

February 8, 1996 92CB040

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

Subject: Interstate Brands Corporation, 1010 46th Street, Oakland, CA
Quarterly Groundwater Monitoring Report

Dear Ms. Hugo:

Woodward-Clyde Consultants (WCC) has prepared this letter report discussing the November 1995 quarterly groundwater monitoring results for the Interstate Brands Corporation (IBC) Site at 1010 46th Street, Oakland, California shown on Figure 1. This site is a former Continental Baking Company (CBC) facility.

### **GROUNDWATER ELEVATION**

Water level measurements were performed on November 29, 1995 by WCC personnel. Water levels were measured in monitoring wells MW-1, 2 and 3, shown on Figure 2, with an electronic water level sounder and recorded to the nearest 0.01 foot. Table 1 summarizes the current and previous groundwater elevation measurements in the three monitoring. Groundwater elevations vary in the three monitoring wells from 48.79 feet above mean sea level (MSL) to 53.36 feet above MSL. The groundwater flow direction is approximately southwest to south-southwest.

### ANALYTICAL RESULTS

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

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-3 and labelled MW-4. Samples were submitted for analysis for Total Petroleum Hydrocarbons (TPH) quantified as diesel (TPHd, modified EPA Method 8015) and gasoline (TPHg); 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.

Woodward-Clyde Consultants • A subsidiary of Woodward-Clyde Group, Inc.

500 12th Street, Suite 100 • Oakland, California 94607-4014 510-893-3600 Fax 510-874-3268

2/8/96 2:12 PM

# **Woodward-Clyde**

Ms. Susan Hugo February 8, 1996 Page 2

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 November, 1995 sampling, summarized in Table 2, are as follows:

- TPHg was detected in MW-1 only at a concentration of 1,700 micrograms per liter (µg/L);
- TPHd was detected in MW-1 only at a concentration of 270 mg/L;
- BTEX was detected in MW-1 only at concentrations ranging from 20 ug/L benzene to 210 ug/L xylenes; and
- 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 continued to decrease in MW-1.

If you have any questions, please feel free to call me at (510) 874-3192.

Sincerely,

William B. Copeland Assistant Project Geologist

cc: Fred Dannecker, IBC-San Francisco Travis Bryant, IBC-Kansas City, MO Jim Hummert, WCC-SL

TABLE 1
SUMMARY OF GROUNDWATER ELEVATION
INTERSTATE BRANDS CORPORATION, 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		
	8/30/95	61.84	9.44	52.40		
	11/29/95	61.84	9.93	51.91		
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		
	8/30/95	63.10	9,53	53.57		
	11/29/95	63.10	9.74	53.36		
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		
	8/30/95	62.51	13.54	48.97		
	11/29/95	62.51	13.72	48.79		

<sup>\*</sup> Noted to be under pressure when opened.

TABLE 2 SUMMARY OF ANALYTICAL RESULTS INTERSTATE BRANDS CORPORATION, OAKLAND, CALIFORNIA

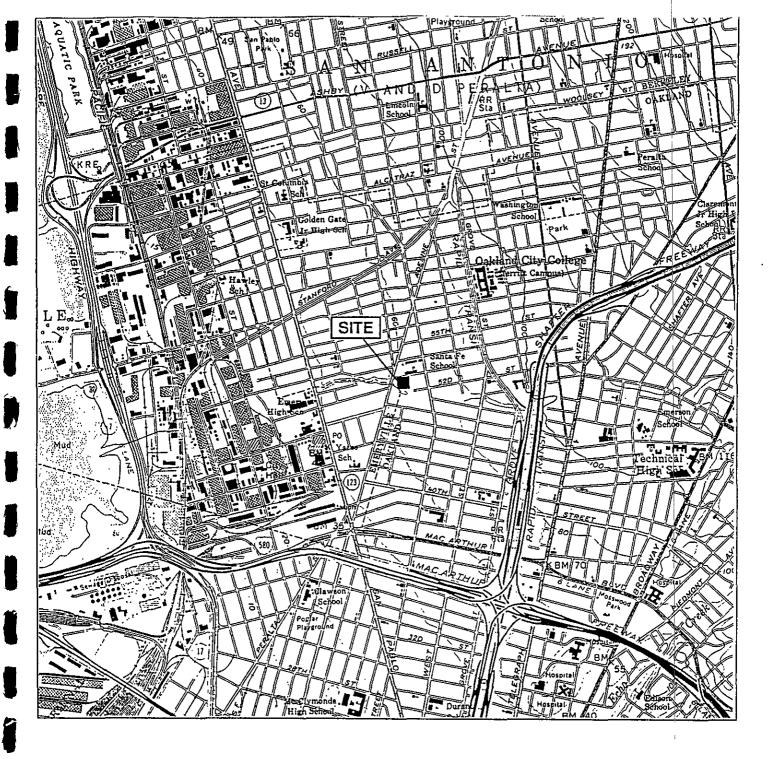
Parameters		TPH diesel	TPH gasoline			ТРН ВТЕХ		
				benzene	toluene	ethyl-benzene	total xylenes	total oil & grease
EPA Method		8015	8015		802	20		5520 BF
Units		(μg/L)	(μg/L)		(μց	/L)	 	(mg/L)
Well Number	Date			<del></del> -				
MW-1	5/26/94	1300	12000	57	340	370	3100	<5.0
	8/26/94	510 <sup>1</sup> /650 <sup>1</sup>	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 <sup>1</sup> /540 <sup>1</sup>	3900/11000	23/280	57/610	200/400	680/2000	<5.0/<5.0
	8/30/95	350 <sup>1</sup>	3300	26	36	250	490	<5.0
	11/29/95	270	1700	20	21	110	210	<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
	8/30/95	52 <sup>3</sup>	<50	<0.50	<0.50	<0.50	<0.50	<5.0
	11/29/95	<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	120 <sup>2</sup>	<50	<0.50	<0.50	<0.50	<0.50	<5.0
	8/30/95	88 <sup>3</sup> /57 <sup>3</sup>	<50/<50	<0.50/<0.50	<0.50/<0.50	<0.50/<0.50	<0.50/<0.50	<5.0/<5.6
	11/29/95	<50	<50	<0.50	<0.50	<0.50	<0.50	<5.0

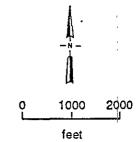
Results of duplicate sample analyses are shown by a dash ("/")

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

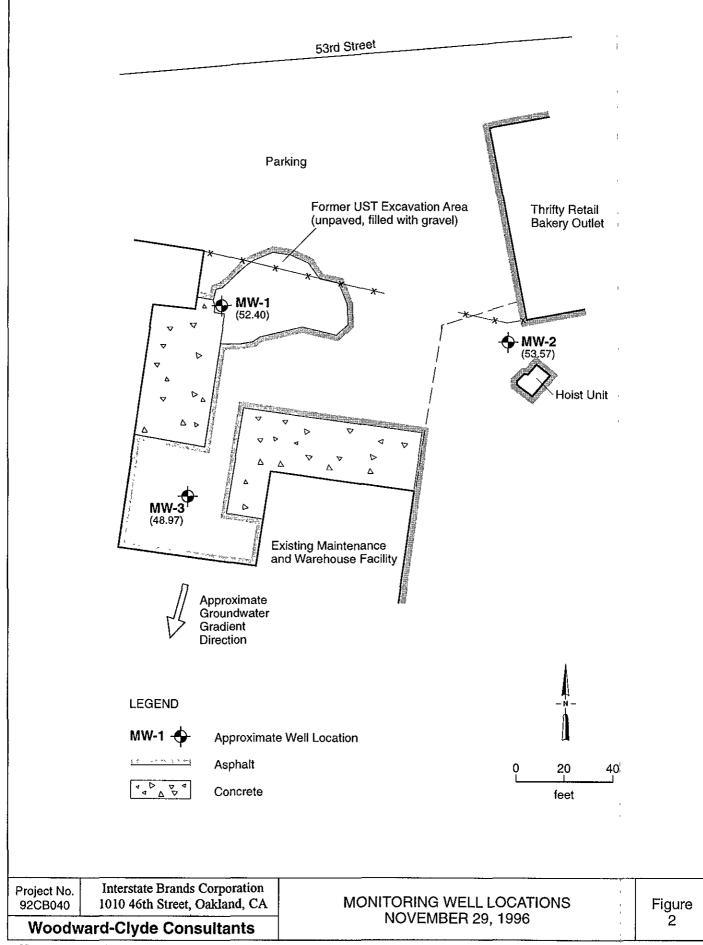
(2) Primarily due to heavier petroleum product of hydrocarbon range C18-C36.

(3) Due to a combination of diesel and a discrete peak not indicative of diesel fuel.





Project No. 92CB040	Interstate Brands Corporation 1010 46th Street, Oakland, CA	SITE LOCATION	Figure
Woodw	ard-Clyde Consultants		1 1



Sample No.		WA	TER	SAM	IPLE	LOG '	s	ample	No.	Μω-/ <b>9-95</b>
11-29-95		Project No. : _	92	c Bo	40	<del>, , ,</del>	Da	sle:	1-2	9-95
MW-1 9.93		Project Name:				and				
MW-Z 9.74		Sample Location	on: 4"	PVC						
MW-3 13.72		Weather Cond	itions:	clea	<u>-                                      </u>					
MW 2 13.12	L.	Observations /				· · · · · · · ·				
						ethod: 2		c_L	'- 6	ailer
		Quality	Assura	nce	Sampling M Method to M	ethod:	r Level :	200	1 % 5	ounder
		Pump Lines:			Cleaned		ailer I inner			
		Method of cle	aning Pump	/ Bailer:		N/	<u>A</u>			
		Pump Lines: Method of cles pH Meter No. Specific Cond	:		1725	749	<u></u>	cs	Description	1.00 / 7.00
		Specific Cond	uctance Met 20.2	er No.: _ - 9.9	3=/0.	27 x .6	53=	6.7	4 4 =	26.8 gal.
		Comments.								
		Sampli	ng rement	s	Water Leve	l (below MP) a	at Start:	9.9 Top	3_ E	1d: 9.94 Ce sing
		Time	Discharge (gallons)	рН	Temp. C	Specific conductance	Turbidity	Color	Odor	Comments
		13:40		6.99	<u>_</u>	umhos/cm) 432	MOD.	GRA)	513	
		13:45		6.71		427	11:	11	u l	
		13:49	22	6.61	_=	399	u	t)	11	
		13:55	29	6.58	21	395	"	11	"	
								-	-	·
<u> </u>		Total Disch	arde:	29.	5 aal	lons o	aşing Volur	nes Rem	oved:	
			disposal of	discharged	i water:	<u>) 5 49</u>	100 01	· 44 etc	<u> </u>	
					ziners filled:(		<del>,</del>			
					<del></del>		Wood	ward	-Clyde	Consultants
		Collected	by:s	J. 1	+AU	S	500 12	hth Street,	Suite 100, O (415) 893-	akland, CA 94607-4014
										**************************************

	" E38.									
Sample No.		w	ATE	RSA	MPL	E LOG		Samp	ole No	MW-2
		Project No. :				akland		Date: _	11-	29-95
		Sample Loca			<u>,                                    </u>	K/C/A/IG			<del></del>	
		Well Descrip	tion: <u>4</u>	"PY						
		Weather Cor				. , ,	11	<u> </u>		
	- 3	Observations	/ Commen	ts:	upli	cate /	<u>a6e/€</u>	d N	1W-	4 <u>@ 14:35</u>
		Quality	Assur	ance	Samplin	g Method:	Dis	هم	26/6	bailer
		<u> </u>		_			ter Level : _	20	0	sounder
		Pump Lines:	eaning Pum	New )/	Cleaned	<u> </u>	Bailer Lihes	" —— <b>(</b>	New	/ Cleaned
		pH Meter No	.:		217	255	· · · ·	c	alibrated	4.00 /7.00
		Specific Cond	ductance Me	ter No.:		1379	19		Calibrated	red-lined
		Comments:	19.53	<u> </u>	74=	7.81×.6	53=6	.4 ×	4=	25.6
		·	· · · · · · · · · · · · · · · · · · ·			·			·	
	2			······································	1			C1 +1	//	9.07
		Sampli Measu	ng rement	S	Water Le Measurir	vel (below MP)  ng Point (MP):	at Start:	Tir	<del>5</del> (	9.86 Casing
			Discharge		Temp.	Specific	T	<del></del>		
		Time	(gallons)	pН	(°C)	Conductance (µmhos / cm)	Turbidity	Color	Odor	Comments
	<b>F E</b>	12:40		6.79	22	385	LOW	CLR	ND	
		12:46		6.70	21	443		u	"	
		/3:10 /3:21	26	6.66	2/ 21	449	<i>                   </i>	11	u	
		15.21	20	0,63	<u> </u>	427	/1	- 11	"	
							<u> </u>			
		Total Dischar	rge:	6,5	5 94	MOAS C	sing Volum	es Remov	 /ed:	
	Harry .	Method of di	sposal of di	scharged	water:	55	30/0A			
		Number and	size of sam	ple contai	ners filled:	<u>@ /5:3</u>	0;		<u> </u>	
							Wood	ward	Clyde	Consultants
		Collected by:	::	5. H	AUS			Street, Su		kland, CA 94607-4014

10.12

Sample No.						LOG				MW-3
		Project No. :	9:	2CI BC	304 - 0	o klane	0.	ue:	1/2	9/95
		Sample Locati Well Descripti Weather Cond	ion: 4"	PV	<u>'C</u>					
		Weather Cond Observations								
		Quality	Assura	nce	Sampling Method t	Method:	Disp	05 a	61a 'S.	bailer
		Pump Lines:	eaning Pump	(a)	Cleaned	B	ailes Lines:		New /	Cleaned 7.00
		I		No.		1874	7	C	alibrated	red lined
		Comments:	19.44	-/3.	72=	5.72×	.653=	3./	X4 =	14.8 gal.
		Sampli	ing rement	s	Water Le	evel (below MP) :	at Start:	3.72 Top	2 of (	ind: 13.77 Casing
		Time	Discharge (galions)	рН	Temp. (°C)	Specific Conductance (µmhos / cm)	Turbidity	Color	Odor	Comments
		12:20	5	6.70	22	960	MOD	GRA	NO	
		12:28		6.72	21	880	11	((	ч	
		12:54	13	6.61		880	10	11	"	
	<b>E</b> J	13:03				870	//	11	<b>C</b> #	<u> </u>
		s								
	3=-1									
		Total Disch	harne:	16.	8	llons	asing Volu	mes Rem	oved:	
		Method of	disposal of o	discharge	d water: _	536	<u>Sellen</u>	dr		
				x 1	LIAI	10	W00	dward	-Clyd Suite 100, 0	e Consultants Dakland, CA 94607-4014

1961 Concourse Drive Suite E San Jose, CA 95131 Tel: 408-452-8192 Fax: 408-432-8198

MR. BILL COPELAND WOODWARD-CLYDE CONSULTANTS 500 12TH STREET, SUITE 100 OAKLAND, CA 94607-4041

Workorder # : 9511299 Date Received: 11/30/95 Project ID : 92CB040/0012

Purchase Order: N/A

The following samples were received at Anametrix for analysis:

ANAMETRIX ID	CLIENT SAMPLE ID
9511299- 1	MW-4
9511299- 2	MW-1
9511299- 3	MW-3
9511299- 4	MW-2
9511299- 5	TRIP.B.

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

This report consists of \_

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

MR. BILL COPELAND WOODWARD-CLYDE CONSULTANTS 500 12TH STREET, SUITE 100 OAKLAND, CA 94607-4041

Workorder # : 9511299
Date Received : 11/30/95
Project ID : 92CB040/0012
Purchase Order: N/A
Department : GC
Sub-Department: TPH

## SAMPLE INFORMATION:

ANAMETRIX SAMPLE ID	CLIENT SAMPLE ID	MATRIX	DATE SAMPLED	METHOD
9511299- 1	MW-4	WATER	11/29/95	TPHd
9511299- 2	MW-1	WATER	11/29/95	TPHd
9511299- 3	MW-3	WATER	11/29/95	TPHd
9511299- 4	MW-2	WATER	11/29/95	трна
9511299- 1	MW-4	WATER	11/29/95	TPHgBTEX
9511299- 2	MW-1	WATER	11/29/95	TPHgBTEX
9511299- 3	MW-3	WATER	11/29/95	TPHGBTEX
9511299- 4	MW-2	WATER	11/29/95	TPHgBTEX
9511299- 5	TRIP.B.	WATER	11/24/95	ТРНЭВТЕХ

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

MR. BILL COPELAND WOODWARD-CLYDE CONSULTANTS 500 12TH STREET, SUITE 100 OAKLAND, CA 94607-4041

Workorder # : 9511299 Date Received: 11/30/95 Project ID : 92CB040/0012

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 concentration reported as diesel for sample MW-1 is primarily due to the presence of a lighter petroleum product of hydrocarbon range C6-C12, possibly gasoline.

Ohrsyl Bremen 14/13/15
Department Supervisor Date

# Organic Analysis Data Sheet

# Total Petroleum Hydrocarbons as Gasoline with BTEX TTS - Anametrix Laboratories - (408)432-8192

Lab Workorder : 9511299

: WATER

Matrix

Client Project ID: 92CB040/0012

Units : uq/L

		Client ID				
	Method	MW-4	MW-1	MM-3	MW-2	TRIP.B.
	Reporting	Lab ID				
Compound Name	Limit*	9511299-01	9511299-02	9511299-03	9511299-04	9511299-05
Benzene	0.50	ND	20	ND	ND	ND
Toluene	0.50	ND	21	ND	ND	ND
Ethylbenzene	0.50	ND	110	ND	ND	ND
Total Xylenes	0.50	ND	210	ND	ND	ND
TPH as Gasoline	50	ND	۷ 1700	ND	ND	ND
Surrogate Recovery		104%	93%	106%	105%	105%
Instrument ID		HP4	HP4	HP4	HP4	HP4
Date Sampled		11/29/95	11/29/95	11/29/95	11/29/95	11/24/95
Date Analyzed		12/05/95	12/04/95	12/04/95	12/04/95	12/04/95
RLMF		1	10	1	1	1
Filename Reference		FRN29901.D	FPN29902.D	FPN29903.D	FPN29904.D	FPN29905.D

<sup>\*</sup> 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.

TPHg : 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.

Date

# Organic Analysis Data Sheet

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

Lab Workorder : 9511299

Client Project ID: 92CB040/0012

Matrix

: WATER

Units : ug/L

		Client ID	Client ID	Client ID	Client ID	Client ID
· · 	Method					
	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		110%	108%			
Instrument ID		HP4	HP4			
Date Sampled		N/A	N/A			
Date Analyzed		12/04/95	12/05/95			
RLMF		1	1			
Filename Reference		BD0401E1.D	BD0501E1.D			

<sup>\*</sup> 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.

TPHg : 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.

Analyst

Date

Supervisor

Dat

# Matrix Spike Report

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

Project ID

: 92CB040/0012

Laboratory ID : 9511299-01

Sample ID

: MW-4

Analyst : TS

Matrix

Supervisor : &

: WATER

Instrument ID : HP4

Date Sampled : 11/29/95

COMPOUND NAME	SPIKE	SAMPLE	MS	MSD	RECOVERY	RPD	RPD
	AMOUNT	RESULTS	RECOVERY	RECOVERY	LIMITS	 	LIMITS
Gasoline	500	ND	88%	92%	48-149	-4%	30
Surrogate Recovery		104%	109%	107%			
Date Analyzed		12/05/95	12/05/95	12/05/95			
Multiplier		1	1	1			
Filename Reference		FRN29901.D	FMN29901.D	FDN29901.D			

<sup>\*</sup> Limits established by Inchcape Testing Services, Anametrix Laboratories.

# Matrix Spike Report

# Total Petroleum Hydrocarbons as BTEX

ITS - Anametrix Laboratories - (408)432-8192

Project ID

: 92CB040/0012

Laboratory ID : 9511299-04

Sample ID

: MW-2

Analyst: TS

Matrix

: WATER

Supervisor : 45

Date Sampled : 11/29/95

Instrument ID: HP4

COMPOUND NAME	SPIKE	SAMPLE	MS	MSD	RECOVERY	RPD	RPD
	TNUOMA	RESULTS	RECOVERY	RECOVERY	LIMITS		LIMITS
Benzene	10	ND	92%	105%	45-139	-13%	30
Toluene	10	ND	90%	106%	51-138	-16%	30
Ethylbenzene	1.0	ND	96%	110%	48-146	-14%	30
Total Xylenes	10	ND	95%	113%	50-139	-17%	30
Surrogate Recovery		105%	103%	102%			
Date Analyzed		12/04/95	12/04/95	12/04/95			
Multiplier		1	1	1			
Filename Reference		FPN29904.D	FMN29904.D	FDN29904.D			

<sup>\*</sup> 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 : HP4

Analyst : TS

Matrix

: LIQUID

Supervisor :05

COMPOUND NAME	SPIKE	LCS	RECOVERY
	AMOUNT	RECOVERY	LIMITS
Benzene	10	101%	52-133
Toluene	10	98%	57-136
Ethylbenzene	10	104%	56-139
Total Xylenes	10	104%	56-141
Surrogate Recovery		103%	61-139
Date Analyzed		12/04/95	
Multiplier		1	
Filename Reference		MD0401E1.D	

<sup>\*</sup> 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 : HP4

Analyst: 73

Matrix

: LIQUID

Supervisor : س

COMPOUND NAME	SPIKE	LCS	RECOVERY
	AMOUNT_	RECOVERY	LIMITS
Gasoline	500	88%	67-127
Surrogate Recovery		115%	61-139
Date Analyzed		12/05/95	
Multiplier		1	
Filename Reference		MD0501E1.D	

<sup>\*</sup> 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:

9511299

Client Project ID:

92CB040/0012

Matrix:

WATER

Date Released:

12/13/95

Date Extracted:

12/11/95

Concentration Units:

ug/L

Instrument ID:

HP27

Anametrix ID	Client ID	Date Sampled	Date <u>Analyzed</u>	Dilution Factor	Reporting <u>Limit</u>	Amount Found	Surrogate Recovery
9511299-01	MW-4	11/29/95	12/12/95	1	50	ND	84%
9511299-02	MW-1	11/29/95	12/12/95	1	50	270	77%
9511299-03	MW-3	11/29/95	12/12/95	1	50	ND	84%
9511299-04	MW-2	11/29/95	12/12/95	1	50	ND	74%
BD1111F9	Method Blank		12/12/95	1	50	ND	88%

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.

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Da

Date

Supervisor

Data

# TOTAL PETROLEUM HYDROCARBONS AS DIESEL

# INCHCAPE TESTING SERVICES - ANAMETRIX (408) 432-8192

# LABORATORY CONTROL SAMPLE REPORT

Client Project ID: 92CB040/0012

Anametrix ID:

M/ND1111F9

Matrix:

WATER

Date Released:

12/13/95

Date Extracted:

12/11/95

Instrument ID:

HP27

Date Analyzed:

12/12/95

Concentration Units:

ug/L

COMPOUND NAME	SPIKE <u>AMT</u>	LCS <u>CONC</u>	% REC <u>LCS</u>	LCSD CONC	%REC <u>LCSD</u>	RPD
Diesel	1250	1090	87%	1050	84%	-4%
o-Terphenyl			97%		95%	

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

MR. BILL COPELAND

WOODWARD-CLYDE CONSULTANTS 500 12TH STREET, SUITE 100 OAKLAND, CA 94607-4041

Workorder # : 9511299
Date Received : 11/30/95
Project ID : 92CB040/0012
Purchase Order: N/A
Department : PREP
Sub-Department: PREP

## SAMPLE INFORMATION:

ANAMETRIX SAMPLE ID	CLIENT SAMPLE ID	MATRIX	DATE SAMPLED	METHOD
9511299- 1	MW-4	WATER	11/29/95	5520BF
9511299- 2	MW-1	WATER	11/29/95	5520BF
9511299- 3	MW-3	WATER	11/29/95	5520BF
9511299- 4	MW-2	WATER	11/29/95	5520BF

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

MR. BILL COPELAND WOODWARD-CLYDE CONSULTANTS 500 12TH STREET, SUITE 100 OAKLAND, CA 94607-4041 Workorder # : 9511299
Date Received : 11/30/95
Project ID : 92CB040/0012

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 Laboratory Control Sample Duplicate were extracted and analyzed instead.

Department Supervisor Date

Angela Knefer 12/11/99 Chémist Date

PREP/PREP- PAGE 2

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

PROJECT I.D. : 92CB040/0012 ANAMETRIX I.D. : 9511299

MATRIX : WATER ANALYST : ALL DATE SAMPLED : 11/29/95 SUPERVISOR : CALL

DATE EXTRACTED: 12/07/95 DATE RELEASED: 12/11/95

DATE ANALYZED : 12/08/95

WORKORDER #	SAMPLE I.D.	REPORTING LIMIT (mg/L)	AMOUNT FOUND (mg/L)
9511299-01	MW-4	5.0	ND
9511299-02	MW-1	5.0	ND
9511299-03	MW-3	5.0	ND
9511299-04	MW-2	5.0	ND
BD0711W4	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/ND0711W4

Matrix : WATER

Date Extracted : 12/07/95

Date Analyzed : 12/08/95

Analyst : Alc

Supervisor : C/

Date Released : 12/11/95

COMPOUND	SPIKE AMT. (mg/L)	LCS (mg/L)	%REC LCS	LCSD (mg/L)	%REC LCSD	% RPD	REC LIMITS
MOTOR OIL	50	46	92	47	94	2	44-128

<sup>\*</sup> Quality control limits established by Anametrix Laboratories.

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

	Woodward-Clyde Consultants 500 12th Street, Suite 100, Oakland, CA 94607-4014 (510) 893-3600  ROJECT NO.							Chain of Custody Record						
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11/29/95	1435	MW-4	W						Z	2			7	
	1455	MW-1	W						2	2			7	
1.//	1510	MW-3	W						2				7	
11/29/95	1530	MW-2	W						2	2			4	
11/24/95		Trip blank	+W					2	-	_	-		2	
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Sample Custodian: Date: 11 30 95

1961 Concourse Drive Suite E

San Josel CA 95131 Tel: 408-432-8192 Fax: 408-432-8198

WORKORDER NUMBER: 4511299 CLIENT PROJECT ID: 92CB	5100/0012		
COOLER			
Shipping slip (airbill, etc.) present?	YES	NO	(N/A)
If YES, enter carrier name and airbill #:	,		
Custody Seal on the outside of cooler?	YES	NO	(N/A)
Condition: INTACT BROKEN			
Temperature of sample (s) within range?	YES	(NO	) N/A
List temperature of cooler (s): /5 'C			
SAMPLES	!		
Chain of custody seal present for each container?	YEŞ	NO	(N/A <sup>-</sup> )
Condition: INTACT BROKEN			
Samples arrived within holding time?	(YES)	NO	N/A
Samples in proper containers for methods requested?	YES	NO	
Condition of containers: INTACT BROKEN			
If NO, were samples transferred to proper container?			
Were VOA containers received with zero headspace?	(YES)	NO	N/A
If NO, was it noted on the chain of custody?			
Were container labels complete? (ID, date, time preservative, etc.)	YES	NO	
Were samples preserved with the proper preservative?	YES	NO	N/A
If NO, was the proper preservative added at time of receipt?			
pH check of samples required at time of receipt?	YES	NO	!
If YES, pH checked and recorded by:			
Sufficient amount of sample received for methods requested?	YES	NO	
If NO, has the client or lab project manager been notified?			
Field blanks received with sample batch? # of Sets:	YEŞ	NO	(N/A)
Trip blanks received with sample batch? # of Sets:/_	YES	NO	N/A
CHAIN OF CUSTODY			
Chain of custody received with samples?	(YES)	NO	
Has it been filled out completely and in ink?	(YES)	NO	
Sample ID's on chain of custody agree with container labels?	YES	NO	
Number of containers indicated on chain of custody agree with number received?	YES	NO	
Analysis methods clearly specified?	(YEŞ)	NO	
Sampling date and time indicated?	(YES)	NO	
Proper signatures of sampler, courier, sample custodian in appropriate place? with time and date?	YES	NO	
Turnaround time? REGULAR V RUSH			
Any NO response and/or any "BROKEN" that was checked must be detailed in the C	orrective Action For	n.	

Project Manager: Date: 12-5-95