GROUNDWATER TECHNOLOGY, INC.
1401 Halyard Drive, Suite 140, West Sacramento, CA 95691, (916) 372-4700
FAX (916) 372-8781

TO: Mr. Don Ringsby
Ringsby Terminals, Inc.
P.O. Box 7240
Denver, CO. 80207
(303) 320-3960 FAX (303) 355-2451

DATE: 04/26/95 JOB NO. 02070-0061
FROM: Jaff Auchterlonie
RE: Ringsby Terminal - Port of Oakland
2225 7th Street
Oakland, CA. 94607

We are sending via: [ ] AIRBORNE [x] MAIL [x] FAX

ORIGINALS	COPIES	DATE	DESCRIPTION
1	0	04/26/95	First Quarter 1995 Groundwater Monitoring and Sampling Report

Transmitted as checked:

[X] For Approval [ ] For Your Use [X] As You Requested
[ ] For Comment [ ] For Resubmittal [X] For Your Records

Remarks: Please review the attached report that has been transmitted via FAX. With your approval, an original of the Quarterly M&S Report will be mailed to your office and copies will be mailed to Jennifer Eberle of the ACDEH and to Mr. Dan Schoenhlz of the Port of Oakland.
If you have any comments or questions concerning the work plan, please feel free to give me a call.

Copies to:

Ms. Jennifer Eberle, Hazardous Materials Specialist (510) 567-6761
Alameda County Department of Environmental Health FAX (510) 337-9335
1131 Harbor Bay Parkway, #250
Alameda, California 94502-6577

Mr. Dan Schoenholz (510) 272-1220
Environmental Scientist FAX (510) 465-3755
Port of Oakland
530 Water Street
Oakland, California 94607

Tms4.WK3

GROUNDWATER TECHNOLOGY, INC.

1401 Halyard Drive, Suite 140, West Sacramento, CA 95691, (916) 372-4700

FAX (916) 372-8781

April 26, 1995

Mr. Don Ringsby
Ringsby Terminals, Inc.
3980 Quebec Street, Suite 214
Denver, CO 80207

Subject: First Quarter 1995 Groundwater Monitoring and Sampling Report
Ringsby Terminals, Port of Oakland
2225 7th Street
Oakland, California 94607
GTI Project 02070 0061

Dear Mr. Ringsby:

This letter summarizes the groundwater monitoring and sampling work performed by Groundwater Technology Inc. at the subject site (Attachment 1, Figure 1). On March 29, 1995, Groundwater Technology personnel monitored the depth to groundwater in three groundwater monitoring wells, MW-1, MW-2, and MW-3, located on the property leased by Ringsby Terminals, Inc. Groundwater Technology personnel also collected water samples from the three wells to determine the distribution of hydrocarbons in the groundwater. The work was performed at the request of Ms. Jennifer Eberle of the Alameda County Health Care Services, Department of Environmental Health, (ACHC).

The groundwater monitoring information and results of analyses of groundwater samples collected in January 1993, September 1994, November 1994, and March 1995, are summarized in Table 1 (Attachment 2). The analytical data and Chain-of-Custody for the March 29, 1995 sampling event are included in Attachment 3. The groundwater monitoring and sampling field notes for March 29, 1995, are included in Attachment 4. Please note the monitoring wells, MW-1, MW-2, and MW-3, are located on the Ringsby Terminal Lease and the three wells, MW-1*, MW-2*, and MW-3*, are located north of the Ringsby Terminal lease on the Port of Oakland property (Figure 2 and Attachment 2). The December 6, 1994 Port of Oakland groundwater monitoring well survey results were used to calculate new groundwater gradients for the current and previous groundwater monitoring events (Figure 3 and Table 1).

File:DNGRYO&M.R3b

Groundwater Monitoring

On March 29, 1995, Groundwater Technology personnel monitored the groundwater elevation and the thickness of any SP hydrocarbons in monitoring wells MW-1, MW-2, and MW-3 (Figure 3, Table 2). Consultants for the Port of Oakland also monitored the depth to groundwater and product thickness in the Port of Oakland wells MW-1*, MW-2*, and MW-3*. The Port of Oakland groundwater monitoring wells were not monitored or sampled by Groundwater Technology.

Depth to water was measured using an ORS Environmental Equipment INTERFACE PROBE Well Monitoring System, consisting of a dual optical sensor and electrical conductivity probe, that distinguishes between water and SP hydrocarbons. The probe was cleaned between each well to avoid cross contamination of the groundwater. To diminish the effects of fluctuations in the groundwater table due to tides, the depth to groundwater was measured in the three wells within a one-hour time period. All measurements were made from the top of casing in each well. No SP hydrocarbons were noted in the three Ringsby Terminals groundwater monitoring wells.

Groundwater Gradient and Flow Direction

Based on the water table measurements in the three Ringsby Terminal groundwater monitoring wells, the calculated groundwater flow was North 13 degrees East at a gradient of 0.003 foot per foot, (Attachment 1, Figure 3). Groundwater monitoring data for the Port of Oakland groundwater monitoring wells MW-1*, MW-2*, and MW-3* was not supplied to Groundwater Technology, Inc or representatives of Ringsby Terminals, Inc.

why not?

Groundwater Sampling

Following groundwater monitoring, groundwater Technology personnel sampled the groundwater in the three Ringsby Terminals monitoring wells to determine the distribution of dissolved hydrocarbons in the groundwater. Prior to water-sample collection, the three Ringsby Terminal groundwater monitoring wells were purged of 4 well volumes and allowed to recharge with representative formation water. Temperature, conductivity, and pH measurements of the purged water were recorded. Due to an obstruction in its screened section, well MW-3 was only purged to a depth of 9.25 feet below the casing top. A disposable Teflon bailer was used for the groundwater sampling. One distilled water field blank was collected for quality control purposes. All water samples were then transferred to two 40-milliliter glass vials with Teflon-septum caps and two 1-liter amber bottles, preserved on ice, and transported to a California state-certified laboratory, accompanied by a chain-of-custody manifest. The three groundwater samples and one field blank sample were analyzed for benzene, toluene, ethylbenzene and xylenes (BTEX), and total petroleum hydrocarbons-as-gasoline (TPH-G), and total petroleum hydrocarbons-as-diesel (TPH-D) by EPA methods 8020 and modified 8015.

clear it out!

WASTEWATER

A total of 55 gallons of purge water was generated during the purging event of the monitoring wells. The 55-gallon drum was labeled "Dongary, non-hazardous well purge water, 03-29-95". Since the analytical results document the presence of hydrocarbons in the groundwater, the drum of purged water will need to be disposed of off-site.

GROUNDWATER ANALYTICAL RESULTS

Samples collected from groundwater monitoring well MW-2 contained 75 ug/L TPH-D and 0.3 ug/L benzene. The water sample collected from MW-2 was also reported by GTEL to have a gas chromatogram pattern that is not characteristic of a gasoline signature (Attachment 3). Water samples collected from groundwater monitoring wells MW-1 and MW-3 did not contain concentrations of BTEX, TPH-G, and TPH-D above the laboratory reporting limits. The recent and historical analytical results are summarized in Table 1. Copies of the laboratory reports and chain-of-custody for the March 29, 1995 groundwater samples are included in Attachment 3 and the field notes are included in Attachment 4.

OBSERVATIONS

The groundwater elevations measured in the three wells on March 29, 1993 were 0.81 to 1.19 feet higher than those measured during the previous monitoring event. The calculated flow direction and gradient calculated for this monitoring event was North 13 degrees East at 0.0035 foot/foot and the previous event was North 17 degrees West at 0.0016 foot/foot. As shown in Table 1, dissolved TPH-D concentrations, reported in all three monitoring wells during the previous quarter, have declined to below the laboratory reporting limits in MW-1 and MW-3.

Please contact Groundwater Technology's West Sacramento office if you have questions or comments regarding this quarterly report.

Sincerely,

Groundwater Technology, Inc.
Written/Approved by

JAFFREY S. AUCHTERLONIE
Lead Geologist
Project Manager

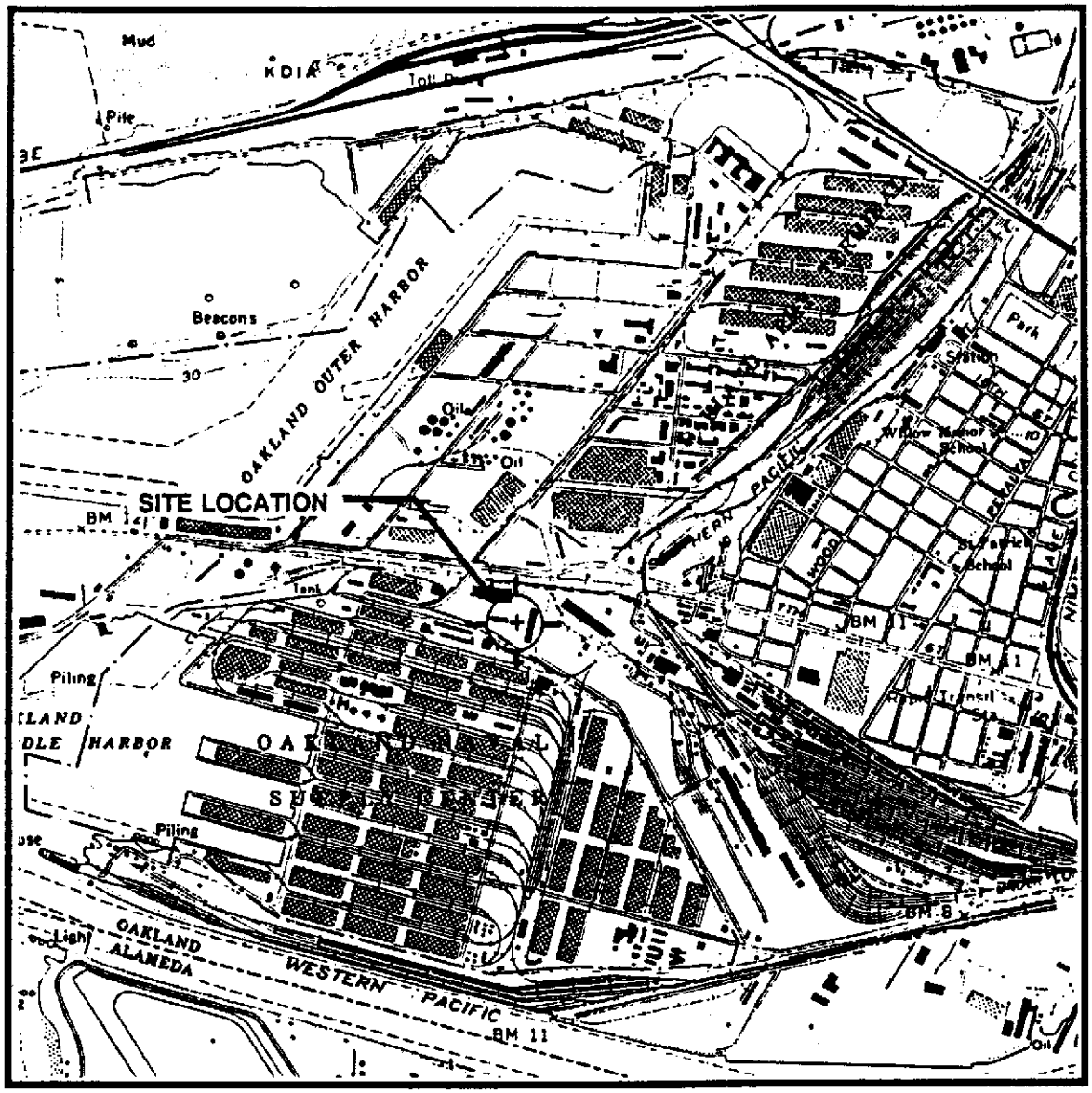
Groundwater Technology, Inc.
Reviewed/Approved by

E. K. SIMONIS, R.G.
Senior Geologist

REGISTERED GEOLOGIST
EDVARDAS (ED) K. SIMONIS
No. 4422
STATE OF CALIFORNIA

JSA/rz

Attachments
1. Figures
2. Tables
3. Laboratory Reports
4. Groundwater Monitoring Well Survey Data, and Monitoring and Sampling Field Notes



SOURCE: U.S.G.S. TOPOGRAPHIC QUADRANGLE
OAKLAND WEST
7.5 MINUTE SERIES
1959/PHOTOREVISED 1980

SCALE 1:24,000

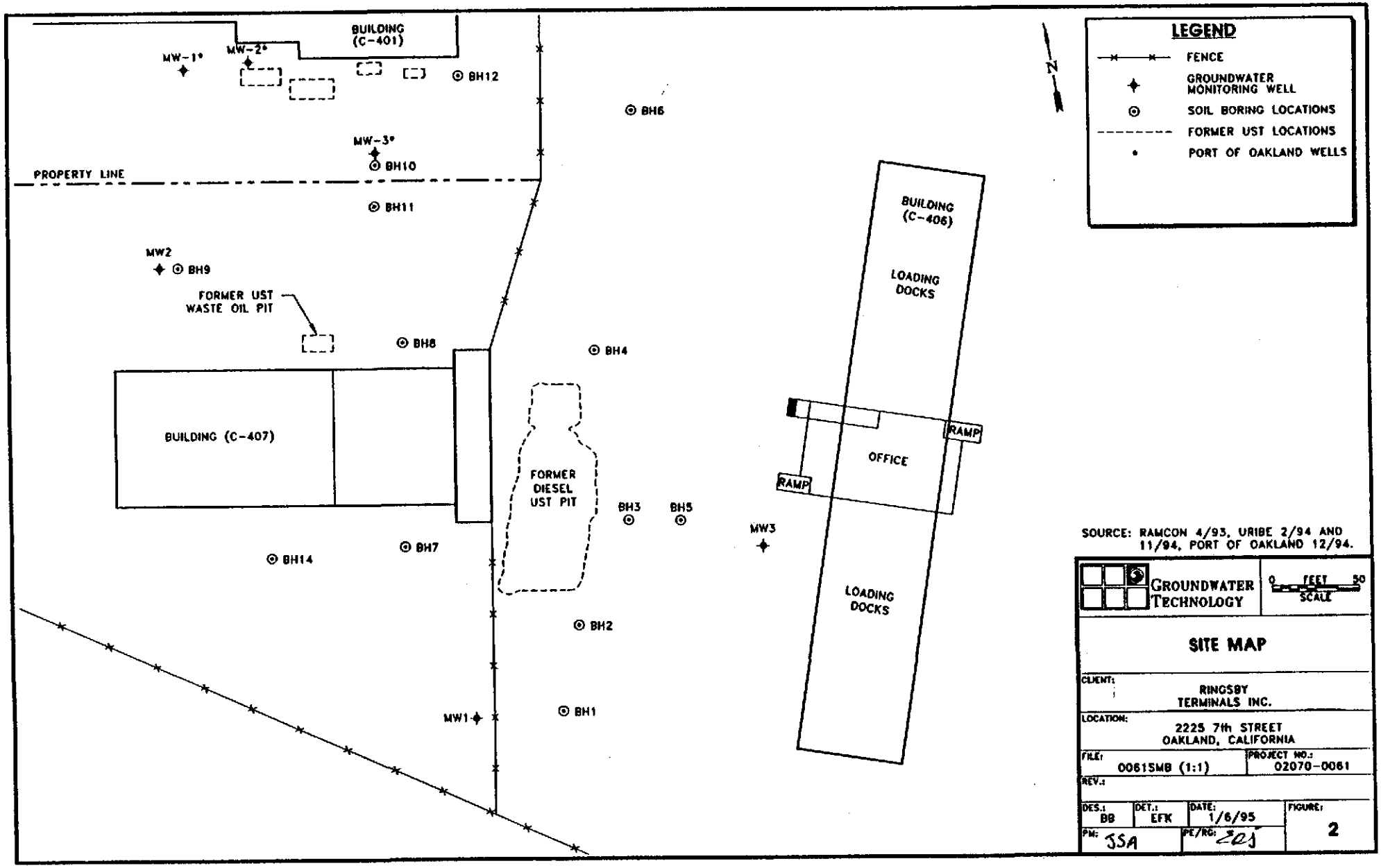
0 2,000 4,000

SCALE FEET

GROUNDWATER TECHNOLOGY

SITE LOCATION MAP

CLIENT: RINGSBY TERMINALS INC.	FILE: 0061-SL (1:1)		PROJECT NO.: 02070-0061	PM: JSA	PE/RG: SP
	REV.				
LOCATION: 2225 7th STREET OAKLAND, CA.	DES.: JA	DET.: SP	DATE: 4-4-95	FIGURE: 1	


BUILDING (C-401)
MW-1*
MW-2*
BH12
BH6
MW-3*
BH10
PROPERTY LINE
BH11
MW2
BH9
FORMER UST WASTE OIL PIT
BH8
BH4
BUILDING (C-407)
FORMER DIESEL UST PIT
BH3
BH5
MW3
BH14
BH7
BH2
MW1
BH1
BUILDING (C-406)
LOADING DOCKS
RAMP
OFFICE
RAMP
LOADING DOCKS
N
LEGEND
FENCE
GROUNDWATER MONITORING WELL
SOIL BORING LOCATIONS
FORMER UST LOCATIONS
PORT OF OAKLAND WELLS
SOURCE: RAMCON 4/93, URIBE 2/94 AND 11/94, PORT OF OAKLAND 12/94.
GROUNDWATER TECHNOLOGY
0 FEET 50
SCALE
SITE MAP
CLIENT: RINGSBY TERMINALS INC.
LOCATION: 2225 7th STREET OAKLAND, CALIFORNIA
FILE: 0061SMB (1:1)
PROJECT NO.: 02070-0061
REV.:
DES.: BB
DET.: EFK
DATE: 1/6/95
FIGURE: 2
PM: JSA
PE/RG: 2QJ

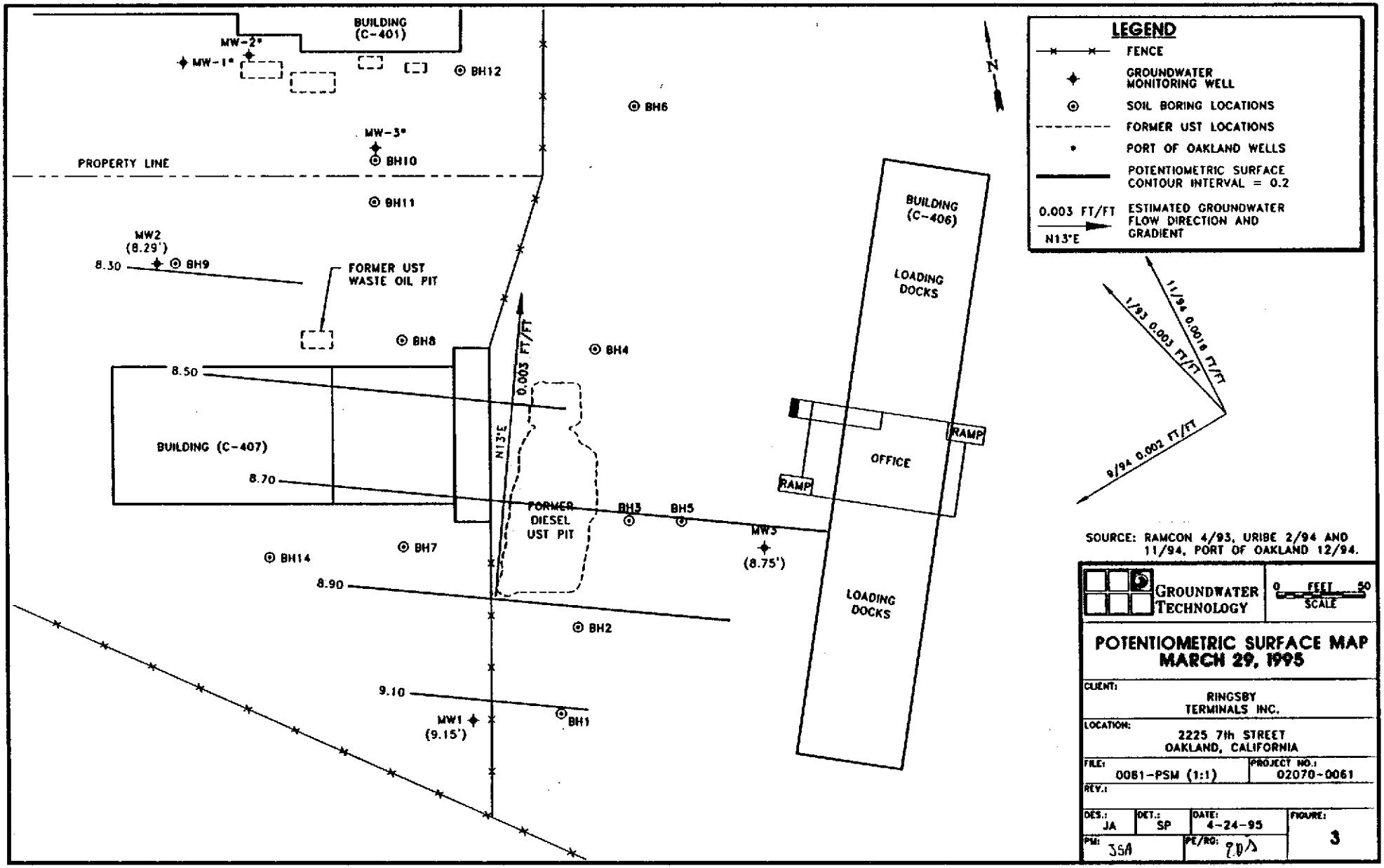

BUILDING (C-401)
MW-2*
MW-1*
BH12
BH6
MW-3*
BH10
PROPERTY LINE
BH11
MW2 (8.29')
8.30
BH9
FORMER UST WASTE OIL PIT
BH8
BH4
8.50
BUILDING (C-407)
8.70
0.003 FT/FT
N13°E
FORMER DIESEL UST PIT
BH3
BH5
MW3 (8.75')
BH14
BH7
8.90
BH2
9.10
MW1 (9.15')
BH1
BUILDING (C-406)
LOADING DOCKS
RAMP
OFFICE
RAMP
LOADING DOCKS
N
LEGEND
FENCE
GROUNDWATER MONITORING WELL
SOIL BORING LOCATIONS
FORMER UST LOCATIONS
PORT OF OAKLAND WELLS
POTENTIOMETRIC SURFACE CONTOUR INTERVAL = 0.2
0.003 FT/FT
N13°E
ESTIMATED GROUNDWATER FLOW DIRECTION AND GRADIENT
11/94 0.0018 FT/FT
1/93 0.003 FT/FT
9/94 0.002 FT/FT
SOURCE: RAMCON 4/93, URIBE 2/94 AND 11/94, PORT OF OAKLAND 12/94.
GROUNDWATER TECHNOLOGY
0 FEET 50
SCALE
POTENTIOMETRIC SURFACE MAP
MARCH 29, 1995
CLIENT:
RINGSBY TERMINALS INC.
LOCATION:
2225 7th STREET
OAKLAND, CALIFORNIA
FILE:
0061-PSM (1:1)
PROJECT NO.:
02070-0061
REV.:
DES.:
JA
DET.:
SP
DATE:
4-24-95
FIGURE:
3
PM:
PE/RG:

Table 1

GROUNDWATER MONITORING AND ANALYTICAL DATA, 1993, 1994, and 1995

Concentrations in parts per billion (ppb), or micrograms per liter (µg/l)

Ringsby Terminals, Inc.- Port of Oakland
2225 7th Street, Oakland, California

WELL ID/ ELEVATION (TOC:feet)	DATE	BENZENE	TOLUENE	ETHYL-BENZENE	XYLENES	TPH-G	TPH-D	DTW (feet)	SPT (feet)	GWE (feet)
MW-1	01/15/93	< 0.3	< 0.3	< 0.3	< 0.3	< 50 ~	< 50	5.21	0.00	8.51
13.72	09/12/94	0.5	< 0.3	< 0.3	< 0.3	< 10 c	10,000	6.37	0.00	7.35
	11/30/94	< 0.3	< 0.3	< 0.3	< 0.3	< 10	2,800	5.76	0.00	7.96
	03/29/95	< 0.3	< 0.3	< 0.3	< 0.3	< 50	< 50	4.57	0.00	9.15 ↑
MW-2	01/15/93	< 0.3	< 0.3	< 0.3	< 0.3	< 50	< 50	6.21	0.00	7.59
13.80	09/12/94	0.5	< 0.3	< 0.3	< 0.3	34 c	< 50	6.47	0.00	7.33
	11/30/94	0.9	< 0.3	< 0.3	< 0.3	< 10	81	6.34	0.00	7.46
	03/29/95	0.3	< 0.3	< 0.3	< 0.3	< 50	75	5.51	0.00	8.29 ↑
MW-3	01/15/93	< 0.3	< 0.3	< 0.3	< 0.3	< 50	< 50	6.44	0.00	8.62
15.06	09/12/94	0.3	< 0.3	< 0.3	< 0.3	< 50	< 50	7.35	0.00	7.71
	11/30/94	< 0.3	< 0.3	< 0.3	< 0.3	110	150	7.12	0.00	7.94
	03/29/95	< 0.3	< 0.3	< 0.3	< 0.3	< 50	< 50	6.31		8.75 ↑
MW-1*	11/30/94	---	---	---	---	---	---	9.51	0.91	-8.71
14.14	03/29/95	---	---	---	---	---	---	---	---	---
MW-2*	11/30/94	---	---	---	---	---	---	8.91	0.00	-8.91
14.37	03/29/95	---	---	---	---	---	---	---	---	---
MW-3*	11/30/94	---	---	---	---	---	---	13.07	5.21	-8.51
14.20	03/29/95	---	---	---	---	---	---	---	---	---

Page 1 of 1

EXPLANATION:

TPH-G = Total petroleum hydrocarbons-as-gasoline
TPH-D = Total petroleum hydrocarbons-as-diesel
DTW = Depth to water
SPT = Separate-phase thickness
GWE = Groundwater elevation
MSL = Mean sea level
TOC = Top of casing
-- = Not analyzed or no sample collected

~ = Sample also analyzed using EPA 624, volatile organics were present.
a = Uncategorized compound not included in the hydrocarbon concentration
b = Uncategorized compound not included in the gasoline concentration
c = Hydrocarbon pattern is not characteristic of gasoline

SURVEY INFORMATION:

Well #	TOC	Grade	Property/well Owner
MW-1	13.72	---	Ringsby Terminals, Inc.
MW-2	13.80	---	Ringsby Terminals, Inc.
MW-3	15.06	---	Ringsby Terminals, Inc.
MW-1*	14.14	---	Port of Oakland
MW-2*	14.37	---	Port of Oakland
MW-3*	14.20	---	Port of Oakland

GWE for wells with separate phase hydrocarbons calculated assuming a specific gravity of (0.875)
Wells surveyed to Port of Oakland Datum 12/06/94, (3.2 feet below mean sea level)

M&STab2.wk1

GROUNDWATER TECHNOLOGY, INC.

GTEL
ENVIRONMENTAL
LABORATORIES, INC.

Northwest Region
4080-C Pike Lane
Concord, CA 94520
(510) 685-7852
(800) 544-3422 *from inside California*
(800) 423-7143 *from outside California*
(510) 825-0720 (FAX)

April 7, 1995

Jaff Auchterlonie
Groundwater Technology, Inc.
1401 Halyard Drive, Suite 140
West Sacramento, CA 95691

RE: GTEL Client ID: 020700061
Login Number: C5030355
Project ID (number): 020700061.030504
Project ID (name): Dongary/2225 7th St., Oakland, CA

Dear Jaff Auchterlonie:

Enclosed please find the analytical results for the samples received by GTEL Environmental Laboratories, Inc. on 03/30/95 under Chain-of-Custody Number(s) 38560.

A formal Quality Assurance/Quality Control (QA/QC) program is maintained by GTEL, which is designed to meet or exceed the EPA requirements. Analytical work for this project met QA/QC criteria unless otherwise stated in the footnotes.

GTEL is certified by the Department of Health Service under Certification Number E1075.

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

Sincerely,
GTEL Environmental Laboratories, Inc.

For

Rashmi Shah
Laboratory Director

GTEL Client ID: 020700061 ANALYTICAL RESULTS
Login Number: C5030355 Volatile Organics
Project ID (number): 020700061.030504 Method: EPA 8020
Project ID (name): Dongary/2225 7th St., Oakland, CA Matrix: Aqueous

GTEL Sample Number	C5030355-01	C5030355-02	C5030355-03	C5030355-04
Client ID	TB-LB	MW 3	MW 2	MW 1
Date Sampled	03/29/95	03/29/95	03/29/95	03/29/95
Date Analyzed	04/01/95	04/02/95	04/03/95	04/02/95
Dilution Factor	1.00	1.00	1.00	1.00

Analyte	Reporting Limit	Units	Concentration:			
Benzene	0.3	ug/L	< 0.3	< 0.3	0.3	< 0.3
Toluene	0.3	ug/L	< 0.3	< 0.3	< 0.3	< 0.3
Ethylbenzene	0.3	ug/L	< 0.3	< 0.3	< 0.3	< 0.3
Xylenes (total)	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
TPH as GAS	50.	ug/L	< 50.	< 50.	< 50.	< 50.
BFB (Surrogate)	--	%	92.3	92.3	93.6	91.8

Notes:

Dilution Factor:

Dilution factor indicates the adjustments made for sample dilution.

EPA 8020:

"Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", SW-846, Third Edition including promulgated Update 1. Acceptability limits for recovery in the Bromofluorobenzene (BFB) surrogate is 62-129%. Modification for TPH as gasoline as per California State Water Resources Board LUFT Manual protocols, May 1988 revision.

C5030355-03:

Uncategorized compound is not included in gasoline concentration.

GTEL ENVIRONMENTAL LABORATORIES, INC.

Client Number: 020700061
Project ID: Dongary
2225 7th St.
Oakland, CA
Work Order Number: C5-03-0335

ANALYTICAL RESULTS

Total Petroleum Hydrocarbons as Diesel in Water

Modified EPA Methods 3510/8015[a]

GTEL Sample Number		02	03	04	GCKB 0405
Client Identification		MW-3	MW-2	MW-1	METHOD BLANK
Date Sampled		03/29/95	03/29/95	03/29/95	--
Date Extracted		04/01/95	04/01/95	04/01/95	04/01/95
Date Analyzed		04/05/95	04/05/95	04/05/95	04/05/95
Analyte	Detection Limit, ug/L	Concentration, ug/L			
TPH as Diesel	50	<50	75	<50	<50
Detection Limit Multiplier		1	1	1	1
O-Terphenyl surrogate, % recovery		108	122	108	88.7

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

GTEL ENVIRONMENTAL LABORATORIES, INC.

GTEL Client ID: 020700061 QUALITY CONTROL RESULTS
Login Number: C5030355 Volatile Organics
Project ID (number): 020700061.030504 Method: EPA 8020
Project ID (name): Dongary/2225 7th St., Oakland, CA Matrix: Aqueous

Method Blank Results

QC Batch No: M040195-1
Date Analyzed: 01-APR-95

Analyte	Method: EPA 8020 Concentration: ug/L
Benzene	< 0.30
Toluene	< 0.30
Ethylbenzene	< 0.30
Xylenes (Total)	< 0.50
TPH as Gasoline	< 50.0

Notes:

GTEL ENVIRONMENTAL LABORATORIES, INC.

GTEL ENVIRONMENTAL LABORATORIES INC

4080 PIKE LANE, SUITE C
CONCORD, CA 94520
(510) 685-7852
(800) 423-7143

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

38560

Company Name: GROUNDWATER TECHNOLOGY

Phone #:

FAX #:

Company Address: 4057 PORTCHICARGO HWY

Site Location: 2225 7TH ST OAKLAND CA.

Project Manager: JAFF AUCHTERLONIE

Client Project ID: (#020700061 030504 (NAME) DONGREY

Sampler Name (Print): HECTOR MEDINA

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

Field Sample ID	GTEL Lab # (Lab Use only)	# CONTAINERS	Matrix: WATER	SOIL	AIR	SLUDGE	PRODUCT	OTHER	Method Preserved: HCl	HNO3	H2SO4	ICE	UNPRESERVED	OTHER (Specify)	Sampling: DATE	TIME
TB-LB	01	1	X						X						3/	—
MW3	02	3	X										X		3/	10.00
MW2	03	3	X										X		3/29	1010
MW-1	04	3	X										X		3/ 95	10.20

Field Sample ID	BTEX 602 ☐ 8020 ☐ with MTBE ☐	BTEX/Gas Hydrocarbons PID/FID ☒ with MTBE ☐	Hydrocarbons GC/FID Gas ☐ Diesel ☐ Screen ☐	Hydrocarbon Profile (SIMDIS) ☐	Oil and Grease 413.1 ☐ 413.2 ☐ SM-503 ☐	TPH/IR 418.1 ☐ SM 503 ☐	EDB by 504 ☐ DBCP by 504 ☐	EPA 503.1 ☐ EPA 502.2 ☐	EPA 601 ☐ EPA 8010 ☐	EPA 602 ☐ EPA 8020 ☐	EPA 608 ☐ 8080 ☐ PCB only ☐	EPA 624/PPL ☐ 8240/TAL ☐ NBS (+15) ☐	EPA 625/PPL ☐ 8270/TAL ☐ NBS (+25) ☐	EPA 610 ☐ 8310 ☐	EP TOX Metals ☐ Pesticides ☐ Herbicides ☐	TCLP Metals ☐ VOA ☐ Semi-VOA ☐ Pest ☐ Herb ☐	EPA Metals - Priority Pollutant ☐ TAL ☐ RCRA ☐	CAM Metals TTLC ☐ STLC ☐	Lead 239.2 ☐ 200.7 ☐ 7420 ☐ 7421 ☐ 6010 ☐	Organic Lead ☐	Corrosivity ☐ Flash Point ☐ Reactivity ☐	OTHER: TPH-DIESEL
TB-LB		X																				
MW3		X																				X
MW2		X																				X
MW-1		X																				X

TAT
Priority (24 hr) ☐
Expedited (48 hr) ☐
7 Business Days ☒
Other _____
Business Days ☐

Special Handling
GTEL Contact _____
Quote/Contract # _____
Confirmation # _____
P.O. # _____

QA/QC Level
Blue ☐ QLP ☐ Other ☐ _____

SPECIAL DETECTION LIMITS
ON ICE AT 4°C

SPECIAL REPORTING REQUIREMENTS
FAX ☐

REMARKS:
BTEX TPH GAS } 1 WEEK TAT
TPH-DIESEL

Lab Use Only Lot #:

Storage Location A 1/1 F/2 YELLOW

Work Order #: C5030355

CUSTODY RECORD

Relinquished by:	Date	Time	Received by:
Sampler:	3-30-95	08:45	
	3-30-95	0900	
	3/30/95	0900	Received by Laboratory

Waybill #

Attachment 4

Groundwater Monitoring Well Survey Data
and
Monitoring and Sampling Field Notes

WORK REQUEST FORM

JOB NAME:	Dongary– Port of Oakland	JOB NUMBER:	02070–0061–030504
SITE ADDRESS:	2225 7th Street Oakland, California	START DATE:	[redacted] ~~03/14/95~~ 3/24/95 [redacted]
		DATE PREPARED:	10/09/94
PREPARED FOR:	Field Services	PREPARED BY:	Jaff Auchterlonie

WORK DESCRIPTION: MONITOR AND SAMPLE THREE 15 foot deep MONITORING WELLS

SCOPE OF WORK: MONITOR and SAMPLE 3–15 foot deep GROUNDWATER WELLS for three quarters

Projected work dates, the second week of: (December, March, and ~~July~~ June

~~Monitoring well seals must be installed at site, please call Jaff Auchterlonie for details~~

MONITOR GROUNDWATER DEPTH IN THREE WELLS

Due to tidal influences at the site it is important to measure the groundwater depth in the in the three wells in a reasonably short time frame.

Break the sanitary seal in each well and allow groundwater to stabilize.

Measure the depth to groundwater in each well, taking no more than 15 minutes to monitor the depths in all three wells.

All depth measurements will be from Top Of Casing

COLLECT WATER SAMPLES FROM THE THREE WELLS, MW–1, MW–2, MW–3

Based on past analyses, sample well MW–3 first, MW–2 second, and MW–1 last.

Using a hand bailer Purge four well volumes from each well

Measure & record pH, conductivity, and temperature of the purged groundwater.

Store water in one or two 55 gallon drums and place drums as shown on attached site plan.

Label drums as purged groundwater, Dongary Investments/GTI, and date.

ANALYZE WATER SAMPLES WITH GTEL.

Fill out COC and request BTEX, TPH–G, and TPH–D on a one week TAT

Replace 4" expansion cap on MW 2 (this may have been done by Chrislic)

EQUIPMENT NEEDED:

Health & Safety Site Plan

Two 55 gallon drums, Nine 40 ml VOAs, Six 1 liter amber bottles

Bailers to purge water from 4" wells and three disposable bailers NO PUMPS

~~1/2~~, 9/16", and ~~15/16~~" sockets 3210 Kay

GENERAL INFORMATION

Direct all questions to Jaff Auchterlonie or Bruce Beale, (916) 372–4700

Site Contacts:	N.W Transport	Monty or Dennis	(510) 451–6987
Off–Site Contact:	Sealand	Todd Burson	(510) 272–5214

~~RECEIVED~~

APR 1 2 1995

PROJECT MANAGER, Jaff Aushterlonie

AUTHORIZATION

~~Reviewed Date:~~ 4-3-95

~~Reviewed By:~~

~~Work Acceptable:~~ ~~Yes~~ ~~No~~

Rework Required Yes No

file:WkReq2.wk1

GROUNDWATER GAUGING FORM

JOB NAME: Dongary– Port of Oakland
IP#: 2225 7th Street, Oakland, CA.
MEASURED TO TOC OR GRADE? Top of Casing

JOB NUMBER: 02070–0061–030504
DATE: 3/29/95

NOTE: Well MW–3 has obstruction at 9.5 feet

WELL I.D.	DTB	WELL DIAM.	WELL ELEV. TOC	DTW	DTP	PT	80% RECHG.	ELEV WATER	COMMENTS Please note if well needs locking cap or street box repai
MW–1	14.95	4"	~~97.72'~~	4.57				9.15	
MW–2	15.0	4"	~~98.59'~~	5.51				8.29	REPLACED CAP+ lock
MW–3	9.50	4"	~~99.45~~ ~~99.22~~	6.31				8.75	Obstruction @ 9.6 ft

SITE VISITATION REPORT

Project: Dongary–Port of Oakland   Date: 3/29/95   Project No.: 02070   0061– 030504

Name(s): HECTOR MERINO   Did you call in?   Yes   (No)

Arrival Time: 8:00   Departure Time: 10:30   Who did you call?

Weather Notations: (SUN)   CLOUDY   RAIN   SNOW   Temperature: 70 °F

PURPOSE OF VISIT

X	GAUGE WELLS		SURVEY		INSTALL EQUIPMENT
	BAIL SEPARATE–PHASE		MONITOR VAPORS		INSTALL SYSTEM
	SAMPLE A/S INF EFF		SAMPLE CARBON		
	SYSTEM CHECK		BATCH FEED		
X	SAMPLE WELLS		EQUIPMENT REPAIR		

DRUM INVENTORY

1 FULL DRUM	WATER		CARBON	TOTAL OPEN TOP	
	SOIL		EMPTY	TOTAL BUNG TOP	

SAMPLE INFORMATION

SAMPLED: ✓ YES   ____ NO

✓ WATER   ____ SOIL

____ AIR   ____ OTHER

PARAMETERS: BTEX TPH GAS / TPH-DIESEL

STATION NO:

LABORATORY: GTEL

LAB RELEASE NO: 38560 COC #

REMEDIATION SYSTEM

FLOW TOTALIZER: ____   AIR VELOCITY: ____

FLOW RATE: ____   PID INF: ____

% LEL: ____   PID EFF: ____

DESCRIPTION OF ACTIVITIES ON SITE AND NOTES

MONITORED + SAMPLED THREE WELLS MW-3-2-1. I FILLED THE DRUM ON SITE TO THE TOP. SAMPLED WELLS FOR BTEX TPH GAS -TPH DIESEL.
I INSTALLED A NEW CAP + LOCK ON MW2.

Project Name: Dongary Investments

Date: 3/29/95

Site Address: 2225 7th St. Oakland

Page 1 of 3

Project Number: 020700061.030504

Project Manager: Jaff Aushterlonie

Well ID: MW-3

Well Diameter: 4

DTW Measurements:
Initial: 6.31
Recharge:
DTB 9.50

Calc Well Volume: 2.0 gal
Well Volume x4 8.13 gal

Purge Method
Peristaltic
Gear Drive
Submersible

Pump Depth ft.
Hand Bailed X
Air Lift
Other

Instruments Used
YSI: X
Hydac:
Omega:

Other:

Time	Temp X C / F	Conductivity	pH	Purge Volume Gallons	Turbidity	Comments
8:36	15.2	2.69	6.57	0	cloudy	Bailed out
8:38	15.4	2.73	6.85	2		A lot of sand
8:40	15.6	2.75	6.92	4		
8:42	15.2	2.94	6.99	6		
8:44	15.5	2.89	7.02	8		

Project Name: Dongary Investments

Site Address: 2225 7th St. Oakland

Project Number: 020700061.030504

Date: 3/29/95

Page 2 of 3

Project Manager: Jaff Aushterlonie

Well ID: MW-2

Well Diameter: 4

DTW Measurements:
Initial: 5.51
Recharge: _____
DTB: 15.0

Calc Well Volume: 6.1 gal
Well Volume x4 24 gal

Purge Method
Peristaltic _____
Gear Drive _____
Submersible _____

Pump Depth _____ ft.
Hand Bailed X
Air Lift _____
Other _____

Instruments Used
YSI: X
Hydac: _____
Omega: _____

Other: _____

Time	Temp X C / F	Conductivity	pH	Purge Volume Gallons	Turbidity	Comments
9:01	15.3	.50	7.10	0	Cloudy	
9:02	15.4	1.46	6.46	5	↓	
9:06	15.7	1.66	6.63	10		
9:08	15.0	1.60	6.61	15		
9:10	15.3	1.56	6.63	20		
9:12	15.6	1.63	6.62	24		

Project Name: Dongary Investments

Date: 3/29/95

Site Address: 2225 7th St., Oakland

Page 3 of 3

Project Number: 020700061.030504

Project Manager: Jaff Aushterlonie

Well ID: MW-1

Well Diameter: 4

DTW Measurements:
Initial: 4.57
Recharge:
DTB 14.95

Calc Well Volume: 6.7 gal
Well Volume: X4 26 gal

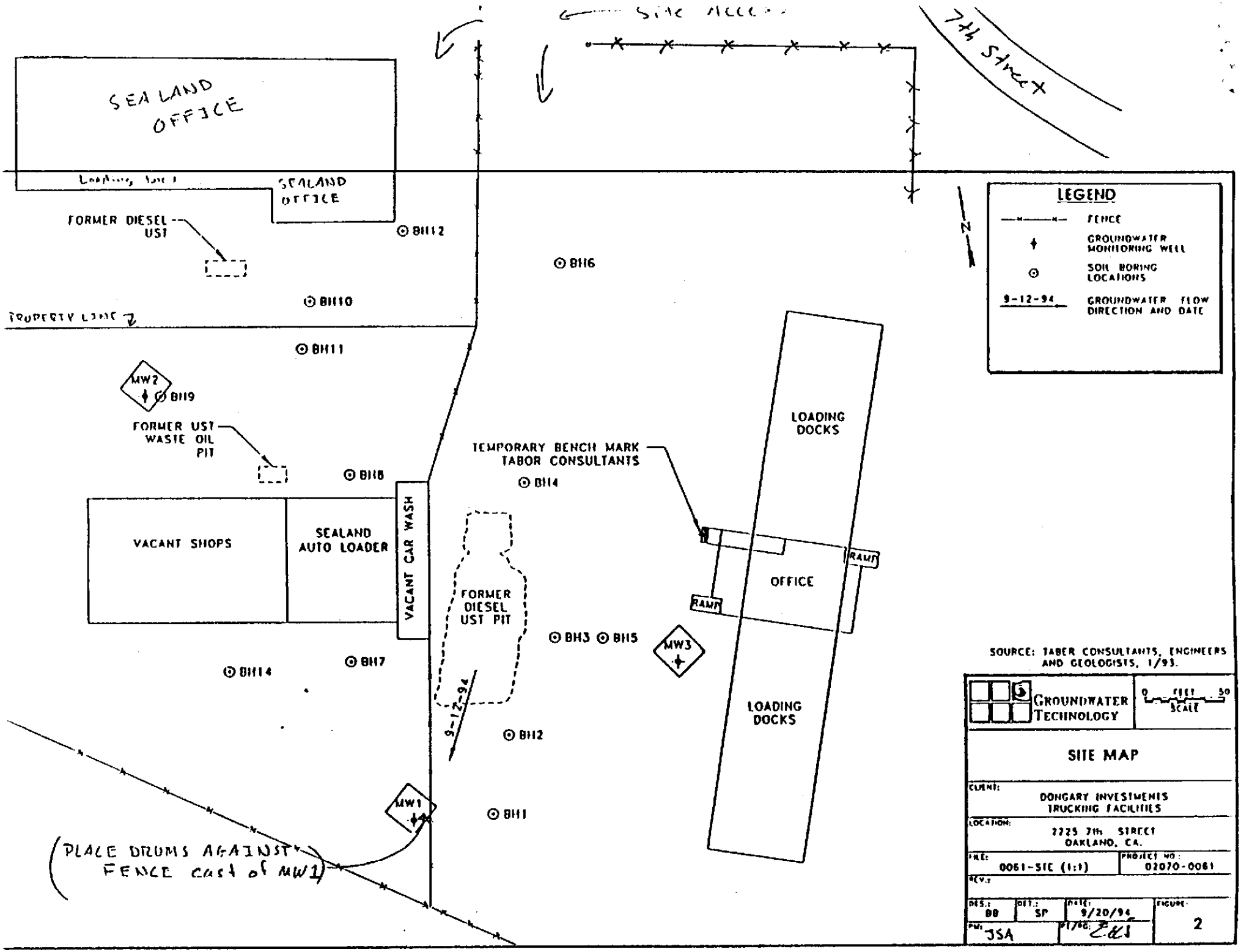
Purge Method
Peristaltic
Gear Drive
Submersible

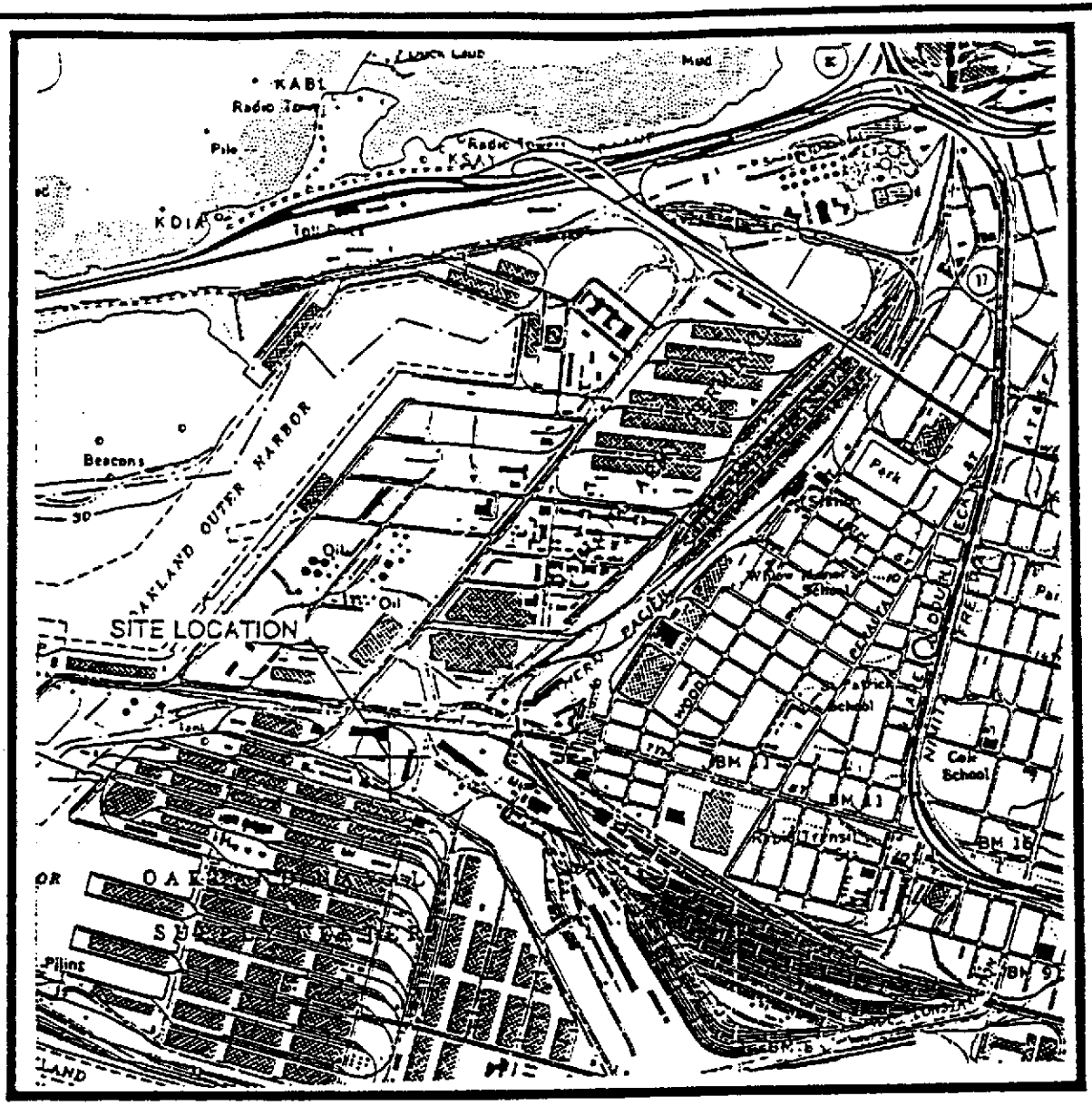
Pump Depth ft.
Hand Bailed X
Air Lift
Other

Instruments Used
YSI: X
Hydac:
Omega:

Other:

Time	Temp ⊗ C / F	Conductivity	pH	Purge Volume Gallons	Turbidity	Comments
9:20	15.8	1.92	6.88	0	cloudy	
9:22	15.9	2.01	7.00	5	↓	
9:24	15.6	2.27	7.10	10		
9:26	15.1	2.28	7.09	15		
9:28	15.0	2.24	7.12	20		
9:30	15.1	2.31	7.10	26	↓	


SEA LAND OFFICE
SEALAND OFFICE
FORMER DIESEL UST
BH12
BH6
BH10
PROPERTY LINE
BH11
MW2
BH9
FORMER UST WASTE OIL PIT
BH8
VACANT SHOPS
SEALAND AUTO LOADER
VACANT CAR WASH
TEMPORARY BENCH MARK TABOR CONSULTANTS
BH4
FORMER DIESEL UST PIT
BH3
BH5
MW3
BH7
BH14
9-12-94
BH2
MW1
BH1
LOADING DOCKS
RAMP
OFFICE
RAMP
LOADING DOCKS
7th STREET
N
LEGEND
FENCE
GROUNDWATER MONITORING WELL
SOIL BORING LOCATIONS
9-12-94 GROUNDWATER FLOW DIRECTION AND DATE
PLACE DRUMS AGAINST FENCE east of MW1
SOURCE: TABER CONSULTANTS, ENGINEERS AND GEOLOGISTS, 1/93.
GROUNDWATER TECHNOLOGY
0 FEET 50
SCALE
SITE MAP
CLIENT: DONGARY INVESTMENTS TRUCKING FACILITIES
LOCATION: 2225 7th STREET OAKLAND, CA.
FILE: 0061-SIE (1:1)
PROJECT NO: 02070-0061
REV.:
DES.: BB
DFT.: SP
DATE: 9/20/94
FIGURE: 2
PM: JSA
APP'D:



SOURCE: U.S.G.S. TOPOGRAPHIC QUADRANGLE
OAKLAND WEST
7.5 MINUTE SERIES
1959/PHOTOREVISED 1980

QUADRANGLE LOCATION

SCALE 1:24,000

0 2,000 4,000

SCALE FEET

GROUNDWATER TECHNOLOGY

SITE LOCATION MAP

CLIENT: DONGARY INVESTMENTS TRUCKING FACILITIES	FILE: 0061-SL (1:1)		PROJECT NO.: 02070-0061	PM: JSA	PE/RG: EJ
	REV.				FIGURE: 1
LOCATION: 2225 7th STREET OAKLAND, CA.	DES.: BB	DET.: SP	DATE: 9/20/94		

GTEL ENVIRONMENTAL LABORATORIES INC

4080 PIKE LANE, SUITE C
CONCORD, CA 94520
(510) 685-7852
(800) 423-7143

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

38560

Company Name: GROUNDWATER TECHNOLOGY
Phone #:
FAX #:
Company Address: 4057 PORTCHICAGO HWY
Site Location: 2225 7TH ST OAKLAND CA.
Project Manager: JAFF AUCHTERLONIE
Client Project ID: (#) 020700061 030504
(NAME) DOUGARY
Sampler Name (Print): HECTOR MEDINA
I attest that the proper field sampling procedures were used during the collection of these samples.

Field Sample ID	GTEL Lab # (Lab Use only)	# CONTAINERS	Matrix: WATER	SOIL	AIR	SLUDGE	PRODUCT	OTHER	Method Preserved: HCl	HNO3	H2SO4	ICE	UNPRESERVED	OTHER (Specify)	Sampling: DATE	TIME
TB-LB		1	X						X						3/	
MW3		3											X		3/	10:00
MW2		3											X		3/	10:10
MW-1		3											X		3/	10:20

ANALYSIS REQUEST | OTHER

BTEX 602 ☐ 8020 ☐ with MTBE ☐
BTEX/Gas Hydrocarbons PID/FID ☐ with MTBE ☐ X
Hydrocarbons GC/FID Gas ☐ Diesel ☐ Screen ☐
Hydrocarbon Profile (SIMDIS) ☐
Oil and Grease 413.1 ☐ 413.2 ☐ SM-503 ☐
TPH/IR 418.1 ☐ SM 503 ☐
EDB by 504 ☐ DBCP by 504 ☐
EPA 503.1 ☐ EPA 502.2 ☐
EPA 601 ☐ EPA 8010 ☐
EPA 602 ☐ EPA 8020 ☐
EPA 608 ☐ 8080 ☐ PCB only ☐
EPA 624/PPL ☐ 8240/TAL ☐ NBS (+15) ☐
EPA 625/PPL ☐ 8270/TAL ☐ NBS (+25) ☐
EPA 610 ☐ 8310 ☐
EP TOX Metals ☐ Pesticides ☐ Herbicides ☐
TCLP Metals ☐ VOA ☐ Semi-VOA ☐ Pest ☐ Herb ☐
EPA Metals - Priority Pollutant ☐ TAL ☐ RCRA ☐
CAM Metals TTLC ☐ STLC ☐
Lead 239.2 ☐ 200.7 ☐ 7420 ☐ 7421 ☐ 6010 ☐
Organic Lead ☐
Corrosivity ☐ Flash Point ☐ Reactivity ☐
TPH - DIESEL X X X X

TAT
Priority (24 hr) ☐
Expedited (48 hr) ☐
7 Business Days ☒
Other _____ Business Days ☐

Special Handling.
GTEL Contact _____
Quote/Contract # _____
Confirmation # _____
P.O. # _____

QA/QC Level
Blue ☐ CLP ☐ Other ☐ _____

SPECIAL DETECTION LIMITS

SPECIAL REPORTING REQUIREMENTS
FAX ☐

REMARKS:
BTEX TPH GAS / 1 WEEK TAT
TPH-DIESEL

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

CUSTODY RECORD

	Date	Time	
Relinquished by Sampler:	3.30.95	08:45	Received by:
Relinquished by:			Received by:
Relinquished by:			Received by Laboratory:

Waybill #