June 24, 1993

SEACOR
Science & Engineering Analysis Corporation

Mr. Thomas Peacock
Hazardous Materials Division
Alameda County Department of
Environmental Health
80 Swan Way, Room 200
Oakland, California 94621

QUARTERLY GROUNDWATER MONITORING REPORT, 4070 SAN PABLO AVENUE, EMERYVILLE, CALIFORNIA

Dear Mr. Peacock:

On behalf of San Francisco French Bread Company (SFFBC), Science & Engineering Analysis Corporation (*SEACOR*) has prepared this quarterly groundwater monitoring report for 4070 San Pablo Avenue in Emeryville, California ("the site", see Figure 1). The site is improved with two warehouse-type buildings. The southern building is currently occupied by Anderson Carpeting and the northern building by Tire Center Inc. A site plan showing the existing site configuration, including the location of the former underground storage tanks (USTs) is attached as Figure 2.

SITE BACKGROUND

In September 1992, *SEACOR* installed monitoring well MW-1 slightly west, and down-gradient of the former UST locations. This well was completed to a depth of 25 feet below ground surface with the screened interval extending from 25 to 15 feet below ground surface. The groundwater sample collected from this well in September 1992 was reported to contain total petroleum hydrocarbons as gasoline (TPHg) and TPH as diesel (TPHd) at concentrations of 1.4 and 0.2 milligrams per liter (mg/ℓ), respectively. The laboratory reported that the positive result for TPHd appears to have been due to the presence of a lighter fuel (e.g. gasoline) rather than diesel. Benzene, toluene, ethylbenzene, and xylenes (BTEX) were also detected in the water sample at concentrations of 0.47, 0.043, 0.045, and 0.10 mg/ℓ, respectively. Based on the findings of our initial investigation, SFFBC initiated a quarterly groundwater monitoring program at the site. This quarterly monitoring event represents the fourth quarter of groundwater sampling.

DEPTH TO GROUNDWATER

Prior to purging and sampling monitoring well MW-1, the depth to groundwater and well depth were measured by *SEACOR* on June 4, 1993 using an electronic water-level indicator. Groundwater was measured at a depth of 5.15 feet below the top of the PVC casing. This represents a 2.67 foot increase in water level since the March 4, 1993 monitoring event. Historic depth to groundwater measurements are included on Table 1.

SFFBQ4E.RPT
70007-004-01 FB11

MONITORING WELL PURGING AND SAMPLING

Monitoring well purging and sampling was performed by *SEACOR* on June 4, 1993. Well purging was accomplished by bailing with a clean PVC bailer. During purging the pH, temperature, and electrical conductivity of the discharge water was measured and the color and turbidity were visually inspected. Stabilization of these parameters was used as an indicator that fresh formation water was entering the well casing. Approximately three casing volumes of water (10 gallons) were removed from the well. A copy of the Water Sample Data Sheet is included as an Attachment. Water removed from the well during purging activities was placed in a DOT-approved 55-gallon drum and stored onsite.

Following completion of well purging, a water sample was collected by lowering a clean stainless-steel bailer into the well casing. The water sample was transferred directly from the bailer into laboratory supplied sample containers and labeled. Sample containers were stored in a cooler containing ice for shipment to the analytical laboratory. The groundwater sample was submitted to NET Pacific Analytical Laboratory for analysis of TPHg and BTEX according to EPA Methods 5030, and 8020, respectively.

CHEMICAL TESTING RESULTS

The groundwater sample analyzed from monitoring well MW-1 was reported to contain TPHg at a concentration of 2.9 mg/ℓ and BTEX at concentrations of 340, 58, 50 and 140 micrograms per liter ($\mu g/\ell$), respectively. When compared to water quality data from March 1993, all analyte concentrations show significant increases. Table 1 summarizes the chemical analytical results for this quarterly groundwater monitoring event as well as the previous sampling events. Laboratory analytical data sheets and chain-of-custody documentation are included as an Attachment.

RECOMMENDATIONS

SEACOR, on behalf of SFFBC, plans to conduct additional investigative activities at the Site to further define the extent of petroleum hydrocarbons in the soil and groundwater. A Work Plan defining the scope of the investigative activities will be submitted to the Alameda County Department of Environmental Health within 60 days.

If you have any questions or comments regarding this report, please do not hesitate to call us at (415) 882-1548.

Sincerely yours,

Science & Engineering Analysis Corporation

Donald W. Moore
Project Geologist

Bruce E. Scarbrough, R.G.
Principal Geologist

DWM/lk

cc: Mr. Peter Sher, San Francisco French Bread Company

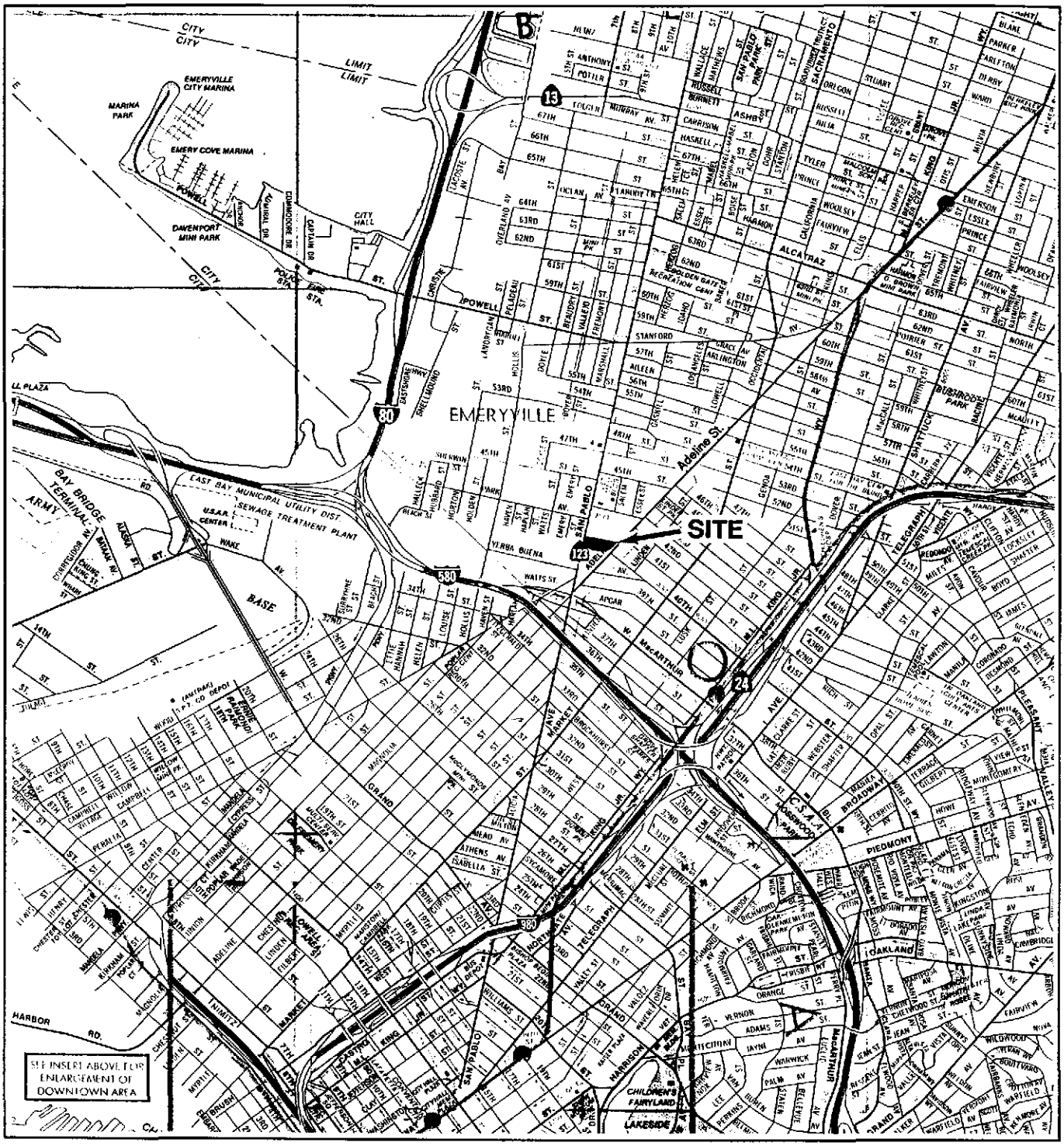
Attachments:

Figure 1 - Site Location Map
Figure 2 - Site Plan
Table 1 - Groundwater Measurements and Chemical Analytical Results
Groundwater Sample Data Sheet, Laboratory Analytical Reports and Chain-of-Custody Records

TABLE 1
GROUNDWATER MEASUREMENTS AND CHEMICAL ANALYTICAL RESULTS
4070 San Pablo Avenue
Emeryville, California

WELL	DATE	DEPTH TO GROUNDWATER[1]	TPHg[2] (mg/l)[3]	BENZENE (µg/l)[4]	TOLUENE (µg/l)	ETHYLBENZENE (µg/l)	XYLENES (µg/l)
MW-1	9/11/92	9.10	1.4	470	45	43	100
	12/3/92	9.55	ND < 0.05	ND < 0.5	ND < 0.5	1.6	ND < 0.5
	3/4/93	7.82	0.70	1.1	ND < 0.5	ND < 0.5	1.1
	6/4/93	5.15	2.9	340	58	50	140

NOTES:
(1) Feet below top of PVC casing.
(2) Total petroleum hydrocarbons as gasoline.
(3) Milligrams per liter.
(4) Micrograms per liter.



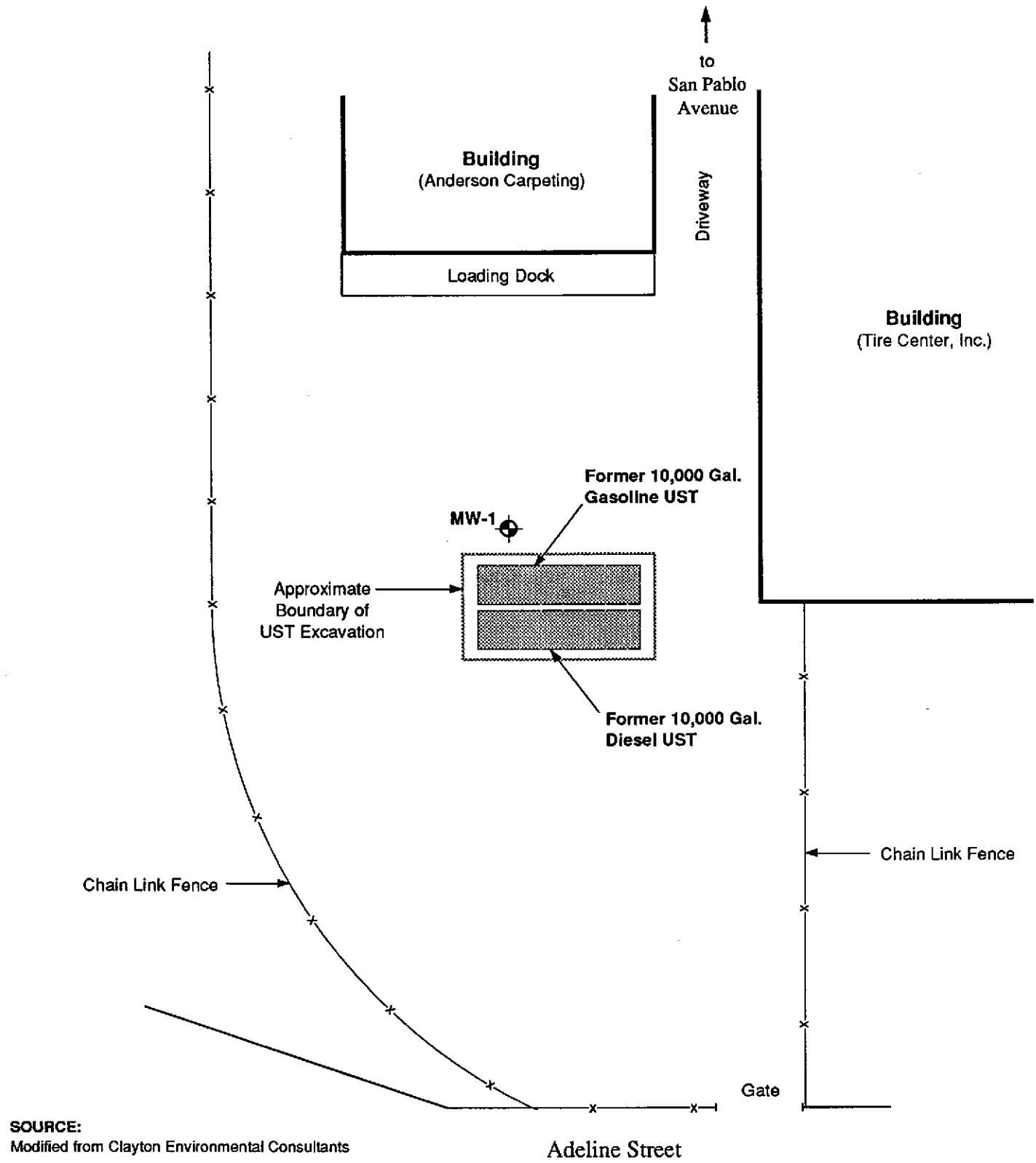
SOURCE:
California State Automobile Association
Oakland, Berkeley, Alameda, 2/91

0 4000 Feet

N

SITE LOCATION MAP
4070 San Pablo Avenue
Emeryville, California
Figure 1

SEACOR
SJN 70007-004-01



SOURCE:
Modified from Clayton Environmental Consultants

N

0 40 Feet

LEGEND

Monitoring Well Location

SITE PLAN
4070 San Pablo Avenue
Emeryville, California
Figure 2

SEACOR
SJN 70007-004-01

SEACOR
WATER SAMPLE FIELD DATA SHEET

PROJECT NO: 70007-004-01
PURGED BY: Kurt Heiss
SAMPLED BY: Kurt Heiss

WELL ID: MW-1
SAMPLE ID: MW-1-24
CLIENT NAME: S.R. French Bread
LOCATION: Emeryville, CA

TYPE: Groundwater ✓ Surface Water ____ Treatment Effluent ____ Other ____

CASING DIAMETER (inches): 2 ✓ 3 ____ 4 ____ 4.5 ____ 6 ____ Other ____

CASING ELEVATION: (feet/MSL):		VOLUME IN CASING (gal)	3.23
DEPTH TO WATER (feet):	5.15	CALCULATED PURGE (gal)	9.69
DEPTH OF WELL (feet):	25.35	ACTUAL PURGE VOL. (gal)	10.00

DATE PURGED: 6/4/93 Start (2400 Hr) 1225 End (2400 Hr.) 1248
DATE SAMPLED: 6/4/93 Start (2400 Hr) 1320 End (2400 Hr.) 1330

FIELD QC SAMPLES COLLECTED AT THIS WELL (i.e. FB-1, X-DUP-1): None

FIELD MEASUREMENTS

TIME (2400 Hr)	VOLUME (gal)	pH (units)	E.C. (umhos/cm@25°C)	TEMPERATURE (°F)	COLOR (visual)	TURBIDITY (NTU) (visual)
1231	6	6.8	1256	68.3	Brown	~~Brown~~ Very
1235	8	6.8	1193	67.7	"	"
1248	10	6.7	1195	67.5	"	"

D.O. (ppm): N.M. COLOR, COBALT (0-100): Brown

ODOR: No

Clear
~~Cloudy~~
Yellow
~~Brown~~

PURGING EQUIPMENT

____	2" Bladder Pump	____	Bailer(Teflon®)
____	Centrifugal Pump	✓	Bailer (PVC)
____	Submersible Pump	____	Bailer (Stainless Steel)
____	Well Wizard™	____	Dedicated

Other: ____

SAMPLING EQUIPMENT

____	2" Bladder Pump	____	Bailer(Teflon®)
____	DDL Sampler	____	Bailer (PVC/disposable)
____	Submersible Pump	✓	Bailer (Stainless Steel)
____	Well Wizard™	____	Dedicated

Other: ____

WELL INTEGRITY: Good LOCK #: Master - 0909

REMARKS: Noise, Semi slow groundwater recovery

SIGNATURE: [signature]

NATIONAL
ENVIRONMENTAL
TESTING, INC.

NET Pacific, Inc.
435 Tesconi Circle
Santa Rosa, CA 95401
Tel: (707) 526-7200
Fax: (707) 526-9623

Donald Moore
Seacor
90 New Montgomery
Suite 620
San Francisco, CA 94105

Date: 06/16/1993
NET Client Acct. No: 74000
NET Pacific Job No: 93.02368
Received: 06/05/1993

Client Reference Information

Project No: 70007-004-01

Sample analysis in support of the project referenced above has been completed and results are presented on following pages. Please refer to the enclosed "Key to Abbreviations" for definition of terms. Should you have questions regarding procedures or results, please feel welcome to contact Client Services.

Approved by:

Jules Skamarack
Laboratory Manager

Enclosure(s)

Ref: Project No: 70007-004-01

SAMPLE DESCRIPTION: MW-1-24
Date Taken: 06/04/1993
Time Taken: 13:20
LAB Job No: (-159248)

Parameter	Results	Reporting Limit	Units	Method
TPH (Gas/BTXE,Liquid)				
METHOD 5030 (GC,FID)	--			
DATE ANALYZED	06-08-93			
DILUTION FACTOR*	1			
as Gasoline	2.9	0.05	mg/L	5030
METHOD 8020 (GC,Liquid)	--			
DATE ANALYZED	06-08-93			
DILUTION FACTOR*	10			
Benzene	340	0.5	ug/L	8020
Ethylbenzene	50	0.5	ug/L	8020
Toluene	58	0.5	ug/L	8020
Xylenes (Total)	140	0.5	ug/L	8020
SURROGATE RESULTS	--			
Bromofluorobenzene	90		% Rec.	5030

Ref: Project No: 70007-004-01

QUALITY CONTROL DATA

Parameter	Reporting Limits	Units	Cal Verf Stand % Recovery	Blank Data	Spike % Recovery	Duplicate Spike % Recovery	RPD
Gasoline	0.05	mg/L	114.0	ND	108.0	112.0	3.6
Benzene	0.5	ug/L	103.8	ND	98.5	95.5	3.1
Toluene	0.5	ug/L	104.0	ND	95.3	96.0	0.7

COMMENT: Blank Results were ND on other analytes tested.

Chain-of-Custody Number: A 7736

SEACOR Chain-of-Custody Record 3969

Address: 90 New Montgomery St, #C20
San Francisco, CA 94105

Project # 70007-004-01 Task # FB11
Project Manager Donald Moore
Laboratory NET Pacific
Turn-around time: Standard

Sampler's Name: Kurt Heiss
Sampler's Signature:

Analysis Request

Sample ID	Date	Time	Matrix	TPHg/BTEX 8015 (modified)/8020	TPHd 8015 (modified)	TPH 418.1	Aromatic Volatiles 602/8020	Volatile Organics 624/8240 (GC/MS)	Halogenated Volatiles 601/8010	Semi-volatile Organics 625/8270 (GC/MS)	Pesticides/PCB's 608/8080	Total Lead 7421	Priority Pollutant Metals (13)	TCLP Metals				Comments/ Instructions	Number of Containers
MW-1-24	6/4/93	1320	water	X														2xVOC	3
*Travel Blank	↓	—	↓	X														HOLD	2

CUSTODY SEALED 6/4/93 @ 1800 AL
seals intact AL

Special Instructions/Comments:

* Please include analytical results with Job #
data package

Relinquished by:
Sign
Print Kurt Heiss
Company SEACOR
Time 1430 Date 6/4/93

Received by:
Sign
Print Andy Mackay
Company NET
Time 1616 Date 6/4/93

Relinquished by:
Sign
Print
Company NET
Time 1808 Date 6/4/93

Received by:
Sign
Print Andy Lope
Company NET
Time 12:00 Date 6/5/93

Sample Receipt

Total no. of containers	4
Chain of custody seals:	Y
Rec'd good condition/cold:	Y
Conforms to record:	Y

Client:
Client Contact:
Client Phone Number:

Date 6 / 4 / 93 Page 1 of 1