakland, CA

Recorded by: WKS

Weather Conditions: Windy

Precip. in last 5 days (inch): None

Well No.: MW-SB2 Date: 4/11/91

Depth of Well from TOC (feet): 11.0

Well Diameter (inch): 2

Screened Interval (feet bgs): 2 — 10

TOC Elevation (feet): NA

Water Level from TOC (feet): 7.46 Time: 10:40

Product Level from TOC (feet): None Time: 10:40

Water Level Measurement: NA

FIELD MEASUREMENTS

Time	Gallons Removed	Appearance
10:54	1	Clear — Slightly Turbid
11:02	2	Clear
11:08	2.5	Clear

Recharge:

Time	Water Level (feet)
11:13:57	10.9
11:20:38	10.8
11:44:33	10.7

Total Gallons Removed: 2.5

Development Method: Double diaphragm pump

Decontamination Method: TSP & DI rinse

Average Recharge Rate (foot/minute): <0.01/min

Purged Water Disposal: Drum # SB-W1

Number of Drums: Drum # SB-W1

Rinsate Disposal: Drum # SB-W1

(5/15/91)

GROUNDWATER SAMPLING

Project No: S9-171 **Well No.:** MW-SB2 Date: 4/19/91

Project Name: Seabreeze Depth of Well from TOC (feet): 11.0

Location: 280 6th Avenue, Oakland, CA Well Diameter (inch): 2

Screened Interval (feet): 2.0 — 10.0

Recorded by: WKS TOC Eleveation (feet): NA

Weather Conditions: Sunny, Slight Breeze Water Level from TOC (feet): 5.38 Time: 11:09

Precip. in last 5 days (inch): None Product Level from TOC (feet): None Time: 11:09

Water Level Measurement: NA

VOLUME OF WATER TO BE REMOVED BEFORE SAMPLING:

[(11.0 ft) − (5.38 ft)] x (.083 ft)^2 x 3.14 x 7.48 =

(Well Depth; Water Level; Well radius)

0.92 gallons on one well volume.
4.6 gallons in 5 well volumes.
3.0 total gallons removed.

CALIBRATION:

	Time	Temp (°F)	pH	EC
Calibration Standard:	10:41	67.2	7.0	1,000
Before Purging:	10:42	67.2	7.02	1,008
After Purging:	15:55	69.0	7.04	1,010

FIELD MEASUREMENTS:

Time	Temp (°F)	pH	EC	Cumulative Gallons Removed	Appearance
11:17	60.5	6.77	<20,000	0.25	Clear
11:27	63.3	6.61	<20,000	2.0	Clear
11:33*	63.0	6.60	<20,000	3.0	Clear

*Well ran dry, very slow recharge rate.

Water Level After Purging Prior to Sampling (feet)**: 10.21 Time: 15:45

Appearance of Sample: Clear Time: 15:50

Duplicate/Blank No.: None Time: NA

Purge Method: Double diaphragm pump

Sampling Equipment: Disposable PVC bailer VOC Attachment: Yes

Sample Containers: 1 liter Amberg glass, 2 40ml VOAs, 250ml plastic bottles

Sample Analyses: 624, 5520 E&F, 7420,7110 Laboratory: Curtis & Tompkins

Decontamination Method: TSP and water, DI water rinse Rinsate Disposal: Drum # MW-SB1

**Recharge rate too slow to allow for full recharge.

(5/15/91)

APPENDIX H

LABORATORY REPORTS FOR GROUNDWATER SAMPLING, APRIL 1991

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710, Phone (415) 486-0900

DATE RECEIVED: 04/17/91
DATE REPORTED: 04/29/91

LAB NUMBER: 103566

CLIENT: BASELINE ENVIRONMENTAL

PROJECT ID: S9-171

LOCATION: SEA BREEZE

RESULTS: SEE ATTACHED

QA/QC Approval

Final Approval

Curtis & Tompkins, Ltd.

Client: Baseline Environmental

Laboratory Login Number: 103566

Project Name: Sea Breeze
Project Number: S9-171

Report Date: 03 May 91

ANALYSIS: Hydrocarbon Oil & Grease (Gravimetric) **METHOD: SMWW 17:5520BF**

Lab ID	Sample ID	Matrix	Sampled	Received	Analyzed	Result	Units	RL	Analyst	QC Batch
103566-001	MW-SB1A	Water	17-APR-91	17-APR-91	25-APR-91	ND	mg/L	5	TR	1314
103566-002	MW-SB1	Water	17-APR-91	17-APR-91	25-APR-91	ND	mg/L	5	TR	1314
103566-003	MW-SB2	Water	17-APR-91	17-APR-91	25-APR-91	ND	mg/L	5	TR	1314

ND = Not Detected at or above Reporting Limit (RL).

Curtis & Tompkins, Ltd.

Q C B a t c h R e p o r t

Client: Baseline Environmental
Project Name: Sea Breeze
Project Number: S9-171

Laboratory Login Number: 103566
Report Date: 30 April 91

ANALYSIS: Hydrocarbon Oil & Grease (Gravimetric) **QC Batch Number: 1314**

Blank Results

Sample ID	Result	MDL	Units	Method	Date Analyzed
BLANK	ND	5	mg/L	SMWW 17:5520BF	25-APR-91

Spike/Duplicate Results

Sample ID	Recovery	Method	Date Analyzed
BS	95%	SMWW 17:5520BF	25-APR-91
BSD	98%	SMWW 17:5520BF	25-APR-91

		Control Limits
Average Spike Recovery	96%	80% - 120%
Relative Percent Difference	3.1%	< 20%

Curtis & Tompkins, Ltd.

LABORATORY NUMBER: 103566
CLIENT: BASELINE ENVIRONMENTAL
PROJECT ID: S9-171
LOCATION: SEA BREEZE

DATE RECEIVED: 04/17/91
DATE ANALYZED: 04/18/91
DATE REPORTED: 04/29/91

ANALYSIS: DISSOLVED COPPER
ANALYSIS METHOD: EPA 6010

LAB ID	SAMPLE ID	RESULT	UNITS	REPORTING LIMIT
103566-1	MW-SB1A	14.4	ug/L	10.0
103566-2	MW-SB1	19.8	ug/L	10.0
103566-3	MW-SB2	48.1	ug/L	10.0

QA/QC SUMMARY

RPD, %	1
Recovery, %	102

Curtis & Tompkins, Ltd

LABORATORY NUMBER: 103566
CLIENT: BASELINE ENVIRONMENTAL
PROJECT ID: S9-171
LOCATION: SEA BREEZE

DATE RECEIVED: 04/17/91
DATE ANALYZED: 04/18/91
DATE REPORTED: 04/29/91

ANALYSIS: DISSOLVED LEAD
ANALYSIS METHOD: EPA 6010

LAB ID	SAMPLE ID	RESULT	UNITS	REPORTING LIMIT
103566-1	MW-SB1A	ND	ug/L	70.0
103566-2	MW-SB1	ND	ug/L	70.0
103566-3	MW-SB2	ND	ug/L	70.0

ND=Not detected at or above reporting limit.

QA/QC SUMMARY

RPD, %	9
Recovery, %	93

Curtis & Tompkins, Ltd.

LABORATORY NUMBER: 103566
CLIENT: BASELINE ENVIRONMENTAL
PROJECT ID: S9-171
LOCATION: SEA BREEZE

DATE RECEIVED: 04/17/91
DATE ANALYZED: 04/18/91
DATE REPORTED: 04/29/91

ANALYSIS: DISSOLVED LEAD
ANALYSIS METHOD: EPA 6010

LAB ID	SAMPLE ID	RESULT	UNITS	REPORTING LIMIT
103566-1	MW-SB1A	ND	ug/L	70.0
103566-2	MW-SB1	ND	ug/L	70.0
103566-3	MW-SB2	ND	ug/L	70.0

ND=Not detected at or above reporting limit.

QA/QC SUMMARY

RPD, %	9
Recovery, %	93

Curtis & Tompkins, Ltd.

LABORATORY NUMBER: 103566-1
CLIENT: BASELINE ENVIRONMENTAL
PROJECT ID: S9-171
SAMPLE ID: MW-SB1A

DATE RECEIVED: 04/17/91
DATE ANALYZED: 04/23/91
DATE REPORTED: 04/29/91

EPA METHOD 8240: VOLATILE ORGANICS IN WATER
Extraction Method: EPA 5030 - Purge & Trap

COMPOUND	Result ug/L	Reporting Limit (ug/L)
chloromethane	ND	10
bromomethane	ND	10
vinyl chloride	ND	10
chloroethane	ND	10
methylene chloride	ND	5.0
acetone	ND	10
carbon disulfide	ND	5.0
trichlorofluoromethane	ND	5.0
1,1-dichloroethene	ND	5.0
1,1-dichloroethane	ND	5.0
1,2-dichloroethene (total)	ND	5.0
chloroform	ND	5.0
freon 113	ND	5.0
1,2-dichloroethane	ND	5.0
2-butanone	ND	10
1,1,1-trichloroethane	ND	5.0
carbon tetrachloride	ND	5.0
vinyl acetate	ND	10
bromodichloromethane	ND	5.0
1,2-dichloropropane	ND	5.0
cis-1,3-dichloropropene	ND	5.0
trichloroethylene	ND	5.0
dibromochloromethane	ND	5.0
1,1,2-trichloroethane	ND	5.0
benzene	ND	5.0
trans-1,3-dichloropropene	ND	5.0
2-chloroethylvinyl ether	ND	10
bromoform	ND	5.0
2-hexanone	ND	10
4-methyl-2-pentanone	ND	10
1,1,2,2-tetrachloroethane	ND	5.0
tetrachloroethylene	ND	5.0
toluene	ND	5.0
chlorobenzene	ND	5.0
ethyl benzene	ND	5.0
styrene	ND	5.0
total xylenes	ND	5.0

ND = Not detected at or above reporting limit

QA/QC SUMMARY: SURROGATE RECOVERIES

1,2-Dichloroethane-d4	88 %
Toluene-d8	93 %
Bromofluorobenzene	90 %

Curtis & Tompkins, Ltd.

LABORATORY NUMBER: 103566-2
CLIENT: BASELINE ENVIRONMENTAL
PROJECT ID: S9-171
SAMPLE ID: MW-SB1

DATE RECEIVED: 04/17/91
DATE ANALYZED: 04/22/91
DATE REPORTED: 04/29/91

EPA METHOD 8240: VOLATILE ORGANICS IN WATER
Extraction Method: EPA 5030 - Purge & Trap

COMPOUND	Result ug/L	Reporting Limit (ug/L)
chloromethane	ND	10
bromomethane	ND	10
vinyl chloride	ND	10
chloroethane	ND	10
methylene chloride	ND	5.0
acetone	ND	10
carbon disulfide	ND	5.0
trichlorofluoromethane	ND	5.0
1,1-dichloroethene	ND	5.0
1,1-dichloroethane	ND	5.0
1,2-dichloroethene (total)	ND	5.0
chloroform	ND	5.0
freon 113	ND	5.0
1,2-dichloroethane	ND	5.0
2-butanone	ND	10
1,1,1-trichloroethane	ND	5.0
carbon tetrachloride	ND	5.0
vinyl acetate	ND	10
bromodichloromethane	ND	5.0
1,2-dichloropropane	ND	5.0
cis-1,3-dichloropropene	ND	5.0
trichloroethylene	ND	5.0
dibromochloromethane	ND	5.0
1,1,2-trichloroethane	ND	5.0
benzene	ND	5.0
trans-1,3-dichloropropene	ND	5.0
2-chloroethylvinyl ether	ND	10
bromoform	ND	5.0
2-hexanone	ND	10
4-methyl-2-pentanone	ND	10
1,1,2,2-tetrachloroethane	ND	5.0
tetrachloroethylene	ND	5.0
toluene	ND	5.0
chlorobenzene	ND	5.0
ethyl benzene	ND	5.0
styrene	ND	5.0
total xylenes	ND	5.0

ND = Not detected at or above reporting limit

QA/QC SUMMARY: SURROGATE RECOVERIES

1,2-Dichloroethane-d4	99 %
Toluene-d8	102 %
Bromofluorobenzene	102 %

Curtis & Tompkins, Ltd.

LABORATORY NUMBER: 103566-3
CLIENT: BASELINE ENVIRONMENTAL
PROJECT ID: S9-171
SAMPLE ID: MW-SB2

DATE RECEIVED: 04/17/91
DATE ANALYZED: 04/22/91
DATE REPORTED: 04/29/91

EPA METHOD 8240: VOLATILE ORGANICS IN WATER
Extraction Method: EPA 5030 - Purge & Trap

COMPOUND	Result ug/L	Reporting Limit (ug/L)
chloromethane	ND	10
bromomethane	ND	10
vinyl chloride	ND	10
chloroethane	ND	10
methylene chloride	ND	5.0
acetone	ND	10
carbon disulfide	ND	5.0
trichlorofluoromethane	ND	5.0
1,1-dichloroethene	ND	5.0
1,1-dichloroethane	ND	5.0
1,2-dichloroethene (total)	ND	5.0
chloroform	ND	5.0
freon 113	ND	5.0
1,2-dichloroethane	ND	5.0
2-butanone	ND	10
1,1,1-trichloroethane	ND	5.0
carbon tetrachloride	ND	5.0
vinyl acetate	ND	10
bromodichloromethane	ND	5.0
1,2-dichloropropane	ND	5.0
cis-1,3-dichloropropene	ND	5.0
trichloroethylene	ND	5.0
dibromochloromethane	ND	5.0
1,1,2-trichloroethane	ND	5.0
benzene	ND	5.0
trans-1,3-dichloropropene	ND	5.0
2-chloroethylvinyl ether	ND	10
bromoform	ND	5.0
2-hexanone	ND	10
4-methyl-2-pentanone	ND	10
1,1,2,2-tetrachloroethane	ND	5.0
tetrachloroethylene	ND	5.0
toluene	ND	5.0
chlorobenzene	ND	5.0
ethyl benzene	ND	5.0
styrene	ND	5.0
total xylenes	ND	5.0

ND = Not detected at or above reporting limit

QA/QC SUMMARY: SURROGATE RECOVERIES

1,2-Dichloroethane-d4	111 %
Toluene-d8	91 %
Bromofluorobenzene	108 %

BA[redacted]INE 103586

5900 Hollis Street, Suite D
Emeryville, CA 94608
(415) 420-8686

CHAIN OF CUSTODY RECORD

Turn-Around Time Normal
Lab Curtis & Tompkins
Contact Person Bill Scott

Project No.	Project Name and Location
59171	Seabreeze Yacht Center 280 6th Ave

Samplers: (Signature) William K Scott

No. Station	Date	Time	Media	Depth	Composites	No. of Containers	Station Location	TVH# 624	TPH 9l + Grease (5520 E&F)	Soluble lead 7420	Soluble copper 7120	Remarks	Detection Limits
MW-SB2a	4-17-91	15:40	water			5		X	X	X	X	NOT VOA as per Teresa NW 4/18/91	0.4G 5000 ppb
MW-SB1	4-17-91	15:30	water			5		X	X	X	X	more sample for 8240 will be submitted Friday 4-19-91	
MW-SB2	4-17-91	15:50	water			5		X	X	X	Y		
									✓				
									Lab to filter				
									+ preserve				

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Date / Time
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Date / Time
Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time
William K Scott	4-17-91 18:00	[illegible]	4/17/91 18:00

Condition of Samples upon Arrival at Laboratory:
Cold

Remarks:
Samples are in walk-in coldroom on cart.

APPENDIX I

GROUNDWATER SAMPLING FORMS AND LABORATORY REPORTS FROM GROUNDWATER SAMPLING, JULY 1991

GROUNDWATER SAMPLING

Project No: S9-171
Well No.: MW-SB1 **Date:** 7-9-81

Project Name: Seabreeze Yacht Center
Depth of Well from TOC (feet): 10.0

Location: 280 Sixth Avenue, Oakland
Well Diameter (inch): 2

Screened Interval (feet): 2.8-9.0

Recorded by: WKS
TOC Elevation (feet): N/A

Weather Conditions: Foggy
Water Level from TOC (feet): 5.92 Time: 10:03

Precip. in last
5 days (inch): None
Product Level from TOC (feet): None Time: 10:03

Water Level Measurement: N/A

VOLUME OF WATER TO BE REMOVED BEFORE SAMPLING:

[(10.0 ft) − (5.92 ft)] x (.083 ft)^2 x 3.14 x 7.48 =
(Well Depth; Water Level; Well radius)

.67	gallons on one well volume.
3.35	gallons in 5 well volumes.
3.5	total gallons removed.

CALIBRATION:

	Time	Temp (°C)	pH	EC
Calibration Standard:	10:05	19	7.0	1,000
Before Purging:	10:06	19	7.05	1,000
After Purging:	11:35	19	7.02	1,000

FIELD MEASUREMENTS:

Time	Temp (°C)	pH	EC	Cumulative Gallons Removed	Appearance
10:15	19	7.01	28,000	0.75	Very slightly turbid
10:20	19	7.04	28,000	1.50	Very slightly turbid
10:30	19	7.03	28,000	3.5	Very slightly turbid

Water Level After Purging Prior to Sampling (feet): 8.6 Time: 10:45
Appearance of Sample: Very slightly turbid Time: 10:45
Duplicate/Blank No.: MW-SB1a/None Time: 11:00
Purge Method: Bailer
Sampling Equipment: Disposable PVC bailer VOC Attachment: None required
Sample Containers: 500 ml Plastic bottle
Sample Analyses: Lead, method 7420; Copper method 7210 Laboratory: Curtis & Tompkins
Decontamination Method: TSP and water, DI water rinse Rinsate Disposal: Drum #MW-SB1W

(3/18/91)

GROUNDWATER SAMPLING

Project No: S9-171
Project Name: Seabreeze Yacht Center, Inc.
Location: 280 Sixth Avenue

Recorded by: WKS
Weather Conditions: Foggy
Precip. in last 5 days (inch): None

Well No.: MW-SB2 Date: 7-9-81
Depth of Well from TOC (feet): 11.0
Well Diameter (inch): 2
Screened Interval (feet): 2.0-10.0
TOC Elevation (feet): N/A
Water Level from TOC (feet): 3.70 Time: 11:04
Product Level from TOC (feet): None Time: 11:04
Water Level Measurement:

VOLUME OF WATER TO BE REMOVED BEFORE SAMPLING:

[(11.0 ft) − (3.7 ft)] x (.083 ft)² x 3.14 x 7.48 =
(Well Depth; Water Level; Well radius)

1.2 gallons on one well volume.
6 gallons in 5 well volumes.
3 total gallons removed.

CALIBRATION:

	Time	Temp (°C)	pH	EC
Calibration Standard:	10:05	19	7.0	1,000
Before Purging:	10:06	19	7.05	1,000
After Purging:	11:35	19	7.02	1,000

FIELD MEASUREMENTS:

Time	Temp (°C)	pH	EC	Cumulative Gallons Removed	Appearance
11:13	19	6.83	24,000	1	Very slightly turbid
11:18	19	6.83	24,000	2	Very slightly turbid
11:23	19	6.83	24,000	3	Very slightly turbid

* Only purged three gallons due to very slow recharge rate.

Water Level After Purging Prior to Sampling (feet): 9.7 Time: 11:30
Appearance of Sample: Very slightly turbid Time: 11:36
Duplicate/Blank No.: None/None Time:
Purge Method: Bailer
Sampling Equipment: Disposable PVC bailer VOC Attachment: None required
Sample Containers: 500 ml Plastic bottle
SampBle Analyses: Lead, method 7420; Copper, method 7210 Laboratory: Curtis & Tompkins
Decontamination Method: TSP and water, DI water rinse Rinsate Disposal: Drum #MW-SB1W

(3/18/91)

BASELINE Environmental Consulting • 5900 Hollis Street, Suite D • Emeryville, CA 94608 • (415) 420-8686 • FAX (415) 420-1707

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710, Phone (415) 486-0900

DATE RECEIVED: 07/09/91
DATE REPORTED: 07/10/91

LAB NUMBER: 104425

CLIENT: BASELINE ENVIRONMENTAL

PROJECT ID: S9171

LOCATION: SEA BREEZE

RESULTS: SEE ATTACHED

QA/QC Approval

Final Approval

Curtis & Tompkins, Ltd.

LABORATORY NUMBER: 104425
CLIENT: BASELINE ENVIRONMENTAL
PROJECT ID: S9171
LOCATION: SEA BREEZE

DATE RECEIVED: 07/09/91
DATE ANALYZED: 07/10/91
DATE REPORTED: 07/10/91

ANALYSIS: COPPER
ANALYSIS METHOD: EPA 7210

LAB ID	SAMPLE ID	RESULT	UNITS	REPORTING LIMIT
104425-1	MW-SB1a	ND	mg/L	0.02
104425-2	MW-SB1	ND	mg/L	0.02
104425-3	MW-SB2	ND	mg/L	0.02

ND = Not detected at or above reporting limit.

QA/QC SUMMARY

RPD, %	<1
Recovery, %	108

Curtis & Tompkins, Ltd.

LABORATORY NUMBER: 104425
CLIENT: BASELINE ENVIRONMENTAL
PROJECT ID: S9171
LOCATION: SEA BREEZE

DATE RECEIVED: 07/09/91
DATE ANALYZED: 07/10/91
DATE REPORTED: 07/10/91

ANALYSIS: LEAD
ANALYSIS METHOD: EPA 7420

LAB ID	SAMPLE ID	RESULT	UNITS	REPORTING LIMIT
104425-1	MW-SB1a	ND	mg/L	0.06
104425-2	MW-SB1	ND	mg/L	0.06
104425-3	MW-SB2	ND	mg/L	0.06

ND = Not detected at or above reporting limit.

QA/QC SUMMARY

RPD, %	9
Recovery, %	89

BASELINE

104425

5900 Hollis Street, Suite D
Emeryville, CA 94608
(415) 420-8686

CHAIN OF CUSTODY RECORD

Turn-Around Time 24 hr

Lab Curtis & Tompkins

Contact Person

Project No.	Project Name and Location
59171	Sea Breeze

Samplers: (Signature) William F Scott

	No. Station	Date	Time	Media	Depth	Composites	No. of Containers	Station Location	Analysis: Lead EPA Method 7420	Lead Method 7420	Copper Method 7210	Remarks	Detection Limits
1	MW-SB1a	7-9-91	11:00	water			1		X	X		Filtered	
2	MW-SB1	7-9-91	10:45	water			1		X	X		Filtered	
3	MW-SB2	7-9-91	11:30	water			1		X	X		Filtered	

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Date / Time
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Date / Time
Relinquished by: (Signature) William F Scott	Date / Time 7-[illegible] [illegible]22	Received for Laboratory by: (Signature) [illegible]	Date / Time [illegible]

Condition of Samples upon Arrival at Laboratory: Cold

Remarks:

APPENDIX J

LABORATORY REPORTS FROM SURFACE WATER RUN-OFF SAMPLING

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710, Phone (415) 486-0900

DATE RECEIVED: 12/30/91
DATE REPORTED: 01/06/92

LABORATORY NUMBER: 106153

CLIENT: BASELINE ENVIRONMENTAL

PROJECT ID: S9-171

LOCATION: SEA BREEZE

RESULTS: SEE ATTACHED

Reviewed By

Reviewed By

Curtis & Tompkins, Ltd.

LABORATORY NUMBER: 106153
CLIENT: BASELINE ENVIRONMENTAL
PROJECT ID: S9-171
LOCATION: SEA BREEZE
SAMPLE ID: SR-1

DATE RECEIVED: 12/30/91
DATE ANALYZED: 12/31/91
DATE REPORTED: 01/06/92

PARAMETER	RESULT	UNITS	REPORTING LIMIT	METHOD
COPPER	140	ug/L	10	EPA 7210
LEAD	ND	ug/L	60	EPA 7420

ND = Not detected at or above reporting limit.

QA/QC SUMMARY	RPD, %	Recovery, %
COPPER	4	106
LEAD	<1	102

BASELINE

5900 Hollis Street, Suite D
Emeryville, CA 94608
(415) 420-8686

CHAIN OF CUSTODY RECORD

Turn-Around Time: normal
Lab: Curtis + Tompkins
Contact Person: Teresa

Project No.	Project Name and Location
59171	Seabreeze

Samplers: (Signature) Teresa Amaya

No. Station	Date	Time	Media	Depth	Composites	No. of Containers	Station Location	Analysis: Pb EPA 7420	Analysis: Cu EPA 7210	Analysis	Analysis	Analysis	Analysis	Analysis	Analysis	Remarks	Detection Limits
SR-1	12/28/91	12:30	water	NA	NO	1	Bayside of drainage swale	X	X							10615-1	

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Date / Time
Teresa Amaya	12/30/91 1255		
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Date / Time
Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature) Matt Morelich	Date / Time 12/30/91 1055

Condition of Samples upon Arrival at Laboratory:

Remarks:

APPENDIX K

LETTER FROM BASELINE TO PORT OF OAKLAND
4 FEBRUARY 1991

BASELINE

ENVIRONMENTAL CONSULTING

4 February 1991
S9-171

Mr. Dan Schoenholz
Port of Oakland
530 Water Street
Oakland, CA 94607

Subject: Status of Waste Removal and Disposal, Seabreeze Yacht Center, 280 6th Avenue, Oakland

Dear Mr. Schoenholz:

The purpose of this letter is to provide an update on waste removal activities being conducted by BASELINE as part of a remedial investigation at Seabreeze Yacht Center located at 280 6th Avenue in Oakland, California. At the request of the Port of Oakland, BASELINE has been coordinating the removal and disposal of wastes abandoned at the site in 5-gallon and 55-gallon containers by the former tenant at the property and by boat owners using the marina.

Waste removal activities commenced in January 1990; documentation of waste disposal activities from January 1990 through November 1990 was provided in a BASELINE Preliminary Remedial Investigation report for Seabreeze Yacht Center dated November 1990. On 23 January 1991, the remaining wastes (eleven 55-gallon drums) were picked up and transported by North State Environmental of South San Francisco and disposed of at Solvent Services in San Jose, Envirosafe Services of Idaho, and Gonzales Bucket and Drum Company in San Francisco. Copies of the Uniform Hazardous Waste Manifests are attached.

Currently, all wastes present in 5-gallon or 55-gallon containers have been removed from the site. BASELINE will conduct groundwater monitoring and additional soil sampling at the site upon authorization from the Port of Oakland. Should you have any questions, please do not hesitate to contact us.

Sincerely,

Teresa Anaya
Associate

Yane Nordhav
Principal

TA:YN:cr/S91A
Enclosures

cc: Mr. Ariu Levi, Alameda County Hazardous Materials Division

5900 Hollis Street, Suite D • Emeryville, CA 94608 • (415) 420-8686 • FAX (415) 420-1707

State of California, Health and Welfare Agency
Approved OMB No. 2050—0039 (Expires 9-30-91)
Please print or type. *(Form designed for use on elite (12-pitch typewriter).*

Department of Health Services
Toxic Substances Control Division
Sacramento, California

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.: CAD982011727 | Manifest Document No.: 00112

2. Page 1 of 1 | Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
Seabreeze Yacht Center
280 6th Avenue
Oakland, CA 94607

4. Generator's Phone (415) 420-8686

A. State Manifest Document Number: 90185979

B. State Generator's ID: TAX EXEMPT

5. Transporter 1 Company Name: North State Environmental
6. US EPA ID Number: CAD000637388

C. State Transporter's ID: 104329
D. Transporter's Phone: (415)588-2838

7. Transporter 2 Company Name: North State Environmental
8. US EPA ID Number: CAD000637388

E. State Transporter's ID:
F. Transporter's Phone: (415)588-2838

9. Designated Facility Name and Site Address
Solvent Services, Inc.
1021 Berryessa Road
San Jose, CA 95133
10. US EPA ID Number: CAD059494310

G. State Facility's ID: CAD059494310

H. Facility's Phone: (408) 453-6946

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	Waste No.
a. Non-RCRA Hazardous Waste Liquid	2	DM	110	G	State 343 / EPA/Other Non-RCRA
b. Waste Oil, Flammable Liquid, NA1270 #05	1	DM	55	G	State 221 / EPA/Other D001
c.					State / EPA/Other
d.					State / EPA/Other

J. Additional Descriptions for Materials Listed Above
A. SSI#BWL2386: 5-10% glycerin, 0-5% tertiary alkanolamine, 85-95% poly(oxyalkalene) polyol, 0-10% water, <1% inorganic chloride ions.
B. SSI#FL2046: 40-60% petroleum oil, 0-10% water, 0-1% other organics, 0-1% inorganic chloride.

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

15. Special Handling Instructions and Additional Information
Emergency Contact: Teresa Anaya (415) 420-8686
Use gloves, goggles, and respirator if drums are opened.

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

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

Printed/Typed Name: DAN SCHOENHOLZ FOR PORT OF OAKLAND AS ATTORNEY-IN-FACT FOR SEABREEZE YACHT CENTER | Signature: Dan Schoenholz | Month Day Year: 01 23 91

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: GARY C. JENSEN | Signature: Gary C. Jensen | Month Day Year: 01 23 91

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

19. Discrepancy Indication Space

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

(7/88)
22
Previous editions are obsolete.

Do Not Write Below This Line

Blue: GENERATOR SENDS THIS COPY TO DOHS WITHIN 30 DAYS
To: P.O. Box 400, Sacramento, CA 95812-0400

of California—Health and Welfare Agency
Approved OMB No. 2050—0039 (Expires 9-30-91)
Please print or type. *(Form designed for use on elite (12-pitch typewriter).*

Department of Health Services
Toxic Substances Control Division
Sacramento, California

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.: C A D 9 8 2 4 0 1 1 2 7
Manifest Document No.: 0 0 1 2 3
2. Page 1 of 1
Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
Seabreeze Yacht Center
280 6th Avenue
Oakland, CA. 94607

4. Generator's Phone (415) 420-8686

A. State Manifest Document Number: 90185980
B. State Generator's ID: T A X E X E M P T

5. Transporter 1 Company Name: North State Environmental
6. US EPA ID Number: C A D 9 8 0 8 6 3 7 3 8
C. State Transporter's ID: 104329
D. Transporter's Phone: (415)588-2838

7. Transporter 2 Company Name: North State Environmental
8. US EPA ID Number: C A D 9 8 0 8 6 3 7 3 8
E. State Transporter's ID
F. Transporter's Phone: (415)588-2838

9. Designated Facility Name and Site Address
Envirosafe Services of Idaho, Inc.
10.5mi NW of Grandview, ID 83624
10. US EPA ID Number: I D D 0 7 3 1 1 4 6 5 4
G. State Facility's ID: I D D 0 7 3 1 1 4 6 5 4
H. Facility's Phone: (208) 384-1500

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. Non-RCRA Hazardous Waste Solid	2	D M	800	P	State 352; EPA/Other Non-RCRA
b. Non-RCRA Hazardous Waste Solid	5	D M	2000	P	State 352; EPA/Other Non-RCRA
c.					State; EPA/Other
d.					State; EPA/Other

J. Additional Descriptions for Materials Listed Above
A. PCN#1671F: 55-65% petroleum grease, 35-45% diatomaceous earth as filler. B. PCN#1671B: 5-10% titanium dioxide, 0-10% zinc oxide, 5-15% each: polyester resin, mineral spirits, 60-70% diatomaceous earth as absorbant.

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

15. Special Handling Instructions and Additional Information
Emergency Contact: Teresa Anaya (415) 420-8686.
Use gloves, goggles, and respirator if drums are opened.

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

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

Printed/Typed Name: DAN SCHVENHOLZ FOR PORT OF OAKLAND AS ATTORNEY-IN-FACT FOR SEABREEZE YACHT CENTER
Signature: Dan Schoenholz
Month Day Year: 01 23 91

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: GARY C. JENSEN
Signature: Gary C Jensen
Month Day Year: 01 23 91

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

19. Discrepancy Indication Space

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

(88)

Do Not Write Below This Line

Previous editions are obsolete.

Blue: GENERATOR SENDS THIS COPY TO DOHS WITHIN 30 DAYS
To: P.O. Box 400, Sacramento, CA 95812-0400

e of California—Health and Welfare Agency
Approved OMB No. 2050—0039 (Expires 9-30-91)
Print or type. (Form designed for use on elite (12-pitch typewriter).

Department of Health Services
Toxic Substances Control Division
Sacramento, California

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.: C A D 9 8 2 4 0 1 1 2 7 | Manifest Document No.: 0 0 1 2 3

2. Page 1 of 1 | Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
Seabreeze Yacht Center
280 6th Avenue
Oakland, CA. 94607

4. Generator's Phone (415) 420-8686

A. State Manifest Document Number: 90185981

B. State Generator's ID: TAX EXEMPT

5. Transporter 1 Company Name: North State Environmental
6. US EPA ID Number: C A D 0 0 0 6 0 3 7 3 8
C. State Transporter's ID: 104329
D. Transporter's Phone: (415)588-2838

7. Transporter 2 Company Name: North State Environmental
8. US EPA ID Number: C A D 0 0 0 6 0 3 7 3 8
E. State Transporter's ID:
F. Transporter's Phone: (415)588-2838

9. Designated Facility Name and Site Address
Gonzales Bucket and Drum Company
1324 Fitzgerald Avenue
San Francisco, CA 94124
10. US EPA ID Number: C A D 9 8 1 3 8 3 2 2 7
G. State Facility's ID: C A D 9 8 1 3 8 3 2 2 7
H. Facility's Phone: (415) 822-3130

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. Waste Oil, NOS, NA1270, Combustible Material	1	D M	50	P	State 512 / EPA/Other Non-RCRA
b. WASTE OIL, NOS, NA1270, COMBUSTABLE MATERIAL	1	DM	10	P	State 512 / EPA/Other Non-RCRA
c.					State / EPA/Other
d.					State / EPA/Other

J. Additional Descriptions for Materials Listed Above
A: 1x55gal empty drum last contained oil.
B: 1x5GAL EMPTY DRUM LAST CONTAINED OIL.

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

15. Special Handling Instructions and Additional Information
Emergency Contact: Teresa Anaya (415) 420-8686
Use gloves, goggles, and respirator if drum is opened.

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

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

Printed/Typed Name: DAN SCHUENHOLZ FOR PORT OF OAKLAND AS ATTORNEY-IN-FACT FOR SEABREEZE YACHT CENTER
Signature: Dan Schuenholz
Month Day Year: 0 1 2 3 9 1

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: GARY C. JENSEN
Signature: Gary C. Jensen
Month Day Year: 0 1 0 3 9 1

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

18. Discrepancy Indication Space

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

(88)
22
Previous editions are obsolete.

Do Not Write Below This Line

Blue: GENERATOR SENDS THIS COPY TO DOHS WITHIN 30 DAYS
To: P.O. Box 400, Sacramento, CA 95812-0400

APPENDIX L

LABORATORY REPORTS FROM SAMPLING OF STOCKPILED MATERIAL

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710, Phone (415) 486-0900

DATE RECEIVED: 06/25/91
DATE REPORTED: 07/10/91

LAB NUMBER: 104275

CLIENT: BASELINE ENVIRONMENTAL

PROJECT ID: S9-171

LOCATION: SEABREEZE, 280 6TH AVE.

RESULTS: SEE ATTACHED

QA/QC Approval

Final Approval

Curtis & Tompkins, Ltd.

LABORATORY NUMBER: 104275
CLIENT: BASELINE ENVIRONMENTAL
PROJECT ID: S9-171
LOCATION: SEABREEZE, 280 6TH AVE.

DATE RECEIVED: 06/25/91
DATE EXTRACTED: 07/02/91
DATE ANALYZED: 07/04,05/91
DATE REPORTED: 07/10/91

Extractable Petroleum Hydrocarbons in Soils & Wastes
California DOHS Method
LUFT Manual October 1989

LAB ID	SAMPLE ID	KEROSENE RANGE (mg/Kg)	DIESEL RANGE (mg/Kg)	REPORTING LIMIT* (mg/Kg)
104275-1	ST1-1	ND	120 *1	1.0
104275-2	ST1-2	ND	500 *1	10
104275-3	ST1-3	ND	68 *1	1.0
104275-4	ST2-1	ND	150 *1	10
104275-5	ST2-2	ND	990 *1	10
104275-6	ST-A	ND	5,900 *1	100

ND = Not Detected at or above reporting limit.

*Reporting limit applies to all analytes.

*1 Chromatographic pattern of sample does not match that of standard. Hydrocarbon contamination present is predominantly heavier then diesel.

QA/QC SUMMARY

RPD, %	11
RECOVERY, %	81

Curtis & Tompkins, Ltd.

LABORATORY NUMBER: 104275-4
CLIENT: BASELINE ENVIRONMENTAL
PROJECT ID: S9-171
LOCATION: SEA BREEZE, 280 6TH AVE.
SAMPLE ID: ST2-1

DATE RECEIVED: 06/25/91
DATE ANALYZED: 06/28-07/03/91
DATE REPORTED: 07/10/91

Title 26 Metals in Soils & Wastes
Digestion Method: EPA 3050

METAL	RESULT mg/Kg	REPORTING LIMIT mg/Kg	METHOD
Antimony	ND	3.0	EPA 6010
Arsenic	5.0	2.5	EPA 7060
Barium	76.7	0.25	EPA 6010
Beryllium	0.34	0.10	EPA 6010
Cadmium	0.29	0.25	EPA 6010
Chromium (total)	29.3	0.50	EPA 6010
Cobalt	14.4	0.90	EPA 6010
Copper	34.5	0.50	EPA 6010
Lead	3.4	3.0	EPA 7420
Mercury	ND	0.10	EPA 7471
Molybdenum	ND	0.70	EPA 6010
Nickel	52.4	1.5	EPA 6010
Selenium	ND	2.5	EPA 7740
Silver	ND	0.50	EPA 6010
Thallium	ND	2.5	EPA 7841
Vanadium	30.6	0.50	EPA 6010
Zinc	54.9	0.50	EPA 6010

ND = Not detected at or above reporting limit.

QA/QC SUMMARY

	RPD,%	RECOVERY,%		RPD,%	RECOVERY,%
Antimony	2	91	Mercury	2	105
Arsenic	5	90	Molybdenum	1	107
Barium	2	101	Nickel	2	100
Beryllium	<1	102	Selenium	10	101
Cadmium	4	89	Silver	<1	83
Chromium	<1	98	Thallium	2	101
Cobalt	<1	98	Vanadium	2	98
Copper	<1	98	Zinc	<1	94
Lead	3	86			

Curtis & Tompkins, Ltd.

LABORATORY NUMBER: 104275-5
CLIENT: BASELINE ENVIRONMENTAL
PROJECT ID: S9-171
LOCATION: SEA BREEZE, 280 6TH AVE.
SAMPLE ID: ST2-2

DATE RECEIVED: 06/25/91
DATE ANALYZED: 06/28-07/03/91
DATE REPORTED: 07/10/91

Title 26 Metals in Soils & Wastes
Digestion Method: EPA 3050

METAL	RESULT mg/Kg	REPORTING LIMIT mg/Kg	METHOD
Antimony	ND	3.0	EPA 6010
Arsenic	4.7	2.5	EPA 7060
Barium	52.8	0.25	EPA 6010
Beryllium	0.25	0.10	EPA 6010
Cadmium	ND	0.25	EPA 6010
Chromium (total)	26.8	0.50	EPA 6010
Cobalt	11.2	0.90	EPA 6010
Copper	39.5	0.50	EPA 6010
Lead	9.0	3.0	EPA 7420
Mercury	ND	0.10	EPA 7471
Molybdenum	ND	0.70	EPA 6010
Nickel	45.6	1.5	EPA 6010
Selenium	ND	2.5	EPA 7740
Silver	ND	0.50	EPA 6010
Thallium	ND	2.5	EPA 7841
Vanadium	27.7	0.50	EPA 6010
Zinc	59.9	0.50	EPA 6010

ND = Not detected at or above reporting limit.

QA/QC SUMMARY

	RPD,%	RECOVERY,%		RPD,%	RECOVERY,%
Antimony	2	91	Mercury	2	105
Arsenic	5	90	Molybdenum	1	107
Barium	2	101	Nickel	2	100
Beryllium	<1	102	Selenium	10	101
Cadmium	4	89	Silver	<1	83
Chromium	<1	98	Thallium	2	101
Cobalt	<1	98	Vanadium	2	98
Copper	<1	98	Zinc	<1	94
Lead	3	86			

Curtis & Tompkins, Ltd.

LABORATORY NUMBER: 104275-6
CLIENT: BASELINE ENVIRONMENTAL
PROJECT ID: S9-171
LOCATION: SEA BREEZE, 280 6TH AVE.
SAMPLE ID: ST-A

DATE RECEIVED: 06/25/91
DATE ANALYZED: 06/28-07/03/91
DATE REPORTED: 07/10/91

Title 26 Metals in Soils & Wastes
Digestion Method: EPA 3050

METAL	RESULT mg/Kg	REPORTING LIMIT mg/Kg	METHOD
Antimony	ND	3.0	EPA 6010
Arsenic	3.0	2.5	EPA 7060
Barium	61.3	0.25	EPA 6010
Beryllium	0.32	0.10	EPA 6010
Cadmium	ND	0.25	EPA 6010
Chromium (total)	30.3	0.50	EPA 6010
Cobalt	13.5	0.90	EPA 6010
Copper	27.1	0.50	EPA 6010
Lead	7.9	3.0	EPA 7420
Mercury	0.24	0.10	EPA 7471
Molybdenum	ND	0.70	EPA 6010
Nickel	54.1	1.5	EPA 6010
Selenium	ND	2.5	EPA 7740
Silver	ND	0.50	EPA 6010
Thallium	ND	2.5	EPA 7841
Vanadium	29.3	0.50	EPA 6010
Zinc	45.1	0.50	EPA 6010

ND = Not detected at or above reporting limit.

QA/QC SUMMARY

	RPD,%	RECOVERY,%		RPD,%	RECOVERY,%
Antimony	2	91	Mercury	2	105
Arsenic	5	90	Molybdenum	1	107
Barium	2	101	Nickel	2	100
Beryllium	<1	102	Selenium	10	101
Cadmium	4	89	Silver	<1	83
Chromium	<1	98	Thallium	2	101
Cobalt	<1	98	Vanadium	2	98
Copper	<1	98	Zinc	<1	94
Lead	3	86			

Curtis & Tompkins, Ltd.

LABORATORY NUMBER: 104275-4
CLIENT: BASELINE ENVIRONMENTAL
PROJECT ID: S9-171
SAMPLE ID: ST2-1

DATE RECEIVED: 06/25/91
DATE ANALYZED: 07/04/91
DATE REPORTED: 07/10/91

EPA METHOD 8240: VOLATILE ORGANICS IN SOILS & WASTES
Extraction Method: EPA 5030 - Purge & Trap

COMPOUND	Result ug/kg	Reporting Limit (ug/kg)
chloromethane	ND	10
bromomethane	ND	10
vinyl chloride	ND	10
chloroethane	ND	10
methylene chloride	ND	5.0
acetone	ND	10
carbon disulfide	ND	5.0
trichlorofluoromethane	ND	5.0
1,1-dichloroethene	ND	5.0
1,1-dichloroethane	ND	5.0
cis-1,2-dichloroethene	ND	5.0
trans-1,2-dichloroethene	ND	5.0
chloroform	ND	5.0
freon 113	ND	5.0
1,2-dichloroethane	ND	5.0
2-butanone	ND	10
1,1,1-trichloroethane	ND	5.0
carbon tetrachloride	ND	5.0
vinyl acetate	ND	10
bromodichloromethane	ND	5.0
1,2-dichloropropane	ND	5.0
cis-1,3-dichloropropene	ND	5.0
trichloroethylene	ND	5.0
dibromochloromethane	ND	5.0
1,1,2-trichloroethane	ND	5.0
benzene	ND	5.0
trans-1,3-dichloropropene	ND	5.0
2-chloroethylvinyl ether	ND	10
bromoform	ND	5.0
2-hexanone	ND	10
4-methyl-2-pentanone	ND	10
1,1,2,2-tetrachloroethane	ND	5.0
tetrachloroethylene	ND	5.0
toluene	ND	5.0
chlorobenzene	ND	5.0
ethyl benzene	ND	5.0
styrene	ND	5.0
total xylenes	ND	5.0

ND = Not detected at or above reporting limit

QA/QC SUMMARY: SURROGATE RECOVERIES

1,2-Dichloroethane-d4	88 %
Toluene-d8	69 %
Bromofluorobenzene	73 %

Curtis & Tompkins, Ltd.

LABORATORY NUMBER: 104275-5
CLIENT: BASELINE ENVIRONMENTAL
PROJECT ID: S9-171
SAMPLE ID: ST2-2

DATE RECEIVED: 06/25/91
DATE ANALYZED: 07/02/91
DATE REPORTED: 07/10/91

EPA METHOD 8240: VOLATILE ORGANICS IN SOILS & WASTES
Extraction Method: EPA 5030 - Purge & Trap

COMPOUND	Result ug/kg	Reporting Limit (ug/kg)
chloromethane	ND	10
bromomethane	ND	10
vinyl chloride	ND	10
chloroethane	ND	10
methylene chloride	ND	5.0
acetone	ND	10
carbon disulfide	ND	5.0
trichlorofluoromethane	ND	5.0
1,1-dichloroethene	ND	5.0
1,1-dichloroethane	ND	5.0
cis-1,2-dichloroethene	ND	5.0
trans-1,2-dichloroethene	ND	5.0
chloroform	ND	5.0
freon 113	ND	5.0
1,2-dichloroethane	ND	5.0
2-butanone	ND	10
1,1,1-trichloroethane	ND	5.0
carbon tetrachloride	ND	5.0
vinyl acetate	ND	10
bromodichloromethane	ND	5.0
1,2-dichloropropane	ND	5.0
cis-1,3-dichloropropene	ND	5.0
trichloroethylene	ND	5.0
dibromochloromethane	ND	5.0
1,1,2-trichloroethane	ND	5.0
benzene	ND	5.0
trans-1,3-dichloropropene	ND	5.0
2-chloroethylvinyl ether	ND	10
bromoform	ND	5.0
2-hexanone	ND	10
4-methyl-2-pentanone	ND	10
1,1,2,2-tetrachloroethane	ND	5.0
tetrachloroethylene	ND	5.0
toluene	ND	5.0
chlorobenzene	ND	5.0
ethyl benzene	ND	5.0
styrene	ND	5.0
total xylenes	ND	5.0

ND = Not detected at or above reporting limit

QA/QC SUMMARY: SURROGATE RECOVERIES

1,2-Dichloroethane-d4	101 %
Toluene-d8	85 %
Bromofluorobenzene	78 %

Curtis & Tompkins, Ltd

LABORATORY NUMBER: 104275-6
CLIENT: BASELINE ENVIRONMENTAL
PROJECT ID: S9-171
SAMPLE ID: ST-A

DATE RECEIVED: 06/25/91
DATE ANALYZED: 07/02/91
DATE REPORTED: 07/10/91

EPA METHOD 8240: VOLATILE ORGANICS IN SOILS & WASTES
Extraction Method: EPA 5030 - Purge & Trap

COMPOUND	Result ug/kg	Reporting Limit (ug/kg)
chloromethane	ND	100
bromomethane	ND	100
vinyl chloride	ND	100
chloroethane	ND	100
methylene chloride	ND	50
acetone	ND	100
carbon disulfide	ND	50
trichlorofluoromethane	ND	50
1,1-dichloroethene	ND	50
1,1-dichloroethane	ND	50
cis-1,2-dichloroethene	ND	50
trans-1,2-dichloroethene	ND	50
chloroform	ND	50
freon 113	ND	50
1,2-dichloroethane	ND	50
2-butanone	ND	100
1,1,1-trichloroethane	ND	50
carbon tetrachloride	ND	50
vinyl acetate	ND	100
bromodichloromethane	ND	50
1,2-dichloropropane	ND	50
cis-1,3-dichloropropene	ND	50
trichloroethylene	ND	50
dibromochloromethane	ND	50
1,1,2-trichloroethane	ND	50
benzene	ND	50
trans-1,3-dichloropropene	ND	50
2-chloroethylvinyl ether	ND	100
bromoform	ND	50
2-hexanone	ND	100
4-methyl-2-pentanone	ND	100
1,1,2,2-tetrachloroethane	ND	50
tetrachloroethylene	ND	50
toluene	ND	50
chlorobenzene	ND	50
ethyl benzene	ND	50
styrene	ND	50
total xylenes	ND	50

ND = Not detected at or above reporting limit

QA/QC SUMMARY: SURROGATE RECOVERIES

1,2-Dichloroethane-d4	94 %
Toluene-d8	95 %
Bromofluorobenzene	101 %

Curtis & Tompkins, Ltd.

LABORATORY NUMBER: 104275-4
CLIENT: BASELLINE ENVIRONMENTAL
PROJECT ID: S9-171
LOCATION: SEA BREEZE, 280 6TH AVE.
SAMPLE ID: ST2-1

DATE RECEIVED: 06/25/91
DATE EXTRACTED: 06/27/91
DATE ANALYZED: 07/03/91
DATE REPORTED: 07/10/91

EPA 8270: Base/Neutral and Acid Extractables in Soils & Wastes
Extraction Method: EPA 3550 Sonication

	RESULT ug/kg	REPORTING LIMIT ug/kg
ACID COMPOUNDS		
Phenol	ND	3300
2-Chlorophenol	ND	3300
Benzyl Alcohol	ND	3300
2-Methylphenol	ND	3300
4-Methylphenol	ND	3300
2-Nitrophenol	ND	17000
2,4-Dimethylphenol	ND	3300
Benzoic Acid	ND	17000
2,4-Dichlorophenol	ND	17000
4-Chloro-3-methylphenol	ND	3300
2,4,6-Trichlorophenol	ND	3300
2,4,5-Trichlorophenol	ND	17000
2,4-Dinitrophenol	ND	17000
4-Nitrophenol	ND	17000
4,6-Dinitro-2-methylphenol	ND	17000
Pentachlorophenol	ND	17000
BASE/NEUTRAL COMPOUNDS		
N-Nitrosodimethylamine	ND	3300
Aniline	ND	3300
Bis(2-chloroethyl)ether	ND	3300
1,3-Dichlorobenzene	ND	3300
1,4-Dichlorobenzene	ND	3300
1,2-Dichlorobenzene	ND	3300
Bis(2-chloroisopropyl)ether	ND	3300
N-Nitroso-di-n-propylamine	ND	3300
Hexachloroethane	ND	3300
Nitrobenzene	ND	3300
Isophorone	ND	3300
Bis(2-chloroethoxy)methane	ND	3300
1,2,4-Trichlorobenzene	ND	3300
Naphthalene	ND	3300
4-Chloroaniline	ND	3300
Hexachlorobutadiene	ND	3300
2-Methylnaphthalene	ND	3300
Hexachlorocyclopentadiene	ND	3300
2-Chloronaphthalene	ND	3300
2-Nitroaniline	ND	17000

Curtis & Tompkins, Ltd.

LABORATORY NUMBER: 104275-4
SAMPLE ID: ST2-1

EPA 8270

BASE/NEUTRAL COMPOUNDS	RESULT ug/kg	REPORTING LIMIT ug/kg
Dimethylphthalate	ND	3300
Acenaphthylene	ND	3300
2,6-Dinitrotoluene	ND	3300
3-Nitroaniline	ND	17000
Acenaphthene	ND	3300
Dibenzofuran	ND	3300
2,4-Dinitrotoluene	ND	3300
Diethylphthalate	ND	3300
4-Chlorophenyl-phenylether	ND	3300
Fluorene	ND	3300
4-Nitroaniline	ND	17000
N-Nitrosodiphenylamine	ND	3300
Azobenzene	ND	3300
4-Bromophenyl-phenylether	ND	3300
Hexachlorobenzene	ND	3300
Phenanthrene	ND	3300
Anthracene	ND	3300
Di-n-butylphthalate	ND	3300
Fluoranthene	ND	3300
Benzidine	ND	3300
Pyrene	ND	3300
Butylbenzylphthalate	ND	3300
3,3'-Dichlorobenzidine	ND	17000
Benzo(a)anthracene	ND	3300
Chrysene	ND	3300
Bis(2-ethylhexyl)phthalate	ND	3300
Di-n-octylphthalate	ND	3300
Benzo(b)fluoranthene	ND	3300
Benzo(k)fluoranthene	ND	3300
Benzo(a)pyrene	ND	3300
Indeno(1,2,3-cd)pyrene	ND	3300
Dibenzo(a,h)anthracene	ND	3300
Benzo(g,h,i)perylene	ND	3300

ND = Not detected at or above reporting limit.

QA/QC SUMMARY: % SURROGATE RECOVERIES

2-Fluorophenol	72 %	Nitrobenzene-d5	69
Phenol-d6	86 %	2-Fluorobiphenyl	94
2,4,6-Tribromophenol	72 %	Terphenyl-d14	64

Curtis & Tompkins, Ltd.

LABORATORY NUMBER: 104275-5
CLIENT: BASELLINE ENVIRONMENTAL
PROJECT ID: S9-171
LOCATION: SEA BREEZE, 280 6TH AVE.
SAMPLE ID: ST2-2

DATE RECEIVED: 06/25/91
DATE EXTRACTED: 06/27/91
DATE ANALYZED: 07/03/91
DATE REPORTED: 07/10/91

EPA 8270: Base/Neutral and Acid Extractables in Soils & Wastes
Extraction Method: EPA 3550 Sonication

ACID COMPOUNDS	RESULT ug/kg	REPORTING LIMIT ug/kg
Phenol	ND	3300
2-Chlorophenol	ND	3300
Benzyl Alcohol	ND	3300
2-Methylphenol	ND	3300
4-Methylphenol	ND	3300
2-Nitrophenol	ND	17000
2,4-Dimethylphenol	ND	3300
Benzoic Acid	ND	17000
2,4-Dichlorophenol	ND	17000
4-Chloro-3-methylphenol	ND	3300
2,4,6-Trichlorophenol	ND	3300
2,4,5-Trichlorophenol	ND	17000
2,4-Dinitrophenol	ND	17000
4-Nitrophenol	ND	17000
4,6-Dinitro-2-methylphenol	ND	17000
Pentachlorophenol	ND	17000
BASE/NEUTRAL COMPOUNDS		
N-Nitrosodimethylamine	ND	3300
Aniline	ND	3300
Bis(2-chloroethyl)ether	ND	3300
1,3-Dichlorobenzene	ND	3300
1,4-Dichlorobenzene	ND	3300
1,2-Dichlorobenzene	ND	3300
Bis(2-chloroisopropyl)ether	ND	3300
N-Nitroso-di-n-propylamine	ND	3300
Hexachloroethane	ND	3300
Nitrobenzene	ND	3300
Isophorone	ND	3300
Bis(2-chloroethoxy)methane	ND	3300
1,2,4-Trichlorobenzene	ND	3300
Naphthalene	ND	3300
4-Chloroaniline	ND	3300
Hexachlorobutadiene	ND	3300
2-Methylnaphthalene	ND	3300
Hexachlorocyclopentadiene	ND	3300
2-Chloronaphthalene	ND	3300
2-Nitroaniline	ND	17000

Curtis & Tompkins, Ltd.

LABORATORY NUMBER: 104275-5
SAMPLE ID: ST2-2

EPA 8270

BASE/NEUTRAL COMPOUNDS	RESULT ug/kg	REPORTING LIMIT ug/kg
Dimethylphthalate	ND	3300
Acenaphthylene	ND	3300
2,6-Dinitrotoluene	ND	3300
3-Nitroaniline	ND	17000
Acenaphthene	ND	3300
Dibenzofuran	ND	3300
2,4-Dinitrotoluene	ND	3300
Diethylphthalate	ND	3300
4-Chlorophenyl-phenylether	ND	3300
Fluorene	ND	3300
4-Nitroaniline	ND	17000
N-Nitrosodiphenylamine	ND	3300
Azobenzene	ND	3300
4-Bromophenyl-phenylether	ND	3300
Hexachlorobenzene	ND	3300
Phenanthrene	ND	3300
Anthracene	ND	3300
Di-n-butylphthalate	ND	3300
Fluoranthene	ND	3300
Benzidine	ND	3300
Pyrene	ND	3300
Butylbenzylphthalate	ND	3300
3,3'-Dichlorobenzidine	ND	17000
Benzo(a)anthracene	ND	3300
Chrysene	ND	3300
Bis(2-ethylhexyl)phthalate	ND	3300
Di-n-octylphthalate	ND	3300
Benzo(b)fluoranthene	ND	3300
Benzo(k)fluoranthene	ND	3300
Benzo(a)pyrene	ND	3300
Indeno(1,2,3-cd)pyrene	ND	3300
Dibenzo(a,h)anthracene	ND	3300
Benzo(g,h,i)perylene	ND	3300

ND = Not detected at or above reporting limit.

QA/QC SUMMARY: % SURROGATE RECOVERIES

2-Fluorophenol	59 %	Nitrobenzene-d5	56
Phenol-d6	73 %	2-Fluorobiphenyl	78
2,4,6-Tribromophenol	66 %	Terphenyl-d14	56

Curtis & Tompkins, Ltd.

LABORATORY NUMBER: 104275-6
CLIENT: BASELLINE ENVIRONMENTAL
PROJECT ID: S9-171
LOCATION: SEA BREEZE, 280 6TH AVE.
SAMPLE ID: ST-A

DATE RECEIVED: 06/25/91
DATE EXTRACTED: 06/27/91
DATE ANALYZED: 07/03/91
DATE REPORTED: 07/10/91

EPA 8270: Base/Neutral and Acid Extractables in Soils & Wastes
Extraction Method: EPA 3550 Sonication

ACID COMPOUNDS	RESULT ug/kg	REPORTING LIMIT ug/kg
Phenol	ND	3300
2-Chlorophenol	ND	3300
Benzyl Alcohol	ND	3300
2-Methylphenol	ND	3300
4-Methylphenol	ND	3300
2-Nitrophenol	ND	17000
2,4-Dimethylphenol	ND	3300
Benzoic Acid	ND	17000
2,4-Dichlorophenol	ND	17000
4-Chloro-3-methylphenol	ND	3300
2,4,6-Trichlorophenol	ND	3300
2,4,5-Trichlorophenol	ND	17000
2,4-Dinitrophenol	ND	17000
4-Nitrophenol	ND	17000
4,6-Dinitro-2-methylphenol	ND	17000
Pentachlorophenol	ND	17000
BASE/NEUTRAL COMPOUNDS		
N-Nitrosodimethylamine	ND	3300
Aniline	ND	3300
Bis(2-chloroethyl)ether	ND	3300
1,3-Dichlorobenzene	ND	3300
1,4-Dichlorobenzene	ND	3300
1,2-Dichlorobenzene	ND	3300
Bis(2-chloroisopropyl)ether	ND	3300
N-Nitroso-di-n-propylamine	ND	3300
Hexachloroethane	ND	3300
Nitrobenzene	ND	3300
Isophorone	ND	3300
Bis(2-chloroethoxy)methane	ND	3300
1,2,4-Trichlorobenzene	ND	3300
Naphthalene	ND	3300
4-Chloroaniline	ND	3300
Hexachlorobutadiene	ND	3300
2-Methylnaphthalene	ND	3300
Hexachlorocyclopentadiene	ND	3300
2-Chloronaphthalene	ND	3300
2-Nitroaniline	ND	17000

Curtis & Tompkins, Ltd.

LABORATORY NUMBER: 104275-6
SAMPLE ID: ST-A

EPA 8270

BASE/NEUTRAL COMPOUNDS	RESULT ug/kg	REPORTING LIMIT ug/kg
Dimethylphthalate	ND	3300
Acenaphthylene	ND	3300
2,6-Dinitrotoluene	ND	3300
3-Nitroaniline	ND	17000
Acenaphthene	ND	3300
Dibenzofuran	ND	3300
2,4-Dinitrotoluene	ND	3300
Diethylphthalate	ND	3300
4-Chlorophenyl-phenylether	ND	3300
Fluorene	ND	3300
4-Nitroaniline	ND	17000
N-Nitrosodiphenylamine	ND	3300
Azobenzene	ND	3300
4-Bromophenyl-phenylether	ND	3300
Hexachlorobenzene	ND	3300
Phenanthrene	ND	3300
Anthracene	ND	3300
Di-n-butylphthalate	ND	3300
Fluoranthene	ND	3300
Benzidine	ND	3300
Pyrene	ND	3300
Butylbenzylphthalate	ND	3300
3,3'-Dichlorobenzidine	ND	17000
Benzo(a)anthracene	ND	3300
Chrysene	ND	3300
Bis(2-ethylhexyl)phthalate	ND	3300
Di-n-octylphthalate	ND	3300
Benzo(b)fluoranthene	ND	3300
Benzo(k)fluoranthene	ND	3300
Benzo(a)pyrene	ND	3300
Indeno(1,2,3-cd)pyrene	ND	3300
Dibenzo(a,h)anthracene	ND	3300
Benzo(g,h,i)perylene	ND	3300

ND = Not detected at or above reporting limit.

QA/QC SUMMARY: % SURROGATE RECOVERIES

2-Fluorophenol	62 %	Nitrobenzene-d5	74
Phenol-d6	80 %	2-Fluorobiphenyl	83
2,4,6-Tribromophenol	65 %	Terphenyl-d14	62

Curtis & Tompkins, Ltd.

LABORATORY NUMBER: 104275
CLIENT: BASELINE ENVIRONMENTAL
PROJECT ID: S9-171
LOCATION: SEA BREEZE, 280 6TH AVE.

DATE RECEIVED: 06/25/91
DATE ANALYZED: 07/08/91
DATE REPORTED: 07/10/91

ANALYSIS: IGNITABILITY

LAB ID	SAMPLE ID	RESULT
104275-4	ST2-1	NOT IGNITABLE *
104275-5	ST2-2	NOT IGNITABLE *
104275-6	ST-A	NOT IGNITABLE *

* Not ignitable as defined in CCR Title 26, Section 22-66702(a)(2).

Curtis & Tompkins, Ltd.

Client: **Baseline Environmental**

Laboratory Login Number: 104275

Project Name: Sea Breeze
Project Number: S9-171

Report Date: 10 July 91

ANALYSIS: pH

Lab ID	Sample ID	Matrix	Sampled	Received	Analyzed	Result	Units	Method	Analyst	QC Batch
104275-004	ST2-1	Soil	25-JUN-91	25-JUN-91	03-JUL-91	8.5	SU *	EPA 9045	TR	1940
104275-005	ST2-2	Soil	25-JUN-91	25-JUN-91	03-JUL-91	9.1	SU *	EPA 9045	TR	1940
104275-006	ST-A	Soil	25-JUN-91	25-JUN-91	03-JUL-91	8.3	SU *	EPA 9045	TR	1940

* Soil pH measured as water

Curtis & Tompkins, Ltd.

QC Batch Report

Client: Baseline Environmental
Project Name: Sea Breeze
Project Number: S9-171

Laboratory Login Number: 104275
Report Date: 10 July 91

ANALYSIS: pH

QC Batch Number: 1940

Calibration Verification Results

Sample	Result	TV	Difference	Limit	Analyzed
ICV	10.00	10.00	.00	< 0.10	03-JUL-91
CCV	10.00	10.00	.00	< 0.10	03-JUL-91

Sample Duplicate Results

Sample	Duplicate	RPD	Analyzed
8.48	8.46	.2%	03-JUL-91

SAMPLE AND BIOASSAY INFORMATION

ABC Laboratories
29 North Olive Street
Ventura, Ca. 93001
(805) 648-2735

CLIENT NAME: Curtis and Tompkins, Ltd DATE: 06/27/91 0930

SAMPLE ID: 104275-7 ST2-1A LAB.NO: C&T0611.195

TEST TYPE: Screening FLOW: Static TANK VOLUME: 10 Liters

DILUTION WATER: Reconstituted Fresh HARDNESS: 36 mg/l END: 36 ALKALINITY: 26 mg/l END: 28

AERATION: Single bubble aeration in all tanks ACCL.TEMP: 20.0 deg.C

ORGANISM: Fathead Minnow SPECIES: Pimephales promelas SOURCE: Thomas Fish Co.

CARRIER: Greyhound Bus Co. DATE REC'D: 06/18/91 AVG.LNGTH: 22 mm AVG.WT.: .2g

NUMBER ORGANISMS PER TANK: 10

	Initial	24 Hour	48 Hour	72 Hour	96 Hour
Date:	06/27/91	06/28/91	06/29/91	06/30/91	07/01/91
Time:	1030	1025	1342	1350	1010

Conc. mg/l	DO	Dg.C	pH	DO	Dg.C	pH	#M	DO	Dg.C	pH	#M	DO	Dg.C	pH	#M	DO	Dg.C	pH	#M	Tot. #M
0 (Con.)	6.3	21.1	7.8	6.5	21.4	7.8	0	6.4	21.4	7.8	0	6.3	20.4	8.1	0	5.9	21.2	7.9	0	0
750(A)	7.6	19.6	7.9	6.3	21.8	8.1	0	6.1	21.6	8.0	0	5.7	21.4	7.6	0	5.8	21.9	7.5	0	0
750(B)	6.0	19.6	7.9	6.0	21.8	8.1	0	6.2	21.6	8.1	0	5.5	21.3	7.6	0	5.3	21.9	7.5	0	0
400(A)	6.0	19.9	8.1	5.6	21.7	8.1	0	6.2	21.6	8.2	0	5.8	21.3	7.7	0	5.5	21.9	7.5	0	0
400(B)	6.2	20.4	8.1	5.9	21.7	8.1	0	6.1	21.6	8.4	0	5.9	21.2	8.1	0	5.3	21.9	7.5	0	0

96 HOUR LC50 = >750 mg/L 95% CONFIDENCE INTERVAL = N/A

TC(tu) = 0.00

CALCULATION METHOD: Binomial Test ANALYST: _____ DATE: 07/01/91

Martha Meyer, Chief Biologist

REMARKS: Beginning Sample Hardness: 36 mg/L (CACO3) Alkalinity: 26 mg/L
Ending Sample Hardness: 35 mg/L (CACO3) Alkalinity: 28 mg/L

SAMPLE AND BIOASSAY INFORMATION

ABC Laboratories
29 North Olive Street
Ventura, Ca. 93001
(805) 648-2735

CLIENT NAME: Curtis and Tompkins, Ltd DATE: 06/27/91 0930

SAMPLE ID: 104275-8 ST2-2B LAB.NO: C&T0611.196

TEST TYPE: Screening FLOW: Static TANK VOLUME: 10 Liters

DILUTION WATER: Reconstituted Fresh HARDNESS: 36 mg/l END: 36 ALKALINITY: 26 mg/l END: 28

AERATION: Single bubble aeration in all tanks ACCL.TEMP: 20.0 deg.C

ORGANISM: Fathead Minnow SPECIES: Pimephales promelas SOURCE: Thomas Fish Co.

CARRIER: Greyhound Bus Co. DATE REC'D: 06/18/91 AVG.LNGTH: 22 mm AVG.WT.: .2g

NUMBER ORGANISMS PER TANK: 10

	Initial	24 Hour	48 Hour	72 Hour	96 Hour
Date:	06/27/91	06/28/91	06/29/91	06/30/91	07/01/91
Time:	1030	1025	1342	1350	1010

Conc. mg/l	DO	Dg.C	pH	DO	Dg.C	pH	#M	DO	Dg.C	pH	#M	DO	Dg.C	pH	#M	DO	Dg.C	pH	#M	Tot. #M
0 (Con.)	6.3	21.1	7.8	6.5	21.4	7.8	0	6.4	21.4	7.8	0	6.3	20.4	8.1	0	5.9	21.2	7.9	0	0
750(A)	6.0	19.9	8.3	5.9	21.7	8.3	0	6.2	21.6	8.0	0	5.7	21.2	7.9	0	5.4	21.9	7.6	0	0
750(B)	5.7	19.8	8.3	5.7	21.7	8.3	0	6.2	21.5	8.1	0	5.7	21.2	7.9	0	5.8	21.8	7.6	1	1
400(A)	6.2	19.9	8.3	5.9	21.7	8.3	0	6.2	21.5	8.0	0	5.8	21.2	7.8	0	5.7	21.8	7.7	1	1
400(B)	6.0	20.0	8.3	6.0	21.7	8.3	0	6.3	21.5	8.1	0	5.9	21.2	7.8	0	5.8	21.9	7.8	0	0

96 HOUR LC50 = >750 mg/L 95% CONFIDENCE INTERVAL = N/A

TC(tu) = 0.00

CALCULATION METHOD: Binomial Test ANALYST: _____ DATE: 07/01/91

Martha Meyer, Chief Biologist

REMARKS: Beginning Sample Hardness: 46 mg/L (CACO3) Alkalinity: 31 mg/L
Ending Sample Hardness: 45 mg/L (CACO3) Alkalinity: 32 mg/L

Chain of Custody Form

Curtis & Tompkins, Ltd
2323 Fifth Street
Berkeley, California 94710
(415) 486-0900

Samplers _____

Job Description 104275

Job Number _____

Client Contact _____ Recorder _____

Matrix: Water	Matrix: Soil	Matrix: Waste	Matrix: Oil	Matrix:	Matrix:	# Containers	Method Preserved: H_2SO_4	Method Preserved: HNO_3	Method Preserved: Ice	Method Preserved: None	Method Preserved: Other	Sample Number	Sampling Date: Yr	Mo	Dy	Time	SAMPLE NOTES
	X					1						104275-7	91	06	25		ST2-1a
	X					1						104275-8	91	06	25		ST2-2b

ANALYSIS REQUESTED

XR RIOMSMY

XR

Laboratory Notes :

96-Hr LC-50

Fathead Minnow

Normal TAT

Chain of Custody Record

Relinquished by: (signature) Date/Hr	Received by (signature)
Relinquished by: (signature) Date/Hr	Received by (signature)
Relinquished by: (signature) Date/Hr	Received by (signature)
Relinquished by: (signature) Date/Hr	Received by (signature)
Dispatched by: (signature) Date/Hr	Received for Lab by: (signature)

6/26/91

6/27 1230

BASELINE
5900 Hollis Street, Suite D
Emeryville, CA 94608
(415) 420-8686

~~102475~~ 104275

CHAIN OF CUSTODY RECORD

Turn-Around Time normal
Lab Curtis & Tompkins
Contact Person

Project No.	Project Name and Location
59-171	Seabreeze 280 6th ave

Samplers: (Signature)
Jerusa Amaya

	No. Station	Date	Time	Media	Depth	Composites	No. of Containers	Station Location	TEH	8015	8240	8270	Title 26 metals	pH	Flashpoint				Remarks	Detection Limits
1	ST1-1	6/25/91	10:15	soil	NA	no	1	Pile 1 (A,1)	X											
2	ST1-2	6/25/91	10:25	soil	NA	no	1	Pile 1 (E,2)	X											
3	ST1-3	6/25/91	10:58	soil	NA	no	1	Pile 1 (A,2.5) (D,3)	X											
4	ST2-1	6/25/91	11:00	soil	NA	no	1	Pile 2 (A,2)	X	X	X	X	X	X						
5	ST2-2	6/25/91	11:10	soil	NA	no	1	Pile 2 (B,0)	X	X	X	X	X	X						
6	ST-4	6/25/91	11:20	soil	NA	no	1	Pile 3 (C,3.5)	X	X	X	X	X	X						

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Date / Time	Condition of Samples upon Arrival at Laboratory:
Jerusa Amaya	6/25/91 ~~4:20~~			
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Date / Time	
Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	Remarks:
			6/25/91 4:20	

BASELINE

5900 Hollis Street, Suite D
Emeryville, CA 94608
(415) 420-8686

~~104275~~ 104275

CHAIN OF CUSTODY RECORD

Turn-Around Time normal
Lab Curtis Tompkins
Contact Person

Project No.	Project Name and Location
59-171	Seabreeze 2580 6th Ave.

Samplers: (Signature)
Teresa Amaya

No.	Station	Date	Time	Media	Depth	Composites	No. of Containers	Station Location	Analysis: fish bioassay	Remarks	Detection Limits
7	ST2-1a	6/25/91	11:05	soil	NA	no	1	Pile 2 (A,2)	X		
8	ST2-2b	6/25/91	11:15	soil	NA	no	1	Pile 2 (B,0)	X		

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Date / Time	Condition of Samples upon Arrival at Laboratory:
Teresa Amaya	6/25/91 14:30			
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Date / Time	
				Remarks:
Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	
		[illegible]	6/25/91 4:30	