GROUNDWATER TECHNOLOGY, INC.

4057 Port Chicago Highway, Concord, CA 94520 (415) 671-2387
FAX: (415) 685-9148

April 15, 1991

Job No. 203-799-8200.02

Mr. Alan McCay
The Martin Group
6475 Christie Avenue, Suite 500
Emeryville, CA 94608

RE: Quarterly Status Report

Dear Mr. Kaczmarek:

Groundwater Technology, Inc. is pleased to submit the fourth Quarterly Status Report for the Bay Center Project located at Christie Avenue and 64th Street in Emeryville, California. This report covers the period of December 1, 1990 to March 31, 1991. A copy of this report has been submitted to East Bay Municipal Utility District (EBMUD) per the current permit requirements.

In November 1990, it was discovered that the product recovery pump had degraded to a point where it was no longer functioning. The product has been hand bailed since that time. Groundwater Technology, Inc. is purchasing a new product pump this week and will be installing it at our cost as soon as it arrives. Additionally, a new transfer pump will be ordered this week. Once the transfer pump has been installed, the system can be restarted. Restart up of the system is scheduled for April 25, 1991.

Work scheduled for this week is as follows:

1) Contact the Bay Area Air Quality Management District (BAAQMD) to inquire about reducing the system sampling frequency per the current permit requirements.

2) Finalize the cost estimate for the second year of operation and maintenance at the site, reflecting decrease in site visits and analyses if reduction approved by BAAQMD.

3) Evaluate the feasibility of utilizing carbon treatment only for the future move of the system.

Groundwater Technology, Inc, would like to thank the Martin Group for this opportunity to be of service. If you have any questions or comments please contact me at (415) 671-2387.

Sincerely,
GROUNDWATER TECHNOLOGY, INC.

Sandra L. Lindsey
Hydrogeologist/
Project Manager

SLL:lf
Enclosures

CV8200B3.SLL

GROUNDWATER
TECHNOLOGY, INC.

4057 Port Chicago Highway, Concord, CA 94520 (415) 671-2387
FAX: (415) 685-9148

April 15, 1991

Job. No. 203 799 8200.02

Mr. William Meckel
East Bay Municipal Utilities District
Industrial Discharge Section
P.O. BOX 24055
Oakland, CA 94623

Re: Quarterly Status Report

Dear Mr. Meckel:

Please find enclosed for your review the fourth Quarterly Status Report for the Bay Center site located in Emeryville, California working under account No. 500-54011.

Groundwater Technology, Inc. appreciates the cooperation of the East Bay Municipal Utilities District with this site, and please feel free to contact me at (415) 671-2387, if I can be of assistance in any way.

Sincerely,
GROUNDWATER TECHNOLOGY, INC.

Sandra L. Lindsey

Sandra L. Lindsey
Hydrogeologist/
Project Manager

SLL:lf

Enclosure

cc: Mr. Alan McCay, The Martin Group

CV8200A3.SLL

QUARTERLY STATUS REPORT

BAY CENTER PROJECT
CHRISTIE AVENUE AND 64th STREET
EMERYVILLE, CALIFORNIA

APRIL 1991

GROUNDWATER TECHNOLOGY, INC.
CONCORD, CALIFORNIA

GROUNDWATER TECHNOLOGY, INC.

4057 Port Chicago Highway, Concord, CA 94520 (415) 671-2387

FAX: (415) 685-9148

QUARTERLY STATUS REPORT
BAY CENTER PROJECT
CHRISTIE AVENUE AND 64TH STREET
EMERYVILLE, CALIFORNIA
APRIL 1991

Prepared for:

Mr. Alan McCay
The Martin Group
6475 Christie Avenue, Suite 500
Emeryville, CA 94623

Prepared by:

GROUNDWATER TECHNOLOGY, INC.
4057 Port Chicago Highway
Concord, California 94520

Sandra L. Lindsey
Hydrogeologist/
Project Manager

Allen B. Storm
Registered Geologist
No. 4394

R8200F3.SLL

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CHRISTIE AVENUE AND 64TH STREET
EMERYVILLE, CALIFORNIA
APRIL 1991

INTRODUCTION

This Quarterly Status Report presents the work conducted for The Martin Group by Groundwater Technology, Inc. during operation of the separate-phase hydrocarbon (product) collection system and the groundwater-treatment system located at Christie Avenue and 64th Street in Emeryville, California (Figure 1). This report covers the period from January through March 1991.

GROUNDWATER MONITORING AND SAMPLING

From January through March 1991, the groundwater-treatment system was periodically sampled in accordance with the East Bay Municipal Utilities District (EBMUD) Wastewater Discharge Permit guidelines (Account No. 500-54011) and the Bay Area Air Quality Management District (BAAQMD) Air Discharge Permit Guidelines (No. 32325). Also, the seven monitoring wells on the site were monitored monthly to determine the groundwater-flow direction and gradient and were sampled quarterly to determine the quality of the surrounding groundwater.

GROUNDWATER MONITORING

On January 17, February 6, and March 7, 1991, the recovery well and each of the seven on-site monitoring wells were monitored for depth-to-water (DTW) and depth-to-product (DTP). The DTW and DTP measurements were taken from surveyed points at the top of each well casing which are referenced to mean sea level (msl). The static DTW was approximately 7- to 11-feet below surface grade during the February 6, 1991, monitoring event. Approximately 0.61-foot of separate-phase hydrocarbons (product) was measured in the recovery well on February 6, 1991.

FIGURE 1. SITE LOCATION MAP

BAY CENTER
EMERYVILLE, CALIFORNIA

ML 3/90

GROUNDWATER TECHNOLOGY, INC.

The groundwater-monitoring data collected throughout the last two quarters are presented in Table 1. The groundwater gradient is characterized by a southeasterly flow direction in the northern half of the site which is influenced by pumping activities at the recovery well (Figure 2). Figure 3 presents the potentiometric surface as interpreted from water levels observed during the February 26, 1990 monitoring event, which was prior to the initiation of pumping. A northeasterly gradient is suggested in the southern portion of the site both prior to, and during pumping. This phenomenon may be related to the heterogeneous nature of the subsurface materials (artificial fill). However, the actual relationship between the water levels in monitoring wells 3 and 4, and those observed on the northern portion of the site has not been determined. Currently, there are insufficient monitoring points in the southern half of the site to accurately define gradient trends.

The calculated capture zone for the recovery well, as reported in Groundwater Pumping Test, 6400 Christie Avenue, Bay Center, Emeryville, California, dated June 1989, is approximately 40-feet downgradient and 130-feet cross-gradient. These calculations appear to be in general agreement with the observed conditions shown on Figure 2.

GROUNDWATER SAMPLING

The seven monitoring wells at the site (MW-1 through MW-6 and MW-E) are sampled on a quarterly basis. The sampling event for the first quarter of 1991 occurred on February 6, 1991. Prior to sampling, each well was purged by bailing until pH, temperature, and conductivity had stabilized. The purged wells were then allowed to recover to at least 80 percent of their original water levels before sampling with a U.S. Environmental Protection Agency (EPA)-approved Teflon[R] surface sampler.

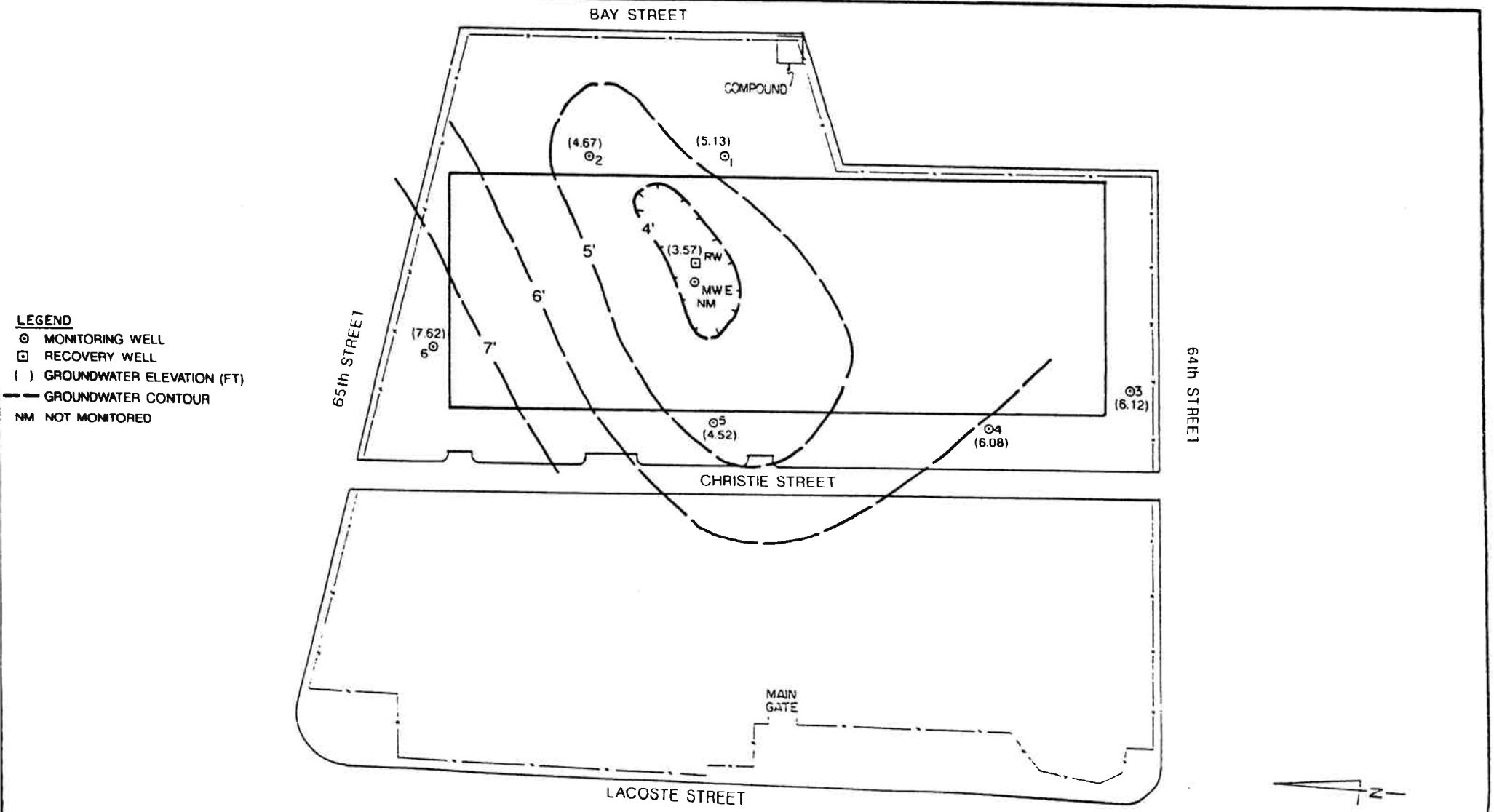
Groundwater samples were collected in 40 milliliter (ml) glass vials and capped with a Teflon[R] septum in such a way that no air was trapped inside. Additional samples were collected in 500 ml plastic or 1-liter glass bottles, as needed, for metals and volatile organic analyses. The sample containers were labeled, placed on ice in an insulated cooler, and transported, accompanied by a Chain-of-Custody Manifest, to a State of California-certified laboratory. Rinsate blanks, containing distilled water used to clean the surface sampler, were collected prior to the sampling of each well for quality control purposes.

TABLE 1

MONITORING DATA

DATE	WELL ID ELEV.	MW-1 14.31	MW-2 14.28	MW-3 14.43	MW-4 14.12	MW-5 14.56	MW-6 14.67	MW-E 15.32	RW-1 14.54
09/05/90	DTW	9.28	10.04	NM	7.52	10.46	8.32	10.82	44.49
	DTP	-	-		-	-	-	-	44.25
	PT	-	-		-	-	-	-	.24
	WATER ELEV.	5.03	4.24		6.6	4.1	6.35	7.5	-29.76
11/19/90	DTW	9.51	10.17	NM	8.97	10.30	8.67	10.85	17.75
	DTP	-	-		-	-	-	-	16.95
	PT	-	-		-	-	-	-	NM
	WATER ELEV.	4.80	4.11		5.16	4.26	6.0	7.47	-2.57
12/18/90	DTW	9.55	100.20	NM	8.09	10.51	7.70	10.74	16.42
	DTP	-	-		-	-	-	-	15.52
	PT	-	-		-	-	-	-	0.9
	WATER ELEV.	4.76	4.08		6.03	4.06	6.97	7.58	-1.16
01/17/91	DTW	9.36	9.65	8.30	8.39	9.82	8.41	9.57	10.24
	DTP	-	-	-	-	-	-	-	9.79
	PT	-	-	-	-	-	-	-	0.45
	WATER ELEV.	4.95	4.63	6.13	5.73	4.74	6.25	8.75	4.66
02/06/91	DTW	9.18	9.61	8.31	8.04	10.04	7.05	NM	11.46
	DTP	-	-	-	-	-	-		10.85
	PT	-	-	-	-	-	-		0.61
	WATER ELEV.	5.13	4.67	6.12	6.08	4.52	7.62		3.57
03/07/91	DTW	8.83	9.42	8.30	7.72	10.17	6.38	10.35	12.10
	DTP	-	-	8.28	-	-	-	-	11.06
	PT	-	-	.02	-	-	-	-	1.04
	WATER ELEV.	5.48	4.86	6.13	.64	4.0	6.35	4.97	2.52

ELEV. = Well Elevation Referenced To Mean Sea Level
DTP = Depth to Product
DTW = Depth to Water
NM = Not Measured
PT = Product Thickness
WATER ELEV. = Groundwater Elevation Referenced To Mean Sea Level

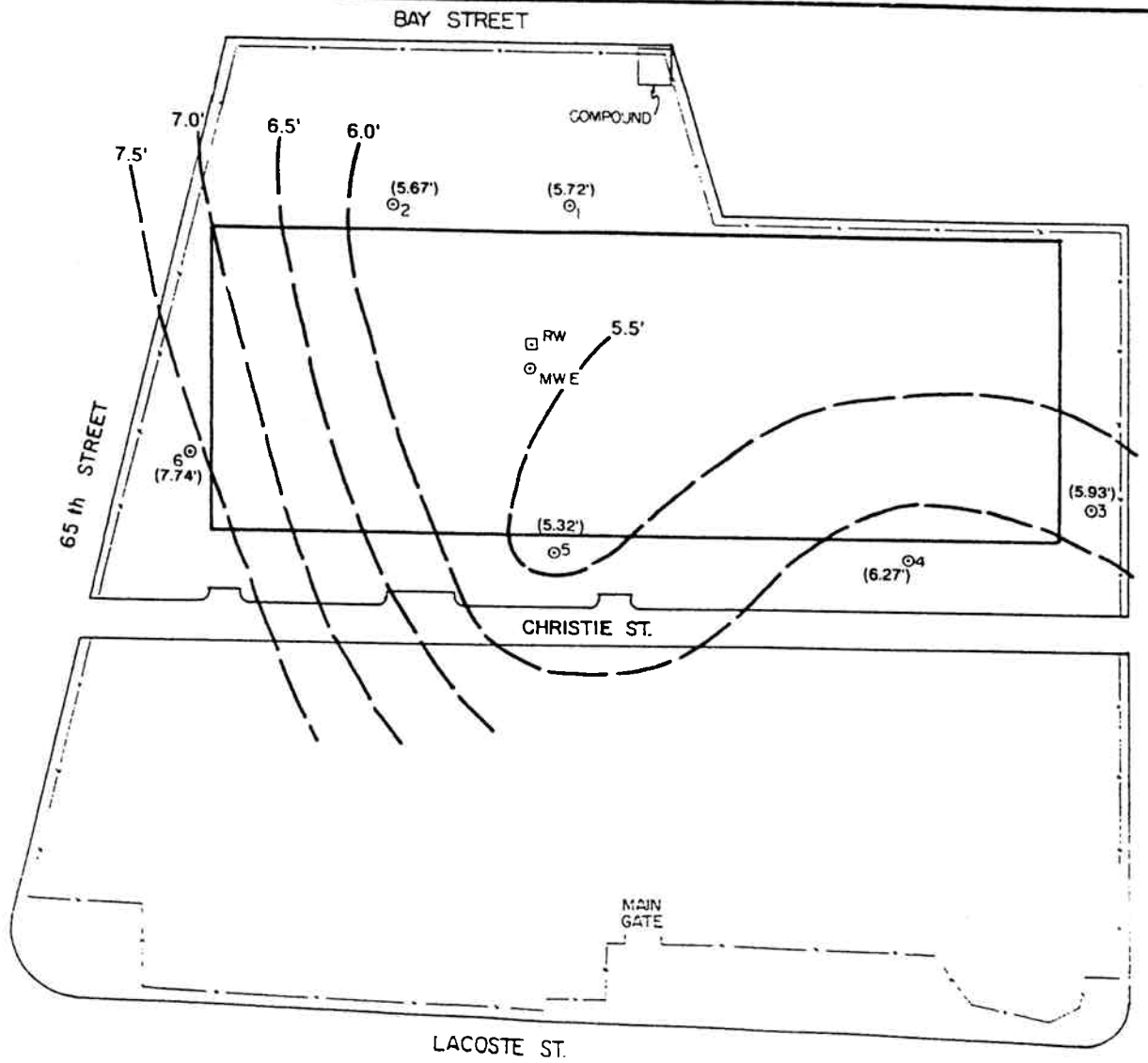


BAY CENTER
EMERYVILLE, CALIFORNIA

FIGURE 2
POTENTIOMETRIC SURFACE MAP
(2/6/91)

GROUNDWATER TECHNOLOGY, INC.

ML 3/91



LEGEND
- ⊙ MONITORING WELL
- ⊡ RECOVERY WELL
- ( ) GROUNDWATER ELEVATION

BAY CENTER
EMERYVILLE, CALIFORNIA

FIGURE 3
POTENTIOMETRIC SURFACE MAP
(2/26/90)

0 FEET 200

ML 4/90

GROUNDWATER TECHNOLOGY, INC

TABLE 2

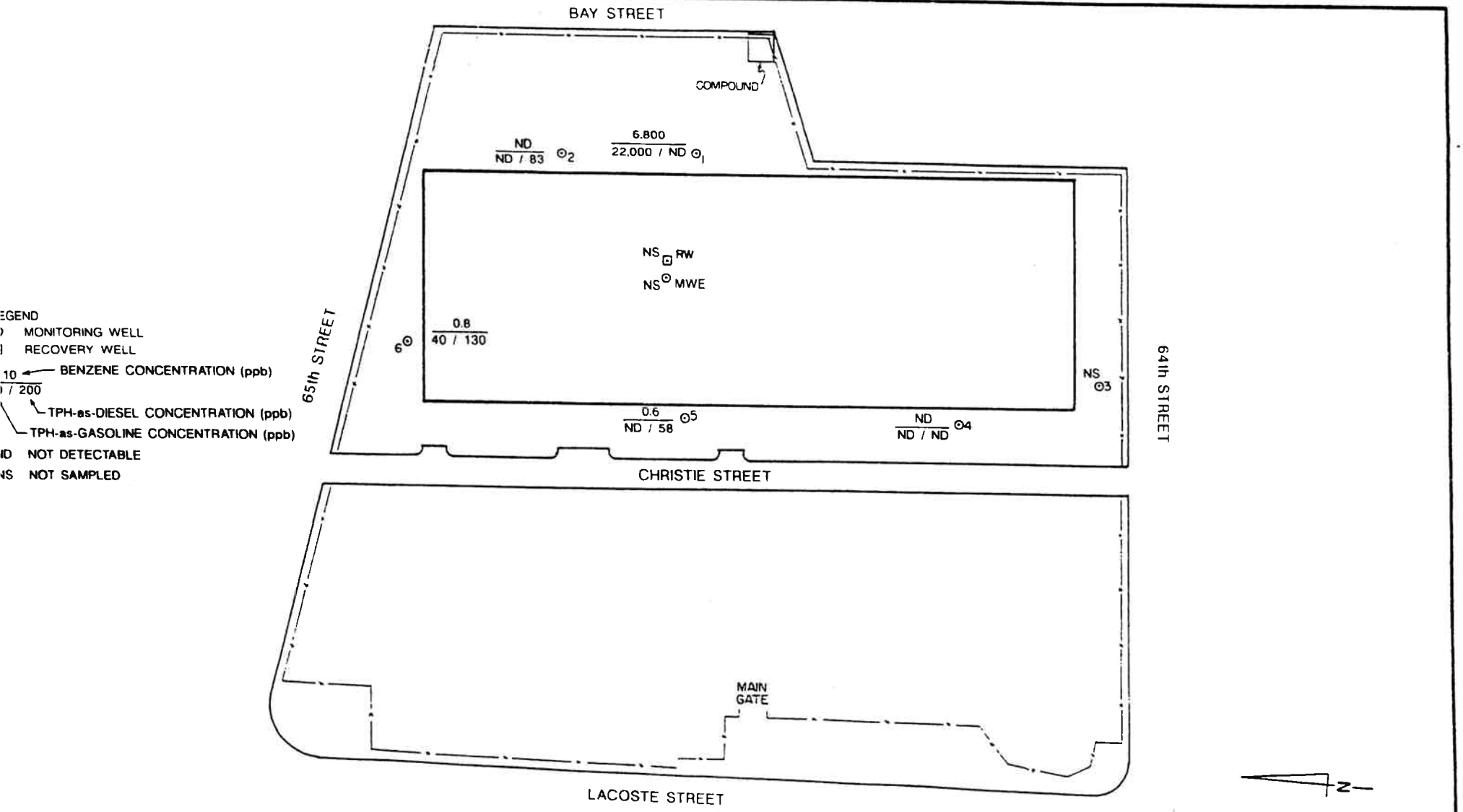
RESULTS OF MONITORING WELL SAMPLING

February 6, 1991

(concentrations in parts per billion)

	MW-1	MW-2	MW-4	MW-5	MW-6
ANTIMONY	<500	<500	<500	<500	<500
ARSENIC	11	<5	<5	5	16
BERYLLIUM	<20	<20	<20	<20	<20
CADMIUM	<20	<20	<20	<20	<20
CHROMIUM, TOTAL	<20	<20	<20	<20	<20
COPPER	<40	<40	<40	<40	<40
LEAD	11	8	7	<5	11
MERCURY	0.2	1.1	<0.2	<0.2	<0.2
NICKEL	<70	<70	<70	<70	<70
SELENIUM	<10	<10	<10	<10	<10
SILVER	<500	<500	<500	<500	<500
THALLIUM	<200	<200	<200	<200	<200
ZINC	<40	<40	<40	<40	<40
TPH-AS-DIESEL	<10	83	<10	58	130
BENZENE	6,800	<0.3	<0.3	0.6	0.8
TOLUENE	3,500	<0.3	<0.3	<0.3	<0.3
ETHYLBENZENE	410	<0.3	<0.3	<0.3	<0.3
XYLENES	2,000	<0.6	<0.6	<0.6	<0.6
TPH-AS-GASOLINE	22,000	<10	<10	<10	40

Note:
TPH-as-gasoline = Total Petroleum Hydrocarbons-as-Gasoline



AY CENTER
MERYVILLE, CALIFORNIA

FIGURE 4
DISTRIBUTION OF DISSOLVED HYDROCARBON CONSTITUENTS
(2/6/91)

0 FEET 200

GROUNDWATER TECHNOLOGY, INC.

ML 3/91

OPERATION OF THE WATER TREATMENT SYSTEM

The groundwater-treatment system operated periodically throughout the reporting period. From December 5, 1990, to March 7, 1991, a total of 188,265 gallons of water were treated and discharged to the sanitary sewer. The system has been maintained at a flow rate of approximately 5.0 gallons per minute (gpm), which decreases occasionally due to sediment buildup within the filter systems. Adjustments are made to the system during site visits, which occur at a minimum of once every two weeks.

Operation of the water table depression pump (WTDP) has caused product to collect in the recovery well (RW-1). Currently, a 1-foot thick layer of product has collected in the recovery well. The product recovery pump was removed from the well on November 21, 1990, because it was no longer functioning. The pump was found to have degraded from contact with the corrosive groundwater. Installation of a new pump has been proposed. Currently, the product is being hand bailed, and is stored in the treatment compound in a 261-gallon double-walled tank. As of March 21, 1991, the system has not been functioning. The transfer pump failed due to calcium carbonate build-up. System start up has been rescheduled for April 25, 1991, at which time a new transfer pump and product pump should be available.

TREATMENT SYSTEM SAMPLE COLLECTION AND ANALYSIS

The water-treatment system was sampled a total of six times during the reporting period. Samples were collected for analyses under the parameters set by the EBMUD Wastewater Discharge Permit and the BAAQMD Air Discharge Permit for the facility. The sampling location points for the treatment system (Figure 5) are:

- The final carbon-filter effluent (Sample point No.SP-1)
- A point between the two carbon filters (No. SP-2)
- The air-stripper influent (No. SP-3)
- The air-stripper effluent (No. SP-4)

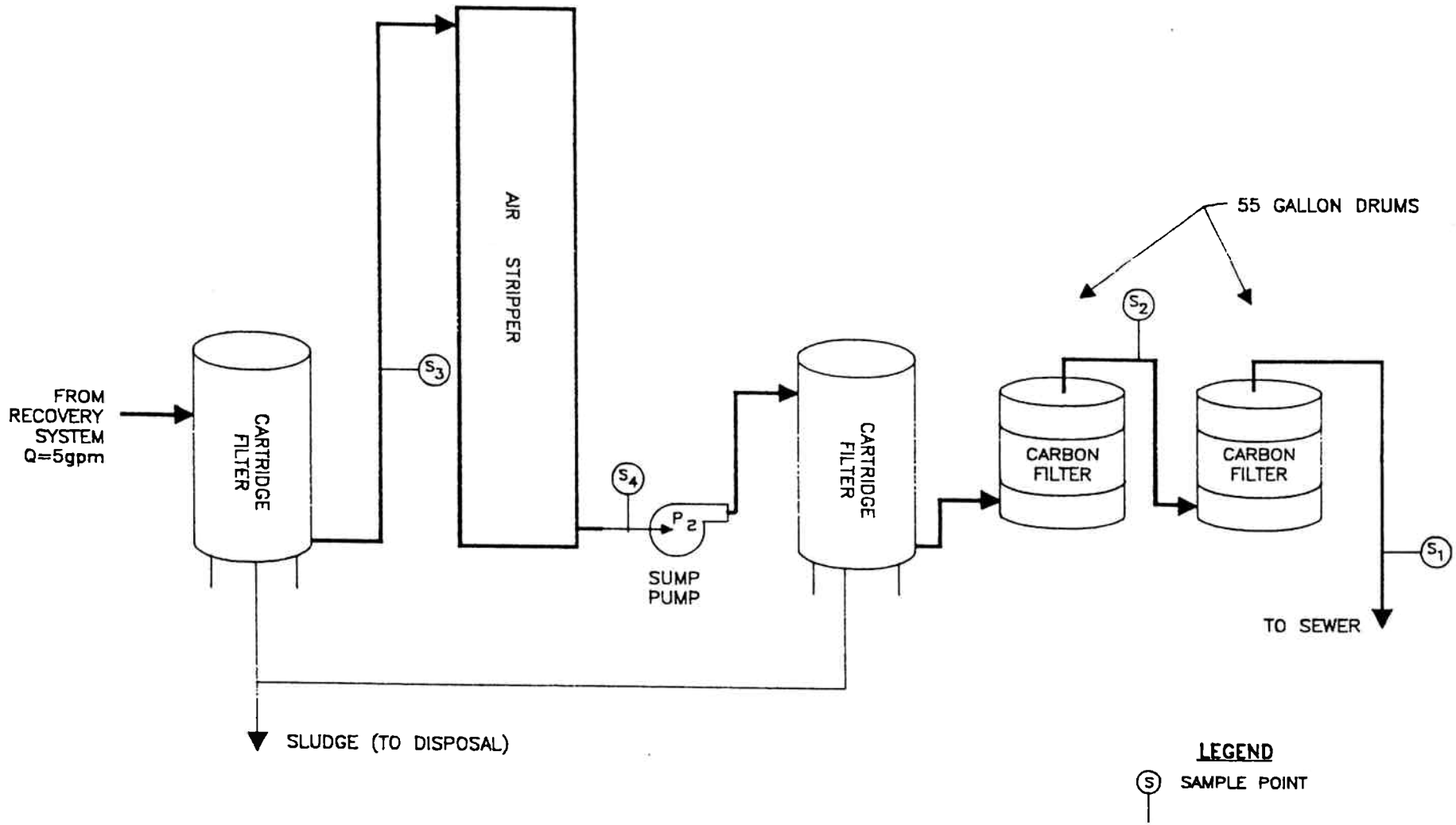


FIGURE 5. SAMPLING POINT LOCATIONS

BAY CENTER
EMERYVILLE, CALIFORNIA

GROUNDWATER TECHNOLOGY, INC.

During the sampling period, the samples from the influent-to and effluent-from the air stripper (sample points SP-3 and SP-4) and the carbon midpoint and final effluent-sample points (SP-2 and SP-1, respectively) were analyzed for the presence of chlorinated hydrocarbons and BTEX using a combined method for EPA Methods 601 (8010) and 602 (8020). Additionally, on March 8, 1991, the annual sampling of SP-1 for organochlorine pesticides using EPA Method 8080, organophosphorus pesticides, using EPA Method 8140, phenoxy acid pesticides, using EPA Method 8150, chlorinated dioxins, using EPA Method 8280, and lead by EPA Method 7421 were collected for analyses.

SUMMARY OF RESULTS

The analytical results for the samples from the treatment system are summarized in Table 3. Analytical results for samples of the influent to the air stripper (SP-3) showed varying concentrations of BTEX constituents (benzene concentrations varied between 34 ppb to 700 ppb). BTEX constituents were below method detection limits (MDL) during the six sampling events for the treatment system air-stripper effluent (SP-4).

Analytical results for the treatment-system effluent samples (SP-1) were below MDL for the reporting period and for all constituents analyzed for the annual sampling requirements indicating that break-through of the activated carbon has not occurred. Both of the carbon drums were changed on March 18, 1991. Laboratory reports and the Chain-of-Custody Manifest are included in Appendix B.

Samples of the treatment system effluent (SP-1) were collected by EBMUD on February 28, 1991. A letter dated March 29, 1991, was received from EBMUD documenting the analytical results of the sampling event. The water sample collected by EBMUD was collected from SP-1, the system effluent port. It was analyzed using EPA Method 624. No violations to the discharge permit were recorded.

VOLUME OF WASTEWATER DISCHARGED

The amount of water discharged to the sanitary sewer during the operating period was 188,265 gallons. The total amount of water discharged since discharging began on April 17, 1990, is 1,088,740 gallons.

TABLE 3

DETECTED CHEMICALS DURING WATER TREATMENT SYSTEM OPERATION

(December 1990 through March 1991)

(concentrations shown in parts per billion)

		SP-1	SP-2	SP-3	SP-4
DECEMBER 5, 1990	EPA METHOD 601/602				
	BENZENE	<0.3	<0.3	34	<0.3
	TOLUENE	<0.3	<0.3	2	<0.3
	ETHYLBENZENE	0.3	<0.3	2	<0.3
	XYLENES	<0.6	<0.6	22	2
DECEMBER 18, 1990	EPA METHOD 601/602				
	BENZENE	<0.5	<0.5	40	<0.5
	TOLUENE	<0.5	<0.5	1.5	<0.5
	ETHYLBENZENE	<0.5	<0.5	1	<0.5
	XYLENES	NA	NA	20	0.8
JANUARY 17, 1991	EPA METHOD 601/602				
	BENZENE	<0.3	1	700	2.1
	TOLUENE	0.3	1	14	1.4
	ETHYLBENZENE	<0.3	<0.3	5.9	<0.5
	XYLENES	<0.6	1	160	1.8
	DICHLOROETHENE	NA	NA	1.2	<0.5

ND = Not Detected
NA = Not Analyzed

TABLE 3

DETECTED CHEMICALS DURING WATER TREATMENT SYSTEM OPERATION

(December 1990 through March 1991)
(Continued)

(concentrations shown in parts per billion)

		SP-1	SP-2	SP-3	SP-4
FEBRUARY 6, 1991	**EPA METHOD 601/602**				
	BENZENE	<0.5	<0.5	310	<0.5
	TOLUENE	<0.5	<0.5	89	0.8
	ETHYLBENZENE	<0.5	<0.5	25	<0.5
	XYLENES	NA	NA	450	<0.5
FEBRUARY 21, 1991	**EPA METHOD 601/602**				
	BENZENE	<0.5	<0.5	344	<0.5
	TOLUENE	<0.5	<0.5	2	<0.5
	ETHYLBENZENE	<0.5	<0.5	1	<0.5
	XYLENES	NA	NA	15	<0.5
MARCH 8, 1991	**EPA METHOD 601/602**				
	BENZENE	<0.5	<0.5	60	<0.5
	TOLUENE	<0.5	<0.5	5	<0.5
	ETHYLBENZENE	<0.5	<0.5	<0.5	<0.5
	XYLENES	<0.5	<0.5	82	<0.5

ND = Not Detected
NA = Not Analyzed

TYPE AND VOLUME OF WASTE REMOVED FROM SITE

Groundwater Technology began operation of the product recovery pump in July 1990. On March 7, 1990, approximately 100 gallons of product had been collected in the product recovery tank. The contents of the tank will be periodically removed to a permitted disposal facility when the tank becomes approximately three-quarters full. To date, no waste materials generated from the treatment of groundwater have been removed from the site.

AIR PERMIT COMPLIANCE

Based upon the sample analytical results for the air-stripper influent sample collected on January 17, 1991 (which showed the highest concentrations (700 ppb benzene) of contaminants identified during the operating period), and assuming complete removal of the volatile organic compounds identified in the analyses, it is estimated that the system has released approximately 0.042 pounds-per-day of benzene and 0.053 lb/day of total BTEX. The maximum allowable limit for benzene is .20 lb/day, and 15.0 lb/day for total BTEX, as detected in the BAAQMD Permit-to-Operate for the facility. Therefore, the Bay Center treatment system releases of 0.42 benzene and 0.053 total BTEX are well below the allowable ranges.

CLOSURE

Groundwater Technology would like to thank The Martin Group for the opportunity to prepare this report. If you have any questions or require additional information, please contact our Concord office at (415) 671-2387.

APPENDIX A

REVISED EBMUD PERMIT

WASTEWATER DISCHARGE PERMIT
Terms and Conditions

EBMUD

Bay Center Apartment Associates
Account No. 500-54011
Page No. 1

APR 10 1991

STANDARD PROVISIONS AND REPORTING REQUIREMENTS CONDITIONS

Bay Center Apartment Associates shall comply with all provisions found in STANDARD PROVISIONS AND REPORTING REQUIREMENTS.

COMPLIANCE REPORTING CONDITIONS

Bay Center Apartment Associates shall immediately discontinue the discharge of any treated wastewater that is known to be, or suspected of, violating wastewater discharge limitations. This violation shall be reported, per Section B, Paragraph II of STANDARD PROVISIONS AND REPORTING REQUIREMENTS.

Bay Center Apartment Associates shall:

- Collect samples per the schedule found on Page 3.
- Submit quarterly reports due January 15, 1991, April 15, 1991, July 15, 1991 and October 15, 1991. Each report shall consist of:
  1. A summary of all self-monitoring and monitoring well results for samples that were collected during the reporting period;
  2. The estimated date that the primary carbon canister breakthrough will occur, using current loading data;
  3. Copies of the Facility Inspection Log. This log must include flow totalizer readings, comments on maintenance, operational changes, visual observations of the unit for leaks or fouling and offhaul of hazardous wastes.

WASTEWATER DISCHARGE PERMIT
Terms and Conditions

Bay Center Apartment Associates
Account No. 500-54011

WASTEWATER DISCHARGE LIMITATIONS

	REGULATED PARAMETER	DAILY MAXIMUM, mg/L
	Arsenic	2.0
	Cadmium	1.0
	Chlorinated Hydrocarbons (Total Identifiable)	0.5
—	Chromium	2.0
	Copper	5.0
	Cyanide	5.0
	Iron	100
	Lead	2.0
	Mercury	0.05
	Nickel	5.0
	Oil and Grease	100
	Phenolic compounds	100
	Silver	1.0
	Zinc	5.0
	pH (not less than)	5.5 S.U.
	Temperature	150°F
*	Benzene	0.005
*	Carbon tetrachloride	0.005
*	1,2-Dichloropropane	0.005
*	Ethylbenzene	0.005
*	Tetrachloroethene	0.042
*	Toluene	0.022
*	Xylenes	0.023
*	2,4-Dimethylphenol	0.005
*	1,2,4-Trichlorobenzene	0.005
*	1,4-Dichlorobenzene	0.005
*	N-Nitroso-di-n-propylamine	0.005
*	Acenaphthlene	0.028
*	Pyrene	0.005
*	2-Methylnaphthalene	0.005

SELF-MONITORING REPORTING REQUIREMENTS

I. Bay Center Apartment Associates shall obtain representative samples of the wastewater discharge. The sampling shall be performed according to the frequency and methods outlined below and according to the methods and requirements found in STANDARD PROVISIONS AND REPORTING REQUIREMENTS.

II. Self-monitoring Reports shall be submitted quarterly and must contain:

1. The laboratory results;
2. The Chain-of-Custody.

III. Sample point SP-1, also known as side sewer no. 1, shall be the sample tap located on the effluent side of the second carbon vessel. Sample point SP-2 shall be the sample tap located intermediate of the two carbon. Sample point SP-3 shall be the sample tap located on the influent side of the air stripper column. Sample point SP-4 shall be the sample tap located on the influent side of the first carbon vessel.

IV. Collect one grab sample each month from sampling points SP-1, SP-2, SP-3 and SP-4. Analyze each sample for EPA 8020, BTEX.

V. During the January 1991 sampling event, analyze the SP-1 sample for EPA 8080 (Organochlo Pesticides), EPA 8140 (Organophos Pesticides), EPA 8150 (Pheno Acid Pesticides), EPA 8270 (Semi-volatile organics), EPA 8280 (Chlorinated Dioxins) and EPA 7420 (Lead). During the April, July and October, 1991 sampling events, analyze the SP-1 sample for EPA 8270 (Semi-volatile organics).

All samples must be obtained using containers, collection methods, preservation techniques, holding times and analytical methods as specified in EPA SW-846.

MONITORING and TESTING CHARGES

Total EBMUD Inspections Per Year 6 @ $465.00 each = $ 2790.00 / year

Total Analyses Per Year:

Parameter	Tests per year	Charge per test	Total Charge per year
EPA 608	2	288.20	576.40
EPA 624	6	360.25	2161.50
EPA 625	2	662.85	1325.70

Monitoring and Testing Charge = $ 6853.60 / year

= $ 571.13 / month

EBMUD

Terms and Conditions
Wastewater Discharge Permit

Bay Center Apartment Associates
Account No. 500-54011

FEES AND WASTEWATER CHARGES

The following fees and charges are due when billed by the District:

Permit Fee	$ 1600.00
Monthly Monitoring Charges	$ 571.13

WASTEWATER DISPOSAL SERVICE CHARGE

Wastewater strength is similar to other facilities with the same Business Classification Code (BCC). All wastewater discharged will be charged for treatment and disposal service at this unit rate. Wastewater charges are determined by multiplying the metered consumption by the percent discharged, adding any fixed volume, and multiplied by the treatment charge.

Meter No.	BCC	Treatment Charge	Description
30790902	6513	67 ¢/Ccf	Apartment Buildings

Account Number	Meter Number	Units	Conversion Factor	Percent Discharged	Fixed Volume Ccf/month	Total Rate ¢/Ccf
500-54011	30790902	Ccf	1.0	100.0%	80	67

This Permit may be amended to include changes to rates and charges which may be established by the District during the term of this Permit.

AVERAGE WASTEWATER DISCHARGE*

LAST 12 MONTHS	PRECEDING 12-24 MONTHS
4,900	NA

*Gallons per calendar day.

AUTHORIZATION

The above named Applicant is hereby authorized to discharge wastewater to the community sewer, subject to said Applicant's compliance with the EBMUD Wastewater Control Ordinance, compliance conditions, reporting requirements and billing conditions.

Effective Date: December 13, 1990

Expiration Date: January 9, 1991

Walter J. Bailey 11/9/90
MANAGER, WASTEWATER DEPARTMENT DATE

SD-30.2 • 8/86

EAST BAY MUNICIPAL UTILITY DISTRICT

APPENDIX B

GROUNDWATER LABORATORY REPORTS

GTEL
ENVIRONMENTAL
LABORATORIES, INC.

Northwest Region
4080 Pike Lane
Concord, CA 94520
(415) 685-7852
(800) 544-3422 from inside California
(800) 423-7143 from outside California

Client Number: 203-799-8200.02
Project ID: Emeryville, CA
Work Order Number: C1-03-205

March 29, 1991

Sandra Lindsey
Groundwater Technology, Inc.
4057 Port Chicago Hwy.
Concord, CA 94520

Enclosed please find the analytical results report prepared by GTEL for samples received on 03/08/91, under chain of custody number 72-10304.

GTEL is certified by the California State Department of Health Services to perform analyses for drinking water, wastewater, and hazardous waste materials according to EPA protocols.

A formal quality control/quality assurance program is maintained by GTEL, which is designed to meet or exceed the EPA requirements. Analytical work for this project was performed in strict adherence to our QA/QC program to ensure sample integrity and to meet quality control criteria.

If you have any questions concerning this analysis or if we can be of further assistance, please call our Customer Service Representative.

Sincerely,
GTEL Environmental Laboratories, Inc.

Emma P. Popek
Laboratory Director

Client Number: 203-799-8200.02
Project ID: Emeryville, CA
Work Order Number: C1-03-205

Table 1

ANALYTICAL RESULTS

Chlorinated Herbicides in Water

EPA Method 615

GTEL Sample Number		01			
Client Identification		SP1			
Date Sampled		03/08/91			
Date Analyzed		03/15/91			
Analyte	Detection Limit, ug/L	Concentration, ug/L			
2,4-D	1.2	< 1.2			
2,4-DB	0.9	< 0.9			
2,4,5-T	0.2	< 0.2			
2,4,5-TP	0.2	< 0.2			
Dalapon	6	< 6			
Dicamba	0.3	< 0.3			
Dichloroprop	0.65	< 0.65			
Dinoseb	0.07	< 0.07			
MCPA	250	< 250			
MCPP	200	< 200			
Detection Limit Multiplier		1			

GTEL
ENVIRONMENTAL
LABORATORIES, INC.

Northwest Region
4080 Pike Lane
Concord, CA 94520
(415) 685-7852
(800) 544-3422 from inside California
(800) 423-7143 from outside California

Client Number: 203-799-8200.02
Project ID: Emeryville, CA
Work Order Number: C1-03-204

March 28, 1991

Sandra Lindsey
Groundwater Technology, Inc.
4057 Port Chicago Hwy.
Concord, CA 94520

Enclosed please find the analytical results report prepared by GTEL for samples received on 03/08/91, under chain of custody number 72-10304.

GTEL is certified by the California State Department of Health Services to perform analyses for drinking water, wastewater, and hazardous waste materials according to EPA protocols.

A formal quality control/quality assurance program is maintained by GTEL, which is designed to meet or exceed the EPA requirements. Analytical work for this project was performed in strict adherence to our QA/QC program to ensure sample integrity and to meet quality control criteria.

If you have any questions concerning this analysis or if we can be of further assistance, please call our Customer Service Representative.

Sincerely,
GTEL Environmental Laboratories, Inc.

Emma P. Popek
Laboratory Director

Table 1

ANALYTICAL RESULTS

Organophosphate Pesticides in Water

EPA Method 8140[a]

GTEL Sample Number		01			
Client Identification		SP1			
Date Sampled		03/08/91			
Date Analyzed		03/26/91			
Analyte	Quantitation Limit, ug/L	Concentration, ug/L			
Azinphos, methyl	15	<15			
Bolstar	2	<2			
Chlorpyrifos	3	<3			
Demeton-S	3	<3			
Diazinon	6	<6			
Dichlorvos	1	<1			
Disulfoton	2	<2			
Ethoprop	3	<3			
Fensulfothion	15	<15			
Fenthion	1	<1			
Merphos	3	<3			
Mevinphos	3	<3			
Naled	1	<1			
Parathion, methyl	1	<1			
Phorate	2	<2			
Ronnel	3	<3			
Stirophos	5	<5			
Malathion	1	<1			
Parathion	1	<1			
Ethion	1	<1			
Quantitation Limit Multiplier		1			

a. Test Methods for Evaluating Solid Waste, SW-846, Third Edition, Revision 0, US EPA November 1986.

GTEL
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LABORATORIES, INC.

Northwest Region
4080 Pike Lane
Concord, CA 94520
(415) 685-7852
(800) 544-3422 from inside California
(800) 423-7143 from outside California

Client Number: 203-799-8200.02
Project ID: Emeryville, CA
Work Order Number: C1-03-203

March 14, 1991

Sandra Lindsey
Groundwater Technology, Inc.
4057 Port Chicago Hwy.
Concord, CA 94520

Enclosed please find the analytical results report prepared by GTEL for samples received on 03/08/91, under chain of custody number 72-10304.

GTEL is certified by the California State Department of Health Services to perform analyses for drinking water, wastewater, and hazardous waste materials according to EPA protocols.

A formal quality control/quality assurance program is maintained by GTEL, which is designed to meet or exceed the EPA requirements. Analytical work for this project was performed in strict adherence to our QA/QC program to ensure sample integrity and to meet quality control criteria.

If you have any questions concerning this analysis or if we can be of further assistance, please call our Customer Service Representative.

Sincerely,
GTEL Environmental Laboratories, Inc.

Emma P. Popek
Laboratory Director

Client Number: 203-799-8200.02
Project ID: Emeryville, CA
Work Order Number: C1-03-203

Table 1

ANALYTICAL RESULTS

Lead in Water

EPA Method 7421[a]

a. Test Methods for Evaluating Solid Waste, SW-846, Third Edition, Revision 0, US EPA November 1986. Sample preparation by EPA Method 3020.

GTEL Sample Number		01			
Client Identification		SP1			
Date Sampled		03/08/91			
Date Prepared		03/12/91			
Date Analyzed		03/12/91			
Analyte	Detection Limit, ug/L	Concentration, ug/L			
Lead, total	5	<5			
Detection Limit Multiplier		1			

GTEL ENVIRONMENTAL LABORATORIES, INC.

GTEL
ENVIRONMENTAL
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Northwest Region
4080 Pike Lane
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(415) 685-7852
(800) 544-3422 from inside California
(800) 423-7143 from outside California

Client Number: 203-799-8200.02
Project ID: Emeryville, CA
Work Order Number: C1-03-201

March 29, 1991

Sandra Lindsey
Groundwater Technology, Inc.
4057 Port Chicago Hwy.
Concord, CA 94520

Enclosed please find the analytical results report prepared by GTEL for samples received on 03/08/91, under chain of custody number 72-10304.

GTEL is certified by the California State Department of Health Services to perform analyses for drinking water, wastewater, and hazardous waste materials according to EPA protocols.

A formal quality control/quality assurance program is maintained by GTEL, which is designed to meet or exceed the EPA requirements. Analytical work for this project was performed in strict adherence to our QA/QC program to ensure sample integrity and to meet quality control criteria.

If you have any questions concerning this analysis or if we can be of further assistance, please call our Customer Service Representative.

Sincerely,
GTEL Environmental Laboratories, Inc.

Emma P. Popek
Laboratory Director

Table 1

ANALYTICAL RESULTS

Pesticides and Polychlorinated Biphenyls in Water

EPA Method 608[a]

GTEL Sample Number		01			
Client Identification		SP1			
Date Sampled		03/08/91			
Date Extracted		03/15/91			
Date Analyzed		03/25/91			
Analyte	Detection Limit, ug/L	Concentration, ug/L			
Aldrin	0.01	< 0.01			
a-BHC	0.01	< 0.01			
b-BHC	0.05	< 0.05			
d-BHC	0.05	< 0.05			
g-BHC	0.01	< 0.01			
Chlordane	0.05	< 0.05			
4,4'-DDD	0.02	< 0.02			
4,4'-DDE	0.01	< 0.01			
4,4'-DDT	0.02	< 0.02			
Dieldrin	0.05	< 0.05			
Endosulfan I	0.01	< 0.01			
Endosulfan II	0.05	< 0.05			
Endosulfan sulfate	0.05	< 0.05			
Endrin	0.01	< 0.01			
Endrin aldehyde	0.05	< 0.05			
Heptachlor	0.02	< 0.02			
Hepthachlor epoxide	0.1	< 0.1			
Methoxychlor	0.01	< 0.01			
Toxaphene	0.5	< 0.5			
PCB-1016	0.1	< 0.1			
PCB-1221	0.1	< 0.1			
PCB-1232	0.1	< 0.1			
PCB-1242	0.1	< 0.1			
PCB-1248	0.1	< 0.1			
PCB-1254	0.1	< 0.1			
PCB-1260	0.1	< 0.1			
Detection Limit Multiplier		1			

a. Federal Register, Vol. 49, October 26, 1984.

GTEL
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LABORATORIES, INC.

Northwest Region
4080 Pike Lane
Concord, CA 94520
(415) 685-7852
(800) 544-3422 from inside California
(800) 423-7143 from outside California

Client Number: 203-799-8200.02
Project ID: Emeryville, CA
Work Order Number: C1-03-200

March 21, 1991

Sandra Lindsey
Groundwater Technology, Inc.
4057 Port Chicago Hwy.
Concord, CA 94520

Enclosed please find the analytical results report prepared by GTEL for samples received on 03/08/91, under chain of custody number 72-10304.

GTEL is certified by the California State Department of Health Services to perform analyses for drinking water, wastewater, and hazardous waste materials according to EPA protocols.

A formal quality control/quality assurance program is maintained by GTEL, which is designed to meet or exceed the EPA requirements. Analytical work for this project was performed in strict adherence to our QA/QC program to ensure sample integrity and to meet quality control criteria.

If you have any questions concerning this analysis or if we can be of further assistance, please call our Customer Service Representative.

Sincerely,
GTEL Environmental Laboratories, Inc.

Emma P. Popek
Laboratory Director

Table 1

ANALYTICAL RESULTS

Purgeable Aromatics in Water

EPA Method 602[a]

GTEL Sample Number		01	02		
Client Identification		SP1	SP2		
Date Sampled		03/08/91	03/08/91		
Date Analyzed		03/12/91	03/12/91		
Analyte	Detection Limit, ug/L	Concentration, ug/L			
Benzene	0.5	<0.5	<0.5		
Toluene	0.5	<0.5	<0.5		
Ethylbenzene	0.5	<0.5	<0.5		
Xylene, total	0.5	<0.5	<0.5		
Chlorobenzene	0.5	<0.5	<0.5		
1,2-Dichlorobenzene	0.5	<0.5	<0.5		
1,3-Dichlorobenzene	0.5	<0.5	<0.5		
1,4-Dichlorobenzene	0.5	<0.5	<0.5		
Detection Limit Multiplier		1	1		

a. Federal Register, Vol. 49, October 26, 1984.

GTEL
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4080 Pike Lane
Concord, CA 94520
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(800) 544-3422 from inside California
(800) 423-7143 from outside California

Client Number: 203-799-8200.02
Project ID: Emeryville, CA
Work Order Number: C1-03-199

March 22, 1991

Sandra Lindsey
Groundwater Technology, Inc.
4057 Port Chicago Hwy.
Concord, CA 94520

Enclosed please find the analytical results report prepared by GTEL for samples received on 03/08/91, under chain of custody number 72-10304.

GTEL is certified by the California State Department of Health Services to perform analyses for drinking water, wastewater, and hazardous waste materials according to EPA protocols.

A formal quality control/quality assurance program is maintained by GTEL, which is designed to meet or exceed the EPA requirements. Analytical work for this project was performed in strict adherence to our QA/QC program to ensure sample integrity and to meet quality control criteria.

If you have any questions concerning this analysis or if we can be of further assistance, please call our Customer Service Representative.

Sincerely,
GTEL Environmental Laboratories, Inc.

Emma P. Popek
Laboratory Director

GTEL ENVIRONMENTAL LABORATORIES, INC

4080- Pike Lane
Concord, CA 94520
415-685-7852

800-544-3422 (In CA)
800-423-7143 (Outside CA)

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

72- 12306

CUSTODY RECORD

Project Manager: Sandra Lindsey
Phone #:
FAX #:
Address: GTI Livermore
Site location: Livermore, CA.
Project Number: 203749820.02
Project Name: Bay Center
Sampler Name (Print): Brenda Fleury

I attest that the proper field sampling procedures were used during the collection of these samples.

Field Sample ID	Source of Sample	GTEL Lab # (Lab use only)	Matrix: SOIL / AIR / SLUDGE / OTHER	# CONTAINERS	Method Preserved: HCl / HNO_3 / H_2SO_4 / ICE / NONE / OTHER	Sampling: DATE / TIME
SP1				2		
SP2				2		
SP4				2		
				2		
				2		
				2		
				2		
				2		
				2		
				2		
				2		

SPECIAL HANDLING

24 HOURS ☐
EXPEDITED 48 Hours ☐
SEVEN DAY ☐
OTHER _____ (#) BUSINESS DAYS
QA/QC CLP Level ☐ Blue Level ☐
FAX ☐

SPECIAL DETECTION LIMITS (Specify)

SPECIAL REPORTING REQUIREMENTS (Specify)

REMARKS:

Lab Use Only
Storage Location
Lot #:
Work Order #:

ANALYSIS REQUEST

- BTEX 602 ☐ 8020 ☐ with MTBE ☐
- BTEX/TPH Gas 602/8015 ☐ 8020/8015 ☐ MTBE ☐
- TPH as ☐ Gas ☐ Diesel ☐ Jet Fuel
- Product I.D. by GC (SIMDIS) ☐
- Total Oil & Grease 413.1 ☐ 413.2 ☐ 503A ☐
- Total Petroleum Hydrocarbons: 418.1 ☐ 503E ☐
- EPA 601 ☐ 8010 ☐ DCA only ☐
- EPA 602 ☐ 8020 ☐
- EPA 608 ☐ 8080 ☐ PCBs only ☐
- EPA 610 ☐ 8310 ☐
- EPA 624 ☐ 8240 ☐ NBS +15 ☐
- EPA 625 ☐ 8270 ☐ NBS +25 ☐
- EPTOX: Metals ☐ Pesticides ☐ Herbicides ☐
- TCLP Metals ☐ VOA ☐ Semi VOA ☐
- EPA Priority Pollutant Metals ☐ HSL ☐
- LEAD 7420 ☐ 7421 ☐ 239.2 ☐ 6010 ☐ Org. Lead ☐
- CAM Metals ☐ STLC ☐ TTLC ☐
- Corrosivity ☐ Flashpoint ☐ Reactivity ☐

	Relinquished by Sampler:	Relinquished by:	Relinquished by:	Received by Laboratory:
Date	2/22/91	4/22/91		2/22/91
Time	8:20			8:30
		Received by:		Way bill #

Client Number: 203-799-8200.02
Project ID: Emeryville, CA
Work Order Number: C1-02-437

Table 1

ANALYTICAL RESULTS

Purgeable Aromatics in Water

EPA Method 602[a]

GTEL Sample Number		01	02		
Client Identification		SP 1	SP 2		
Date Sampled		02/21/91	02/21/91		
Date Analyzed		02/26/91	02/26/91		
Analyte	Detection Limit, ug/L	Concentration, ug/L			
Benzene	0.5	<0.5	<0.5		
Toluene	0.5	<0.5	<0.5		
Ethylbenzene	0.5	<0.5	<0.5		
Xylene, total	0.5	<0.5	<0.5		
Chlorobenzene	0.5	<0.5	<0.5		
1,2-Dichlorobenzene	0.5	<0.5	<0.5		
1,3-Dichlorobenzene	0.5	<0.5	<0.5		
1,4-Dichlorobenzene	0.5	<0.5	<0.5		
Detection Limit Multiplier		1	1		

a. Federal Register, Vol. 49, October 26, 1984.

Table 1

ANALYTICAL RESULTS

Volatile Halocarbons and Aromatics in Water

EPA Methods 601 and 602[a]

GTEL Sample Number		01	02		
Client Identification		SP3	SP4		
Date Sampled		03/08/91	03/08/91		
Date Analyzed		03/12/91	03/12/91		
Analyte	Detection Limit, ug/L	Concentration, ug/L			
Chloromethane	0.5	<0.5	<0.5		
Bromomethane	0.5	<0.5	<0.5		
Vinyl chloride	1	<1	<1		
Chloroethane	0.5	<0.5	<0.5		
Methylene chloride	0.5	<0.5	<0.5		
1,1-Dichloroethene	0.2	<0.2	<0.2		
1,1-Dichloroethane	0.5	<0.5	<0.5		
1,2-Dichloroethene	0.5	<0.5	<0.5		
Chloroform	0.5	<0.5	<0.5		
1,2-Dichloroethane	0.5	<0.5	<0.5		
1,1,1-Trichloroethane	0.5	<0.5	<0.5		
Carbon tetrachloride	0.5	<0.5	<0.5		
Bromodichloromethane	0.5	<0.5	<0.5		
1,2-Dichloropropane	0.5	<0.5	<0.5		
cis-1,3-Dichloropropene	0.5	<0.5	<0.5		
Trichloroethene	0.5	<0.5	<0.5		
Dichlorodifluoromethane	0.5	<0.5	<0.5		
Dibromochloromethane	0.5	<0.5	<0.5		
1,1,2-Trichloroethane	0.5	<0.5	<0.5		
trans-1,3-Dichloropropene	0.5	<0.5	<0.5		
2-Chloroethylvinyl ether	1	<1	<1		
Bromoform	0.5	<0.5	<0.5		
Tetrachloroethene	0.5	<0.5	<0.5		
1,1,2,2-Tetrachloroethane	0.5	<0.5	<0.5		
Chlorobenzene	0.5	<0.5	<0.5		
1,2-Dichlorobenzene	0.5	<0.5	<0.5		
1,3-Dichlorobenzene	0.5	<0.5	<0.5		
1,4-Dichlorobenzene	0.5	<0.5	<0.5		
Trichlorofluoromethane	0.5	<0.5	<0.5		
Benzene	0.5	60	<0.5		
Toluene	0.5	5	<0.5		
Ethylbenzene	0.5	<0.5	<0.5		
Xylenes, total	0.5	82	<0.5		
Detection Limit Multiplier		1	1		

a. Federal Register, Vol. 49, October 26, 1984.

GTEL ENVIRONMENTAL LABORATORIES, INC.

4080- Pike Lane
Concord, CA 94520
415-685-7852

800-544-3422 (In CA)
800-423-7143 (Outside CA)

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST 72- 10304

Project Manager: Sandra Lindsey
Phone #:
FAX #:
Address: GTI Concord
Site location: Emeryville
Project Number: 203 799 8200.02
Project Name: Bay Center
I attest that the proper field sampling procedures were used during the collection of these samples.
Sampler Name (Print): Brennen Fleener

ANALYSIS REQUEST

Field Sample ID	Source of Sample	GTEL Lab # (Lab use only)	# CONTAINERS	Matrix: WATER	SOIL	AIR	SLUDGE	OTHER	Method Preserved: HCl	HNO_3	H_2SO_4	ICE	NONE	OTHER	Sampling: DATE	TIME	BTEX 602 ☐ 8020 ☐ with MTBE ☐	BTEX/TPH Gas 602/8015 ☐ 8020/8015 ☐ MTBE ☐	TPH as ☐ Gas ☐ Diesel ☐ Jet Fuel	Product I.D. by GC (SIMDIS) ☐	Total Oil & Grease: 413.1 ☐ 413.2 ☐ 503A ☐	Total Petroleum Hydrocarbons 418.1 ☐ 503E ✓	EPA 601 ☐ 8010 ☐ (8020 SERIES)	EPA 602 ☐ 8020 ☐	EPA 608 ☐ 8080 ☐ PCBs only ☐	EPA 610 ☐ 8310 ☐	EPA 624 ☐ 8240 ☐ NBS +15 ☐	EPA 625 ☐ 8270 ☐ NBS +25 ☐	EPTOX: Metals ☐ Pesticides ☐ Herbicides ☐	TCLP Metals ☐ VOA ☐ Semi VOA ☐	EPA Priority Pollutant Metals ☐ HSL ☐	LEAD 7420 ☐ 7421 ☐ 239.2 ☐ 6010 ☐ Org. Lead ☐	CAM Metals ☐ STLC ☐ TTLC	Corrosivity ☐ Flashpoint ☐ Reactivity ☐	8140	8150	8280
SP1			2	✓											3/8/91								[scribbled out]	✓													
SP1			1	✓																												✓					
SP1			4	✓																					✓										✓	✓	✓
SP2			2	✓																				✓													
SP3		01	2	✓																			✓														
SP4		02	2	✓																			✓														
SP4			1	✓																								✓									

CUSTODY RECORD

Relinquished by Sampler: Brennen F.	Date 3/8/91	Time 1600	Received by:
Relinquished by:	Date	Time	Received by:
Relinquished by:	Date 3/8	Time 1600	Received by Laboratory: W Bohannan

Way bill #

JBox

SPECIAL HANDLING

24 HOURS ☐
EXPEDITED 48 Hours ☐
SEVEN DAY ☐
OTHER ________(#) BUSINESS DAYS
QA/QC CLP Level ☐ Blue Level ☐
FAX ☐

SPECIAL DETECTION LIMITS (Specify)

SPECIAL REPORTING REQUIREMENTS (Specify)

REMARKS:

Lab Use Only
Storage Location
Lot #:
Work Order #:

MA 3/18/91

GTEL
ENVIRONMENTAL
LABORATORIES, INC.

Northwest Region
4080 Pike Lane
Concord, CA 94520
(415) 685-7852
(800) 544-3422 from inside California
(800) 423-7143 from outside California

Client Number: 203-799-8200.02
Project ID: Emeryville, CA
Work Order Number: C1-02-438

March 11, 1991

Sandra Lindsey
Groundwater Technology, Inc.
4057 Port Chicago Hwy.
Concord, CA 94520

Enclosed please find the analytical results report prepared by GTEL for samples received on 02/22/91, under chain of custody number 72-12306.

GTEL is certified by the California State Department of Health Services to perform analyses for drinking water, wastewater, and hazardous waste materials according to EPA protocols.

A formal quality control/quality assurance program is maintained by GTEL, which is designed to meet or exceed the EPA requirements. Analytical work for this project was performed in strict adherence to our QA/QC program to ensure sample integrity and to meet quality control criteria.

If you have any questions concerning this analysis or if we can be of further assistance, please call our Customer Service Representative.

Sincerely,
GTEL Environmental Laboratories, Inc.

Emma P. Popek
Laboratory Director

Table 1

ANALYTICAL RESULTS

Purgeable Halocarbons in Water

EPA Method 601[a]

GTEL Sample Number		01	02		
Client Identification		SP 3	SP 4		
Date Sampled		02/21/91	02/21/91		
Date Analyzed		02/28/91	02/28/91		
Analyte	Detection Limit, ug/L	Concentration, ug/L			
Chloromethane	0.5	<0.5	<0.5		
Bromomethane	0.5	<0.5	<0.5		
Vinyl chloride	1	<1	<1		
Chloroethane	0.5	<0.5	<0.5		
Methylene chloride	0.5	<0.5	<0.5		
1,1-Dichloroethene	0.2	<0.2	<0.2		
1,1-Dichloroethane	0.5	<0.5	<0.5		
1,2-Dichloroethene	0.5	<0.5	<0.5		
Chloroform	0.5	<0.5	<0.5		
1,2-Dichloroethane	0.5	<0.5	<0.5		
1,1,1-Trichloroethane	0.5	<0.5	<0.5		
Carbon tetrachloride	0.5	<0.5	<0.5		
Bromodichloromethane	0.5	<0.5	<0.5		
1,2-Dichloropropane	0.5	<0.5	<0.5		
cis-1,3-Dichloropropene	0.5	<0.5	<0.5		
Trichloroethene	0.5	<0.5	<0.5		
Dichlorodifluoromethane	0.5	<0.5	<0.5		
Dibromochloromethane	0.5	<0.5	<0.5		
1,1,2-Trichloroethane	0.5	<0.5	<0.5		
trans-1,3-Dichloropropene	0.5	<0.5	<0.5		
2-Chloroethylvinyl ether	1	<1	<1		
Bromoform	0.5	<0.5	<0.5		
Tetrachloroethene	0.5	<0.5	<0.5		
1,1,2,2-Tetrachloroethane	0.5	<0.5	<0.5		
Chlorobenzene	0.5	<0.5	<0.5		
1,2-Dichlorobenzene	0.5	<0.5	<0.5		
1,3-Dichlorobenzene	0.5	<0.5	<0.5		
1,4-Dichlorobenzene	0.5	<0.5	<0.5		
Trichlorofluoromethane	0.5	<0.5	<0.5		
Benzene	0.5	34	<0.5		
Toulene	0.5	2	<0.5		
Ethylbenzene	0.5	1	<0.5		
Xylenes, Total	0.5	15	<0.5		
Detection Limit Multiplier		1	1		

a. Federal Register, Vol. 49, October 26, 1984.

GTEL
ENVIRONMENTAL
LABORATORIES, INC.

Northwest Region
4080 Pike Lane
Concord, CA 94520
(415) 685-7852
(800) 544-3422 from inside California
(800) 423-7143 from outside California

Client Number: 203-799-8200.02
Project ID: Emeryville, CA
Work Order Number: C1-02-437

March 5, 1991

Sandra Lindsey
Groundwater Technology, Inc.
4057 Port Chicago Hwy.
Concord, CA 94520

Enclosed please find the analytical results report prepared by GTEL for samples received on 02/22/91, under chain of custody number 72-12306.

GTEL is certified by the California State Department of Health Services to perform analyses for drinking water, wastewater, and hazardous waste materials according to EPA protocols.

A formal quality control/quality assurance program is maintained by GTEL, which is designed to meet or exceed the EPA requirements. Analytical work for this project was performed in strict adherence to our QA/QC program to ensure sample integrity and to meet quality control criteria.

If you have any questions concerning this analysis or if we can be of further assistance, please call our Customer Service Representative.

Sincerely,
GTEL Environmental Laboratories, Inc.

Emma P. Popek
Laboratory Director

GTEL
ENVIRONMENTAL
LABORATORIES, INC.
Northwest Region
4080 Pike Lane
Concord, CA 94520
(415) 685-7852
(800) 544-3422 from inside California
(800) 423-7143 from outside California

Client Number: 203-799-8200.02
Project ID: Emeryville
Work Order Number: C1-02-153

February 15, 1991

Sandra Lindsey
Groundwater Technology, Inc.
4057 Port Chicago Hwy.
Concord, CA 94520

Enclosed please find the analytical results report prepared by GTEL for samples received on 02/07/91, under chain of custody number 72-16423 through 72-16425.

GTEL is certified by the California State Department of Health Services to perform analyses for drinking water, wastewater, and hazardous waste materials according to EPA protocols.

A formal quality control/quality assurance program is maintained by GTEL, which is designed to meet or exceed the EPA requirements. Analytical work for this project was performed in strict adherence to our QA/QC program to ensure sample integrity and to meet quality control criteria.

If you have any questions concerning this analysis or if we can be of further assistance, please call our Customer Service Representative.

Sincerely,
GTEL Environmental Laboratories, Inc.

Emma P. Popek
Laboratory Director

Client Number: 203-799-8200.02
Project ID: Emeryville
Work Order Number: C1-02-153

Table 1

ANALYTICAL RESULTS

Total Petroleum Hydrocarbons as Diesel in Water

Modified EPA Methods 3510/8015[a]

a. Test Methods for Evaluating Solid Waste, SW-846, Third Edition, Revision 0, US EPA November 1986.

GTEL Sample Number		01	02	03	04
Client Identification		MW-2	MW-6	MW-5	MW-4
Date Sampled		02/06/91	02/06/91	02/06/91	02/06/91
Date Extracted		02/09/91	02/09/91	02/09/91	02/09/91
Date Analyzed		02/12/91	02/12/91	02/12/91	02/12/91
Analyte	Detection Limit, ug/L	Concentration, ug/L			
TPH as diesel	10	83*	130*	58*	<10
Detection Limit Multiplier		1	1	1	1

GTEL Sample Number		05			
Client Identification		MW-1			
Date Sampled		02/06/91			
Date Extracted		02/09/91			
Date Analyzed		02/12/91			
Analyte	Detection Limit, ug/L	Concentration, ug/L			
TPH as diesel	10	<10			
Detection Limit Multiplier		1			

* Hydrocarbons in the range of diesel.

Table 1

ANALYTICAL RESULTS

Aromatic Volatile Organics and Total Petroleum Hydrocarbons as Gasoline in Water

EPA Methods 5030, 8020, and Modified 8015[a]

GTEL Sample Number		01	02	03	04
Client Identification		MW-2	MW-6	RBMW-5	MW-5
Date Sampled		02/06/91	02/06/91	02/06/91	02/06/91
Date Analyzed		02/08/91	02/08/91	02/08/91	02/08/91
Analyte	Detection Limit, ug/L	Concentration, ug/L			
Benzene	0.3	<0.3	0.8	<0.3	0.6
Toluene	0.3	<0.3	<0.3	<0.3	<0.3
Ethylbenzene	0.3	<0.3	<0.3	<0.3	<0.3
Xylene, total	0.6	<0.6	<0.6	<0.6	<0.6
BTEX, total	–	–	0.8	–	0.6
TPH as Gasoline	10	<10	40	<10	<10
Detection Limit Multiplier		1	1	1	1

a. Test Methods for Evaluating Solid Waste, SW-846, Third Edition, Revision 0, US EPA November 1986. Modification for TPH as gasoline as per California State Water Resources Control Board LUFT Manual protocols, May 1988 revision.

Table 1 (Continued)

ANALYTICAL RESULTS

Aromatic Volatile Organics and Total Petroleum Hydrocarbons as Gasoline in Water

EPA Methods 5030, 8020, and Modified 8015[a]

GTEL Sample Number		05	06		
Client Identification		MW-4	MW-1		
Date Sampled		02/06/91	02/06/91		
Date Analyzed		02/08/91	02/08/91		
Analyte	Detection Limit, ug/L	Concentration, ug/L			
Benzene	0.3	<0.3	6800		
Toluene	0.3	<0.3	3500		
Ethylbenzene	0.3	<0.3	410		
Xylene, total	0.6	<0.6	2000		
BTEX, total	–	–	13000		
TPH as Gasoline	10	<10	22000		
Detection Limit Multiplier		1	1		

a. Test Methods for Evaluating Solid Waste, SW-846, Third Edition, Revision 0, US EPA November 1986. Modification for TPH as gasoline as per California State Water Resources Control Board LUFT Manual protocols, May 1988 revision.

GTEL
ENVIRONMENTAL
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(415) 685-7852
(800) 544-3422 from inside California
(800) 423-7143 from outside California

Client Number: 203-799-8200.02
Project ID: Emeryville
Work Order Number: C1-02-152

February 16, 1991

Sandra Lindsey
Groundwater Technology, Inc.
4057 Port Chicago Hwy.
Concord, CA 94520

Enclosed please find the analytical results report prepared by GTEL for samples received on 02/07/91, under chain of custody number 72-16423 through 72-16425.

GTEL is certified by the California State Department of Health Services to perform analyses for drinking water, wastewater, and hazardous waste materials according to EPA protocols.

A formal quality control/quality assurance program is maintained by GTEL, which is designed to meet or exceed the EPA requirements. Analytical work for this project was performed in strict adherence to our QA/QC program to ensure sample integrity and to meet quality control criteria.

If you have any questions concerning this analysis or if we can be of further assistance, please call our Customer Service Representative.

Sincerely,
GTEL Environmental Laboratories, Inc.

Emma P. Popek
Laboratory Director

GTEL
ENVIRONMENTAL
LABORATORIES, INC.

Northwest Region
4080 Pike Lane
Concord, CA 94520
(415) 685-7852
(800) 544-3422 from inside California
(800) 423-7143 from outside California

Client Number: 203-799-8200.
Project ID: Emeryville, CA
Work Order Number: C1-01-318

January 22, 1991

Sandra Lindsey
Groundwater Technology, Inc.
4057 Port Chicago Hwy.
Concord, CA 94520

Enclosed please find the analytical results report prepared by GTEL for samples received on 01/17/91, under chain of custody number 72-11343.

GTEL is certified by the California State Department of Health Services to perform analyses for drinking water, wastewater, and hazardous waste materials according to EPA protocols.

A formal quality control/quality assurance program is maintained by GTEL, which is designed to meet or exceed the EPA requirements. Analytical work for this project was performed in strict adherence to our QA/QC program to ensure sample integrity and to meet quality control criteria.

If you have any questions concerning this analysis or if we can be of further assistance, please call our Customer Service Representative.

Sincerely,
GTEL Environmental Laboratories, Inc.

Emma P. Popek
Laboratory Director

Client Number: 203-799-8200.
Project ID: Emeryville, CA
Work Order Number: C1-01-319

Table 1
ANALYTICAL RESULTS
Purgeable Halocarbons in Water
EPA Method 601[a]

GTEL Sample Number		01	02		
Client Identification		SP-3	SP-4		
Date Sampled		01/17/91	01/17/91		
Date Analyzed		01/22/91	01/22/91		
Analyte	Detection Limit, ug/L	Concentration, ug/L			
Chloromethane	0.5	<0.5	<0.5		
Bromomethane	0.5	<0.5	<0.5		
Vinyl chloride	1	<1	<1		
Chloroethane	0.5	<0.5	<0.5		
Methylene chloride	0.5	<0.5	<0.5		
1,1-Dichloroethene	0.2	<0.2	<0.2		
1,1-Dichloroethane	0.5	<0.5	<0.5		
1,2-Dichloroethene	0.5	1.2	<0.5		
Chloroform	0.5	<0.5	<0.5		
1,2-Dichloroethane	0.5	<0.5	<0.5		
1,1,1-Trichloroethane	0.5	<0.5	<0.5		
Carbon tetrachloride	0.5	<0.5	<0.5		
Bromodichloromethane	0.5	<0.5	<0.5		
1,2-Dichloropropane	0.5	<0.5	<0.5		
cis-1,3-Dichloropropene	0.5	<0.5	<0.5		
Trichloroethene	0.5	<0.5	<0.5		
Dichlorodifluoromethane	0.5	<0.5	<0.5		
Dibromochloromethane	0.5	<0.5	<0.5		
1,1,2-Trichloroethane	0.5	<0.5	<0.5		
trans-1,3-Dichloropropene	0.5	<0.5	<0.5		
2-Chloroethylvinyl ether	1	<1	<1		
Bromoform	0.5	<0.5	<0.5		
Tetrachloroethene	0.5	<0.5	<0.5		
1,1,2,2-Tetrachloroethane	0.5	<0.5	<0.5		
Chlorobenzene	0.5	<0.5	<0.5		
1,2-Dichlorobenzene	0.5	<0.5	<0.5		
1,3-Dichlorobenzene	0.5	<0.5	<0.5		
1,4-Dichlorobenzene	0.5	<0.5	<0.5		
Trichlorofluoromethane	0.5	<0.5	<0.5		
Benzene	0.5	700	2.1		
Toluene	0.5	14	1.4		
Ethyl Benzene	0.5	5.9	<0.5		
Xylenes	0.5	160	1.8		
Detection Limit Multiplier		1	1		

a. Federal Register, Vol. 49, October 26, 1984.

CIOI 31X

GTEL ENVIRONMENTAL LABORATORIES, INC.
4080- Pike Lane
Concord, CA 94520
415-685-7852
800-544-3422 (In CA)
800-423-7143 (Outside CA)

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST 72- 11343

Project Manager: Sandra Lindsey
Phone #:
FAX #:
Address: G.T.I Concord
Site location: Emeryville, CA
Project Number: 203 799 8200 0
Project Name: Bay Center
I attest that the proper field sampling procedures were used during the collection of these samples.
Sampler Name (Print): Mark N. Gizda

ANALYSIS REQUEST

BTEX 602 ☐ 8020 ☒ with MTBE ☐ | BTEX/TPH Gas 602/8015 ☐ 8020/8015 ☐ MTBE ☐ | TPH as ☐ Gas ☐ Diesel ☐ Jet Fuel | Product I.D. by GC (SIMDIS) ☐ | Total Oil & Grease 413.1 ☐ 413.2 ☐ 503A ☐ | Total Petroleum Hydrocarbons 418.1 ☐ 503E ☐ | EPA 601 ☐ 8010 ☒ DCA only ☐ | EPA 602 ☐ 8020 ☒ Series | EPA 608 ☐ 8080 ☐ PCBs only ☐ | EPA 610 ☐ 8310 ☐ | EPA 624 ☐ 8240 ☐ NBS +15 ☐ | EPA 625 ☐ 8270 ☐ NBS +25 ☐ | EPTOX: Metals ☐ Pesticides ☐ Herbicides ☐ | TCLP Metals ☐ VOA ☐ Semi VOA ☐ | EPA Priority Pollutant Metals ☐ HSL ☐ | LEAD 7420 ☐ 7421 ☐ 239.2 ☐ 6010 ☐ Org. Lead ☐ | CAM Metals ☐ STLC ☐ TTLC | Corrosivity ☐ Flashpoint ☐ Reactivity ☐ | HOLD

Field Sample ID	Source of Sample	GTEL Lab #	# Containers	Matrix: Water	Method Preserved: HCl	Method Preserved: Ice	Sampling Date	Sampling Time	BTEX 8020	EPA 601/8010, EPA 602/8020	HOLD
TB			1	✓		✓	1/17	1130			X
SP-1	01		2	✓	✓	✓	1/17	1545	X		
SP-2	02		2	✓	✓	✓	1/17	1550	X		
SP-3			2	✓	✓	✓	1/17	1555		X	
SP-4			2	✓	✓	✓	1/17	1800		X	

J-BOX
3/14/ [illegible]

SPECIAL HANDLING
24 HOURS ☐
EXPEDITED 48 Hours ☐
SEVEN DAY ☐
OTHER ________(#) BUSINESS DAYS
QA/QC CLP Level ☐ Blue Level ☐
FAX ☐

SPECIAL DETECTION LIMITS (Specify)

SPECIAL REPORTING REQUIREMENTS (Specify)

REMARKS: Pg 1 of 1

Lab Use Only
Lot #:
Storage Location
Work Order #:

CUSTODY RECORD

Relinquished by Sampler: [signature]	Date	Time
Received by:	Date	Time
Relinquished by:	Date	Time
Received by:	Date	Time
Relinquished by:	Date	Time
Received by Laboratory: [signature]	Date 1-17-9[illegible]	Time 5:03
Way bill #		

1/18 RPT

GTEL
ENVIRONMENTAL
LABORATORIES, INC.
Northwest Region
4080 Pike Lane
Concord, CA 94520
(415) 685-7852
(800) 544-3422 from inside California
(800) 423-7143 from outside California

Client Number: 203-799-8200.
Project ID: Emeryville, CA
Work Order Number: C1-01-319

January 29, 1991

Sandra Lindsey
Groundwater Technology, Inc.
4057 Port Chicago Hwy.
Concord, CA 94520

Enclosed please find the analytical results report prepared by GTEL for samples received on 01/17/91, under chain of custody number 72-11343.

GTEL is certified by the California State Department of Health Services to perform analyses for drinking water, wastewater, and hazardous waste materials according to EPA protocols.

A formal quality control/quality assurance program is maintained by GTEL, which is designed to meet or exceed the EPA requirements. Analytical work for this project was performed in strict adherence to our QA/QC program to ensure sample integrity and to meet quality control criteria.

If you have any questions concerning this analysis or if we can be of further assistance, please call our Customer Service Representative.

Sincerely,
GTEL Environmental Laboratories, Inc.

Emma P. Popek
Laboratory Director

Table 1

ANALYTICAL RESULTS

Aromatic Volatile Organics in Water

EPA Methods 5030 and 8020[a]

a. Test Methods for Evaluating Solid Waste, SW-846, Third Edition, Revision 0, US EPA November 1986.

GTEL Sample Number		01	02		
Client Identification		SP-1	SP-2		
Date Sampled		01/17/91	01/17/91		
Date Analyzed		01/18/91	01/18/91		
Analyte	Detection Limit, ug/L	Concentration, ug/L			
Benzene	0.3	<0.3	1		
Toluene	0.3	0.3	1		
Ethylbenzene	0.3	<0.3	<0.3		
Xylene, total	0.6	<0.6	1		
BTEX, total	–	0.3	3		
Detection Limit Multiplier		1	1		

GTEL
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4080 Pike Lane
Concord, CA 94520
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(800) 544-3422 from inside California
(800) 423-7143 from outside California

Client Number: 203-799-8200.06
Project ID: Emeryville
Work Order Number: C0-12-460

January 2, 1991

Sandra Lindsey
Groundwater Technology, Inc.
4080-D Pike Lane
Concord, CA 94520

Enclosed please find the analytical results report prepared by GTEL for samples received on 12/19/90, under chain of custody number 72-11348.

GTEL is certified by the California State Department of Health Services to perform analyses for drinking water, wastewater, and hazardous waste materials according to EPA protocols.

A formal quality control/quality assurance program is maintained by GTEL, which is designed to meet or exceed the EPA requirements. Analytical work for this project was performed in strict adherence to our QA/QC program to ensure sample integrity and to meet quality control criteria.

If you have any questions concerning this analysis or if we can be of further assistance, please call our Customer Service Representative.

Sincerely,
GTEL Environmental Laboratories, Inc.

Emma P. Popek/kc
Emma P. Popek
Laboratory Director

Client Number: 203-799-8200.06
Project ID: Emeryville
Work Order Number: C0-12-460

Table 1

ANALYTICAL RESULTS

Aromatic Volatile Organics in Water

EPA Methods 5030 and 8020[a]

a. Test Methods for Evaluating Solid Waste, SW-846, Third Edition, Revision 0, US EPA November 1986.

GTEL Sample Number		01	02		
Client Identification		SP1	SP2		
Date Sampled		12/18/90	12/18/90		
Date Analyzed		12/27/90	12/27/90		
Analyte	Detection Limit, ug/L	Concentration, ug/L			
Benzene	0.3	<0.3	<0.3		
Toluene	0.3	<0.3	<0.3		
Ethylbenzene	0.3	<0.3	<0.3		
Xylene, total	0.6	<0.6	<0.6		
BTEX, total	–	–	–		
Detection Limit Multiplier		1	1		

GTEL
ENVIRONMENTAL
LABORATORIES, INC.

Northwest Region
4080 Pike Lane
Concord, CA 94520
(415) 685-7852
(800) 544-3422 *from inside California*
(800) 423-7143 *from outside California*

01/03/91 rw

WORK ORD#: C012461
CLIENT: Sandra Lindsey
Groundwater Technology, Inc.
4041-F Pike Lane
Concord, CA 94520
PROJECT#: 203-799-8200.06
LOCATION: Emeryville

SAMPLED: 12/18/89 BY: H. Merino
B. Fleener
ANALYZED: 12/20/90 BY: M. Verona
MATRIX: Water
UNITS: ug/L (ppb)

TEST RESULTS

COMPOUND	MDL	LAB # I.D.#	01 SP3	02 SP4		
Benzene	0.5		40	<0.5		
Bromodichloromethane	0.5		<0.5	<0.5		
Bromoform	0.5		<0.5	<0.5		
Bromomethane	0.5		<0.5	<0.5		
Carbon tetrachloride	0.5		<0.5	<0.5		
Chlorobenzene	0.5		<0.5	<0.5		
Chloroethane	0.5		<0.5	<0.5		
2-Chloroethylvinyl ether	1		<1	<1		
Chloroform	0.5		<0.5	<0.5		
Chloromethane	0.5		<0.5	<0.5		
Dibromochloromethane	0.5		<0.5	<0.5		
1,2-Dichlorobenzene	0.5		<0.5	<0.5		
1,3-Dichlorobenzene	0.5		<0.5	<0.5		
1,4-Dichlorobenzene	0.2		<0.2	<0.2		
Dichlorodifluoromethane	0.5		<0.5	<0.5		
1,1-Dichloroethane	0.5		<0.5	<0.5		
1,2-Dichloroethane	0.5		<0.5	<0.5		
1,1-Dichloroethene	0.2		<0.2	<0.2		
trans-1,2-Dichloroethene	0.5		<0.5	<0.5		
1,2-Dichloropropane	0.5		<0.5	<0.5		
cis-1,3-Dichloropropene	0.5		<0.5	<0.5		
trans-1,3-Dichloropropene	0.5		<0.5	<0.5		
Ethylbenzene	0.5		1.0	<0.5		
Methylene chloride	0.5		<0.5	<0.5		
1,1,2,2-Tetrachloroethane	0.5		<0.5	<0.5		
Tetrachloroethene	0.5		<0.5	<0.5		
Toluene	0.5		1.5	<0.5		
1,1,1-Trichloroethane	0.5		<0.5	<0.5		
1,1,2-Trichloroethane	0.5		<0.5	<0.5		
Trichloroethene	0.5		<0.5	<0.5		
Trichlorofluoromethane	0.5		<0.5	<0.5		
Vinyl Chloride	1		<1	<1		
Xylenes	0.5		20	<0.5		

MDL = Method Detection Limit.
METHOD: EPA Method 601/602

Emmo P. Poppy, Laboratory Director

GTEL ENVIRONMENTAL LABORATORIES, INC

4080- Pike Lane
Concord, CA 94520
415-685-7852

800-544-3422 (In CA)
800-423-7143 (Outside CA)

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST 72-11348

Project Manager: Sandra Lindsey
Phone #:
FAX #:
Address: GTI Concord
Site location: Emeryville
Project Number: 203799 8200.06
Project Name: Bay Center
I attest that the proper field sampling procedures were used during the collection of these samples.
Sampler Name (Print): Brennan Fleener / Hector Martinez

J-B04

ANALYSIS REQUEST

Field Sample ID	Source of Sample	GTEL Lab # (Lab use only)	# CONTAINERS	Matrix: WATER	SOIL	AIR	SLUDGE	OTHER	Method Preserved: HCl	HNO_3	H_2SO_4	ICE	NONE	OTHER	Sampling: DATE	TIME	BTEX 602 ☐ 8020 ☐ with MTBE ☐	BTEX/TPH Gas 602/8015 ☐ 8020/8015 ☐ MTBE ☐	TPH as ☐ Gas ☐ Diesel ☐ Jet Fuel	Product I.D. by GC (SIMDIS) ☐	Total Oil & Grease: 413.1 ☐ 413.2 ☐ 503A ☐	Total Petroleum Hydrocarbons: 418.1 ☐ 503E ☐	EPA 601 ☐ 8010 ☐ DCA only ☐	EPA 602 ☐ 8020 ☐	EPA 608 ☐ 8080 ☐ PCBs only ☐	EPA 610 ☐ 8310 ☐	EPA 624 ☐ 8240 ☐ NBS +15 ☐	EPA 625 ☐ 8270 ☐ NBS +25 ☐	EPTOX: Metals ☐ Pesticides ☐ Herbicides ☐	TCLP Metals ☐ VOA ☐ Semi VOA ☐	EPA Priority Pollutant Metals ☐ HSL ☐	LEAD 7420 ☐ 7421 ☐ 239.2 ☐ 6010 ☐ Org. Lead ☐	CAM Metals ☐ STLC ☐ TTLC	Corrosivity ☐ Flashpoint ☐ Reactivity ☐	8020/8010 Series	HOLD	
SB			1	✓					✓			✓			12/18/90																				✓	
SP1		82	2	✓					✓			✓					✓																			
SP2			2	✓					✓			✓					✓																			
SP3			2	✓					✓			✓																						✓		
SP4			2	✓					✓			✓																						✓		

CUSTODY RECORD

Relinquished by Sampler: [signature]	Date	Time	Received by:
Relinquished by:	Date	Time	Received by:
Relinquished by:	Date 12/18/90	Time 3:40	Received by Laboratory: [signature] Way bill #

12/27

SPECIAL HANDLING

24 HOURS ☐
EXPEDITED 48 Hours ☐
SEVEN DAY ☐
OTHER ________(#) BUSINESS DAYS
QA/QC CLP Level ☐ Blue Level ☐
FAX ☐

SPECIAL DETECTION LIMITS (Specify)

SPECIAL REPORTING REQUIREMENTS (Specify)

REMARKS:

Lab Use Only
Lot #:
Storage Location
Work Order #:

GTEL
ENVIRONMENTAL
LABORATORIES, INC.

Northwest Region
4080 Pike Lane
Concord, CA 94520
(415) 685-7852
(800) 544-3422 from inside California
(800) 423-7143 from outside California

Client Number: 203-799-8200
Project ID: Emeryville, CA
Work Order Number: C0-12-108

December 13, 1990

Sandra Lindsey
Groundwater Technology, Inc.
4080-D Pike Lane
Concord, CA 94520

Enclosed please find the analytical results report prepared by GTEL for samples received on 12/05/90, under chain of custody number 72-10563.

GTEL is certified by the California State Department of Health Services to perform analyses for drinking water, wastewater, and hazardous waste materials according to EPA protocols.

A formal quality control/quality assurance program is maintained by GTEL, which is designed to meet or exceed the EPA requirements. Analytical work for this project was performed in strict adherence to our QA/QC program to ensure sample integrity and to meet quality control criteria.

If you have any questions concerning this analysis or if we can be of further assistance, please call our Customer Service Representative.

Sincerely,
GTEL Environmental Laboratories, Inc.

Emma P. Popek
Laboratory Director

Client Number: 203-799-8200.
Project ID: Emeryville, CA
Work Order Number: C0-12-108

Table 1

ANALYTICAL RESULTS

Aromatic Volatile Organics in Water

EPA Methods 5030 and 8020[a]

a. Test Methods for Evaluating Solid Waste, SW-846, Third Edition, Revision 0, US EPA November 1986.

GTEL Sample Number		01	02		
Client Identification		SP1	SP2		
Date Sampled		12/05/90	12/05/90		
Date Analyzed		12/11/90	12/11/90		
Analyte	Detection Limit, ug/L	Concentration, ug/L			
Benzene	0.3	<0.3	<0.3		
Toluene	0.3	<0.3	<0.3		
Ethylbenzene	0.3	<0.3	<0.3		
Xylene, total	0.6	<0.6	<0.6		
BTEX, total	–	–	–		
Detection Limit Multiplier		1	1		

GTEL
ENVIRONMENTAL
LABORATORIES, INC.

Northwest Region
4080 Pike Lane
Concord, CA 94520
(415) 685-7852
(800) 544-3422 *from inside California*
(800) 423-7143 *from outside California*

12/13/90 jp

WORK ORD#: C012109
CLIENT: Sandra Lindsey
Groundwater Technology, Inc.
4080-D Pike Lane
Concord, CA 94520
PROJECT#: 203-799-8200
LOCATION: Emeryville, CA

SAMPLED: 12/05/90 BY: M. Czipka
ANALYZED: 12/05/90 BY: M. Verona
MATRIX: Water
UNITS: ug/L (ppb)

TEST RESULTS

COMPOUND	MDL	LAB # I.D.#	01 SP3	02 SP4		
Benzene	0.5		34	<0.5		
Bromodichloromethane	0.5		<0.5	<0.5		
Bromoform	0.5		<0.5	<0.5		
Bromomethane	0.5		<0.5	<0.5		
Carbon tetrachloride	0.5		<0.5	<0.5		
Chlorobenzene	0.5		<0.5	<0.5		
Chloroethane	0.5		<0.5	<0.5		
2-Chloroethylvinyl ether	1		<1	<1		
Chloroform	0.5		<0.5	<0.5		
Chloromethane	0.5		<0.5	<0.5		
Dibromochloromethane	0.5		<0.5	<0.5		
1,2-Dichlorobenzene	0.5		<0.5	<0.5		
1,3-Dichlorobenzene	0.5		<0.5	<0.5		
1,4-Dichlorobenzene	0.2		<0.2	<0.2		
Dichlorodifluoromethane	0.5		<0.5	<0.5		
1,1-Dichloroethane	0.5		<0.5	<0.5		
1,2-Dichloroethane	0.5		<0.5	<0.5		
1,1-Dichloroethene	0.2		<0.2	<0.2		
trans-1,2-Dichloroethene	0.5		<0.5	<0.5		
1,2-Dichloropropane	0.5		<0.5	<0.5		
cis-1,3-Dichloropropene	0.5		<0.5	<0.5		
trans-1,3-Dichloropropene	0.5		<0.5	<0.5		
Ethylbenzene	0.5		2	<0.5		
Methylene chloride	0.5		<0.5	<0.5		
1,1,2,2-Tetrachloroethane	0.5		<0.5	<0.5		
Tetrachloroethene	0.5		<0.5	<0.5		
Toluene	0.5		2	<0.5		
1,1,1-Trichloroethane	0.5		<0.5	<0.5		
1,1,2-Trichloroethane	0.5		<0.5	<0.5		
Trichloroethene	0.5		<0.5	<0.5		
Trichlorofluoromethane	0.5		<0.5	<0.5		
Vinyl Chloride	1		<1	<1		
Xylenes	0.5		22	<0.5		

MDL = Method Detection Limit.
METHOD: EPA Method 8010/8020

Emma P. Popek

EMMA P. POPEK, Laboratory Director

(012 108

GTEL ENVIRONMENTAL LABORATORIES, INC
4080- Pike Lane
Concord, CA 94520
415-685-7852
800-544-3422 (In CA)
800-423-7143 (Outside CA)

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST 72- 10563

Project Manager: Sandra Lindsey
Phone #:
FAX #:
Address: G.T.I Concord
Site location: Emeryville
Project Number: 203 799 8200 0
Project Name: Bay Center
I attest that the proper field sampling procedures were used during the collection of these samples.
Sampler Name (Print): Mark N. Czipke

ANALYSIS REQUEST

BTEX 602 ☐ 8020 ☒ with MTBE ☐; BTEX/TPH Gas 602/8015 ☐ 8020/8015 ☐ MTBE ☐; TPH as ☐ Gas ☐ Diesel ☐ Jet Fuel; Product I.D. by GC (SIMDIS) ☐; Total Oil & Grease 413.1 ☐ 413.2 ☐ 503A ☐; Total Petroleum Hydrocarbons 418.1 ☐ 503E ☐; EPA 601 ☐ 8010 ☒ DCA only ☐; EPA 602 ☐ 8020 ☒ Series; EPA 608 ☐ 8080 ☐ PCBs only ☐; EPA 610 ☐ 8310 ☐; EPA 624 ☐ 8240 ☐ NBS +15 ☐; EPA 625 ☐ 8270 ☐ NBS +25 ☐; EPTOX: Metals ☐ Pesticides ☐ Herbicides ☐; TCLP Metals ☐ VOA ☐ Semi VOA ☐; EPA Priority Pollutant Metals ☐ HSL ☐; LEAD 7420 ☐ 7421 ☐ 239.2 ☐ 6010 ☐ Org. Lead ☐; CAM Metals ☐ STLC ☐ TTLC ☐; Corrosivity ☐ Flashpoint ☐ Reactivity ☐; HOLD

1-ROX

Field Sample ID	Source of Sample	GTEL Lab # (Lab use only)	# Containers	Matrix: Water	Method Preserved: HCl	Method Preserved: Ice	Sampling Date	Sampling Time	BTEX 602/8020	EPA 601/8010 & EPA 602/8020	HOLD
SP1	01		2	✓	✓	✓	12/5/90		X		
SP2	02		2	✓	✓	✓	12/5/90		X		
SP3			2	✓	✓	✓	12/5/90			X	
SP4			2	✓	✓	✓	12/5/90			X	
TB			1	✓		✓	12/5/90				X

Handwritten across the table: MA 12/12/90

CUSTODY RECORD

	Date	Time	
Relinquished by Sampler: [signature]			Received by:
Relinquished by:			Received by:
Relinquished by:	12-5	2:32	Received by Laboratory: [signature] Way bill #

SPECIAL HANDLING

24 HOURS ☐
EXPEDITED 48 Hours ☐
SEVEN DAY ☐
OTHER ________(#) BUSINESS DAYS
QA/QC CLP Level ☐ Blue Level ☐
FAX ☐

SPECIAL DETECTION LIMITS (Specify)

SPECIAL REPORTING REQUIREMENTS (Specify)

REMARKS: Please Note 8010/8020 Series
Pg 1 of 1

Lab Use Only
Lot #:
Storage Location
Work Order #:

APPENDIX C

EBMUD LABORATORY REPORTS

NOTIFICATION OF TEST RESULTS

EAST BAY
MUNICIPAL UTILITY DISTRICT

WASTEWATER DEPARTMENT

March 29, 1991

Bay Center Apartments
% Groundwater Technology, Inc.
4080-D Pike Lane
Concord, CA 94520

Sample Location: Side Sewer No. 1
Lab Number: 91 02 28 201
Sample Type: Grab @ 0920

Attention: Ms. Sandra Lindsey

Account No. 500-54011

EBMUD inspected your facility and sampled the wastewater discharged on February 28, 1991. The test results and corresponding discharge permit limitations are shown in the table below. No discharge limit violations were noted.

Parameter	Test Result mg/L	Limitation mg/L
EPA 624	ND	*

* See Page 3 of your Wastewater Discharge Permit for specific limitations.

Effluent meter reading - 1058960

If you have any questions regarding the inspection or the sample results, please contact me at 465-3700 extension 128.

Sincerely,

William Meckel
EBMUD Representative
Industrial Discharger Section

WEM:wem

Account No.: 500-54011
Lab Number : 91 02 28 201
Sample Type: AutoGrab

Station Name: MARTIN
Side Sewer : 1

ACROLEIN	<	5.000	ug/L
ACRYLONITRILE	<	5.000	ug/L
BENZENE	<	1.000	ug/L
BROMODICHLOROMETHANE-GC/MS	<	1.000	ug/L
BROMOFORM-GC/MS	<	2.000	ug/L
BROMOETHANE	<	3.000	ug/L
CARBON TETRACHLORIDE	<	1.000	ug/L
CHLOROBENZENE	<	1.000	ug/L
CHLOROETHANE	<	2.000	ug/L
2-CHLOROETHYLVINYL ETHER	<	5.000	ug/L
CHLOROFORM	<	1.000	ug/L
CHLOROMETHANE	<	2.000	ug/L
DIBROMOCHLOROMETHANE	<	1.000	ug/L
1,2-DICHLOROBENZENE	<	1.000	ug/L
1,3-DICHLOROBENZENE	<	1.000	ug/L
1,4-DICHLOROBENZENE	<	1.000	ug/L
1,1-DICHLOROETHANE	<	1.000	ug/L
1,2-DICHLOROETHANE	<	1.000	ug/L
1,1-DICHLOROETHENE	<	1.000	ug/L
TRANS-1,2-DICHLOROETHENE	<	1.000	ug/L
1,2-DICHLOROPROPANE	<	1.000	ug/L
CIS-1,2-DICHLOROPROPENE	<	1.000	ug/L
TRANS-1,3-DICHLOROPROPENE	<	1.000	ug/L
ETHYL BENZENE	<	1.000	ug/L
METHYLENE CHLORIDE	<	1.000	ug/L
1,1,2,2-TETRACHLOROETHANE	<	1.000	ug/L
TETRACHLOROETHENE	<	1.000	ug/L
TOLUENE	<	1.000	ug/L
1,1,1-TRICHLOROETHANE	<	1.000	ug/L
1,1,2-TRICHLOROETHANE	<	1.000	ug/L
TRICHLOROETHENE	<	1.000	ug/L
VINYL CHLORIDE	<	2.000	ug/L
ACETONE	<	5.000	ug/L
DIBROMOCHLOROPROPANE	<	3.000	ug/L
ETHYLENE DIBROMIDE	<	5.000	ug/L
METHYLETHYL KETONE	<	10.000	ug/L
METHYL ISOBUTYL KETONE	<	2.000	ug/L
STYRENE	<	1.000	ug/L
TETRAHYDROFURAN	<	4.000	ug/L
FREON 113	<	1.000	ug/L
SATURATED HYDROCARBONS	<	20.000	ug/L
UNSATURATED HYDROCARBONS	<	20.000	ug/L
AROMATIC HYDROCARBONS	<	20.000	ug/L
XYLENES	<	1.000	ug/L
1,2,4-TRICHLOROBENZENE	<	1.000	ug/L
FLUOROTRICHLOROMETHANE	<	5.000	ug/L
DICHLORODIFLUOROMETHANE	<	5.000	ug/L
M-CHLOROTOLUENE	<	1.000	ug/L
DIBROMOMETHANE	<	1.000	ug/L
1,3-DICHLOROPROPANE	<	1.000	ug/L
BROMOCHLOROMETHANE	<	1.000	ug/L

Account No.: 500-54011 Station Name: MARTIN
Lab Number : 91 02 28 201 Side Sewer : 1
Sample Type: AutoGrab

1,2,3-TRICHLOROBENZENE	<	1.000	ug/L
N-PROPYLBENZENE	<	1.000	ug/L
1,1,1,2-TETRACHLOROETHANE	<	1.000	ug/L
PENTACHLOROETHANE	<	1.000	ug/L
BIS (2-CHLOROISOPROPYL) ETHER	<	2.000	ug/L
SEC-DICHLOROPROPANE	<	1.000	ug/L
1,2,4-TRIMETHYLBENZENE	<	1.000	ug/L
N-BUTYLBENZENE	<	1.000	ug/L
NAPHTHALENE	<	1.000	ug/L
HEXACHLOROBUTADIENE	<	2.000	ug/L
P-CHLOROTOLUENE	<	1.000	ug/L
1,3,5-TRIMETHYLBENZENE	<	1.000	ug/L
P-ISOPROPYLTOLUENE	<	1.000	ug/L
1,1-DICHLOROPROPANE	<	1.000	ug/L
ISOPROPYLBENZENE	<	1.000	ug/L
TERT-BUTYLBENZENE	<	1.000	ug/L
SEC-BUTYLBENZENE	<	1.000	ug/L
BROMOBENZENE	<	1.000	ug/L
CIS-1,2-DICHLOROETHENE	<	1.000	ug/L
O-CHLOROTOLUENE	<	1.000	ug/L
CARBON DISULFIDE	<	1.000	ug/L
1,1-DICHLOROPROPENE	<	1.000	ug/L
ETHYL ACETATE	<	1.000	ug/L
2-HEXANONE	<	1.000	ug/L
VINYL ACETATE	<	1.000	UG/L
1,3-BUTADIENE	<	1.000	UG/L
1,4-DIOXANE	<	1,000.000	UG/L
VOLATILE REGULATED ORGANICS			MG/L
VOLATILE CHLOR. HYDROCARBONS			MG/L
VOA TOTAL TOXIC ORGANICS			mg/L