

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

FAX (916) 372-8781

						FAX (916) 372-8781
TO: Mr. Don F	Ringsby			DATE:	01/17/95	JOB NO. 02070-0061
Dongary	Investments	5		FROM:	Jaff Auchterlonie	JSA
P.O. Box	7240			RE:	Dongary Investment	s – Port of Oakland
Denver, C	O. 80207				2225 7th Street	
					Oakland, CA. 94607	
We are se	ending via:		X AIRBORNE		MAIL F	AX
ORIGINALS	COPIES	DATE			DESCRIPTION	
1		01/17/94	Groundwater Mon	itoring and	Sampling Report	
Transmitt	ed as checl	ked:				
X	For Appr	oval	For Your Use	e	As You Requeste	3
					<del></del>	
	For Com	ment	For Resubm	ittal X	For Your Records	
Remarks:	Attached ye	ou will find	Groundwater Tec	hnology's	Groundwater Monitori	ng & Sampling Report.
						rded to Jennifer Eberle of the
· · · · · · · · · · · · · · · · · · ·	Alameda C	ounty Hea	alth Care Services [	Departmen	t of Environmental He	alth with your approval.
	,				hoenholtz of the Port of	
	If you need	additiona	l copies or informa	tion, pleas	e feel free to call me @	372-4700.
With approval	copies will	forwarded	to:			
	Ms. Jennife	r Eberle, l	Hazardous Materia	ls Specialis	st (5 <sup>-</sup>	0) 567-6761
	Alameda C	ounty Dep	partment of Environ	mental He	alth FAX (51	0) 337-9335
	Environme	ntal Protec	ction Division			
	1131 Harbo	or Bay Pai	kway, #250			
	Alameda, C	California	94502-6577			
	Mr. Dan Sc	hoenholz		·	(5 <sup>-</sup>	0) 272-1220
	Port of Oak	land, Env	ironmental Departn	nent	FAX (5	0) 465-3755
	530 Water	Street, 5th	Floor			
	Oakland, C	alifornia	94607			
						-
Dory~Tr3.WK1						

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

FAX (916) 372-8781

January 17, 1995

Mr. Don Ringsby Dongary Investments 3980 Quebec Street, Suite 214 Denver, CO 80207

Subject:

Groundwater Monitoring and Sampling Report

Dongary Investments, 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 November 30, 1994, Groundwater Technology personnel and representatives from Uribe Associates monitored the groundwater elevation, and thickness of any separate-phase petroleum hydrocarbons (SP) in three monitoring wells (MW-1, MW-2, and MW-3), located on the Property leased by Dongary Investment and, three wells (MW-1\*, MW-2\*, and MW-3\*), located north of the Dongary lease on the Port of Oakland property (Figure 2). Groundwater Technology personnel also sampled the groundwater in the three Dongary Investments monitoring wells to determine the distribution of dissolved hydrocarbons. 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 analyses of groundwater samples collected in January 1993, September 1994, and November 1994 are summarized in Table 1 (Attachment 2). The analytical data and Chain-of-Custody for the November 30, 1994 sampling event are included in Attachment 3. The groundwater monitoring well survey data and the monitoring and sampling field notes for November 30, 1994, are included in Attachment 4.

DNGRYO&M.R2b

#### Groundwater Gradient and Flow Direction

Based on the water table measurements in the three Dongary Investment groundwater monitoring wells, the calculated groundwater flow was North 17 degrees West at a gradient of 0.0016 foot per foot (Figure 3).

The previous monitoring and sampling events were performed at the site by Taber Consultants on January 15, 1993, and by Groundwater Technology on September 12, 1994. Based on the new survey information, new groundwater gradient calculations were performed and a comparison of the gradients based on the previous Taber Survey data and the new Port of Oakland Survey gradients are shown below.

Monitoring	Groundwater Gradient for D	ongary Investment Property
Date	Taber Consultants Survey	Port of Oakland Survey
01/15/93	0.0014 ft/ft - South 85 West	0.003 ft/ft - North 34 West
09/12/94	0.004 ft/ft - South 27 West	0.002 ft/ft - South 69 West
11/30/94	0.002 ft/ft - South 40 West	0.0016 ft/ft - North 17 West

As stated above, the Port of Oakland survey results have been adopted to calculate new groundwater gradients for the previous groundwater monitoring events on the Dongary Investments Property (Figure 3 and in Table 1).

Due to the abrupt change in the lithology noted in RAMCON's "Soil and Groundwater Assessment" dated March 18, 1993, and the abrupt drop in groundwater elevation, (2 feet), between Dongary Investment's well MW-2 and the Port of Oakland's well MW-2\*; it appears that an east-west oriented hydrologic barrier exists between the two properties. The lateral extent and continuity of the hydrologic barrier is not known. Given the history of property development via dredging and backfilling the tidal mud flats and construction of the roadways for pier access, linear barriers to shallow groundwater flow are expected.

Due to the presence of separate phase hydrocarbons measured in MW-1\* and MW-3\*, the groundwater gradient around the three wells on the Port of Oakland property is controlled by the specific gravity used to calculate the gradient.

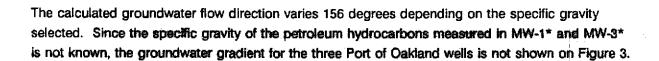
7

DNGRYO&M.R2b



Based on analytical data from soil and water samples collected from the three wells, the SP is assumed to be composed of diesel range hydrocarbons. The ASTM/IP Petroleum Measurements Tables define a range of 0.82 to 0.92 for the specific gravity of diesel. Calculations of the groundwater gradient using specific gravities for SP ranging from .82 to .92, results in the following groundwater gradients:

Specific Gravity	Flow Direction	<u>Gradient</u>
.82	South 35 West	0.004 ft/ft
.85	South 85 West	0.002 ft/ft
.875	North 13 West	0.003 ft/ft
.90	North 1 West	0.005 ft/ft
.92	North 11 East	0.008 ft/ft



#### **Groundwater Sampling**

Prior to water-sample collection, the three Dongary Investment 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<sup>R</sup>-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) by EPA methods 5030/8020/modified 8015, and total petroleum hydrocarbons-as-diesel (TPH-D) by EPA method 3510/modified 8015.



#### 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, 11-30-94". 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 wells MW-1, MW-2 and MW-3 contained TPH-D at concentrations of 2,800 ug/L, 81 ug/L, and 150 ug/L respectively. Sample MW-3 contained 110 ug/L TPH-G and sample MW-2 contained 0.9 ug/L benzene. The recent and historical analytical results are summarized in Table 1. Copies of the laboratory reports and chain-of-custody for the November 30, 1994 groundwater samples are included in Attachment 3 and the field notes are included in Attachment 4.

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

Sincerely.

Groundwater Technology, Inc.

Reviewed/Approved by

JÁFÉREY S. AUCHTERLONIE

Lead Geologist Project Manager

**JSA** 

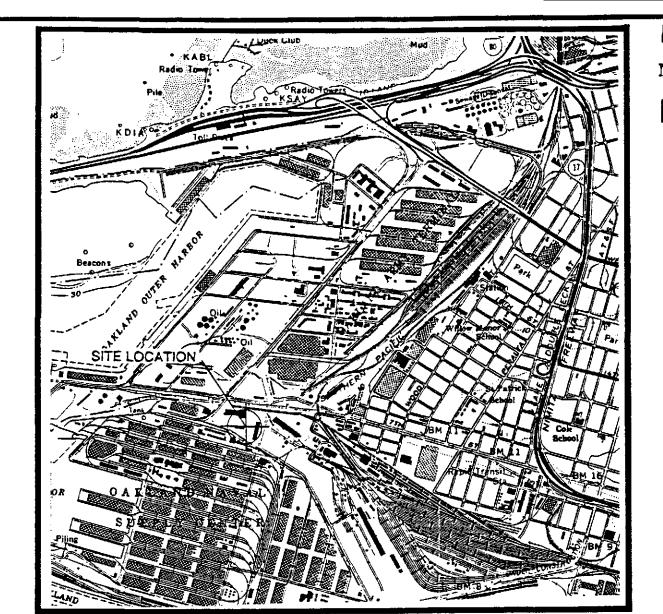
Groundwater Technology, Inc. Written/Approved by

E. K. SIMONIS, R.G.

Senior Environmental Geologist

#### **Attachments**

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



SOURCE: U.S.G.S. TOPDGRAPHIC QUADRANGLE DAKLAND WEST 7.5 MINUTE SERIES 1959/PHOTOREVISED 1980



SCALE 1:24,000

0 2,000 4,000 SCALE FEET

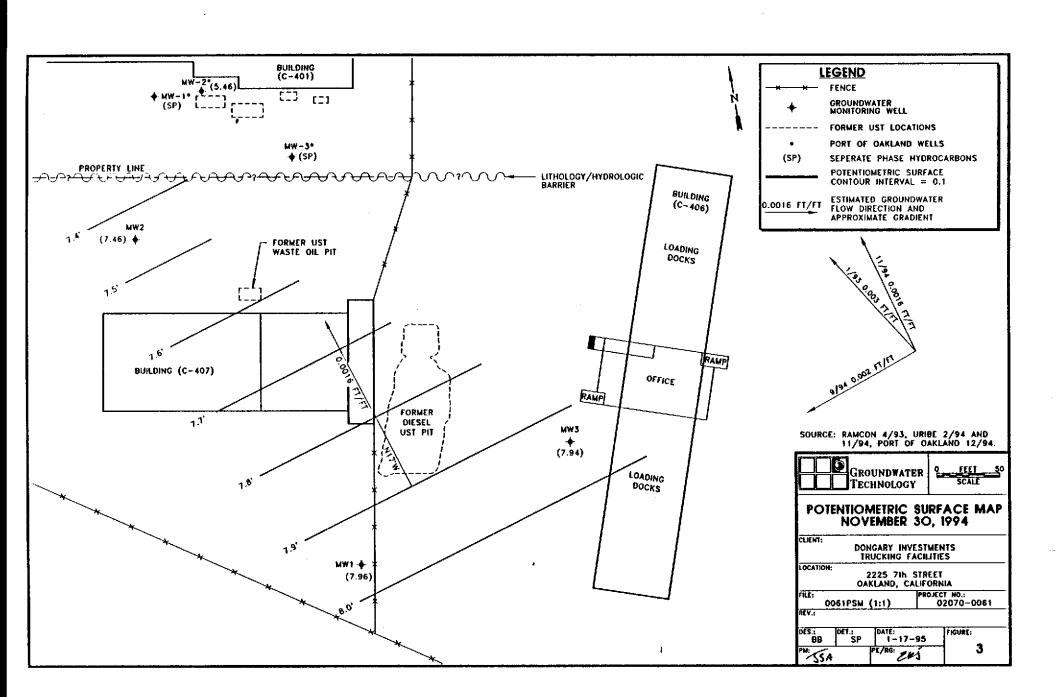
SITE LOCATION MAP GROUNDWATER TECHNOLOGY PROJECT NO.: 02070-0061 CLIENT: FILE: DD61-SL (1:1) DONGARY INVESTMENTS ELS 35A TRUCKING FACILITIES REY. FIGURE: LOCATION: 2225 7th STREET DATE: DES. DET. SP 9/20/94 DAKLAND, CA. 88

==

Or con

BUILDING (C-401) LEGEND FENCE **⊕** BH12 GROUNDWATER MONITORING WELL BH6 SOIL BORING LOCATIONS FORMER UST LOCATIONS MW-3\* **♦** BH10 PORT OF OAKLAND WELLS PROPERTY LINE BUILDING ⊕ BH11 (C-406) MW2 ♦ ⊚ вн9 LOADING FORMER UST -DOCKS WASTE OIL PIF **⊕** BH8 BH4 RAMP BUILDING (C-407) OFFICE FORMER RAMP DIESEL UST PIT BH3 BH5 0 MW3 SOURCE: RAMCON 4/93, URIBE 2/94 AND 11/94, PORT OF OAKLAND 12/94. ⊕ BH7 **⊕ 8**H14 GROUNDWATER LOADING TECHNOLOGY DOCKS ⊕ BH2 SITE MAP CLIENT: DONGARY INVESTMENTS TRUCKING FACILITIES ⊕ BH1 MW1+ LOCATION: 2225 7th STREET OAKLAND, CALIFORNIA PROJECT NO.: 0061SMB (1:1) 02070-0061 ŘEV. DATE: 1/6/95 DET.: EFK FIGURE: BB 2

į



## Table 1 GROUNDWATER MONITORING AND ANALYTICAL DATA, 1993 and 1994

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

#### Dongary investments – 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 13.72	01/15/93 09/12/94 11 <b>/30/94</b>	< 0.3 0.5 < 0.3	19.54. Since <b>&lt; 0.3</b>	< 0.3 < 0.3 < 0.3	< 0.3 < 0.5 < 0.5	< 50 ~ < 10 c < 10	< 50 10,000 2,800	5.21 6.37 5.76	0.00 0.00 0.00	8.51 7.35 7.96
MW-2 13.80	01/15/93 09/12/94 11 <b>/3</b> 0/94	< 0.3 0.5 0.9	< 0.3	< 0.3 < 0.3 < 0.3	< 0.3 < 0.5 < 0.5	< 50 34 c < 10	< 50 < 50 81	6.21 6.47 6.34	0.00 0.00 0.00	7.59 7.33 7.46
MW-3 15.06	01/15/93 09/12/94 11 <b>/30/94</b>	< 0.3 0.3 < 0.3	< 0.3	< 0.3 < 0.3 < 0.3	< 0,3 < 0,5 < 0,5	2. 4. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2.	< 50 < 50 150	and the second second second second second	0.00 0.00 0.00	8.62 7:71 7.94
MW-1* 14.14	11/30/94							9.51	0.91	5.43
MW-2* 14.37	11/30/94							8.91	0,00	5.46
MW-3* 14.20	11/30/94							13.07	5.21	5,69

Page 1 of 1

Page 1 of 1

EXPLANATION:	SURVEY	INFORM	IATION:	
TPH-G = Total petroleum hydrocarbons-as-gasoline	Well #	TOC	Grade	Property/well Owner
TPH-D = Total petroleum hydrocarbons-as-diesel	MW-1	13.72		Dongary Investments
DTW = Depth to water	MW-2	13.80		Dongary Investments
SPT = Separate - phase thickness	MW-3	15.06		Dongary Investments
GWE = Groundwater elevation	MW-1*	14.14		Port of Oakland
MSL = Mean sea level	MW-2*	14.37		Port of Oakland
TOC = Top of casing	MW-3*	14.20		Port of Oakland
= Not analyzed or no sample collected				
~ = Sample also analyzed using EPA 624, volatile organics were present.	GWE for v	vells with	separate	phase hydrocarbons
a = Uncategorized compound not included in the hydrocarbon concentration	calculated	assumin	g a spec	ific gravity of (0.875)
b = Uncategorized compound not included in the gasoline concentration	Wells surv	veyed to F	ort of Oa	kland Datum
c = Hydrocarbon pattern is not characteristic of gasoline	12/06/94,	(3.2 feet	below m	ean sea level)



### Attachment 3

#### **Laboratory Reports**







Western Region 4080 Pike Lane, Suite C Concord, CA 94520 (510) 685-7852 (800) 544-3422 Inside CA FAX (510) 825-0720

December 9, 1994

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

RE: GTEL Client ID:

020700061

Login Number:

C4120022

Project ID (number):

020700061

Project ID (name):

Dongary Invest./2255 7th St., Oakland

#### Dear Jaff Auchterionie:

Enclosed please find the analytical results for the samples received by GTEL Environmental Laboratories, Inc. on 12/01/94 under Chain-of-Custody Number(s) 32665.

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.

Rashmi Shah

Laboratory Director

GTEL Client ID:

020700061

ANALYTICAL RESULTS

Login Number:

C4120022

Volatile Organics **EPA 8020** Method:

Project ID (number): 020700061

Matrix:

Aqueous

Project ID (name): Dongary Invest./2255 7th St., Oakland

STEL SM	sple Number C4170022-01 C4	1120022-02 C4120022-03 C4120022-04
		NA-3 NA-2 NA-3
		11/30/94 11/30/94 11/30/94
		12/06/94 12/06/94 12/06/94
Drivi	tion Factor 1.00	1.00 1.00 1.00

	Reporting					
Analyte	Limit	Units	Conc	centration:		
Benzene	0.3	ug/L	< 0.3	< 0.3	0.9	< 0.3
Toluene	0.3	ug/L	0.9	< 0.3	< 0.3	< 0.3
Ethylbenzene Ethylbenzene	0.3	ug/L	< 0.3	< 0.3	< 0.3	< 0.3
Xylenes (total)	0.5	ug/L	1.4	< 0.5	< 0.5	< 0.5
TPH as GAS	10.	ug/L	< 10.	110	< 10.	< 10.
BFB (Surrogate)		X	107.	107.	104.	104.

#### 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.

#### C4120022-01:

Estimated concentrations, possible carryover from previous sample. No backup available for reanalysis.

GTEL Concord, CA C4120022:1



GTEL Client ID:

020700061

QUALITY CONTROL RESULTS

Login Number:

C4120022

Project ID (number): 020700061

Method:

**Volatile Organics** EPA 8020

Project ID (name): Dongary Invest./2255 7th St., Oakland

Matrix:

Aqueous

#### Method Blank Results

QC Batch No:

G120594-1

05-DEC-94

	Date Analyzed:	U5-UEL-94		
Analyte	Meth	nod:EPA 802	Concentration:	ug/L
Benzene		< 0.30		
Toluene		< 0.30		
Ethy Ibenzene		< 0.30		
Xylenes (Total)		< 0.50		
TPH as Gasoline		< 10.		

Notes:



GTEL Client ID:

020700061

QUALITY CONTROL RESULTS

Login Number:

C4120022

Project ID (number): 020700061

Volatile Organics Method:

EPA 8020

Project ID (name): Dongary Invest./2255 7th St. . Oakland

Matrix: Aqueous

#### Matrix Spike and Matrix Spike Duplicate Results

	Original	Solke	Matrix Soike	Matrix Søike	Matrix Spike Duplicate	Matrix Spike	:	Acceptabi	lity Limits
Analyte	Concentrat	on Amount	Concentration	n Recovery, \$	Concentration	Recovery, I	RPD. X	RPD, I	Recovery, I
EPA 8020	GTEL Sample ID:C4110	410-07	Spike ID:	G120594-3	Dup. ID:G	L20594-4			
Units: ug/L	Analysis Date:02-DE	C-94		06-DEC-94	06	5-DEC-94	Client	ID:Batch	QC
Benzene	< 0.50	20.0	22.3	112.	21.7	106.	5.5	34	57.3-138
Toluene	< 0.50	** 20.0	22.1	111.	20.8	104.	6.5	31	63-134%
Ethylbenzene	< 0.50	20.0	21.4	107.	20.4	102.	4.7	38	59.3-137
Xylenes (Tota	1) < 0.50	60.0	66.1	110.	62.9	105.	4.6	31	59.3-144%

#### Notes:



<sup>\*:</sup> C4110410-07: Toluene: For data validation purposes an estimated concentration of 0.270, which is below the reporting limit, was used to calculate the spike recovery results.

Client Number: 020700061 Project ID: Oakland Work Order Number: C4-12-0022

#### **ANALYTICAL RESULTS**

#### Total Petroleum Hydrocarbons as Diesel in Water

#### Modified EPA Methods 3510/8015<sup>a</sup>

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

GTEL Sample Number		02	03	04	GCI1206
Client Identification		MW-3	MW-2	MW-1	METHOD BLANK
Date Sampled		11/30/94	11/30/94	11/30/94	_
Date Extracted		12/02/94	12/02/94	12/02/94	12/02/94
Date Analyzed		12/06/94	12/07/94	12/07/94	12/06/94
Analyte	Detection Limit, ug/L		Concentra	ation, ug/L	
TPH as Diesel	50	150	81	2800	<50
Detection Limit Multiplier		1	1	2	1
O-Terphenyl surrogate, % reco	overy	148	121	b	126

b. Unable to report surrogate due to target compound interference.



	GTEL
=	**************************************

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

#### CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

**326**65

101014104143		(8	300)	423	-71	43										"V				13		1.1	7	ΆN	ALY	'sls	1	'nШ	Ś		·	. ,	i i	न् <b>रमा</b> ः स्टब्स			F	171	
Company Name		_		_			one									112		0.0	13.				6 1 1						4		. ·	,			C /	7/4		44	HV.
GROWE	XWATER T	<u> Ec</u>	<u>H^</u>	0) 0(	<u>67</u>	FA	X_#:										1:	10		]		ĺ									. E	١,,						J	<u>~</u>
Company Addre	ess:					Site	e Lo	cati	on:									<u>چ</u>		١.,				-	i					1.1	_ Hero	Æ	ł	Ų				-	
WEST SA Project Manage	(KAMEA)	7)				QΕ	Ŀĸ	10	M	$\overline{U}$							≥ 5	1 5							1		ΙÜ	11		des		☐ RCRA	İ	_ 6010					
						Clie	ent f	Proj	ect	D: i	(#) <b>(</b> /	707	00	061,07	1504	] <sub></sub>	1	1 1	Ť	SM-503							1 🗓	(+25		ğ	11	TAL.		1.7		4		4.	$\backslash$
Joseph Aut I lie pr	TERION	116	<u> </u>			LINA	ME	T	<u>∕o</u>	ኅ6	NZ	۲).		06 (,0)		with MTBE	8	i se	Ð	Ιű		1.	,l	ı		11	RBS	_ NBS (+25) _		뿔	Semi-VOA	111		7420 = 7421		Reactivity		7	3
f attest that the procedures were	oper field salnpling used during the	g		ıL	_	Sar	mpte	er V	iame	e (P	rinl)	:"				ا چ	6	[]	(SiO	13.	1,,	1 02	11	ı İ	l	i g	11	1]		des	Ë	utant	l i	8		α		U	
collection of these		··	<b>-</b>	KI	<u> 2 (</u>	20	<u>R./</u>	$\gamma_{l}$	R	-11	Ò					\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \	8	0	S.	ļÙ	S S	ã	22		l l	20	Ş	ξ.		estici	113	Pol	STLC			200			
		ا س	,[	Ма	atri	lх					tod			Sam	pling	9020	BTEX/Gas Hydrocarbons PID/EID + With MTBE	Hydrocarbons GC/FID Gas ☐ Diese	Hydrocarbon Profile (SIMDIS)	Oil and Grease 413.1 = 413.2 =	SM 503	EDB by 504 T DBCP by 504	303.1 □ EPA 502.2 □	EPA 601 _ EPA 8010 _	EPA 602 _ EPA 8020 _	EPA 608 _ 8080 _ PCB anty	_ 8240/TAL	EPA 625/PPL = 8270/TAL	110	EP TOX Metals _ Pesticides _ Herbicides	VOA 🗆	EPA Metals - Pnonty Pollutant	9	Lead 239.2 _ 200.7		Flash Point			
Field	GTEL	* CONTAINERS	ļ,		<u> </u>	1	_ -		Pre	ese	rve	<u>d</u> _			· •	1 [1]	F	, g	ā.	98.6		1	1 5	B	싎	8	ر ا	ď	EPA 610 🗀 8310	atais	ā II	٠.	CAM Metals TTLC	2	뮕	Œ.			
Sample ID	Lab # /Lab Use\	Ž	<u></u>		Į.ų		nr.	ı			ľ	ولي	œ _			602	Sas	Ę	ğ	ยู้	1 =	80	, E	[	g	8	24/P	25.P	5	ž	Meta	letal	Aetal	39.2	c Le	2 2	Ì		İ
	only	ĝ	¥	ğ q	֓֞֞֓֓֓֓֓֞֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓	PRODUCT	퇿	⊽	ğΪ	250	Ж	SERVED	H S	DATE	TIME	BTEX 602	Ř	l å	ydro	Į Š	TPH/IR 418.1	8	EPA 5	1 8 A	P 4 6	9 d	EPA 624/PPL	PA 6	PA 6	5	TCLP Metals	PAN	WY	pad ?	Organic Lead	Corrosivity			
TO 1001	01	١÷		<u>''                                    </u>	1	<del>" "</del>	ᅴ.	ᅷ	┷┟			300	09	11/		100	1-	1	_ <u>_</u>	10	╁╧	W	Ή	μ	ш	ш	ш	W	ш	ш	Ĕ.	w	Ú	ٽ	0	冎			-
Nik Drik_	07	1			- -	-	—K	$\Xi$			<u> </u>	$\dashv$	$\dashv$	ly_	154.4		<u> </u> ∑	-	<b> -</b>	┼	╀	╀	┨—	-							—	<u> </u>				} <b>-</b> }			
TRIPBHIK NW-3 NW-2 MW-1	02	1			+-	-	- {	X			<u>x</u>	$\dashv$		/ <del>30-</del> 194	12110 12110 12:20	-		X	-	-	-	-	╁	<del> </del>	<del> </del>	<del> </del>				_	_	-							-
1400-6	04	- 7			-	┨╾╽		χĻ			X		-	1-94	12:2	<u> </u>	<u>.</u> }	/		<del> </del> -	-{-		-	<b>-</b>															-
W M - 1	_ <del>UT</del> _	- [-1	Σ	- -	- -	-	- <b> </b> -	<u> </u>		- -	$ \mathbf{x} $	-			10.00	[—	X	X	_	<del> </del>		-	-	<del> </del>			<b> </b>		_							_		.	İ
		- -	$\left\{ -\right\}$		-	╌╢╾╢				-		-				<u> </u>	├-	ļ	ļ	·   · ·	·	1—	-	<del> </del> -	<del> </del> —	<del> </del>									· ·			-	
	<u> </u>	-	╁╌┟		- -	╌┨╼╌┨				-	$\dashv$		-				├—			-	╁	<del> </del>	╁		<del> </del> -	$\vdash$	<del> </del>					<u> </u>	<u> </u>	-	—		_		-
	-	-	1-1		╁	-{						-	$\dashv$						_		<del> </del>	<del> </del>	$\vdash$	╀	<del> </del> —	<del> </del>	_												
		1-	1-1		╁╌	┧╾╽	-}-						$\dashv$				├	<del> </del> -		-	╁─	<b> </b>	-	╂—	-				-					_					
		-}-				╂╾╂	- -						-			<u> </u>	┢			┨—		<del> </del>		}	-	_	_		-									_ -	-
	<u> </u>	-	╂╌╂	- -	- -			-				- -	-					<b></b> -			-	-	-	-	-	$\vdash$		_	-										-
		<u> </u>	<u></u>					PEC	IAL	DE.	IEC	TION		MITS			<u>L</u>	.L		<del>]</del>	REA	AAD	K.C.	<u> </u>	<u> </u>					1					لبا				
TAT Priority (24 hr) (_)	Specia GTEL Contact _	u ma	anoi	ing			ľ		,,, , <u>,</u>											-	D.4	h		כאר	11	C 4		1	Y	1-1	DI	ES	6.6						
Expedited (48 hr) []	Quole/Contract #	<u> </u>																			O		χ.	14	F1 '	<b>9</b> 7		<u>'</u>	-										
7 Business Days X	Confirmation # _						L													4	$O^{\prime\prime}$	16	<u>-</u> V	VE	Ł	<u>Ľ</u>		<u> </u>											
Business Days ( )	P.O. #						S	PEC	HAL	REF	POF	TINC	3 RI	EQUINE	MENTS	;				-	Lab	Use	Onl	y Lo	l #:							5	Stora	ige L	oca	lion			
	QA/QC Level																			ł			2		_		_												
Blue [] CLP []	Other [7]					_	F/	AX[	)	·····											Wor	k Oı	der	#: (	_<	<u>£</u>	ع [	<u> 2(</u>	<u>)(</u>	<u> </u>	2	2							
	Relinquished	1		pter:	_											Date		ı		Time			Rec	cive	by:	١.	/)a.	م.۵			•	-							
CUSTOD		hu:	7									·			11.	( ~* Date				Time		+	Rec				0	<u> </u>											
RECORD	Joen			مهو	2				į						اير			ı		-10			1100	GIVE(	υy.														
	Relinquished	by:			•	-										Date	3			Time	9		Rec														•		
			·												121	11	9	1-	14	<u> </u>	LO		Way	/bifl #		C	222	a	1	1/1	2	Ź	2	22	26	2	7		

#### Attachment 4

# Groundwater Monitoring Well Survey Data and Monitoring and Sampling Field Notes

DNGRYO&M.R2



#### December 6, 1994

To: DAN SCHOENHOLZ

Environmental Planning

From:

GILBERT E. HAYES

Survey Chief

Re:

Locations and Elevations of Monitoring Wells Survey Request 917932 / Work order: 202386

We have completed the survey work as you requested. After our discussion yesterday, I met, in the field, with Mr. John Borrego of U & A.

Together we were able to open some of the wells, however we were unable to open most of the padiccks. Thus the locations of the elevations taken at each well are annotated.

WELL	NORTHING	EASTING	ELEVATION	NOTES	EL TOL
MW1	2121670.68	6037561,78	14.59 GRADE	(1)	14,14
MW2	2121568.81	6037599.76	14.71 GRADE	(1)	14.37
MW3	2121604.12	6037663.10	14.20 TOL	(2)	14.20
MW1b	2121269.53	8037669.68	13.72 TOC	(4)	13.71
MW2b	2121560.37	6037529.43	13.81 ~	(3)	13.80
MW3b	2121339.82	6037846.26	15.06 TOL	(4)	15.06
NOTES:				( )	

- (1) The fld could not be opened. The elevation was taken on the flange of the rim. This location was punched and peinted red for future location.
- (2) The lid was opened, but the cap assembly covered the casing. Nobody had a key to this padiock. An elevation was taken on the padiock flange which was painted red.
- (3) The lid was opned however the cap was locked (no key). A measurement was made to the top of the cap. Subtract C.01 from the value shown to determine the elevation of the casing at the indicator mark.
- (4) The lid was opened and the cap removed successfully. The elevation shown is on the top of the casing.

In the future it would be very helpful if we can obtain keys and whatever tools are required to open the lids. Also, as a suggestion, you might wish to think about generating a Port Standard Detail so that lids, locks, caps, etc. are always the same on future wells.



## **WORK REQUEST FORM**

	Dongary-Port of O	<u> </u>	NUMBER:	02070-0061-030504
SITE ADDRESS:	2225 7th Street	STAR	T DATE:	11/30/94, at 8:45 AM
	Oakland, California		PREPARED:	11/23/94
	Camera, Camorra		THEFARED.	11/23/94
PREPARED FOR:	Field Services	PREF	ARED BY:	Jaff Auchterionie
WORK DESCRIE	TION: MONITO	R AND SAMPLE	HREE 15 for	of deep MONITORING WELLS
SCOPE OF WORL	C: MONITOR 6 wells ar	d SAMPLE 3-15 f	ot deep GRO	UNDWATER WELLS
MON!	OR GROUNDWATER	DEPTH IN THRE	E WELLS ON	SITE AND 3 WELLS OFFSITE
	Meet With Uribe Con	sultants, Doug She	eks, by offsite	well MW-3, at 8;45 AM
	is the circulation and	s at the site it is im	portant to mea	sure the groundwater depth in t
	in the six wells in a re	Easonably shortim	e Trame.	Arr to build by the state of th
<del></del>	montoning order o	TI WERS (MIVVS, MIVV	Z, and MVVI)	Offsite Wells (MW2, MW1, MW3
-	Break the sanitary se	al in each well and	allow proupdy	vater to stabilize
	<u>Measure the depth to </u>	ogroundwater in ea	ch well and de	con the IP hotegon each wall
1,	Offsite walls MW-1,	and MW-3 have tr	e product, me	asure product thickness
	Record depth measu	romante from Tax	of Casino	The state of the s
	THE STATE OF THE S	rements from 100 i	7	
COLLE	CT WATER SAMPLES	FROM THE THR	EE WELLS, A	#W-1, MW-2, MW-3
COLLE	ECT WATER SAMPLES Based on past analys	FROM THE THR	EE WELLS, A	/W-1, MW-2, MW-3 -2 second, and MW-1 last.
COLLE	Based on past analys Using a hand bailer	S FROM THE THR ses, sample well Mi Purge four well	EE WELLS, AV-3 first, MW-	-2 second, and MW-1 last,
COLLI	Based on past analys Using a hand bailer Measure & record ph	FROM THE THR ses, sample well Mi Purge four well I, conductivity, and	EE WELLS, NV-3 first, MW- polumes from elemperature o	-2 second, and MW-1 last, each well  I the purged groundwater.
COLLE	Based on past analys Using a hand bailer Measure & record ph Store water in one or	FROM THE THR  Ses, sample well MV  Purge four well  I, conductivity, and two 55 gallon drun	EE WELLS, NV-3 first, MW-plumes from etemperature of sand place d	-2 second, and MW-1 last, each well fithe purged groundwater. rums as shown on attached site
COLLE	Based on past analys Using a hand bailer Measure & record ph	FROM THE THR  Ses, sample well MV  Purge four well  I, conductivity, and two 55 gallon drun	EE WELLS, NV-3 first, MW-plumes from etemperature of sand place d	-2 second, and MW-1 last, each well fithe purged groundwater. rums as shown on attached site
	Based on past analys Using a hand bailer Measure & record ph Store water in one or Label drums as purge	S FROM THE THR ses, sample well MV Purge four well I, conductivity, and two 55 gallon drun ed groundwater, Do	EE WELLS, NV-3 first, MW-plumes from etemperature of sand place d	-2 second, and MW-1 last, each well fithe purged groundwater. rums as shown on attached site
	Based on past analys Using a hand bailer Measure & record ph Store water in one or Label drums as purge ZE WATER SAMPLES	FROM THE THR ses, sample well Mi Purge four well I, conductivity, and two 55 gallon drun ad groundwater, Do WITH GTEL	EE WELLS, AV – 3 first, MW-	2 second, and MW-1 last, each well fithe purged groundwater, rums as shown on attached site tents/GTI, and date.
	Based on past analys Using a hand bailer Measure & record ph Store water in one or Label drums as purge	FROM THE THR ses, sample well Mi Purge four well I, conductivity, and two 55 gallon drun ad groundwater, Do WITH GTEL	EE WELLS, AV – 3 first, MW-	2 second, and MW-1 last, each well fithe purged groundwater, rums as shown on attached site tents/GTI, and date.
	Based on past analys Using a hand bailer Measure & record ph Store water in one or Label drums as purge ZE WATER SAMPLES	FROM THE THR ses, sample well Mi Purge four well I, conductivity, and two 55 gallon drun ad groundwater, Do WITH GTEL	EE WELLS, AV – 3 first, MW-	2 second, and MW-1 last, each well fithe purged groundwater, rums as shown on attached site tents/GTI, and date.
	Based on past analys Using a hand bailer Measure & record ph Store water in one or Label drums as purge ZE WATER SAMPLES	FROM THE THR ses, sample well Mi Purge four well I, conductivity, and two 55 gallon drun ad groundwater, Do WITH GTEL	EE WELLS, AV – 3 first, MW-	2 second, and MW-1 last, each well fithe purged groundwater, rums as shown on attached site tents/GTI, and date.
ANALY	Based on past analys Using a hand bailer Measure & record ph Store water in one or Label drums as purge ZE WATER SAMPLES Fill out COC and requ	FROM THE THR ses, sample well Mi Purge four well I, conductivity, and two 55 gallon drun ad groundwater, Do WITH GTEL	EE WELLS, AV - 3 first, MW- columes from elemperature of the sand place displaced in gary investments.	2 second, and MW-1 last, each well fithe purged groundwater, rums as shown on attached site tents/GTI, and date.
ANALY	Based on past analys Using a hand bailer Measure & record ph Store water in one or Label drums as purge ZE WATER SAMPLES Fill out COC and requ DED:	FROM THE THR ses, sample well Mi Purge four well I, conductivity, and two 55 gallon drun ad groundwater, Do WITH GTEL	EE WELLS, AV - 3 first, MW- columes from elemperature of the sand place displaced in gary investments.	2 second, and MW-1 last, each well fithe purged groundwater, rums as shown on attached site tents/GTI, and date.
ANALY QUIPMENT NEE lealth & Safety Sit	Based on past analys Using a hand bailer Measure & record ph Store water in one or Label drums as purge ZE WATER SAMPLES Fill out COC and required	S FROM THE THR ses, sample well Mi Purge four well I, conductivity, and two 55 gallon drun ed groundwater, Do WITH GTEL Jest BTEX, TPH-G	EE WELLS, AV-3 first, MW- columns from elemperature of the sand place of the sand place of the sand TPH-D columns and TPH-D columns from the sand the	2 second, and MW-1 last, each well fithe purged groundwater, rums as shown on attached site tents/GTI, and date.
ANALY  QUIPMENT NEE  lealth & Safety Sit  wo 55 gallon drur	Based on past analys Using a hand bailer Measure & record ph Store water in one or Label drums as purge ZE WATER SAMPLES Fill out COC and required Plan The Plan This is a pure of the property of the propert	S FROM THE THR ses, sample well MV Purge four well conductivity, and two 55 gallon drun ed groundwater, Do WITH GTEL rest BTEX, TPH-G	EE WELLS, AV-3 first, MW-plumes from etemperature of sand place diagary investment and TPH-D company investment of the sand temperature of the sand te	-2 second, and MW-1 last, each well If the purged groundwater, rums as shown on attached site tents/GTI, and date.
ANALY QUIPMENT NEE lealth & Safety Sit wo 55 gallon drur lallers to purge wa	Based on past analys Using a hand bailer Measure & record ph Store water in one or Label drums as purge ZE WATER SAMPLES Fill out COC and required Plan The Plan This, Nine 40 ml VOAs, Single from 4° wells and the	S FROM THE THR ses, sample well MV Purge four well conductivity, and two 55 gallon drun ed groundwater, Do WITH GTEL rest BTEX, TPH-G	EE WELLS, AV-3 first, MW-plumes from etemperature of sand place diagary investment and TPH-D company investment of the sand temperature of the sand te	-2 second, and MW-1 last, each well If the purged groundwater, rums as shown on attached site tents/GTI, and date.
ANALY  QUIPMENT NEE  lealth & Safety Sit  wo 55 gallon drur  lallers to purge wa	Based on past analys Using a hand bailer Measure & record ph Store water in one or Label drums as purge ZE WATER SAMPLES Fill out COC and required Plan The Plan This, Nine 40 ml VOAs, Single from 4° wells and the	S FROM THE THR ses, sample well MV Purge four well conductivity, and two 55 gallon drun ed groundwater, Do WITH GTEL rest BTEX, TPH-G	EE WELLS, AV-3 first, MW-plumes from etemperature of sand place diagary investment and TPH-D company investment of the sand temperature of the sand te	-2 second, and MW-1 last, each well If the purged groundwater, rums as shown on attached site tents/GTI, and date.
ANALY  QUIPMENT NEE  lealth & Safety Sit  wo 55 gallon drur  sallers to purge wa	Based on past analys Using a hand bailer Measure & record ph Store water in one or Label drums as purge ZE WATER SAMPLES Fill out COC and required Plan The Plan This, Nine 40 ml VOAs, Single from 4° wells and the	S FROM THE THR ses, sample well MV Purge four well conductivity, and two 55 gallon drun ed groundwater, Do WITH GTEL rest BTEX, TPH-G	EE WELLS, AV-3 first, MW-plumes from etemperature of sand place diagary investment and TPH-D company investment of the sand temperature of the sand te	-2 second, and MW-1 last, each well If the purged groundwater, rums as shown on attached site tents/GTI, and date.
ANALY  QUIPMENT NET  lealth & Safety Sit  wo 55 gallon drur  sallers to purge wa  /2', 9/16', and 15/	Based on past analys Using a hand bailer Measure & record ph Store water in one or Label drums as purge ZE WATER SAMPLES Fill out COC and required Plan ns, Nine 40 ml VOAs, Sinter from 4" wells and thr	S FROM THE THR ses, sample well Mir Purge four well I, conductivity, and two 55 gallon drun ed groundwater, Do WITH GTEL Jest BTEX, TPH-G	EE WELLS, AV-3 first, MW-plumes from etemperature of sand place diagary investment and TPH-D cores	-2 second, and MW-1 last, each well If the purged groundwater, rums as shown on attached site tents/GTI, and date.
ANALY QUIPMENT:NEE lealth & Safety Sit wo 55 gation drur allers to purge wa /2', 9/16', and 15/	Based on past analys Using a hand bailer Measure & record ph Store water in one or Label drums as purge ZE WATER SAMPLES Fill out COC and requ DED: Plan ns, Nine 40 ml VOAs, Sinter from 4" wells and thr 16" sockets	S FROM THE THR ses, sample well Mix Purge four well I, conductivity, and two 55 gallon drun ed groundwater, Do WITH GTEL Jest BTEX, TPH-G  x 1 liter amber bottle ee disposable balle	EE WELLS, AV-3 first, MW-plumes from etemperature of sand place diagary investment and TPH-D cores	-2 second, and MW-1 last, each well If the purged groundwater, rums as shown on attached site tents/GTI, and date.
ANALY QUIPMENT:NEE lealth & Safety Sit wo 55 gation drur lailers to purge wa /2', 9/16', and 15/	Based on past analys Using a hand bailer Measure & record ph Store water in one or Label drums as purge ZE WATER SAMPLES Fill out COC and required Plan ns, Nine 40 ml VOAs, Sinter from 4" wells and thr	S FROM THE THR ses, sample well Mix Purge four well I, conductivity, and two 55 gallon drun ed groundwater, Do WITH GTEL Jest BTEX, TPH-G  x 1 liter amber bottle ee disposable balle	EE WELLS, AV-3 first, MW-plumes from etemperature of sand place diagary investment and TPH-D cores	-2 second, and MW-1 last, each well If the purged groundwater, rums as shown on attached site tents/GTI, and date.
ANALY  QUIPMENT NET  lealth & Safety Sit  wo 55 gallon drur  lallers to purge wa  /2*, 9/16*, and 15/	Based on past analys Using a hand bailer Measure & record ph Store water in one or Label drums as purge ZE WATER SAMPLES Fill out COC and required Plan hs, Nine 40 ml VOAs, Sinter from 4" wells and the 16" sockets  MATION to Brian Garber, (916) 3	S FROM THE THR ses, sample well Mix Purge four well I, conductivity, and two 55 gallon drun ed groundwater, Do WITH GTEL Jest BTEX, TPH-G  x 1 liter amber bottle ee disposable balle	EE WELLS, AV-3 first, MW-plumes from etemperature of sand place diagary investment and TPH-D cores	-2 second, and MW-1 last, each well If the purged groundwater, rums as shown on attached site tents/GTI, and date.
ANALY  QUIPMENT NEE lealth & Safety Sit wo 55 gallon drur lallers to purge wa /2*, 9/16*, and 15/ ENERAL*INFOR irect all questions ite Contacts:	Based on past analys Using a hand bailer Measure & record ph Store water in one or Label drums as purge ZE WATER SAMPLES Fill out COC and requ DED: Plan ns, Nine 40 ml VOAs, Sinter from 4" wells and thr 16" sockets	S FROM THE THR ses, sample well Mix Purge four well I, conductivity, and two 55 gallon drun ed groundwater, Do WITH GTEL Jest BTEX, TPH-G  x 1 liter amber bottle ee disposable balle	EE WELLS, AV-3 first, MW-plumes from etemperature of sand place diagary investment and TPH-D cores	-2 second, and MW-1 last. each well I the purged groundwater. rums as shown on attached site sents/GTI, and date. on a one week TAT
ANALY  QUIPMENT:NEE lealth & Safety Sit wo 55 gallon drur lailers to purge wa /2', 9/16', and 15/	Based on past analys Using a hand bailer Measure & record ph Store water in one or Label drums as purge ZE WATER SAMPLES Fill out COC and required Plan hs, Nine 40 ml VOAs, Sinter from 4" wells and the 16" sockets  MATION to Brian Garber, (916) 3	S FROM THE THR ses, sample well Mix Purge four well I, conductivity, and two 55 gallon drun ed groundwater, Do WITH GTEL Jest BTEX, TPH-G  x 1 liter amber bottl ree disposable balls	EE WELLS, AV—3 first, MW- polumes from elemperature of the send place of the send place of the send place of the send place of the send TPH—D company investments of the send TPH—D comp	-2 second, and MW-1 last. each well I the purged groundwater. rums as shown on attached site tents/GTI, and date.  on a one week TAT

11/3094

## **GROUNDWATER GAUGING FORM**

JOB NAME	: Dongary- Port of Oakland	JOB NUMBER:	02070-0061-030504
iP#:	2225 7th Street, Oakland, CA.	DATE:	11/3094

MEASURED TO TOC OR GRADE? Top of Casing

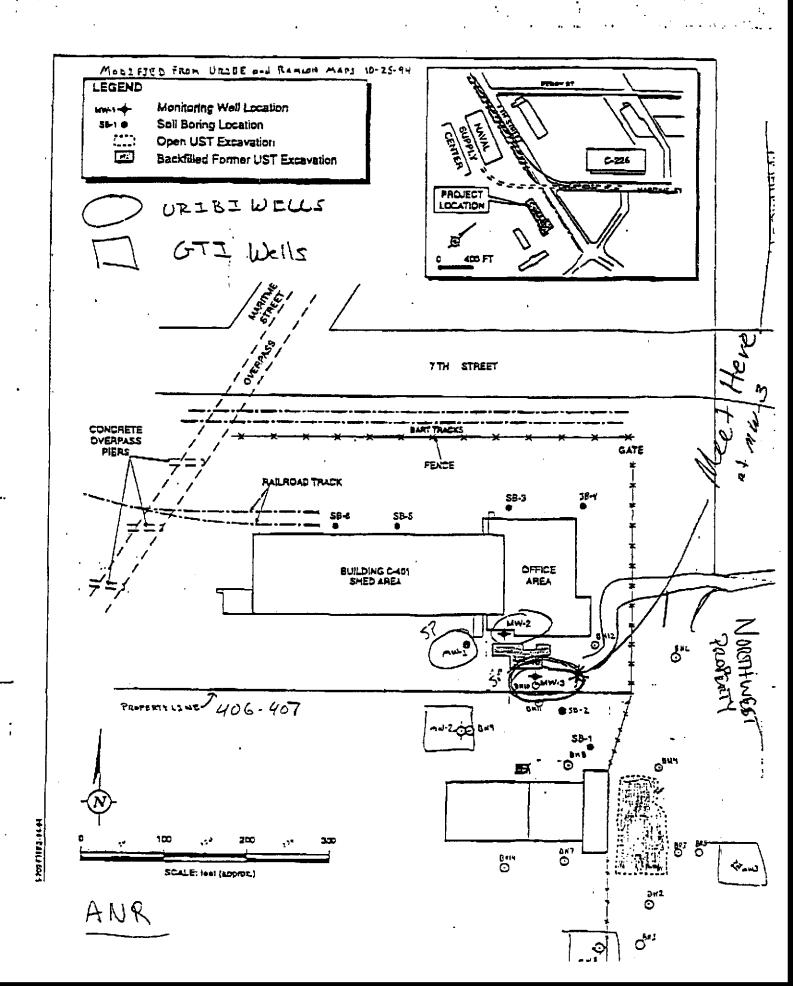
WELL 1:D	DTB	WELL DIAM.	WELL ELEV. TOC	DTW	DTP	PT	BO% RECHG	WATER	COMMENTS  Please note if well needs  locking cap of street box
MW-1	14,90	4"	.3.12	5.76				7.96	23
MW-2	15.10	4"	13.80	6.34				7,46	22
MW-3	Blacked 9,25	4"	15.06	7,12				7.94	Obstruction @ 9.6 ft
Off-Site We	ils, Buildin	9 401 - C,	2277 7th St	reet, Port of	Oakland,	CA. US	ZIBE		
MW-1		2"	] 4, 14	9.51	8,60	91	l	<u> </u>	Free Product in Well
WW-2		2*	14.37	8,91				5.46	
viW-3		2"	14,20	13.67	7.86	5.21			Free Product in Well
			_						
				_					
	_								
						7			
				· · · · · · · · · · · · · · · · · · ·		·			

## SITE VISITATION REPORT

Project:	Dongary-Port of Oakland	Date: <u> </u>	Project No.: 02070	0061 - 030504
Name(s)	- Transmens		Did you call in?	Yes No
Arrival Time		re Time: 12:30	Who did you call?	BRYNKARBER
Weather No	stations: SUN CLOUDY	RAIN	SNOW	Temperature:
		PURPOSE OF V	/ISIT	
X	GAUGE WELLS  BAIL SEPARATE—PHASE  SAMPLE AS INF EFF  SYSTEM CHECK  SAMPLE WELLS	SURVEY  MONITOR VAPORS  SAMPLE CARBON  BATCH FEED  EQUIPMENT REPAIR		INSTALL EQUIPMENT INSTALL SYSTEM
		DRUM INVENTO	DRY	
	WATER	CARBON EMPTY	TOTAL OPE	·
		SAMPLE INFORMA	ATION	
SAMPLED:		PÁRAMETEF STATION NO		-TOHOKETY
	WATER SOIL AIROTHER	Laboratof Lab releas		
		REMEDIATION SY	STEM	
LOW TOTALIZI	R:		UP 1190	
LOW RATE:			AIR VELOCITY:	
LEL:	<del></del>	F	PID EFF:	
	DESCRIPTIO	N OF ACTIVITIES O	N SITE AND NO	PTES
VET DO	up steks & Brian wines of In SED GTI WELD While Doug	PRIME ACTOR U	711 WEID.	
1 They	WE NIM HOED EACH OTHERS.	THEY UP Q 10:3	D AM	
<del></del>	*	······································		

11/23/84 16:12 FAI 816 372 8781 GRUUNDWALER LECE --- GIT CONCURD ENGLISH FRE PRODUCT TIL LIRERI INECLI MW3

FREE PRODUCT IN URERI WELLI MW ?



12 02/3	1 10.00	₩ 11 V UUU 5.	. 4. 3	GROUNDWALL	. 1	70.0
Project Name:	Dongary Inves	stments			1	-30-94
Site Address:	2225 7th St.	Oaldand		Pa	ige	ot <u>3</u>
Project Numbe	r: <u>02070</u>	00061,030504		Pr	Jaff Aushterlonie	
Well ID: Well Diameter:	/ 1	)-3	Initia	V Measuremer al: 7:12 harge:	nts: Calc Wel Well Volu	I Volume:gal ume:gal
Gear Drive	Hand Air Lif	DeptitBailed <u>&gt;</u> t		Hydac:	ts Used	<del>-</del>
Time	Temp ————————————————————————————————————	Conductivity	pН	Purge Volume Gallons	Turbidity	Comments
10:40	181	1,72	(0.64	0	Cloudy	
10-91	188	2.06	7.24	İ		
10:42	18.2	1.84	844	3		Day at 3 gallons
						BAILED FINE Sand Franciell.
i	l		1	I	]	

Project Name:	Dongary Inve	strnents		Da	ate:        -	30-94											
Site Address:	2225 7th St.	or <u>3</u>															
Project Numbe	_	00061,030504		oject Manager:	Jaff Aushterionie												
Well ID: Well Diameter:	<u>Mw</u> -4		Initia	DTW Measurements: Initial: <u>6・3年</u> Calc Well Volume: gal Recharge: Well Volume: y 4 <u>2</u> 2 gal													
Gear Drive	Hand Air Lif	DepthBailedXt		Instrument YSI: Hydac: Ornega:	ts Used X	Other:											
Time	Temp C F	Conductivity	рН	Purge Volume Gallons	Turbidity	Comments											
10.55	18.6	8.6 2.97		0	Clian -												
10:57	(8.8	3-34	7.27	5													
107.59	188	376	7.45	স্থ	Gee 4												
11:01	18.9	3.77	7-48	10													
						·											
			<u>-</u> .														
	<u> </u>			 													

Project Name:	Dongary Inves	stments			nte:	
Site Address:	2225 7th St.	<u>Oakland</u>	•	Pa	<u>, 3</u>	ot 3
Project Numbe	r: <u>02070</u>	00061,030504	Jaff Aushterionie			
Well ID: Well Diameter:				V Measuremen al; 5,76 harge;	Volume: gal me: x4 <u>23</u> gal	
Gear Drive	Hand Air Lif	Bailed t		Hydac:	s Used	-
Time	Temp X C F	Conductivity	рН	Purge Volume Gallons	Turbidity	Comments
11.13	Pump DepthHand BailedAir LiftOther		7.66	0	Oleca	
11:19	18-9	1.34	7.66	5		
11-20	190	1,41	7.50	10		
				<del>_</del>		
		-				
				·		
		Pump Depth Hand Bailed Y Air Lift Other  Temp X C F Conductivity 9.4 1.31				

GTEL															CHAIN-OF-CUSTODY RECORD 3266 SAND ANALYSIS REQUEST OTHER														<b>-</b>													
Set at Maderale Set and Set at August 1985		(80	00)	42	3-7	14	3																		P	INA	LY	SIS	RE	QUI	<b>S</b> I								_0	Ж	빏	
Company Name:	Phone #:																													ă						ł		1				
Company Address: Sile Location:																밀			╽										Her	2		ă					1					
Company Address:  Site Location:  OAKMD  Project Manager:  Client Project ID: (#X/20706061,07:50*														PIO/EID 3 - ich MTBE ( )	Scre						 			ä	<u> </u>		1580	Peet C Herb	Д Б		16010		-			-						
Project Manager:	kentik vil	U	_				C	ien	Pro	jec	i ib:	(#)	120	70	00	61,070	504	п	1	å		SM-503 🗆		Ì					(+) (s	S (+2		đội S	Ō	TAL		421 L		TILVE)			- (	
JAFF AUC	HTERION	16	· 				ĒЙ	ΙΑΜ	E) i	<u>``</u>	<u> </u>	<u> </u>	29	). —				TB€	Q/F/O	ä		O	1	ជិ				[] yino	□ (\$1+) San □	W		Ü	۰ ا	Œ '	o	200		R.				
I altest that the prop procedures were us	ed during the	3		1			1	amp	ner (	Nar ≀∕	ne (	P NN	4):					with MTBE	ins Pi	Ghe	MD	1413.2	N D	oy 504	502.21	0	0	83		14 14		stede	Ser		CSTLCC	] 742(		뜋			١	
collection of these s	amples.	T	<u> </u>				_	<u> </u>	<del>[]</del>		Me				T	<u> </u>			ě	GC/FID Gas □ DiescideGereen □	Prolife (SIMDIS)	413.1	418.1   SM 503	by 504 □ DBC? by	EPA SO	텵	602 □ EPA 8020 □	Ğ	8240	3270	ă	C Per	VOA	lority		00.7		C Flash Point C Reactivity (	ĺ	1	ļ	
Field	GTEL	SES			Ма	itri:	X				res					Samp	ning	8020	Hydro	S G	on Pro	Grease	[-]	400	1 10	495	400	808	<u>-</u>	۱ř	810 () 8310 ()	le rads	0 SE	d s	빌	21.12	) De		Į			
Sample ID	Lab # (Lab Use) only	# CONTAINERS	WATER	١		SLUDGE		OTHER		NO.	g			THE OTHER	ractiva)	DATE	기정은	97EX 602	BTEX/Gas	drocaro	Hydrocarbo	Oil and Gre	TPH/IR 41	E08 by 50	EPA 503,1	EPA 601   EPA 8010	EPA 602 [	EPA 608 () 8080 () PCS	EPA 624/PPL 1 18240/TAL	EPA 625/PPL - 9270/TAL - NBS (+25)	EPA 610 (	EP TOX Metals () Pesticides () Herbioldes ()	TCLP Metals 🗆 VOA 🗀 Semi-VOA 🗀	EPA Metals - Priority Pollutant ( ) TAL ( ) RCRA (	CAM Metals TTLC	Leed 239.2 [ ] 200.7 🗆 7420 🗇 7421 🗀 6010 🗇	Organic Lead 1	Corresivity				
	্ only / ভারতিজ্ঞানত	1	3	<u>8</u>	면적	ŭ	1 8	E   6	¥ X	<u>f</u>	£	2	3	0	<u>.</u>	6	F	m	χ	1. 1.5	i.	0	<u> </u>	3	iii	u iii	u W	Ш	1U	<u>"</u>	W 			UI						7		1
TRIPBINK MW-3 MW-2			<u> </u>	1	٠	3	1	4			1	>			₽Įŧ	1	12:0		X	\ \ \	193	::. <u>:</u>		1161		\$#\$.	خند		1.5	355	2/12			480	7.	1127			7			
NIM 3		-   -	ľŚ	╁			+	: : :	弋		-	t			1	30	12:10		X	$\stackrel{\checkmark}{\sim}$			EV.	77	17	3	200	110	12 <sup>11</sup> 1			ος γι 11.7			43 A		, Y		1	2		: ] :
MW-1	uni pi i <u>la la sarti 19</u> 48	_[_4	ll x	1-		1		T	入		1	Tŝ			_ /	7-74	17:20		X	χ											1	<u> </u>		_			<u></u>	ļ.,				- ^
		7			1			vi (1)								3123		当	- 5				):.	-					70.4					-	1.1	Ŀ	15	• • •				
				1,	5 5.		_	-12	-	E 169	1.	1 100	¥	S-1-3	33 l.	<b>,</b> 332-347	- 3540 C	7	24	<u> 20.</u>	- Jan	 	35°	1.5	1	5.5	152,			. 73:	1			i in	19.5					11 / 1 1 / 2 1 / 3		
		Ĭ		- ·	1	i i	-			1 24				<u> </u>	<i>}</i> ;::	14.70	<u> 1989 (G</u>	-		32.5	10.3%		15.						347													= 1
					1					7 2 2 2	<b>1</b>		1 3				17 67 20, 19	100	3	30		1		2.			7				9 - 3 1 - 5 - 3	111	3.						<u></u>	3	-	<u>:</u>
	13 - 4460, 14 <b>5</b> 4	11				7) 5		3, 15		). ). [g	<u> </u>		.,:/ ₹		25	- 10 mg/g				200		l i	133	<u>.</u>			7 1				6	35.7 35.2	1 12		-		17	-				
		i i	Į,			Į.			92	) () EC	ΑΙ 3	<u>. [</u>	<u>ála</u> ECI			MITS	2402		REMARKS: BTEXTHE GAS, THOUESEL																							
TAT Priority (24 hr) C	Spec GTEL Contact	lal F 	lar —	ıd#	ng			_	3,		ne t	,							•			ľ	R	TE	<b>x</b> '	76	Ή	Ç,	<b>A</b> 5	-	W	? <b>}</b> }	·	Æ,	SE	L						
Expedited (48 hr)	Quote/Contract																					l	$\widetilde{\alpha}$	16	ر.	N'	ç <i>ç</i>	'K'	1	Ā	T											
	Confirmation #								SF	EC.	AL I	1EP	OR.	rinc	3 Pi	EQUIR	EMENT	S				┪	Lab	Us	e Or	ly L	ol #:								Sto	rage	Loc	ation				
Business Days []	QA/QC Leve							_														1																				
Rium C CLP C	Other	=1							FΑ	×Ε	)				_									rk O	)(der																_	_
	Relindush		-		pler												11.	Da -   -		, 1	0	Tim 7:3																				
CUSTOD		ed b	-\ v:\	7										<u> </u>			1	Da		ـــــــــــــــــــــــــــــــــــــ		Tin			_		ed b						•••									_
HECORL	RECORD Relinquished by:																					ime Received by Laboratory:																				