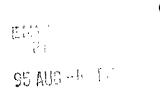


August 2, 1995 92CB040



Ms. Susan Hugo Alameda County Health Care Services Agency Department of Environmental Health 1131 Harbor Bay Parkway Alameda, CA 94502

Subject: Continental Baking Company, 1010 46th Street, Oakland, CA
Quarterly Groundwater Monitoring Report

Dear Ms. Hugo:

In response to your letter to Mr. Fred Dannecker, Continental Baking Company (CBC), requesting quarterly groundwater monitoring reporting, this letter report is being submitted. Woodward-Clyde Consultants is providing environmental consulting services to CBC and is submitting this report on their behalf.

GROUNDWATER ELEVATION

Water level measurements were performed on June 12, 1995 by WCC personnel. Water levels were measured in monitoring wells MW-1, 2 and 3 with an electronic water level sounder and recorded to the nearest 0.01 foot. Table 1 summarizes the groundwater elevation variation in the three monitoring wells since the first investigation at the CBC Oakland facility in May, 1994. Figure 1 is a location map of the CBC facility. Figure 2 is a groundwater elevation contour map for the event reported in the present quarterly report.

The reported results from the water elevation measurements are the following:

- In the second quarter of 1995, the groundwater elevation has fallen to about 50 to 54 feet above mean sea level (MSL).
- The groundwater flow direction was estimated to be towards the southwest.

The reported results during this quarter are generally consistent with previous results. The groundwater elevation fall may be attributed to seasonal variations.

Woodward-Clyde

Ms. Susan Hugo August 2, 1995 Page 2

ANALYTICAL RESULTS

Sampling activities were also performed in June, 1995 by WCC personnel. A copy of the field water sample logs are attached.

Prior to sampling, an oil/water interface probe was used to detect the presence of an immiscible layer. No measurable immiscible layer was detected in any of the wells.

The wetted casing volume was calculated for each well and approximately 4 casing volumes were removed from each well prior to sampling. In addition to the groundwater samples collected from the three monitoring wells, one duplicate sample was collected from well MW-1 and labelled MW-4. Samples were submitted for analysis for Total Petroleum Hydrocarbons (TPH) and quantified as Diesel (TPHd, modified EPA Method 8015) and gasoline (TPHg) and benzene, toluene, ethylbenzene, and xylene (BTEX, EPA Method 8020) and Total Recoverable Petroleum Hydrocarbons by Standard Method 5520BF. Sample analyses were performed by Anametrix Laboratories, San Jose, California. Copies of the laboratory data sheets and the chain-of-custody form are attached.

A quality assurance/quality control review of the analytical data was performed by a WCC chemist. The results of the review indicated that the data are of acceptable quality.

The reported results from the June, 1995 sampling and analysis effort are summarized in Table 2, and are the following:

- TPHg was detected at a concentration of 11000 μ g/L in MW-1.
- TPHd was detected at a concentration of 810 μ g/L in MW-1 and 120 μ g/L in MW-3. Neither matched the diesel standard chromatograph, however.
- Concentrations of BTEX were detected in monitoring well MW-1.
- None of the analytes were detected in MW-2.
- Oil and Grease was not detected in any of the wells.

The reported results from this sampling and analysis effort are generally consistent with results reported for samples from these wells during the past year, although levels of all constituents decreased in MW-1.

Woodward-Clyde

Ms. Susan Hugo August 2, 1995 Page 3

If you have any questions, please feel free to phone me at (510) 874-3138.

Sincerely,

Jo Beth Folger, P.E.



Attachments

c: Fred Dannecker, CBC-SF Carl Eklund, CBC-SL Jim Hummert, WCC-SL

TABLE 1 SUMMARY OF GROUNDWATER ELEVATION CONTINENTAL BAKING COMPANY, OAKLAND, CA

Well Identification	Date	Top of Casing Elevation (feet above MSL)	Depth to water (feet below top of casing)	Water Surface Elevation (feet above MSL
MW-1	5/26/94	61.84	9.27	52.57
	7/29/94	61.84	9.81	52.03
	8/26/94	61.84	9.87	51.97
	10/4/94	61.84	9.89	51.95
	10/27/94	61.84	9.94	51.90
	11/30/94	61.84	8.92	52.92
	1/3/95	61.84	8.79	53.05
	1/31/95	61.84	8.33	53.51
	3/16/95	61.84	8.07	53.77
	6/12/95	61.84	9.02	52.82
MW-2	5/26/94	63.10	9.30	53.80
	7/29/94	63.10	9.70	53.40
	8/26/94	63.10	9.89	53.21
	10/4/94	63.10	9.86	53.24
	10/27/94	63.10	9.96	53.14
	11/30/94	63.10	8.95	54.15
	1/3/95	63.10	8.15	54.95
	1/31/95	63.10	6.96*	56.14
	3/16/95	63.10	6.37*	56.73
	6/12/95	63.10	9.07	54.03
MW-3	5/26/94	62.51	12.88	49.63
	7/29/94	62.51	13.61	48.90
	8/26/94	62.51	13.71	48.80
	10/4/94	62.51	13.74	48.77
	10/27/94	62.51	13.77	48.74
	11/30/94	62.51	11.85	50.66
	1/3/95	62.51	12.09	50.42
	1/31/95	62.51	10.64	51.87
	3/16/95	62.51	10.79	51.72
	6/12/95	62.51	12.05	50.46

^{*} Noted to be under pressure when opened.

I:\92\22418.1(92CB040)\1

SUMMARY OF ANALYTICAL RESULTS

CONTINENTAL BAKING COMPANY, OAKLAND, CALIFORNIA

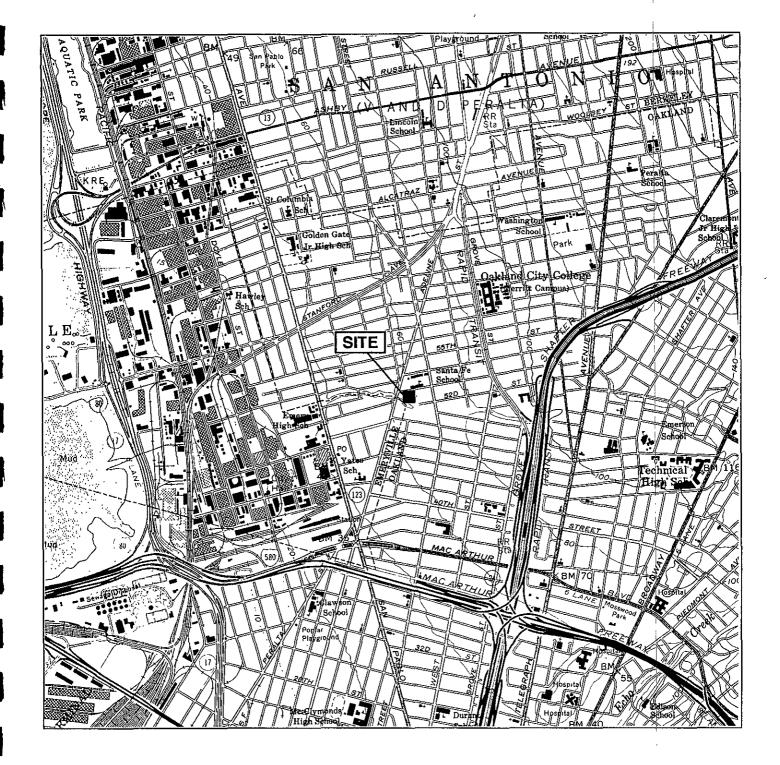
TABLE - 2

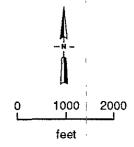
Parameters		TPH diesel	TPH gasoline			TPH BTEX		
				benzene	toluene	ethyl-benzene	total zylenes	total oil & grease
EPA Method		801 <i>5</i>			8020			
Units	_	(μg/L)			(mg/L)			
Well Number	Date							
MW-1	5/26/94	1300	12000	57	340	370	3100	<5.0
	8/26/94	510 ¹ /650 ¹	6700/8400	22/35	71/97	310/410	1000/1400	<5.0/<5.0
	11/30/94	1300	29000	480	1100	1200	5300	<5.0
	3/16/95	1900	29000	140	1400	1800	9700	<5.0
	6/12/95	810 ¹ /540 ¹	3900/11000	23/280	57/610	200/400	680/2000	<5.0/<5.0
MW-2	5/26/94	<50/<50	<50/<50	0.50/<0.50	0.50/<0.50	0.50/<0.50	0.50/<0.50	<5.0
	8/26/94	< 50	< 50	< 0.50	< 0.50	< 0.50	< 0.50	< 5.0
	11/30/94	<50	<50	< 0.50	< 0.50	< 0.50	< 0.50	<5.0
	3/16/95	<50/<50	<50/<50	<0.50/<0.50	<0.50/<0.50	<0.50/<0.50	<0.50/<0.50	<5.0
	6/12/95	< 50	< 50	< 0.50	< 0.50	< 0.50	< 0.50	<5.0
MW-3	5/26/94	99	<50	< 0.50	< 0.50	< 0.50	1.7	<5.0
	8/26/94	66²	< 50	< 0.50	< 0.50	< 0.50	< 0.50	<5.0
	11/30/94	78/85	100/100	< 0.50/1.9	<0.50/0.50	<0.50/1.0	2.1/4.3	<5.0
	3/16/95	<50	<50	< 0.50	< 0.50	< 0.50	< 0.50	<5.0
	6/12/95	1 20 ²	< 50	< 0.50	< 0.50	< 0.50	< 0.50	<5.0

Results of duplicate sample analyses are shown by a dash ("/")

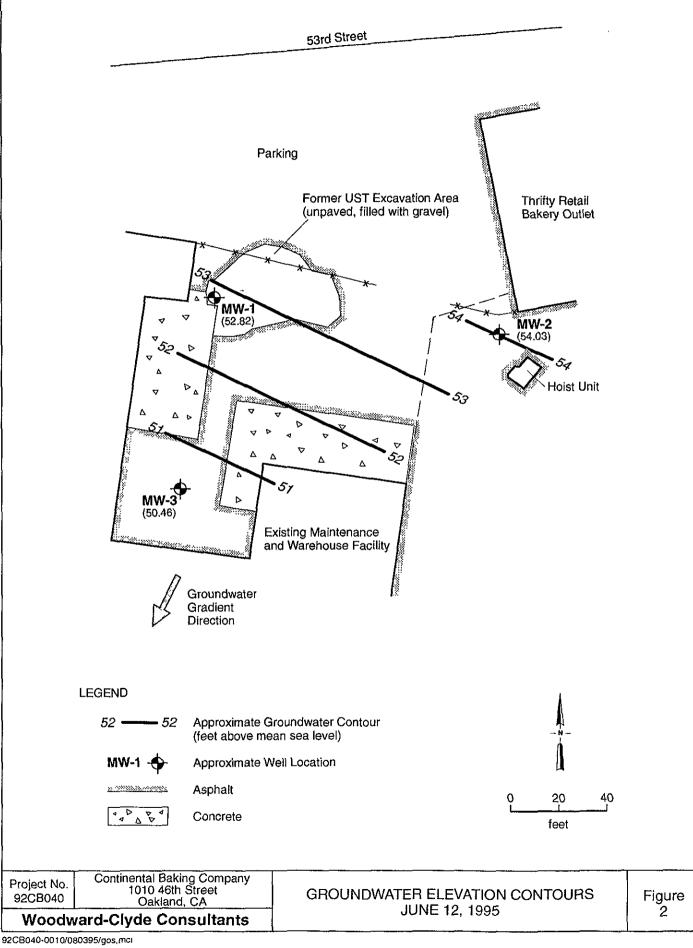
⁽¹⁾ Primarily due to lighter petroleum product of hydrocarbon range C6-C12, possibly gasoline.

⁽²⁾ Primarily due to heavier petroleum product of hydrocarbon range C18-C36.





Project No. 92CB040	Continental Baking Company 1010 46th Street Oakland, California	SITE LOCATION	Figure
Woody	vard-Clyde Consultants		J



mple No.		WATER	SAI	MPL			Samp	le No.	MW-1
	Project	No.: 92	CBO	040	<u></u>		Date:	6-1	2-95
	Project	Name:	<u> BC -</u>	00	cland				
	Sample	Location: M	N-/		1 13				
		escription:				ce/)		
		er Conditions:		- ,	arm-				
	Observ	ations / Comment	Du	10/100	te labe	led M	W-4	@ /	5:40
	6=8			<u> </u>					bailer
	Qu	ality Assura	ance	Method 1	o Measure Wat	er Level :	200'	Soli	mst_
	. Pump	Lines:	New /				. (New /	Cleaned
	Method	Lines:	p / Bailer:		<i>N</i>	14			4.00 /10.01
	Me Hor	ter No.:	21	125	>6	_	Ca	llibrated 4	212
	Specifi	c Conductance Me	ter No.: _	<u> </u>	80165	<u> </u>	·	aliorateu	7
	Comm	ents: D=2	20.20	<u>-9.02</u>	= {(,18 K,	,65 <u>3=</u>	1.3 X ·	4= 29	12 gal.
									9 - 3
		mpling		Water Le	vel (below MP)	at Start:	7.02 4 R	- E	nd: 9.03
	—— Sar	mpling asurement	s	Water Le	vel (below MP) ng Point (MP):	at Start:	7.02 K RI	- E	nd: 9.03
	—— Sar	asurement Discharge	S	Measurii Temp.	Specific Conductance	No -	Cotor	Odor O	nd: 9.03
	Sar Me	asurement Discharge (gallons)	рН	Measurii Temp. (°C)	Specific Conductance	No -	Cotor	Odor O	o at Casing
	Sar Me	Discharge (gallons) 30 5	рн 7.01	Measurii Temp. (°C)	Specific Conductance (µmhos/cm)	<u> Nort</u> T	Cotor	Odor O	o at Casing
	Sar Me	Discharge (gallons) 30 5 33 (0) 37 (5)	рн 7.01 6.94 6.92	Measurii Temp. (°C)	Specific Conductance (µmhos/cm) 462 438	No.F	color CLR	Odor Siene	o at Casing
	Sar Me Tim 143 143 143 144	Discharge (gallons) 30 5 33 (0 37 (5) 40 20	рн 7.01 6.94	Temp. (°C)	Specific Conductance (µmhos/cm) 462	Turbidity LOW	Color CLR	Odor Sies	o at Casing
	Sai Me Tim 193 193 194 194 194 194	Discharge (gallons) 30 5 33 (0 37 (5 40 20 44 25	рн 7.01 6.94 6.92 6.91 6.93	Temp. (°C) (9.2 19.4 19.2 19.0 /9.1	Specific Conductance (µmhos/cm) 462 438 420 370 418	Turbidity LOW	Color CLR	Odor Slight HC? A	o at Casing
	Sai Me Tim 193 193 194 194 194 194	Discharge (gallons) 30 5 33 (0 37 (5 40 20 44 25	рн 7.01 6.94 6.92 6.91 6.93	Temp. (°C) (9.2 19.4 19.2 19.0 /9.1	Specific Conductance (µmhos/cm) 462 438 420 370 418	Turbidity LOW 11 11 11	Color CLR 11 11 11 11	Odor Slight He i	o at Casing
	Sai Me Tim 193 193 194 194 194 194	Discharge (gallons) 30 5 33 (0 37 (5 40 20 44 25	рн 7.01 6.94 6.92 6.91 6.93	Temp. (°C) (9.2 19.4 19.2 19.0 /9.1	Specific Conductance (µmhos/cm) 462 438 420 370 418	Turbidity Low 11 11 11	Color CLR	Odor Slight HC? A	o at Casing
	Sai Me Tim 14: 14: 14: 14: 14: 14: 14: 14: 14: 14	Discharge (gallons) 30 5 33 (0 37 (5 40 20 44 25	рн 7.01 6.94 6.92 6.91 6.93	Temp. (°C) (9.2 19.4 19.2 19.0 /9.1	Specific Conductance (µmhos/cm) 462 438 420 370 418	Turbidity LOW 11 11 11	Color CLR 11 11 11 11	Odor Sight Hei ND 11 11 11 11	Comments
	Sai Me Tim 193 194 194 194 194 194 196 Total	Bischarge:	рн 7.01 6.94 6.92 6.91 6.93 6.93	Measurin Temp. (°C) (9.2 19.4 19.2 19.0 (9.1 19.1 19.4	Specific Conductance (umhos/cm) 462 438 420 370 418 422 417	Turbidity Low 11 11 11 11 11 11 11 11 11	Color CLR 11 11 11 11 11 11 11 11 11 11 11 11 11	Odor Slight HC? A ND	o at Casing
	Sai Me Tim I I I I I I I I I I I I I I I I I I I	Discharge (gallons) 30 5 33 (0 37 (5 40 25 47 30 30 5 A.S	pH 7.01 6.94 6.92 6.91 6.93 6.93 6.90	Temp. (°C) [9.2 [9.4 [19.0 [19.1 [19.4 [19.4 [19.4	Specific Conductance (umhos/cm) 462 438 420 390 418 422 417	Turbidity Low 11 11 11 11 11 11 11 11 11	Color CLR 11 11 11 11 11 11 11 11 11 11 11 11 11	Odor Slight HC? A ND	Comments
	Sai Me Tim I I I I I I I I I I I I I I I I I I I	Bischarge:	pH 7.01 6.94 6.92 6.91 6.93 6.93 6.90	Temp. (°C) [9.2 [9.4 [19.0 [19.1 [19.4 [19.4 [19.4	Specific Conductance (umhos/cm) 462 438 420 390 418 422 417	Turbidity Low 11 11 11 11 11 11 11 11 11	Color CLR 11 11 11 11 11 11 11 11 11 11 11 11 11	Odor Slight HC? A ND	Comments
	Sal Me Tim 19 19 19 19 19 19 19 19 10 Total Methon	Discharge (gallons) 30 5 33 (0 37 (5 40 25 47 30 30 5 A.S	pH 7.01 6.94 6.92 6.91 6.93 6.93 6.90	Temp. (°C) [9.2 [9.4 [19.0 [19.1 [19.4 [19.4 [19.4	Specific Conductance (umhos/cm) 462 438 420 390 418 422 417	Turbidity LOW II II II II II II II II II	Color CLR 11 11 11 11 11 11 11 11 11 11 11 11 11	Odor Sight He i	Comments

Sample No.		W	ATER	SAM	IPLE	LOG				MW-2
		Project No. : . Project Name:	:	CBC	40 - 00	kland)ate:(G-1	2-95
		Well Description: 4" PVC w/(scting cap Weather Conditions: clear, warm Observations / Comments: Quality Assurance Sampling Method: Disposable bailer								
									ailer	
		Pump Lines:	aning Pump	/ Bailer:	Cleaned		Bailer Lines:			
		pH Meter No. Specific Cond	:	or No.:	2172 F	8016	<u> </u>	c	alibrated :	red-lined
		Comments:	TD=19.	<i>55-</i> 9	7.07=	<u>/0.48x.0</u>	.53= 6	.8 ×4	<u> </u>	<u>,4</u>
		Samplii			Water Leve	al (below MP)	at Start:	9.0	7 E	nd: <u>(0.37</u>
			Discharge		Ţ	Point (MP): Specific Conductance	North Turbidity	Color	Odor	Comments
		1315			19.4	(µmhos/cm)	MoD.	(LOUD)	ND CN	
	*	13/8	15	.82	19.2 19.2 19.3	410	11	/(1)		drye16
	/40E	1345 1459 1508	24	6.88	19.3	414	15	11); h	76.53
		1644	Ā.Š.	6.86	19.2	416	LOW	CLR	ND	
		Total Discha	arge:	29 g	gallo	ns o	asing Volum	nes Remo	ved:	4.24
		Number and	t size of sam	ple contain	ners filled:	@1640 _/				
	And a second	Collected by	y:	5. H/	AUS		Woo 0 500 12	th Street S	-Clyde uke 100, Oa (415) 893-3	Consultants akland, CA 94607-4014 6600

			_							
Sample No.		W.	ATER	SAI	MPL	ELOG		Samp	le No	MW-3
		Project No. :	9	CR	8040 C-0	aklan		Date:	6-	12-95
		Sample Loca	ation: 🎢	W-3	*					
		Well Descript	tion: <u>4</u>	<u>" 5ch</u>	. 40	24C m/	Pock	ing	ap	
		Weather Con			·r , u	/arm				
	ا کیا	Observations	: / Comment	5:						
	S=3	Quality	/ Assura	ance					_	bailen
		<u> </u>		$\overline{\wedge}$	-	o Measure Wat				_
		Pump Lines: Method of cle		New / / Bailer:	Cleaned		Baile Lines		New	/ Cleaned
		pH Meter No	i.:	21	725	80165		Ca	librated	4.00/10.01
		Specific Cond	ductance Me	ter No.:	F /2 05	80165	88			red-lined
		Comments:	<u>[V-7-</u>	7.44	-12.03	5 7. 57 x	,605 <u>=</u>	7.8.	<u> </u>	=/9.3 ga/.
	1	**-								
		Sampli	na -		Water Le	vel (below MP) :	at Start:	12.0	25	End: 12.17
		Measu	rement	S	Measurir	g Point (MP):	H-aN	RI	<u>~,7</u>	ip of Cosing
		Time	Discharge (galions)	рH	Temp.	Specific Conductance (µmhos / cm)	Turbidity	Color	Odor	Comments
		1250			18.4	1080	7100	GREY GREE	HS	dry@ 5.5
		1259			19.1	960	10	11	10	drye 10
		1401 1422	15 20		18.2	920	- f3 - f4	18	1ª	dry @ 15.5
		1623				910	LOW	CLR		7
							<u> </u>			
				21		<u> </u>	<u></u>			11 25
		Total Discha			<u>ga//</u>	55 gal	asing Volum	•		4.35
						0/620;	1000	4 - 47		
						 				
		Collected by	7	- HA	-//5		Wood 500 121	Street, St	ite 100, C	e Consultants Pakland, CA 94607-4014
	اجنيس	Collected by	y: <u>_</u>	. 1/77	دں				(415) 893	3600

1961 Concourse Drive Suite E San Jose, CA 95131 Tel: 408-432-8192 Fax: 408-432-8198

MS. JOBETH FOLGER
WOODWARD-CLYDE CONSULTANTS
500 12TH STREET, SUITE 100
OAKLAND, CA 94607-4041

Workorder # : 9506180
Date Received : 06/13/95
Project ID : 92CB040
Purchase Order: N/A

The following samples were received at Anametrix for analysis:

ANAMETRIX ID	CLIENT SAMPLE ID
9506180- 1	MW-4
9506180- 2	MW-1
9506180- 3	MW-3
9506180- 4	MW-2
9506180- 5	T.BLANK

This report is organized in sections according to the specific Anametrix laboratory group which performed the analysis(es) and generated the data.

The results contained within this report relate to only the sample(s) tested. Additionally, these data should be considered in their entirety and Anametrix cannot be responsible for the detachment, separation, or otherwise partial use of this report.

Anametrix is certified by the California Department of Health Services (DHS) to perform environmental testing under Certificate Number 1234.

If you have any further questions or comments on this report, please call your project manager as soon as possible. Thank you for using Inchcape Testing Services.

Susan Kraska Yeager Laboratory Director

6/23/95

This report consists of _____ pages.

REPORT SUMMARY ANAMETRIX, INC. (408)432-8192

MS. JOBETH FOLGER WOODWARD-CLYDE CONSULTANTS 500 12TH STREET, SUITE 100 OAKLAND, CA 94607-4041

Workorder # : 9506180
Date Received : 06/13/95
Project ID : 92CB040
Purchase Order: N/A
Department : GC

Sub-Department: TPH

SAMPLE INFORMATION:

ANAMETRIX SAMPLE ID	CLIENT SAMPLE ID	MATRIX	DATE SAMPLED	METHOD
9506180~ 1	MW-4	WATER	06/12/95	TPHd
9506180- 2	MW-1	WATER	06/12/95	трна
9506180- 3	MW-3	WATER	06/12/95	TPHd
9506180- 4	MW-2	WATER	06/12/95	трна
9506180- 1	MW-4	WATER	06/12/95	трндвтех
9506180- 2	MW-1	WATER	06/12/95	трндвтех
9506180- 3	MW-3	WATER	06/12/95	трндвтех
9506180- 4	MW-2	WATER	06/12/95	TPHgBTEX
9506180- 5	T.BLANK	WATER	05/26/95	ТРНЗВТЕХ

REPORT SUMMARY ANAMETRIX, INC. (408)432-8192

MS. JOBETH FOLGER WOODWARD-CLYDE CONSULTANTS 500 12TH STREET, SUITE 100 OAKLAND, CA 94607-4041

Workorder # : 9506180 Date Received: 06/13/95 Project ID : 92CB040 Purchase Order: N/A Department : GC Sub-Department: TPH

QA/QC SUMMARY :

- All holding times have been met for the analyses reported in this

- The concentrations reported as diesel for samples MW-4 and MW-1 are

primarily due to the presence of a lighter petroleum product of hydrocarbon range C6-C14, possibly gasoline.

- The concentration reported as diesel for sample MW-3 is due to the presence of a combination of diesel and a heavier petroleum product of hydrogarbon range C12-C26 maggible matter til hydrocarbon range C18-C36, possibly motor oil.

Department Supervisor

uceo Shor 6/21/95

GC/TPH- PAGE 2

Organic Analysis Data Sheet Total Petroleum Hydrocarbons as Gasoline with BTEX

ITS - Anametrix Laboratories - (408)432-8192

Lab Workorder : 9506180

Client Project ID: 92CB040

Matrix

: WATER

Units : ug/L

						
		Client ID	Client ID	Client ID	Client ID	Client ID
	Method	MW-4	MW-1	MM-3	MW-2	T.BLANK
	Reporting	Lab ID	Lab ID	Lab ID	Lab ID	Lab ID
Compound Name	Limit*	9506180-01	9506180-02	9506180-03	9506180-04	9506180-05
Benzene	0.50	280	23	ND	ND _	ND
Toluene	0.50	610	57	ND	ND	ND
Ethylbenzene	0.50	400	200	ND	ND	ND
Total Xylenes	0.50	2000	680	ND	ND	ND
TPH as Gasoline	50	11000	3900	ND	ND	ND
Surrogate Recovery		116%	90%	109%	106%	107%
Instrument ID		HP6	HP6	HP6	HP6	HP6
Date Sampled		06/12/95	06/12/95	06/12/95	06/12/95	05/26/95
Date Analyzed		06/15/95	06/16/95	06/15/95	06/15/95	06/15/95
RLMF		100	25	1	1	1
Filename Reference		FPU18001.D	FRU18002.D	FPU18003.D	FPU18004.D	FPU18005.D

^{*} The Method Reporting Limit must be multiplied by the Reporting Limit Multiplication Factor (RLMF) to achieve the compound's reporting limit in the analysis.

: Not detected at or above the reporting limit for the analysis as performed. ND

TPHq : Determined by GC/FID following sample purge & trap by EPA Method 5030.

BTEX : Determined by modified EPA Method 8020 following sample purge & trap by EPA Method 5030.

Lab Control Limits for surrogate compound p-Bromofluorobenzene are 61-139%.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

luces Shor 6/21/95 Date Chuyl Bulman Supervisor

Organic Analysis Data Sheet Total Petroleum Hydrocarbons as Gasoline with BTEX ITS - Anametrix Laboratories - (408)432-8192

Lab Workorder : 9506180

Client Project ID: 92CB040

Matrix

: WATER

Units : ug/L

		Client ID	Client ID	Client ID	Client ID	Client ID
	Method					***************************************
	ł I	T-b TD	T = le TD	Tab ID	Tob TD	Tale TD
1	Reporting	Lab ID	Lab ID	Lab ID	Lab ID	Lab ID
Compound Name	Limit*	METHOD BLANK	METHOD BLANK			
Benzene	0.50	ND	ND			
Toluene	0.50	ND	ND			
Ethylbenzene	0.50	ND	ND			
Total Xylenes	0.50	ND	ND			
TPH as Gasoline	50	ND	ND			
Surrogate Recovery		103%	95%			_
Instrument ID		HP6	HP6			
Date Sampled		N/A	N/A			
Date Analyzed		06/15/95	06/16/95			
RLMF		1	1	`		
Filename Reference		BU1502E1.D	BU1601E1.D			

^{*} The Method Reporting Limit must be multiplied by the Reporting Limit Multiplication Factor (RLMF) to achieve the compound's reporting limit in the analysis.

ND : Not detected at or above the reporting limit for the analysis as performed.

TPHq: Determined by GC/FID following sample purge & trap by EPA Method 5030.

BTEX: Determined by modified EPA Method 8020 following sample purge & trap by EPA Method 5030.

Lab Control Limits for surrogate compound p-Bromofluorobenzene are 53-147%.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

Heggie Dawson 6/28/95
Analyst Date

Mary Dane

Supervisor

Date

Matrix Spike Report

Total Petroleum Hydrocarbons as Gasoline ITS - Anametrix Laboratories - (408)432-8192

Project ID

: 92CB040

Laboratory ID : 9506175-03

Sample ID

: Batch Spike

Analyst : RO

Matrix

Supervisor :

: WATER

Instrument ID : HP6

Date Sampled : 06/12/95

Units : ug/L

COMPOUND NAME	SPIKE	SAMPLE	MS	MSD	RECOVERY	RPD	RPD
	AMOUNT	RESULTS	RECOVERY	RECOVERY	LIMITS		LIMITS
Gasoline	500	ND	86%	96%	48-149	-11%	30
Surrogate Recovery		100%	92%	103%			
Date Analyzed		06/15/95	06/15/95	06/15/95			
Multiplier		1	1	1			
Filename Reference		FPU17503.D	FMU17503.D	FDU17503.D			

^{*} Limits established by Inchcape Testing Services, Anametrix Laboratories.

Laboratory Control Spike Report Total Petroleum Hydrocarbons as Gasoline ITS - Anametrix Laboratories - (408)432-8192

Instrument ID : HP6

Analyst : RO

Matrix

: LIQUID

Supervisor : *

Units : ug/L

COMPOUND NAME	SPIKE	LCS	RECOVERY
	AMOUNT	RECOVERY	LIMITS
Gasoline	500	92%	56-141
Surrogate Recovery		97%	61-139
Date Analyzed		06/15/95	
Multiplier		1	
Filename Reference		MU1501E1.D	

^{*} Limits established by Inchcape Testing Services, Anametrix Laboratories.

Laboratory Control Spike Report Total Petroleum Hydrocarbons as BTEX ITS - Anametrix Laboratories - (408)432-8192

Instrument ID : HP6

Analyst :RD

Matrix

: LIQUID

Supervisor :4,

Units : ug/L

COMPOUND NAME	SPIKE	LCS	LCSD	RECOVERY	RPD	RPD
	AMOUNT	RECOVERY	RECOVERY	LIMITS		LIMITS
Benzene	20	100%	115%	52-133	-14%	30
Toluene	20	106%	117%	57-136	-10%	30
Ethylbenzene	20	105%	113%	56-139	-7%	30
Total Xylenes	20	109%	118%	56-141	-8%	30
Surrogate Recovery		103%	106%	61-139		
Date Analyzed		06/16/95	06/16/95			
Multiplier		1	1			
Filename Reference		MU1602E1.D	NU1603E1.D			

^{*} Limits established by Inchcape Testing Services, Anametrix Laboratories.

TOTAL PETROLEUM HYDROCARBONS AS DIESEL

INCHCAPE TESTING SERVICES - ANAMETRIX (408) 432-8192

DATA SUMMARY FORM

Anametrix Workorder:

9506180

Client Project ID:

92CB040

Matrix:

WATER

Date Released:

6/21/95

Date Extracted:

6/14/95

Concentration Units:

ug/L

Instrument ID:

HP29

Anametrix ID	Client ID	Date Sampled	Date Analyzed	Dilution Factor	Reporting <u>Limit</u>		Surrogate Recovery
9506180-01	MW-4	6/12/95	6/15/95	1	50	540	88%
9506180-02	MW-1	6/12/95	6/15/95	1	50	810	92%
9506180-03	MW-3	6/12/95	6/15/95	1	50	120	93%
9506180-04	MW-2	6/12/95	6/15/95	1	50	ND	97%
BU1412F9	Method Blank		6/15/95	1	50	ND	94%

ND: Not detected at or above the reporting limit for the method.

TPHd: Total Petroleum Hydrocarbons as C10-C28 is determined by GC/FID (modified EPA Method 8015) following sample extraction by EPA Method 3510. Surrogate recovery quality control limits for o-terphenyl are 67-103%.

All testing procedures follow California Department of Health Services approved methods.

() fredel

06122195

Supervisor

Date

TOTAL PETROLEUM HYDROCARBONS AS DIESEL

INCHCAPE TESTING SERVICES - ANAMETRIX (408) 432-8192

LABORATORY CONTROL SAMPLE REPORT

Client Project ID:	92CB040			Anametrix I	MU1412F9	
Matrix:	WATER			Date Releas	6/21/95	
Date Extracted:	6/14/95			Instrument	HP29	
Date Analyzed:	6/15/95			Concentrati	ug/L	
COMPOUND	SPIKE	LCS	% REC	LCSD	%REC	RPD
NAME	<u>AMT</u>	CONC	LCS	CONC	LCSD	
Diesel	1250	1220	98%	1230	98%	1%
o-Terphenyl			97%		101%	

Quality control limits for LCS/LCSD recovery are 38-96%

Quality control limits for RPD(relative percent difference) are +/- 18%.

Quality control limits for o-terphenyl recovery are 67-103%.

REPORT SUMMARY ANAMETRIX, INC. (408)432-8192

MS. JOBETH FOLGER WOODWARD-CLYDE CONSULTANTS 500 12TH STREET, SUITE 100 OAKLAND, CA 94607-4041 Workorder # : 9506180
Date Received : 06/13/95
Project ID : 92CB040
Purchase Order: N/A
Department : PREP
Sub-Department: PREP

SAMPLE INFORMATION:

ANAMETRIX SAMPLE ID	CLIENT SAMPLE ID	MATRIX	DATE SAMPLED	METHOD
9506180- 1	MW-4	WATER	06/12/95	5520BF
9506180- 2	MW-1	WATER	06/12/95	5520BF
9506180- 3	MW-3	WATER	06/12/95	5520BF
9506180- 4	MW-2	WATER	06/12/95	5520BF

REPORT SUMMARY ANAMETRIX, INC. (408)432-8192

MS. JOBETH FOLGER WOODWARD-CLYDE CONSULTANTS 500 12TH STREET, SUITE 100 OAKLAND, CA 94607-4041 Workorder # : 9506180
Date Received : 06/13/95
Project ID : 92CB040
Purchase Order: N/A
Department : PREP
Sub-Department: PREP

QA/QC SUMMARY :

- All holding times have been met for the analyses reported in this section.

- Insufficient water sample was received for a Matrix Spike and Matrix Spike Duplicate analysis for Method 5520BF. A Laboratory Control Sample and a Laboratory Control Sample Duplicate were extracted and analyzed instead.

Department Supervisor Date

Chemist Ling 420/95 Date

PREP/PREP- PAGE 2

ANALYSIS DATA SHEET - TOTAL RECOVERABLE PETROLEUM HYDROCARBONS INCHCAPE TESTING SERVICES - ANAMETRIX LABORATORY (408) 432-8192

PROJECT I.D. : 92CB040 ANAMETRIX I.D. : 9506180

MATRIX : WATER ANALYST : ALC DATE SAMPLED : 06/12/95 SUPERVISOR : 72

DATE EXTRACTED: 06/16/95 DATE RELEASED: 06/20/95

DATE ANALYZED : 06/19/95

WORKORDER #	SAMPLE I.D.	REPORTING LIMIT (mg/L)	AMOUNT FOUND (mg/L)
9506180-01	MW-4	5.0	ND
9506180-02	MW-1	5.0	ND
9506180-03	MW-3	5.0	ND
9506180-04	MW-2	5.0	ND
BU1611W4	METHOD BLANK	5.0	ND

ND - Not detected above the reporting limit for the method.

TRPH - Total Recoverable Petroleum Hydrocarbons are determined by Standard Method 5520BF.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

LAB CONTROL SAMPLE REPORT - TOTAL RECOVERABLE PETROLEUM HYDROCARBONS INCHCAPE TESTING SERVICES - ANAMETRIX LABORATORIES (408) 432-8192

Sample I.D.: LAB CONTROL SAMPLE Anametrix I.D.: M/NU1611W4

Matrix : WATER

Date Extracted : 06/16/95

Date Analyzed : 06/19/95

Analyst : Alc.

Supervisor : 300/19/95

Date Released : 06/19/95

COMPOUND	SPIKE AMT. (mg/L)	LCS (mg/L)	%REC LCS	LCSD (mg/L)	%REC LCSD	% RPD	REC LIMITS
MOTOR OIL	50	44	88	45	90	2	44-128

^{*} Quality control limits established by Anametrix Laboratories.

TRPH - Total Recoverable Petroleum Hydrocarbons are determined by Standard Method 5520BF.

45180 9506180 (95) (8)

Woodward-Clyde Consultants Chain of Custody Record 500 12th Street, Suite 100, Oakland, CA 94607-4014 (510) 893-3600 PROJECT NO. **ANALYSES** 92CB040 Number of Containers ZOBI SAMPLERS: (Signature) REMARKS Sample Matrix (S)oil, (W)ater, (A)ir (Sample preservation, EPA Method EPA Method handling EPA Method procedures, etc.) SAMPLE NUMBER DATE TIME IM W-4 2 Z 12/18 1540 Z 3 Z 1600 Z1620 Standard T.A.T. 3 MW-Z Z 2 Trip Blank Results to. BBEH Folger TOTAL NUMBER OF CONTAINERS RECEIVED BY 6/3/95 RELINQUISHED BY 6/13/98 DATE/TIME DATE/TIME RECEIVED BY: RELINQUISHED BY (Signature) 1430 (Signature) (Signature) METHOD OF SHIPMENT SHIPPED BY COURIER RECEIVED FOR LAB BY DATE/TIME (Signature) (Signature) (Signature)



Project Manager: CU'R Date: 6/23/95

SAMPLE RECEIVING CHECKLIST

WORKORDER NUMBER: 9506 180 CLIENT PI	ROJECT ID: _	9208040			
COOLER					
Shipping slip (airbill, etc.) present?		YE:	3	NO	(N/A)
If YES, enter carrier name and airbill #:					
Custody Seal on the outside of cooler?		YES	5	NO	(N/A)
Condition: INTACT BROKEN		,			
Temperature of sample (s) within range?		YE	3)	NO	N/A
List temperature of cooler (s):5°C		1		· · · · ·	
SAMPLES					
Chain of custody seal present for each container?		YES	3	NO	N/A)
Condition: INTACT BROKEN					
Samples arrived within holding time?		(YE	<u>(</u>	NO	N/A
Samples in proper containers for methods requested?		YE)	NO	
Condition of containers: INTACT BROKEN					
If NO, were samples transferred to proper container?					
Were VOA containers received with zero headspace?		Œ	3)	МО	N/A
If NO, was it noted on the chain of custody?					
Were container labels complete? (ID, date, time preservative, etc.)		VE.	<u>s</u>	NO	
Were samples preserved with the proper preservative?		YE	<u>\$</u>	NO	N/A
If NO, was the proper preservative added at time of receipt?		·			
pH check of samples required at time of receipt?		ÝΕ	s (ÑO,	
If YES, pH checked and recorded by:			,		
Sufficient amount of sample received for methods requested?		YE	<u>s</u>)	NO	
If NO, has the client or lab project manager been notified?					
Field blanks received with sample batch? # of Sets:		YE	S	NO	N/A
Trip blanks received with sample batch? # of Sets:	· · · · · · · · · · · · · · · · · · ·	(VE	<u>دي</u>	NO	N/A
CHAIN OF CUSTODY					
Chain of custody received with samples?	•	(YE	<u>s)</u>	NO	
Has it been filled out completely and in ink?		(YE		NO	
Sample ID's on chain of custody agree with container labels?		 €E	<u>s</u>	NO	
Number of containers indicated on chain of custody agree with number r	eceived?	YE	<u>s</u>	NO	
Analysis methods clearly specified?		CYE.	<u>s</u>	NO	
Sampling date and time indicated?		YE	<u>s</u>	NO	
Proper signatures of sampler, courier, sample custodian in appropriate pl	lace? with time	and date? (YE	<u>s</u>	NO	
Turnaround time? REGULAR RUSH		· · · · · · · · · · · · · · · · · · ·			
Any NO response and/or any "BROKEN" that was checked must b	e detailed in the	e Corrective Act	ion	Forn	n.

Sample Custodian: Wirane UnDate: 6/14/95