500 Shellmound Street, Emeryville, CA 94608-2411

Fax: 510-547-5043 Phone: 510-450-6000

April 24, 1995

Scott Seery
Alameda County Department of
Environmental Health
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502

Re: First Quarter 1995
Shell Service Station
WIC #204-5508-3301
6039 College Avenue
Oakland, California
WA Job #81-0618-105

95 MAY 11 PH 2: 19

Dear Mr. Seery:

This status report satisfies the quarterly reporting requirements prescribed by California Administrative Code Title 23 Waters, Chapter 3, Subchapter 16, Article 5, Section 2652.d.

First Quarter 1995 Activities:

- Blaine Tech Services, Inc. (BTS) of San Jose, California measured depths to ground water and collected ground water samples from the site wells. Well MW-4 contained separate-phase hydrocarbons (SPH) and was not sampled. BTS' report describing these activities and analytic results for ground water is included as Attachment A.
- Weiss Associates (WA) compiled the ground water elevation and analytic data (Tables 1 and 2) and prepared a ground water elevation contour map (Figure 2). WA also tabulated SPH removal data on Table 3. To date, over 10 pounds of SPHs have been removed from the subsurface.

Anticipated Second Quarter 1995 Activities:

• WA will submit a report presenting the results of second quarter 1995 ground water sampling and ground water depth measurements. The report will include tabulated chemical analytic results and a ground water elevation contour map.

Scott Seery April 26, 1995



Conclusions and Recommendations:

WA recommends continued monitoring of dissolved hydrocarbon concentrations in ground water. Despite the fact that hydrocarbons were detected in soil borings between wells MW-4 and MW-5, no total petroleum hydrocarbons as gasoline (TPH-G) or benzene, ethylbenzene, toluene and xylenes (BETX) have been detected in ground water samples collected from well MW-5 since it was installed in 1991. No BTEX compounds or more than 120 ppb TPH-G have consistantly been detected in ground water samples collected from downgradient well MW-6. Therefore, it appears the extent of hydrocarbons in ground water has been fully assessed downgradient of the site.

Please call if you have any questions.

Sincerely,

Weiss Associates

Grady S. Glasser Technical Assistant

James W. Carmody, C.E.G.

Senior Project Hydrogeologist

Attachments: A - Blaine Tech Services' Ground Water Monitoring Report

No. EG 1576

CERTIFIED NGINEERING GEOLOGIST

Dan Kirk, Shell Oil Company, P.O. Box 4023, Concord, CA 94524

Tom Callaghan, San Francisco Bay Regional Water Quality Control Board, 2101 Webster

Street, Oakland, CA 94612

GSG/JWC:eac

cc:

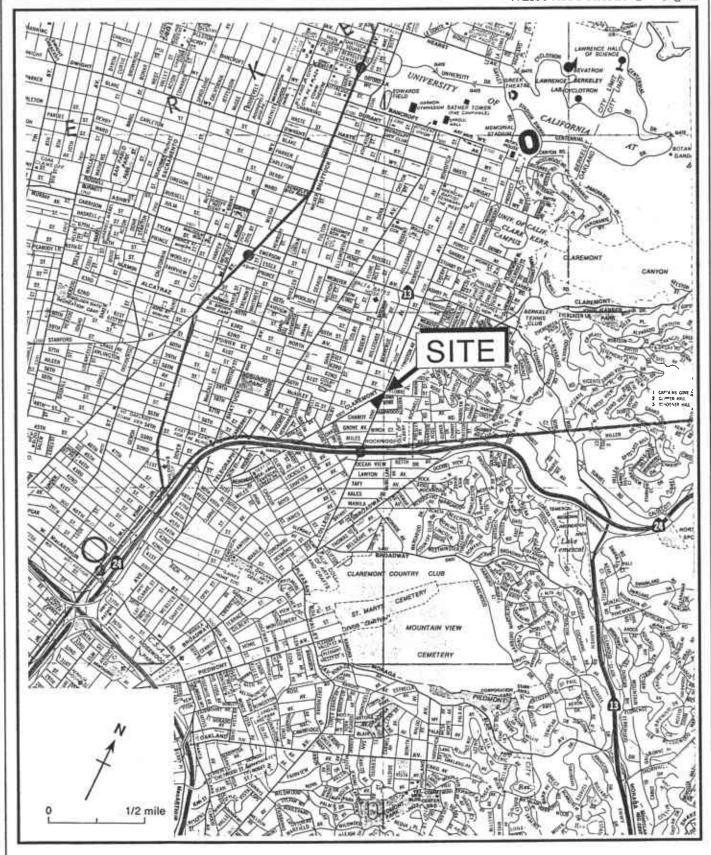


Figure 1. Site Location Map - Shell Service Station WIC #204-5508-3301, 6039 College Avenue, Oakland, California



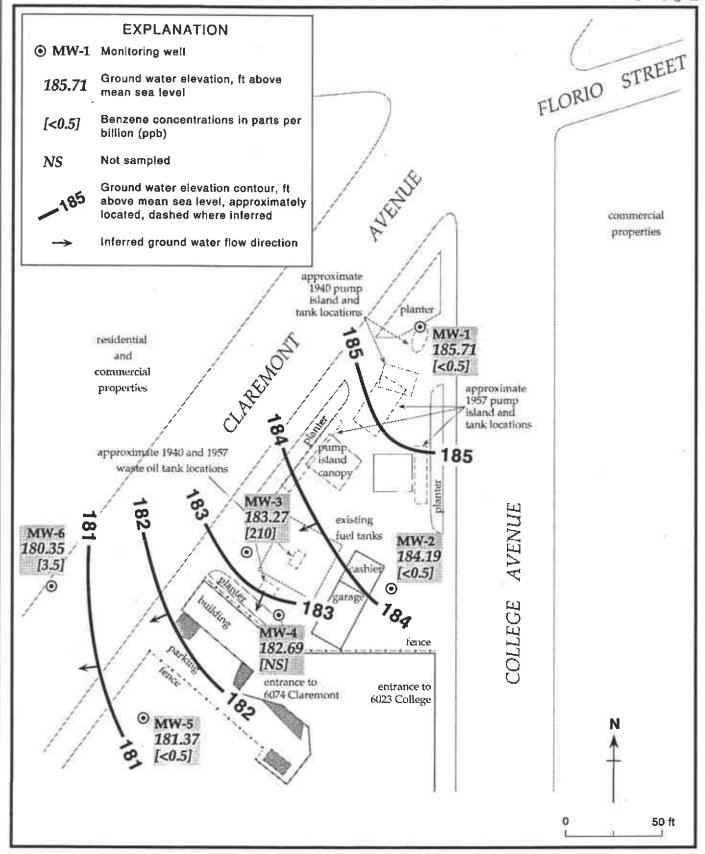


Figure 2. Monitoring Well Locations, Ground Water Elevation Contours, and Benzene Concentrations in Ground Water - February 1, 1995 - Shell Service Station WIC #204-5510-0303, 6039 College Avenue, Oakland, California

Table 1. Ground Water Elevations - Shell Service Station WIC #204-5508-3301, 6039 College Avenue, Oakland, California

Well ID	Date	Top-of-Casing Elevation (ft above msl)	Depth to Water (ft)	Separate-Phase Hydrocarbon Thickness (ft)	Ground Water Elevation (ft above msl) ^a
MW-1	06/03/91	195.89	17.82		178.07
	08/30/91		19.87		176.02
	11/22/91	•	20.58		175.31
	03/18/92		13.55		182.34
	05/28/92		17.08		178.81
	08/19/92		19.07		176.82
	11/17/92		20.11		175.78
	02/12/93		12.10		183.79
	06/10/93		14.87		181.02
	08/18/93		16.90		178.99
	11/19/93		19.72		176.17
	02/28/94		15.08		180.81
	05/04/94		17.20		178.69
	08/10/94		18.76		177.13
	11/08/94	•	16.00		179.89
	02/01/95		10.18		185.71
MW-2	06/03/91	194.27	17.00		177.27
	08/30/91		18.95		175.32
	11/22/91		19.55		174.72
	03/18/92		12.91	•	181.36
	05/28/92		16.25		178.02
	08/19/92		18.21	4	176.06
	11/17/92		19.15		175.12
	02/12/93		11.60		182.67
	06/10/93		14.14		180.13
	08/18/93		16.10		178.17
	11/19/93		18.77		175.50
	02/28/94		14.35		179.92
	05/04/94		16.34		177.93
	08/10/94		15.79		178.48
	11/08/94		15.04	ne recorded the remove of the first bud bud beds accompanied	179.23
	02/01/95		10.08		184.19
MW-3	06/03/91	192.52	15.84		176.68
	08/30/91		17.79		174.73
	11/22/91		18.40		174.12
	03/18/92		12.03		180.49
	05/28/92		15.16		177.36
	08/19/92		17.03		175.49
	11/17/92		17.94		174.58
	02/12/93		9.16		183.36

Table 1. Ground Water Elevations - Shell Service Station WIC #204-5508-3301, 6039 College Avenue, Oakland, California (continued)

Well ID	Date	Top-of-Casing Elevation (ft above msl)	Depth to Water (ft)	Separate-Phase Hydrocarbon Thickness (ft)	Ground Water Elevation (ft above msl) ^a
	06/10/93		13.20	•	179.32
	08/18/93		14.93		177.59
•	11/19/93		17.58		174.94
	02/28/94		13.30		179.22
	05/04/94	•	15.25		177.27
	08/10/94		16.63		175.89
	11/08/94		13.88		178.64
	02/01/95		9.25		183.27
MW-4	06/03/91	193.37	16.77		176.60
	08/30/91	1,0.0,	18.71	•	174.66
	11/22/91	•			
	03/18/92 ^a		13.15	0.24	180.41
	05/28/92ª		16.22	0.12	177.25
	08/19/92ª		18.05	0.09	175.39
	11/17/92		18.89	,	174.48
	02/12/93		11.78	< 0.01	181.59
	06/10/93		14.20	10.01	179.17
	08/18/93		15.95	0.01	177.43
	11/19/93	•	18.48	0.01	174.90
	02/28/94	•	14.60	< 0.01	178.77
	05/04/94		16.15	< 0.01	177.22
	08/10/94		17.58	0.02	175.81
	11/08/94		15.05	0.05	178.36
	02/01/95		10.71	0.04	182.69
MW-5	08/30/91	190.35	16.74		173.61
	11/22/91		17.27		173.08
	03/18/92	•	11.28		179.07
	05/28/92 ^b				
	08/19/92		15.99		174.36
	11/17/92		16.84		173.51
	02/12/93		10.30		180.05
	06/10/93		12.36		177.99
	08/18/93		14.02		176.33
	11/19/93		16.50		173.85
	02/28/94		12.55		177.80
	05/04/94		14.27		176.08
	08/10/94		15.60		174.75
	11/08/94		12.85		177.50
	02/01/95		8.98		181.37

Table 1. Ground Water Elevations - Shell Service Station WIC #204-5508-3301, 6039 College Avenue, Oakland, California (continued)

Well ID	Date	Top-of-Casing Elevation (ft above msl)	Depth to Water (ft)	Separate-Phase Hydrocarbon Thickness (ft)	Ground Water Elevation (ft above msl) ^a
MW-6	09/21/93	189.05	14.64		174,41
	11/19/93				
	02/28/94		12.18		176.87
	05/04/94		13.62		175.43
	08/10/94	· ·	14.98		174.07
	11/08/94		12.20		176.85
	02/01/95		8.70		180.35

Notes:

⁼ When separate-phase hydrocarbons are present, ground water elevation is corrected by the relation: Corrected ground water elevation = (Top-of-Casing Elevation) - (depth to water) + (0.8 x separate-phase hydrocarbon thickness)

b = Well inaccessible

^{--- =} Data not available

Table 2. Analytic Results for Ground Water - Shell Service Station WIC #204-5508-3301, 6039 College Avenue, Oakland, California

Well/Boring	Date	Depth to	TPH-G	TPH-D	TPH-MO	POG	В	E	T	X	SVOC
ID	Sampled	Water (ft)	←			arts per billi	on (μg/L) —	.			\rightarrow
	<u> </u>	` '				•					
MW-1	06/03/91	17.82	ND	ND	ND		ND	ND	ND	ND	
	08/30/91	19.87	ND	520	ND		ND	ND	ND	ND	
	11/22/91	20.58	< 50	< 50	< 500		< 0.5	< 0.5	< 0.5	< 0.5	•••
	03/18/92	13.55	< 30	< 50			< 0.3	< 0.3	< 0.3	< 0.3	
	05/28/92	17.08	< 50	< 50			< 0.5	< 0.5	< 0.5	< 0.5	
	08/19/92	19.07	< 50	< 50			< 0.5	< 0.5	< 0.5	< 0.5	
	11/17/92	20.11	< 50	< 50			< 0.5	< 0.5	< 0.5	< 0.5	
	02/12/93	12.10	< 50	< 50			< 0.5	< 0.5	< 0.5	< 0.5	
	06/10/93	14.87	< 50				< 0.5	< 0.5	< 0.5	< 0.5	
	06/10/93 ^{dup}	14.87	< 50				< 0.5	< 0.5	< 0.5	< 0.5	
	08/18/93	16.90	< 50				< 0.5	< 0.5	< 0.5	< 0.5	
	11/19/93	19.72	< 50				< 0.5	< 0.5	< 0.5	< 0.5	
	02/18/94	15.08	< 50				< 0.5	< 0.5	< 0.5	1.7	-
	05/04/94	17.20	< 50				< 0.5	< 0.5	< 0.5	< 0.5	
	08/10/94	18,76	< 50				< 0.5	< 0.5	< 0.5	< 0.5	
	08/10/94 ^{dup}	18.76	< 50				< 0.5	< 0.5	< 0.5	< 0.5	
	11/08/94	16.00	< 50	B+4		***	< 0.5	< 0.5	< 0.5	< 0.5	
	02/01/95	10.18	< 50			· · · · · · · · · · · · · · · · · · ·	< 0.5	<0.5	< 0.5	< 0.5	601081 - 0110 <u>28</u> 801081 - 01188 7 5
	0.5/0.0 (0.4	45.00									
MW-2	06/03/91	17.00	ND	ND	ND		ND	ND	ND	ND	
	08/30/91	18.95	ND	ND	ND		ND	ND	ND	ND	-
	11/22/91	19.55	< 50	< 50	< 500		< 0.5	< 0.5	< 0.5	< 0.5	-
	03/18/92	12.91	< 30				< 0.3	< 0.3	< 0.3	< 0.3	
	05/28/92	16.25	< 50				< 0.5	< 0.5	< 0.5	< 0.5	-
	08/19/92	18.21	< 50	7		***	< 0.5	1.2	2	1.9	
	11/17/92	19.15	< 50			***	< 0.5	1.2	2	1.9	
	02/12/93 ^{dup}	11.60	< 50	·			< 0.5	< 0.5	< 0.5	< 0.5	
	02/12/93	11.60	< 50				<0.5	< 0.5	< 0.5	< 0.5	-
*	06/10/93	14.14	< 50				< 0.5	< 0.5	< 0.5	< 0.5	-
	08/18/93	16.10	< 50				< 0.5	< 0.5	< 0.5	< 0.5	-
	08/18/93 ^{dup}	16.10	< 50				< 0.5	< 0.5	< 0.5	< 0.5	-
	11/19/93	18.77	< 50		• •••		< 0.5	< 0.5	< 0.5	< 0.5	-
	02/18/94	14.55	< 50				< 0.5	< 0.5	< 0.5	1.6	-
	05/04/94	16.34	< 50				< 0.5	< 0.5	< 0.5	< 0.5	-
	08/10/94	15.79	< 50			·,	< 0.5	< 0.5	< 0.5	< 0.5	
	11/08/94	15.04	< 50				< 0.5	< 0.5	< 0.5	< 0.5	
	02/01/95	10,08	< 50			9	< 0.5	< 0.5	< 0.5	< 0.5	1966.839



Table 2. Analytic Results for Ground Water - Shell Service Station WIC #204-5508-3301, 6039 College Avenue, Oakland, California (continued)

Well/Boring ID	Date Sampled	Depth to	TPH-G	TPH-D	ТРН-МО	POG	B	E	T	x	SVOCs
ועו	Sampled	Water (ft)	· · · · · ·			parts per billi	on (μg/L) —				<u>→</u>
MW-3	06/03/91	15.84	1,700	690°	ND		260	98	13	24	
MW-3	08/30/91	17.79	870	370 ^b	500		200 44	10	6.1	24 2.9	
	11/22/91	18.40	310	140	500		18	3.3	1.2	2.9	***
	03/18/92	12.03	67,100	1,900	20,000		620	220	28	38	
	05/28/92	15.16	2,300	1,100°	4,600		200	71	9	36 17	
	08/19/92	17.03	5,700	1,000°	1,800		71	52	7 7	130	
	11/17/92	17.94	3,600	1,000	1,200		16	24	8.6	50	
•	02/12/93	9.16	4,700	560°	< 50		820	130	58	30 77∙	
	06/10/93	13.20	2,200	J00 	940 ^d		310	89	23	23	
	08/18/93	14.93	260		460 ^d		27	7.0	2.0	2.2	
	11/19/93	17.58	1,500°		960 ^d	< 5,000	24	37	54	17	
	02/18/94	13.30	2,700		1,600	<5,000	65	16	5.2	6.3	
	02/18/94 ^{dup}	15.50	3,100		2,200	< 5,000	82	19	6.7	7.9	
	05/04/94	15.25	780		710	< 5,000	120	21	7.5	6.9	f
	05/04/94 ^{dup}	15.25	920		1,600	< 5,000	120	22	7.3	7.1	
·	08/10/94	16.63	920		< 500	< 5,000	20	3.0	2.3	2.2	g r
	11/08/94	13.88	1,300	-	1,300	45,000	180	7.0	16	12	
	11/08/94 ^{dup}	13.88	1,200	***	730		170	7.2	15	11	
	02/01/95	9.25	1,400		900°		210	11.	8.5	8.7	
MW-4	06/03/91	16.77	670 ^h	1,100 ⁱ	ND		240	1.6	0.0	2.2	
141 444	08/30/91	18.71	570	280 ⁱ	2,000				2.3	2.3	
	11/22/91 ^{SPH}	10.71		280			64	0.9	1.8	0.9	
	03/18/92 ^{SPH}	13.15							***		***
	05/28/92 ^{SPH}	16,22									
	03/28/92 08/19/92 ^{SPH}	18.05									
•	11/17/92 ^{SPH}	18,89.			*-"		*				
	02/12/93 ^{SPH}	11.78		***							
17	06/10/93	14.20			***						
* 1	08/18/93 ^{SPH}	15.95									
¥.	11/19/93 ^{SPH}	18.48				•					
	02/28/94 ^{SPH}	14.60	*** ,								
	05/04/94 ^{SPH}	16.15									
	08/10/94 ^{SPH}	17.58					•••				
	11/08/94 ^{SPH}	15.05			·						
	02/01/95 ^{SPH}	10.71							 	 21352 44 133	
MW-5	08/30/91	16.74	ND	00	ND		NT.		MD). Tra	
C+ 44 TAT	11/22/91			80 < 50			ND	ND	ND	ND	
•	11/22/91	17.27	< 50	< 50	< 500		< 0.5	< 0.5	< 0.5	< 0.5	

[—] Table 2 continues on next page —



Table 2. Analytic Results for Ground Water - Shell Service Station WIC #204-5508-3301, 6039 College Avenue, Oakland, California (continued)

Well/Boring	Date	Depth to	TPH-G	TPH-D	ТРН-МО	POG	В	Е	T	X	SVOCs
ID	Sampled	Water (ft)				parts per bill	ion (μg/L) —			-	<u>→ _</u>
	03/18/92	11.00	- 20	. ś0				.0.0			
	05/18/92 05/28/92 ^j	11.28	< 30	< 50			< 0.3	< 0.3	< 0.3	< 0.3	
	08/19/92	15.00						-0.5			
	11/17/92	15.99	< 50	<50			< 0.5	< 0.5	< 0.5	< 0.5	
	02/12/93	16.84	< 50	<50			< 0.5	< 0.5	< 0.5	< 0.5	
	06/10/93	10.30	< 50	< 50			< 0.5	< 0.5	< 0.5	< 0.5	
		12.36	< 50				< 0.5	< 0.5	< 0.5	< 0.5	
	08/18/93	14.02	< 50				< 0.5	< 0.5	< 0.5	< 0.5	
	11/19/93	16.50	< 50				< 0.5	< 0.5	< 0.5	< 0.5	
	11/19/93 ^{dup}	16.50	< 50				< 0.5	< 0.5	< 0.5	< 0.5	
	02/18/94	12.55	< 50				< 0.5	< 0.5	< 0.5	< 0.5	
	05/04/94	14.27	< 50				< 0.5	< 0.5	< 0.5	< 0.5	
	08/10/94	15.60	70°				< 0,5	< 0.5	< 0.5	< 0.5	
	11/08/94	12.85	< 50				< 0.5	< 0.5	< 0.5	< 0.5	***
	02/01/95	8.98	< 50				< 0.5	< 0.5	< 0.5	< 0.5	
MW-6	09/21/93	14.64	< 50	< 50		<5,000	< 0.5	< 0.5	< 0.5	< 0.5	< 10-50
•	11/19/93 ^k										
	02/28/94	12.18	98 ¹			< 5,000	< 0.5	< 0.5	< 0.5	< 0.5	
•	05/04/94	13.62	< 50	***		< 5,000	< 0.5	< 0.5	< 0.5	< 0.5	< 2-10
	08/10/94	14.98	80°			< 5,000	<0.5	< 0.5	< 0.5	< 0.5	Г
	11/08/94 ^j	12.20									
	02/01/95	8.70	120				3.5	3.4	21	22	
	02/01/95 ^{dup}	8.70	110	, , ,,,,			0.6	0.5	0.6	0.9	*** ** ** <u></u>
ВН-А	09/09/93	16.50	4,900	2,900°	***	< 5,000	18	54	<5	. 11	m
вн-в	09/09/93	15.85	< 50	150	44-	< 5,000	< 0.5	< 0.5	< 0.5	< 0.5	ND
					-	< 3,000	₹0.5	~0. 5	₹0.5	₹0.5	ND
BH-C ⁿ	09/10/93	15.80	640°	100		<5,000	3.5	0.6	< 0.5	< 0.5	ND
BH-D ⁿ	09/10/93	14.2	24,000°	25,000°		20,000	720	44	86	11	p
Bailer	08/19/92		< 50				< 0.5	< 0.5	< 0.5	< 0.5	
Blank	11/17/92		< 50				< 0.5	<0.5	< 0.5	< 0.5	
Trip	06/03/91		ND				ND	ND	ND	ND	***
Blank	08/30/91		ND			***	ND	ND	ND	ND	
	03/18/92		< 30	< 50			< 0.3	< 0.3	< 0.3	< 0.3	
	05/28/92		< 50				< 0.5	< 0.5	< 0.5	< 0.5	

⁻ Table 2 continues on next page -



Table 2. Analytic Results for Ground Water - Shell Service Station WIC #204-5508-3301, 6039 College Avenue, Oakland, California (continued)

Well/Boring	Date	Depth to	TPH-G	TPH-D	ТРН-МО	POG	B (7.)	E	T	X	SVOCs
ID	Sampled	Water (ft)				parts per b	illion (μg/L) —				
	08/19/92		< 50				< 0.5	< 0.5	< 0.5	< 0.5	
	11/17/92		< 50				< 0.5	< 0.5	< 0.5	< 0.5	
	02/12/93		< 50				< 0.5	< 0.5	< 0.5	< 0.5	
	06/10/93		< 50				< 0.5	< 0.5	< 0.5	< 0.5	
	11/19/93		< 50				< 0.5	< 0.5	< 0.5	< 0.5	
	02/28/94		< 50				< 0.5	< 0.5	< 0.5	< 0.5	
	05/04/94		< 50				< 0.5	< 0.5	< 0.5	< 0.5	
	08/10/94		< 50				< 0.5	< 0.5	< 0.5	< 0.5	
	11/08/94		< 50				< 0.5	< 0.5	< 0.5	< 0.5	
	02/01/95		<50				< 0.5	<0.5	<0.5	< 0.5	
DTSC MCLs			NE	NE	NE.		. 1	680	100 ^q	1,750	

Table 2. Analytic Results for Ground Water - Shell Service Station WIC #204-5508-3301, 6039 College Avenue, Oakland, California (continued)

Abbreviations:

TPH-G = Total petroleum hydrocarbons as gasoline by Modified EPA Method 8015

TPH-D = Total petroleum hydrocarbons as diesel by Modified EPA Method 8015

TPH-MO = Total petroleum hydrocarbons as motor oil by EPA Method 8015

B = Benzene by EPA Method 8020

E = Ethylbenzene by EPA Method 8020

 Γ = Toluene by EPA Method 8020

X = Xylenes by EPA Method 8020

POG = Petroleum Oil & Grease by EPA Method 5520B/F

SVOCs = Semivolatile organic compounds by EPA Method 8270

NE = Not established

DTSC MCLs = California Department of Toxic Substances Control Maximum
Contaminant Levels drinking water

--- = Not analyzed or measured

< n = Not detected at detection limits of n ppb

ND = Not detected, detection limit not known

SPH = Separate-phase hydrocarbons in well, not sampled

dup = Duplicate sample

Notes:

a = Positive results for diesel appear to be less volatile constituents of gasoline

b = Positive results for diesel has a typical diesel pattern

 c = Concentration reported as diesel is primarily due to the presence of a lighter petroleum product, possibly gasoline or kerosene

 d = Concentration reported as motor oil is due to the presence of a combination of motor oil and a lighter petroleum product of hydrocarbon range C6-C12, possibly gasoline

 e = Concentration reported as gasoline is due to the presence of gasoline and a discrete peak not indicative of gasoline

f = Compounds are within chromatographic range of gasoline but are not characteristic of the standard gasoline pattern

g = Results include compounds apparently due to gasoline as well as those due to diesel

h = 6.5 ppb Naphthalene detected

i = 11.0 ppb Naphthalene detected

= Well inaccessible and not sampled

k = Well inadvertently not sampled

1 = The concentration reported as gasoline is primarily due to the presence of a discrete peak not indicative of gasoline

m = 13 ppb-methylnaphthalene and 23 ppb naphthalene detected

 Due to chain of custody mis-communication analyses run after holding time expiration

o = The positive result has an atypical pattern for gasoline analysis

= 75 ppb 2-methylnapthalene and 18 ppb naphthalene detected

= DTSC recommended action level; MCL not established

= Not detected at detection limits between 10 and 50 ppb

c = Concentration reported as motor oil is due to the presence of heavier and lighter petroleum products.

t = 27 ppb Naphthalene detected

Table 3. Separate-Phase Hydrocarbon Removal - Shell Service Station WIC #204-5508-3301, 6039 College Avenue, Oakland, California

Well ID	Date	Separate-Phase Hydrocarbon Thickness (ft)	Separate-Phase Hydrocarbons Removed (lbs)	Cumulative Hydrocarbons Removed (lbs)
MW-4ª	01/15/92		3.12	3.12
•	02/15/92		3.12	6.24
	03/18/92	0.24		6.24
	04/29/92		1.50	7.74
	05/28/92	0.12	0.18	7.92
	08/19/92	0.09	0.96	8.86
	11/17/92		0.96	9.82
	02/12/93	< 0.01		9.82
	06/10/93	0.02	0.06	9.88
	08/18/93	0.01	0.06	9.94
	11/19/93	0.01	0.06	10.00
	02/28/94	0.01	0.06	10.06
	05/04/94	0.00	0.06	10.12
	08/10/94	0.02	0.06	10.18
	11/10/94	0.05 1/2	0.08	10.26
	02/01.95	0.04	0.06	10.32

Notes:

a = Petrotrap separate-phase hydrocarbon skimmer installed in well

^{-- =} Not measured or no hydrocarbons bailed

ATTACHMENT A

GROUND WATER MONITORING REPORT AND ANALYTIC REPORT



Santa Rosa Division 435 Tesconi Circle Santa Rosa, CA 95401

Tel: (707) 526-7200 Fax: (707) 526-9623

March 1, 1995

Dear Project Manager:

NET has recently noted persistent low level positive occurrences of toluene and xylenes in laboratory supplied trip blanks and rinse water. Since the levels of these compounds are occurring below 2 PPB, and there is a lack of any gasoline type pattern present, we are very confident of their presence being due to laboratory contamination. It appears that the water we used became contaminated from an unidentified source.

We believe this same source may be affecting samples. We have noted the presence of toluene and xylene at or below the reporting limits in our method blanks, which are from a different water sources. This low level response may be contributing to positive results in actual samples.

NET is taking steps to correct this problem and hope to eliminate it by the 8th of March. We will keep you informed if the problem continues beyond this date.

Thank you for patience.

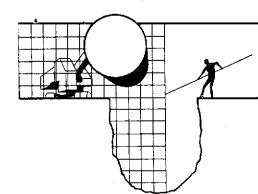
Respectfully,

National Environmental Testing

Thomas F. Cullen, Jr.

Division Manager





BLAINE TECH SERVICES INC.

985 TIMOTHY DRIVE SAN JOSE, CA 95133 (408) 995-5535 FAX (408) 293-8773

February 20, 1995

Shell Oil Company P.O. Box 4023 Concord, CA 94524

Attn: Daniel T. Kirk

SITE: Shell WIC #204-5508-3301 6039 College Avenue Oakland, California

QUARTER: 1st quarter of 1995

QUARTERLY GROUNDWATER SAMPLING REPORT 950201-K-2

This report contains data collected during routine inspection, gauging and sampling of groundwater monitoring wells performed by Blaine Tech Services, Inc. in response to the request of the consultant who is overseeing work at this site on behalf of our mutual client, Shell Oil Company. Data collected in the course of our field work is presented in a TABLE OF WELL GAUGING DATA. The field information was collected during our preliminary gauging and inspection of the wells, the subsequent evacuation of each well prior to sampling, and at the time of sampling.

Measurements taken include the total depth of the well and the depth to water. The surface of water was further inspected for the presence of immiscibles which may be present as a thin film (a sheen on the surface of the water) or as a measurable free product zone (FPZ). At intervals during the evacuation phase, the purge water was monitored with instruments that measure electrical conductivity (EC), potential hydrogen (pH), temperature (degrees Fahrenheit), and turbidity (NTU). In the interest of simplicity, fundamental information is tabulated here, while the bulk of the information is turned over directly to the consultant who is making professional interpretations and evaluations of the conditions at the site.

STANDARD PROCEDURES

Evacuation

Groundwater wells are thoroughly purged before sampling to insure that the sample is collected from water that has been newly drawn into the well from the surrounding geologic formation. The selection of equipment to evacuate each well is based on the physical characteristics of the well and what is known about the performance of the formation in which the well has been installed. There are several suitable devices which can be used for evacuation. The most commonly employed devices are air or gas actuated pumps, electric submersible pumps, and hand or mechanically actuated bailers. Our personnel frequently employ USGS/Middleburg positive displacement pumps or similar air actuated pumps which do not agitate the water standing in the well.

Normal evacuation removes three case volumes of water from the well. More than three case volumes of water are removed in cases where more evacuation is needed to achieve stabilization of water parameters and when requested by the local implementing agency. Less water may be removed in cases where the well dewaters and does not recharge to 80% of its original volume within two hours and any additional time our personnel have reason to remain at the site. In such cases, our personnel return to the site within twenty four hours and collect sample material from the water which has recharged into the well case.

Decontamination

All apparatus is brought to the site in clean and serviceable condition. The equipment is decontaminated after each use and before leaving the site. Effluent water from purging and on-site equipment cleaning is collected and transported to Shell's Martinez Manufacturing Complex in Martinez, California.

Free Product Skimmer

The column headed, VOLUME OF IMMISCIBLES REMOVED (ml) is included in the TABLE OF WELL GAUGING DATA to cover situations where a free product skimming device must be removed from the well prior to gauging. Skimmers are installed in wells with a free product zone on the surface of the water. The skimmer is a free product recovery device which often prevents normal well gauging and free product zone measurements. The 2.0" and 3.0" PetroTraps fall into the category of devices that obstruct normal gauging. In cases where the consultant elects to have our personnel pull the skimmers out of the well and gauge the well, our personnel perform the additional task of draining the accumulated free product out of the PetroTrap before putting it back in the well. This

recovered free product is measured and logged in the VOLUME OF IMMISCIBLES REMOVED column. Gauging at such sites is performed in accordance with specific directions from the professional consulting firm overseeing work at the site on Shell's behalf.

Sample Containers

Sample material is collected in specially prepared containers which are provided by the laboratory that performs the analyses.

Sampling

Sample material is collected in stainless steel bailer type devices normally fitted with both a top and a bottom check valve. Water is promptly decanted into new sample containers in a manner which reduces the loss of volatile constituents and follows the applicable EPA standard for handling volatile organic and semi-volatile compounds.

Following collection, samples are promptly placed in an ice chest containing prefrozen blocks of an inert ice substitute such as Blue Ice or Super Ice. The samples are maintained in either an ice chest or a refrigerator until delivered into the custody of the laboratory.

Sample Designations

All sample containers are identified with a site designation and a discrete sample identification number specific to that particular groundwater well. Additional standard notations (e.g. time, date, sampler) are also made on the label.

Chain of Custody

Samples are continuously maintained in an appropriate cooled container while in our custody and until delivered to the laboratory under a standard Shell Oil Company chain of custody. If the samples are taken charge of by a different party (such as another person from our office, a courier, etc.) prior to being delivered to the laboratory, appropriate release and acceptance records are made on the chain of custody (time, date, and signature of the person releasing the samples followed by the time, date and signature of the person accepting custody of the samples).

Hazardous Materials Testing Laboratory

The samples obtained at this site were delivered to National Environmental Testing, Inc. in Santa Rosa, California. NET is a California Department of Health Services certified Hazardous Materials Testing Laboratory and is listed as DOHS HMTL #178.

Objective Information Collection

Blaine Tech Services, Inc. performs specialized environmental sampling and documentation as an independent third party. In order to avoid compromising the objectivity necessary for the proper and disinterested performance of this work, Blaine Tech Services, Inc. performs no consulting and does not become involved in the marketing or installation of remedial systems of any kind. Blaine Tech Services, Inc. is concerned only with the generation of objective information, not with the use of that information to support evaluations and recommendations concerning the environmental condition of the site. Even the straightforward interpretation of objective analytical data is better performed by interested regulatory agencies, and those engineers and geologists who are engaged in the work of providing professional opinions about the site and proposals to perform additional investigation or design remedial systems.

Reportage

Submission of this report and the attached laboratory report to interested regulatory agencies is handled by the consultant in charge of the project. Any professional evaluations or recommendations will be made by the consultant under separate cover.

Please call if we can be of any further assistance.

Richard C. Blaine

RCB/lp

attachments: table of well gauging data

chain of custody

certified analytical report

cc: Weiss Associates
5500 Shellmound Street
Emeryville, CA 94608-2411
ATTN: Michael Asport

TABLE OF WELL GAUGING DATA

WELL I.D.	DATA COLLECTION DATE	MEASUREMENT REFERENCED TO	QUALITATIVE OBSERVATIONS (sheen)	DEPTH TO FIRST IMMISCIBLES LIQUID (FPZ) (feet)	THICKNESS OF IMMISCIBLES LIQUID ZONE (feet)	VOLUME OF IMMISCIBLES REMOVED (mi)	DEPTH TO WATER (feet)	DEPTH TO WELL BOTTOM (feet)
MW-1	2/1/95	TOC		NONE			10.18	23.92
MW-2	2/1/95	TOC		NONE		••	10.08	23.90
MW-3	2/1/95	TOC	ODOR	NONE		_	9.25	24.24
MW-4	2/1/95	TOC	FREE PRODUCT	10.67	0.04	50	10.71	-
MW-5	2/1/95	TOC		NONE			8,98	28.06
MW-6 *	2/1/95	TOC	-	NONE			8.70	23.73
T-1	2/1/95	TOC	DRY	NONE				4.30
T-2	2/1/95	TOC	DRY	NONE		_	_	8.18

^{*} Sample DUP was a duplicate sample taken from well MW-6.

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1	508-3	3301																	CHECK OHE (I) TOX OHLY	C1/D1	IME CHUOSA HEUT
Shell Engineer:	<u> </u>			Phone	No.:	(510)	1							-					Quarterly Monitoring	1134	24 hours '
Dan Kirk			_	575-6 Fax #:	168					ı			1	25					Site investigation) aus (
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74001			<u> </u>		ļ	 				 								<u>'</u>		_	
Mw2						3						X									•
KW 3						8						X	X	X					·		
MW5					<u>. </u>	3						X					-				
MW6		•										X								_	•
DUP								٠.				X						-	12/	1/8	EMED \
ES		•				\							<u></u>				·		401	37	
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Santa Rosa Division 435 Tesconi Circle Santa Rosa, CA 95401

Tel: (707) 526-7200 Fax: (707) 526-9623

Jim Keller Blaine Tech Services 985 Timothy Dr. San Jose, CA 95133

Date: 02/13/1995

NET Client Acct. No: 1821 NET Pacific Job No: 95.00510

Received: 02/03/1995

Client Reference Information

Shell 6039 College Ave., Oakland/950201-K2

Sample analysis in support of the project referenced above has been completed and results are presented on following pages. Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety. Please refer to the enclosed "Key to Abbreviations" for definition of terms. Should you have questions regarding procedures or results, please feel welcome to contact Client Services.

Approved by:

Judy Ridley

Project Coordinator

Thomas F. Cullen, Jr.

Division Manager

Enclosure(s)





Client Acct: 1821

Date: 02/13/1995

ELAP Cert: 1386 Page: 2

Ref: Shell 6039 College Ave., Oakland/950201-K2

SAMPLE DESCRIPTION: MW1

Date Taken: 02/01/1995

NET Sample No: 235110							Run
		Reporting	9		Date	Date	Batch
Parameter	Results Flags	: Limit	Units	Method	Extracted	Analyzed	No.
TPH (Gas/BTXE, Liquid)							
METHOD 5030/M8015						02/04/1995	2558
DILUTION FACTOR*	1					02/04/1995	2558
as Gasoline	ND	50	ug/L	5030		02/04/1995	2558
Carbon Range:							2579
METHOD 8020 (GC, Liquid)						02/04/1995	2558
Benzene	ND	0.5	ug/L	8020		02/04/1995	2558
Toluene	ND	0.5	ug/L	8020		02/04/1995	2558
Ethylbenzene	ND	0.5	ug/L	8020		02/04/1995	2558
Xylenes (Total)	ND ·	0.5	ug/L	8020		02/04/1995	2558
SURROGATE RESULTS						02/04/1995	2558
Bromofluorobenzene (SURR)	91		% Rec.	5030		02/04/1995	2558



Client Acct: 1821 NET Job No: 95.00510 Date: 02/13/1995

ELAP Cert: 1386 Page: 3

Ref: Shell 6039 College Ave., Oakland/950201-K2

SAMPLE DESCRIPTION: MW2

Date Taken: 02/01/1995

NET Sample No: 235111								Run
			Reporting	3		Date	Date	Batch
Parameter	Results	Flags	Limit	Units	Method	Extracted	Analyzed	No.
TPH (Gas/BTXE, Liquid)								
METHOD 5030/M8015							02/04/1995	2558
DILUTION FACTOR*	1						02/04/1995	2558
as Gasoline	ND		50	ug/L	5030		02/04/1995	2558
Carbon Range:							•	2579
METHOD 8020 (GC, Liquid)							02/04/1995	2558
Benzene	ND ·		0.5	ug/L	8020		02/04/1995	2558
Toluene	ND		0.5	ug/L	8020		02/04/1995	2558
Ethylbenzene	ND		0.5	ug/L	8020		02/04/1995	2558
Xylenes (Total)	ND		0.5	ug/L	8020		02/04/1995	2558
SURROGATE RESULTS							02/04/1995	2558
Bromofluorobenzene (SURR)	89			% Rec.	5030		02/04/1995	2558



Client Acct: 1821 NET Job No: 95.00510 Date: 02/13/1995

ELAP Cert: 1386 Page: 4

Ref: Shell 6039 College Ave., Oakland/950201-K2

SAMPLE DESCRIPTION: MW3

Date Taken: 02/01/1995

Time Taken:

NET Sample No: 235112

NET Sample No: 235112								Run
			Reporting			Date	Date	Batch
Parameter	Results	Flags	Limit	Units	Method	Extracted	Analyzed	No.
TPH (Gas/BTXE, Liquid)								
METHOD 5030/M8015							02/04/1995	2558
DILUTION FACTOR*	1						02/04/1995	2558
as Gasoline	1,400		50	ug/L	5030		02/04/1995	2558
Carbon Range:	C5-C14						02/06/1995	2559
METHOD 8020 (GC, Liquid)							02/04/1995	2558
Benzene	210	FC	0.5	ug/L	8020		02/06/1995	2559
Toluene	8.5		0.5	ug/L	8020		02/04/1995	2558
Ethylbenzene	11		0.5	ug/L	8020		02/04/1995	2556
Xylenes (Total)	8.7		0.5	ug/L	8020		02/04/1995	2558
SURROGATE RESULTS							02/04/1995	2558
Bromofluorobenzene (SURR)	117			% Rec.	5030		02/04/1995	2558
METHOD M8015 (EXT., Liquid)						02/06/1995		
DILUTION FACTOR*	1	•					02/07/1995	913
as Motor Oil	900	DH, DL	500	ug/L	3510		02/07/1995	913
Carbon Range:	<c10-c28< td=""><td>B+</td><td></td><td></td><td></td><td></td><td>02/07/1995</td><td>913</td></c10-c28<>	B+					02/07/1995	913

DH : The positive result appears to be a heavier hydrocarbon than Motor Oil.

 $\mathtt{DL}\,:\,\mathtt{The}\,$ positive result appears to be a lighter hydrocarbon than Motor $\mathtt{Oil}\,.$

FC : Compound quantitated at a 10% dilution factor.



Client Acct: 1821 NET Job No: 95.00510 Date: 02/13/1995

Run

ELAP Cert: 1386 Page: 5

Ref: Shell 6039 College Ave., Oakland/950201-K2

SAMPLE DESCRIPTION: MW3

Date Taken: 02/01/1995

Time Taken:

NET Sample No: 235112

MET Squibte NO: 532115								Kuii
-			Reportin	ıg		Date	Date	Batch
Parameter	Results	Flags	Limit	Units	Method	Extracted	Analyzed	No.
METHOD 8270 (GCMS, Liquid)				• •		02/06/1995		
DILUTION FACTOR*	1						02/07/1995	668
Acenaphthene	ND		10	ug/L	B270		02/07/1995	66B
Acenaphthylene ·	ND		10	ug/L	8270		02/07/1995	668
Aldrin	ND		50	ug/L	8270		02/07/1995	668
Anthracene	ND		10	ug/L	8270		02/07/1995	668
Benzidine	ND		44	ug/L	8270		02/07/1995	668
Benzo (a) anthracene	ND		10	ug/L	8270		02/07/1995	668
Benzo (b) fluoranthene	ND		10	ug/L	8270		02/07/1995	668
Benzo(k)fluoranthene	ND		10	ug/L	8270	•	02/07/1995	668
Benzo(a)pyrene	ND		10	ug/L	8270		02/07/1995	668
Benzo(q,h,i)perylene	ND		10	ug/L	8270	•	02/07/1995	668
Benzoic acid	ND		50	ug/L	8270		02/07/1995	668
Benzyl alcohol	ND		10	ug/L	8270		02/07/1995	668
Butyl benzyl phthalate	ND		10	ug/L	8270		02/07/1995	668
delta-BHC	ND		50	ug/L	8270		02/07/1995	668
gamma-BHC	ND		50	ug/L	8270		02/07/1995	668
bis(2-Chloroethyl)ether	ND		10	ug/L	8270		02/07/1995	668
bis (2-Chloroethoxy) methane	ND		10	ug/L	8270		02/07/1995	668
bis(2-Chloroisopropyl)ether	ND		10	ug/L	8270		02/07/1995	668
bis(2-Ethylhexyl)phthalate	ND		10	ug/L	8270		02/07/1995	668
4-Bromophenyl phenyl ether	ND		10	ug/L	8270		02/07/1995	668
4-Chloroaniline	ND		10	ug/L	8270		02/07/1995	668
2-Chloronaphthalene	ND		10	ug/L	8270		02/07/1999	668
4-Chlorophenyl phenyl ether	ND		10	ug/L	8270		02/07/1995	668
Chrysene	ND		10	ug/L	8270		02/07/1995	668
4,4'-DDD	ND		50	ug/L	8270		02/07/1999	668
4,4'-DDE	ND		50	ug/L	B270		02/07/1995	668
4,4'-DDT	ND		50	ug/L	8270		02/07/1995	66B
Dibenzo (a, h) anthracene	ND		10	ug/L	8270		02/07/1995	668
Dibenzofuran	ND		10	ug/L	8270		02/07/1995	668
Di-n-butylphthalate	ND		10	ug/L	8270		02/07/1995	668
1,2-Dichlorobenzene	ND		10	ug/L	8270		02/07/1995	668
1,3-Dichlorobenzene	ND		10	ug/L	8270		02/07/1995	668
1,4-Dichlorobenzene	ND		10	ug/L	8270		02/07/1995	668
3,3'-Dichlorobenzidine	ND		20	ug/L	8270		02/07/1999	668
Dieldrin	'ND		50	ug/L	8270		02/07/1995	
Diethylphthalate	ND		10	ug/L	8270		02/07/1999	668
Dimethyl phthalate	ND		10	ug/L	8270		02/07/1999	
2,4-Dinitrotoluene	ND		10	ug/L	8270		02/07/1995	
2,6-Dimitrotoluene	ND		10	ug/L	8270		02/07/1999	
Di-n-octyl phthalate	ND		10	ug/L	8270		02/07/199	668



Client Acct: 1821 NET Job No: 95.00510 Date: 02/13/1995

ELAP Cert: 1386 Page: 6

Ref: Shell 6039 College Ave., Oakland/950201-K2

SAMPLE DESCRIPTION: MW3

Date Taken: 02/01/1995

Time Taken:

1777 Paris 1 - 17 - 17 - 17 - 17 - 17 - 17 - 17 -							D
NET Sample No: 235112	•				•	B	Run
		Reporting	_		Date	Date	Batch
Parameter	Results Flags	Limit	Units	Method	Extracted	Analyzed	No.
Endrin aldehyde	ND	50	ug/L	8270		02/07/1995	
Fluoranthene	ND	10	ug/L	8270		02/07/1995	
Fluorene .	ND	10	ug/L	8270		02/07/1995	
Heptachlor	ND	50	ug/L	8270		02/07/1995	
Heptachlor epoxide	ND	50	ug/L	8270		02/07/1995	
Hexachlorobenzene	ND	10	ng/L	8270		02/07/1995	
Hexachlorobutadiene	ND	10	ug/L	8270	4	02/07/1995	
Hexachlorocyclopentadiene	ND	10	ug/L	8270		02/07/1995	
Hexachloroethane	ND	10	ug/L	8270		02/07/1995	
Indeno(1,2,3-cd)pyrene	ND	10	ug/L	B270		02/07/1995	
Isophorone	ND ·	10	ug/L	8270		02/07/1995	
2-Methylnaphthalene	ND	10	ug/L	8270		02/07/1995	
Naphthalene	27	10	ug/L	8270		02/07/1995	
2-Nitroaniline	ND	50	ug/L	8270		02/07/1995	
3-Nitroaniline	ND	50	ug/L	8270		02/07/1995	668
4-Nitroaniline	ND	50	ug/L	8270		02/07/1995	668
Nitrobenzene	ND	10	ug/L	8270		02/07/1995	668
N-Nitroso-Di-N-propylamine	ND	10	ug/L	8270		02/07/1995	668
N-Nitrosodiphenylamine	ND	10	ug/L	8270		02/07/1995	668
Phenanthrene	ND	10	ug/L	8270		02/07/1995	668
Pyrene	ND	10	ug/L	8270		02/07/1995	668
1,2,4-Trichlorobenzene	ND	10	ug/L	8270		02/07/1995	668
ACID EXTRACTABLES						02/07/1995	668
4-Chloro-3-methylphenol	ND	10	ug/L	8270		02/07/1995	668
2-Chlorophenol	ND	10	ug/L	8270		02/07/1995	668
2,4-Dichlorophenol	ND	10	ug/L	8270		02/07/1995	668
2,4-Dimethylphenol	ND	10	ug/L	8270		02/07/1995	668
2,4-Dinitrophenol	ND	50	ug/L	8270		02/07/1995	668
4,6-Dinitro-2-methylphenol	ND	50	ug/L	8270		02/07/1995	66B
2-Nitrophenol	ND	10	ug/L	8270		02/07/1995	66B
4-Nitrophenol	ND	.50	ug/L	8270		02/07/1995	668
Pentachlorophenol	· ND	50	ug/L	8270		02/07/1995	668
Phenol	ND	10	ug/L	8270		02/07/1995	668
2,4,6-Trichlorophenol	ND	10	ug/L	8270		02/07/1995	668
2-Methylphenol	ND	10	ug/L	8270		02/07/1999	668
4-Methylphenol	ND	10	ug/L	8270		02/07/1995	668
2,4,5-Trichlorophenol	ND	50	ug/L	8270		02/07/1995	668
SURROGATE RESULTS			_ _			02/07/1995	668
Nitrobenzene-d5 (SURR)	73		% Rec.	8270		02/07/1999	668
2-Fluorobiphenyl (SURR)	69		% Rec.	8270		02/07/1995	
p-Terphenyl-d14 (SURR)	48		% Rec.	8270		02/07/1999	
Phenol-d5 (SURR)	81		% Rec.	8270		02/07/1995	



Client Acct: 1821 NET Job No: 95.00510 Date: 02/13/1995

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Ref: Shell 6039 College Ave., Oakland/950201-K2

SAMPLE DESCRIPTION: MW3

Date Taken: 02/01/1995

Time Taken:

NET Sample No: 235112

Run

HAI DAMPIC NO. 233112								
			Reportin	ıg		Date	Date	Batch
Parameter	Results	Flags	Limit	Units	Method	Extracted	Analyzed	No.
2-Fluorophenol (SURR)	53			% Rec.	8270		02/07/1995	668
2,4,6-Tribromophenol (SURR)	106			% Rec.	8270		02/07/1995	66B



Client Acct: 1821 NET Job No: 95.00510 Date: 02/13/1995

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Ref: Shell 6039 College Ave., Oakland/950201-K2

SAMPLE DESCRIPTION: MW5

Date Taken: 02/01/1995

NET Sample No: 235113								Run
			Reportin	ਬ		Date	Date	Batch
Parameter	Results	Flags	Limit	Units	Method	Extracted	Analyzed	No.
TPH (Gas/BTXE,Liquid)						•		
METHOD 5030/M8015							02/04/1995	2558
DILUTION FACTOR*	1						02/04/1995	2558
as Gasoline	ND		50	ug/L	5030	•	02/04/1995	2558
Carbon Range:								2558
METHOD 8020 (GC, Liquid)							02/04/1995	2558
Benzene	ND		0.5	ug/L	8020		02/04/1995	2558
Toluene	ND		0.5	ug/L	8020		02/04/1995	2558
Ethylbenzene	ND		0.5	ug/L	8020		02/04/1995	2558
Xylenes (Total)	ND		0.5	ug/L	8020		02/04/1995	2558
SURROGATE RESULTS							02/04/1995	2558
Bromofluorobenzene (SURR)	90			% Rec.	5030		02/04/1995	2558



Client Acct: 1821 NET Job No: 95.00510 Date: 02/13/1995

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Ref: Shell 6039 College Ave., Oakland/950201-K2

SAMPLE DESCRIPTION: MW6

Date Taken: 02/01/1995

NET Sample No: 235114								Run
			Reportin	ıg		Date	Date	Batch
Parameter	Results F	Plags	Limit	Units	Method	Extracted	Analyzed	No.
TPH (Gas/BTXE, Liquid)								
METHOD 5030/M8015							02/04/1995	2558
DILUTION FACTOR*	1						02/04/1995	2558
as Gasoline	120		50	ug/L	5030		02/04/1995	2558
Carbon Range:	C5-C14							2579
METHOD 8020 (GC, Liquid)							02/04/1995	2558
Benzene	3.5		0.5	ug/L	8020		02/04/1995	2558
Toluene .	21		0.5	ug/L	8020		02/04/1995	2558
Ethylbenzene	3.4		0.5	ug/L	8020		02/04/1995	2558
Xylenes (Total)	22		0.5	ug/L	8020		02/04/1995	2558
SURROGATE RESULTS							02/04/1995	2558
Bromofluorobenzene (SURR)	86			% Rec.	5030		02/04/1995	2558



Client Acct: 1821

Date: 02/13/1995

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Ref: Shell 6039 College Ave., Oakland/950201-K2

SAMPLE DESCRIPTION: DUP

Date Taken: 02/01/1995

NET Sample No: 235115							Run
		Reportin	g		Date	Date	Batch
Parameter	Results Flags	Limit	Units	Method	Extracted	Analyzed	No.
TPH (Gas/BTXE, Liquid)							
METHOD 5030/M8015					,	.02/06/1995	2559
DILUTION FACTOR*	1					02/06/1995	2559
as Gasoline	110	50	ug/L	5030		02/06/1995	2559
Carbon Range:	C5~C14					02/06/1995	2559
METHOD 8020 (GC, Liquid)						02/06/1995	2559
Benzene	0.6	0.5	ug/L	8020		02/06/1995	2559
Toluene	0.6	0.5	ug/L	8020		02/06/1995	2559
Ethylbenzene	0.5	0.5	ug/L	8020		02/06/1995	2559
Xylenes (Total)	0.9	0.5	ug/L	8020		02/06/1995	2559
SURROGATE RESULTS						02/06/1995	2559
Bromofluorobenzene (SURR)	116		% Rec.	5030		02/06/1995	2559



Client Acct: 1821 NET Job No: 95.00510 Date: 02/13/1995

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Ref: Shell 6039 College Ave., Oakland/950201-K2

SAMPLE DESCRIPTION: EB

Date Taken: 02/01/1995

NET Sample No: 235116								Run	
			Reportin	g		Date	Date	Batch	
Parameter	Results	Flags	Limit	Units	Method	Extracted	Analyzed	No.	
TPH (Gas/BTXE, Liquid)									
METHOD 5030/M8015							02/06/1995	2559	
DILUTION FACTOR*	1						02/06/1995	2559	
as Gasoline	ND		50	ug/L	5030		02/06/1995	2559	
Carbon Range;	** **					·	02/06/1995	2559	
METHOD 8020 (GC, Liquid)						•	02/06/1995	2559	
Benzene	ND		0.5	ug/L	8020	e .	02/06/1995	2559	
Toluene	0.9	С	0.5	ug/L	8020		02/06/1995	2559	
Ethylbenzene	ND		0.5	ug/L	8020		02/06/1995	2559	
Xylenes (Total)	ND		0.5	ug/L	8020		02/06/1995	2559	
SURROGATE RESULTS							02/06/1995	2559	
Bromofluorobenzene (SURR)	99			% Rec.	5030		02/06/1995	2559	

C : Positive result confirmed by secondary column or GC/MS analysis.



Client Acct: 1821 NET Job No: 95.00510 Date: 02/13/1995

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Ref: Shell 6039 College Ave., Oakland/950201-K2

SAMPLE DESCRIPTION: TB

Date Taken: 02/01/1995

Time Taken:

NET Sample No: 235117

NET Sample No: 235117				•			Run
		Reporting			Date	Date	Batch
Parameter	Results Flags	Limit	Units	Method	Extracted	Analyzed	No.
TPH (Gas/BTXE,Liquid)							
METHOD 5030/M8015						02/04/1995	2558
DILUTION FACTOR*	1					02/04/1995	2558
as Gasoline	ND	50	ug/L	5030		02/04/1995	2558
Carbon Range:	~ ~						2579
METHOD 8020 (GC, Liquid)						02/04/1995	2558
Benzene	ND	0.5	ug/L	8020		02/04/1995	2558
Toluene	ND	0.5	ug/L	8020		02/04/1995	2558
Ethylbenzene	ND	0.5	ug/L	8020		02/04/1995	2558
Xylenes (Total)	ND	0.5	ug/L	8020		02/04/1995	2558
SURROGATE RESULTS						02/04/1995	2558
Bromofluorobenzene (SURR)	83		% Rec.	5030		02/04/1995	2558



lient Acct: 1821 NET Job No: 95.00510 Date: 02/13/1995

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Ref: Shell 6039 College Ave., Oakland/950201-K2

CONTINUING CALIBRATION VERIFICATION STANDARD REPORT

		CCV	CCV				
	CCV	Standard	Standard				Run
	Standard	Amount	Amount		Date	Analyst	Batch
Parameter	% Recovery	Found	Expected	Units	Analyzed	Initials	Number
TPH (Gas/BTXE, Liquid)							
as Gasoline	107.0	1.07	1.00	mg/L	02/04/1995	lss	2558
Benzene	113.2	5.66	5.00	ug/L	02/04/1995	lss	2558
Toluene	106.4	5.32	5.00	ug/L	02/04/1995	lss	2558
Ethylbenzene	100.8	5.04	5.00	ug/L	02/04/1995	lss	2558
Xylenes (Total)	101.3	15.2	15.0	ug/L	02/04/1995	lss	2558
Bromofluorobenzene (SURR)	114.0	114	100	% Rec.	02/04/1995	lss	2558
TPH (Gas/BTXE,Liquid)							
as Gasoline	112.0	1.12	1.00	mg/L	02/06/1995	aal	2559
Benzene	94.4	4.72	5.00	ug/L	02/06/1995	aal	2559
Toluene	94.0	4.70	5.00	ug/L	02/06/1995	aal	2559
Ethylbenzene	95.0	4.75	5.00	ug/L	02/06/1995	aal	2559
Xylenes (Total)	96.0	14.4	15.0	ug/L	02/06/1995	aal	2559
Bromofluorobenzene (SURR)	102.0	102	100	% Rec.	02/06/1995	aal	2559
TPH (Gas/BTXE, Liquid)							
as Gasoline	96.0	0.96	1.00	mg/L	02/07/1995	aal	2564
Benzene	97.2	4.86	5.00	ug/L	02/07/1995	aal	2564
Toluene	100.6	5.03	5.00	ug/L	02/07/1995	aal	2564
Ethylbenzene	93.4	4.67	5.00	ug/L	02/07/1995	aal	2564
Xylenes (Total)	104.7	15.7	15.0	ug/L	02/07/1995	aal	2564
Bromofluorobenzene (SURR)	106.0	106	100	% Rec.	02/07/1995	aal	2564
METHOD M8015 (EXT., Liquid)							
as Motor Oil	99.3	993	1000	mg/L	02/07/1995	tdn	913



Date: 02/13/1995

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Ref: Shell 6039 College Ave., Oakland/950201-K2

CONTINUING CALIBRATION VERIFICATION STANDARD REPORT

		ccv	CCV				
	CCV	Standard	Standard				Run
	Standard	Amount	Amount		Date	Analyst	Batch
Parameter	% Recovery	Found	Expected	Units	Analyzed	Initials	Number
METHOD 8270 (GCMS, Liquid)							
Acenaphthene	110.0	55.0	50.0	ug/L	02/07/1995	gęs	668
Benzo(a)pyrene	86.0	43.0	50.0	ug/L	02/07/1995	₽jg	668
1,4-Dichlorobenzene	111.0	55.5	50.0	ug/L	02/07/1995	sjg	668
Di-n-octyl phthalate	88,0	44.0	50.0	ug/L	02/07/1995	sjg	668
Fluoranthene	115.0	57.5	50.0	ug/L	02/07/1995	sjg	668
Hexachlorobutadiene	108.0	54.0	50.0	ug/L	02/07/1995	sjg	668
N-Nitrosodiphenylamine	111.0	55.5	50.0	ug/L	02/07/1995	sjg	668
4-Chloro-3-methylphenol	108.0	54.0	50.0	ug/L	02/07/1995	sjg	668
2,4-Dichlorophenol	108.0	54.0	50.0	ug/L	02/07/1995	sjg	668
2-Nitrophenol	102.0	51.0	50.0	ug/L	02/07/1995	sjg	668
Pentachlorophenol	107.0	53.5	50.0	ug/L	02/07/1995	sjg	668
Phenol	107.0	53.5	50.0	ug/L	02/07/1995	sjg	668
2,4,6-Trichlorophenol	100.0	50.0	50.0	ug/L	02/07/1995	sjg	668
Nitrobenzene-d5 (SURR)	105.0	105	100	% Rec.	02/07/1995	sjg	668
2-Fluorobiphenyl (SURR)	1.06.0	106	100	% Rec.	02/07/1995	sjg	668
p-Terphenyl-d14 (SURR)	110.0	110	100	% Rec.	02/07/1995	sjg	668
Phenol-d5 (SURR)	106.0	106	100	% Rec.	02/07/1995	sjg	668
2-Fluorophenol (SURR)	102.0	102	100	% Rec.	02/07/1995	sjg	668
2.4.6-Tribromophenol (SURR)	106.0	106	100	ቴ Rec.	02/07/1995	gţa	668



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Ref: Shell 6039 College Ave., Oakland/950201-K2

METHOD BLANK REPORT

	Method					
	Blank					Run
	Amount	Reporting		Date	Analyst	Batch
Parameter	Found	Limit	Units	Analyzed	Initials	Number
TPH (Gas/BTXE, Liquid)						
as Gasoline	ND	0.05	mg/L	02/04/1995	lss	2558
Benzene	ND	0.5	ug/L	02/04/1995	lss	2558
Toluene	ND	0.5	ug/L	02/04/1995	lss	2558
Ethylbenzene	ND	0.5	ug/L	02/04/1995	lss	2558
Xylenes (Total)	ND	0.5	ug/L	02/04/1995	lss	2558
Bromofluorobenzene (SURR)	106		% Rec.	02/04/1995	lss	2558
TPH (Gas/BTXE, Liquid)						
as Gasoline	ND	0.05	mg/L	02/06/1995	aal	2559
Benzene	ND	0.5	ug/L	02/06/1995	aal	2559
Toluene	ND	0.5	ug/L	02/06/1995	aal	2559
Ethylbenzene	ND	0.5	ug/L	02/06/1995	aal	2559
Xylenes (Total)	ND	0.5	ug/L	02/06/1995	aal	2559
Bromofluorobenzene (SURR)	94		% Rec.	02/06/1995	aal	2559
TPH (Gas/PTXE, Liquid)						
as Gasoline	ND	0.05	mg/L	02/07/1995	aal	2564
Benzene	ND	0.5	ug/L	02/07/1995	aal	2564
Toluene	ND	0.5	ug/L	02/07/1995	aal	2564
Ethylbenzene	ND	0.5	ug/L	02/07/1995	aal	2564
Xylenes (Total)	ND	0.5	ug/Ļ	02/07/1995	aal	2564
Bromofluorobenzene (SURR)	82		% Rec.	02/07/1995	aal	2564
METHOD M8015 (EXT., Liquid)		•				
as Motor Oil	ND	0.5	mg/L	02/07/1995	tdn	913



Client Acct: 1821 NET Job No: 95.00510 Date: 02/13/1995

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Ref: Shell 6039 College Ave., Oakland/950201-K2

METHOD BLANK REPORT

Blank	
Parameter Found Limit Units Analyzed Initials METHOD 8270 (GCMS, Liquid) ND 10 ug/L 02/07/1995 sjg Acenaphthene ND 10 ug/L 02/07/1995 sjg Acenaphthylene ND 10 ug/L 02/07/1995 sjg Aldrin ND 50 ug/L 02/07/1995 sjg Anthracene ND 10 ug/L 02/07/1995 sjg Benzo (a) anthracene ND 10 ug/L 02/07/1995 sjg Benzo (b) fluoranthene ND 10 ug/L 02/07/1995 sjg Benzo (a) pyrene ND 10 ug/L 02/07/1995 sjg	Run
METHOD 8270 (GCMS, Liquid) Acenaphthene ND 10 ug/L 02/07/1995 sjg Acenaphthylene ND 10 ug/L 02/07/1995 sjg Aldrin ND 50 ug/L 02/07/1995 sjg Anthracene ND 10 ug/L 02/07/1995 sjg Benzidine ND 44 ug/L 02/07/1995 sjg Benzo (a) anthracene ND 10 ug/L 02/07/1995 sjg Benzo (b) fluoranthene ND 10 ug/L 02/07/1995 sjg Benzo (a) pyrene ND 10 ug/L 02/07/1995 sjg Benzo (g,h,i) perylene ND 10 ug/L 02/07/1995 sjg	Batch
Acenaphthene ND 10 ug/L 02/07/1995 sjg Acenaphthylene ND 10 ug/L 02/07/1995 sjg Aldrin ND 50 ug/L 02/07/1995 sjg Anthracene ND 10 ug/L 02/07/1995 sjg Benzidine ND 44 ug/L 02/07/1995 sjg Benzo(a) anthracene ND 10 ug/L 02/07/1995 sjg Benzo (b) fluoranthene ND 10 ug/L 02/07/1995 sjg Benzo (a) pyrene ND 10 ug/L 02/07/1995 sjg Benzo (g,h,i) perylene ND 10 ug/L 02/07/1995 sjg	Number
Acenaphthylene ND 10 ug/L 02/07/1995 sjg Aldrin ND 50 ug/L 02/07/1995 sjg Anthracene ND 10 ug/L 02/07/1995 sjg Benzidine ND 44 ug/L 02/07/1995 sjg Benzo (a) anthracene ND 10 ug/L 02/07/1995 sjg Benzo (b) fluoranthene ND 10 ug/L 02/07/1995 sjg Benzo (k) fluoranthene ND 10 ug/L 02/07/1995 sjg Benzo (a) pyrene ND 10 ug/L 02/07/1995 sjg Benzo (g,h,i) perylene ND 10 ug/L 02/07/1995 sjg	
Aldrin ND 50 ug/L 02/07/1995 sjg Anthracene ND 10 ug/L 02/07/1995 sjg Benzidine ND 44 ug/L 02/07/1995 sjg Benzo (a) anthracene ND 10 ug/L 02/07/1995 sjg Benzo (b) fluoranthene ND 10 ug/L 02/07/1995 sjg Benzo (k) fluoranthene ND 10 ug/L 02/07/1995 sjg Benzo (a) pyrene ND 10 ug/L 02/07/1995 sjg Benzo (g,h,i) perylene ND 10 ug/L 02/07/1995 sjg	668
Anthracene ND 10 ug/L 02/07/1995 sjg Benzidine ND 44 ug/L 02/07/1995 sjg Benzo(a) anthracene ND 10 ug/L 02/07/1995 sjg Benzo (b) fluoranthene ND 10 ug/L 02/07/1995 sjg Benzo (k) fluoranthene ND 10 ug/L 02/07/1995 sjg Benzo (a) pyrene ND 10 ug/L 02/07/1995 sjg Benzo (g,h,i) perylene ND 10 ug/L 02/07/1995 sjg	668
Benzidine ND 44 ug/L 02/07/1995 sjg Benzo(a) anthracene ND 10 ug/L 02/07/1995 sjg Benzo(b) fluoranthene ND 10 ug/L 02/07/1995 sjg Benzo(k) fluoranthene ND 10 ug/L 02/07/1995 sjg Benzo(a) pyrene ND 10 ug/L 02/07/1995 sjg Benzo(g,h,i) perylene ND 10 ug/L 02/07/1995 sjg	668
Benzo (a) anthracene ND 10 ug/L 02/07/1995 sjg Benzo (b) fluoranthene ND 10 ug/L 02/07/1995 sjg Benzo (k) fluoranthene ND 10 ug/L 02/07/1995 sjg Benzo (a) pyrene ND 10 ug/L 02/07/1995 sjg Benzo (g,h,i) perylene ND 10 ug/L 02/07/1995 sjg	668
Benzo (b) fluoranthene ND 10 ug/L 02/07/1995 sjg Benzo (k) fluoranthene ND 10 ug/L 02/07/1995 sjg Benzo (a) pyrene ND 10 ug/L 02/07/1995 sjg Benzo (g,h,i) perylene ND 10 ug/L 02/07/1995 sjg	668
Benzo(k) fluoranthene ND 10 ug/L 02/07/1995 sjg Benzo(a) pyrene ND 10 ug/L 02/07/1995 sjg Benzo(g,h,i) perylene ND 10 ug/L 02/07/1995 sjg	668
Benzo(a) pyrene ND 10 ug/L 02/07/1995 sjg Benzo(g,h,i) perylene ND 10 ug/L 02/07/1995 sjg	668
Benzo(g,h,i)perylene ND 10 ug/L 02/07/1995 sjg	66B
25.	668
Benzoic acid ND 50 ug/L 02/07/1995 sjg	668
	668
Benzyl alcohol ND 10 ug/L 02/07/1995 sjg	668
Butyl benzyl phthalate ND 10 ug/L 02/07/1995 sjg	668
delta-BHC ND 50 ug/L 02/07/1995 sjg	668
gamma-BHC ND 50 ug/L 02/07/1995 sjg	668
bis(2-Chloroethyl)ether ND 10 ug/L 02/07/1995 sjg	66B
bis(2-Chloroethoxy)methane ND 10 ug/L 02/07/1995 sjg	668
bis(2-Chloroisopropyl)ether ND 10 ug/L 02/07/1995 sjg	668
bis(2-Ethylhexyl)phthalate ND 10 ug/L 02/07/1995 sjg	668
4-Bromophenyl phenyl ether ND 10 ug/L 02/07/1995 sjg	668
4-Chloroaniline ND 10 ug/L 02/07/1995 sjg	668
2-Chloronaphthalene ND 10 ug/L 02/07/1995 sjg	668
4-Chlorophenyl phenyl ether ND 10 ug/L 02/07/1995 sjg	668
Chrysene ND 10 ug/L 02/07/1995 sjg	668
4,4'-DDD ND 50 ug/L 02/07/1995 sjg	668
4,4'-DDE ND 50 ug/L 02/07/1995 sjg	668
4,4'-DDT ND 50 ug/L 02/07/1995 sjg	668
Dibenzo(a,h)anthracene ND 10 ug/L 02/07/1995 sjg	668
Dibenzofuran ND 10 ug/L 02/07/1995 sjg	668
Di-n-butylphthalate ND 10 ug/L 02/07/1995 sjg	668
1,2-Dichlorobenzene ND 10 ug/L 02/07/1995 sjg	668
1,3-Dichlorobenzene ND 10 ug/L 02/07/1995 sjg	668
1,4-Dichlorobenzene ND 10 ug/L 02/07/1995 sjg	668
3,3'-Dichlorobenzidine ND 20 ug/L 02/07/1995 sjg	668
Dieldrin ND 50 ug/L 02/07/1995 sjg	668
Diethylphthalate ND 10 ug/L 02/07/1995 sjg	668
Dimethyl phthalate ND 10 ug/L 02/07/1995 sjg	668
2,4-Dinitrotoluene ND 10 ug/L 02/07/1995 sjg	668
2,6-Dinitrotoluene ND 10 ug/L 02/07/1995 sjg	668
Di-n-octyl phthalate ND 10 ug/L 02/07/1995 sjg	668
Endrin aldehyde ND 50 ug/L 02/07/1995 sjg	668
Fluoranthene ND 10 ug/L 02/07/1995 sjg	668
Fluorene ND 10 ug/L 02/07/1995 sjg	668
Heptachlor ND 50 ug/L 02/07/1995 sjg	668
Heptachlor epoxide ND 50 ug/L 02/07/1995 sjg	668
Hexachlorobenzene ND 10 ug/L 02/07/1995 sjg	668
Hexachlorobutadiene ND 10 ug/L 02/07/1995 sjg	668

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.



NET Job No: 95,00510

Date: 02/13/1995

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Ref: Shell 6039 College Ave., Oakland/950201-K2

Method

METHOD BLANK REPORT

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Run	
Batch Number	
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ELAP Cert: 1386

Ref: Shell 6039 College Ave., Oakland/950201-K2

MATRIX SPIKE / MATRIX SPIKE DUPLICATE

	Matrix Spike	Matrix Spike Dup		Spike	Sample	Matrix Spike	Matrix Spike Dup.		Date	Run	Sample Spiked
Parameter	% Rec.	% Rec.	RPD	Amount	Conc.	Conc.	Conc.	Units	Analyzed	Batten	
TPH (Gas/BTXE,Liquid)						•					234985
as Gasoline	102.0	101.0	1.0	1.00	ND	1.02	1.01	mg/L	02/04/1995	2558	234985
Benzene	94.5	93.3	1.3	23.8	ND	22.5	22.2	ug/L	02/04/1995	2558	234985
Toluene	96.7	96.1	0.6	95.9	ND	92.7	92.2	ug/L	02/04/1995	2558	234985
TPH (Gas/BTXE, Liquid)									•		235227
as Gasoline	110.0	111.0	0.9	1.00	ND	1.10	1.11	mg/L	02/06/1995	2559	235227
Benzene	96.8	95.5	1.4	31.1	ND	30.1	29.7	ug/L	02/06/1995	2559	235227
Toluene	98.7	99.0	0.3	90.7	1.0	90.5	90.8	ug/L	02/06/1995	2559	235227
TPH {Gas/BTXE,Liquid}											235238
as Gasoline	111.0	103.0	7.5	1.00	0.09	1.20	1.12	mg/L	02/07/1995	2564	235238
Benzene	117.5	107.3	9.1	20.6	0.6	24.8	22.7	ug/L	02/07/1995	2564	235238
Toluene	117.6	110.2	6.5	77.8	1.4	92.9	87.1	ug/L	02/07/1995	2564	235238



Client Name: Blaine Tech Se

Client Acct: 1821 NET Job No: 95.00510 Date: 02/13/1995

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MATRIX SPIKE / MATRIX SPIKE DUPLICATE

	Matrix	Matrix Spike				Matrix	Matrix Spike				
	Spike	Dup		Spike	Sample	Spike	Dup.		Date	Run	Sample
Parameter	% Rec.	ቼ Rec.	RPD	Amount	Conc.	Conc.	Conc.	Units	Analyzed	Batch	Spiked
METHOD 8270 (GCMS, Liquid)											235175
Acenaphthene	75.0	74.0	1.3	100	ND	75	74	ug/L	02/07/1995	668	235175
1,4-Dichlorobenzene	63.0	61.0	3.2	100	ND	63	61	ug/L	02/07/1995	66B	235175
2,4-Dinitrotoluene	93.0	96.0	3.2	100	ND	93	96	ug/L	02/07/1995	66B	235175
N-Nitroso-Di-N-propylamine	85.0	83.0	2.4	100	ND	85	83	ug/L	02/07/1995	668	235175
Pyrene	82.0	85.0	3.6	100	NĎ	82	B5	ug/L	02/07/1995	668	235175
1,2,4-Trichlorobenzene	65.0	62.0	4.7	100	ND	65	62	ug/L	02/07/1995	668	235175
4-Chloro-3-methylphenol	72.0	69.0	4.3	200	NĎ	144	138	ug/L	02/07/1995	668	235175
2-Chlorophenol	83.0	77.0	7.5	200	ND	166	154	ug/L	02/07/1995	668	235175
4-Nitrophenol	37.5	43.5	14.8	200	ND	75	87	ug/L	02/07/1995	668	235175
Pentachlorophenol	36.0	48.0	28.6	200	ND	72	96	ug/L	02/07/1995	66B	235175
Phenol	47.5	47.5	0.0	200	ND	95	95	ug/L	02/07/1995	66B	235175



2,4,6-Tribromophenol (SURR)

109.0

Client Name: Blaine Tech Services

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Date: 02/13/1995

02/07/1995 sjg

% Rec.

100

668

Ref: Shell 6039 College Ave., Oakland/950201-K2

LABORATORY CONTROL SAMPLE REPORT

•					Duplicat	te				
		Duplicate		LCS	LCS	LCS				
	LCS	LCS		Amount	Amount	Amount		Date	Analyst	Run
Parameter	% Recovery	% Recovery	RPD	Found	Found	Expected	Units	Analyzed	Initials	Batch
METHOD 8270 (GCMS, Liquid)										
Acenaphthene	72.0			72		100	ug/L	02/07/1995	sjg	668
1,4-Dichlorobenzene	61.0			61		100	ug/L	02/07/1995	sjg	668
2,4-Dinitrotoluene	90.0			90		100	ug/L	02/07/1995	sjg	66B
N-Nitroso-Di-N-propylamine	84.0			84		100	ug/L	02/07/1995	sjg	668
Pyrene	B5.0			85		100	ug/L	02/07/1995	sjg	668
1,2,4-Trichlorobenzene	60.0			60		100	ug/L	02/07/1995	sjg	668
4-Chloro-3-methylphenol	79.0			158		200	ug/L	02/07/1995	sjg	668
2-Chlorophenol	81.5			163		200	ug/L	02/07/1995	sjg	668
4-Nitrophenol	31.5			63		200	ug/L	02/07/1995	sjg	668
Pentachlorophenol	85.5			171		200	ug/L	02/07/1995	sjg	668
Phenol	37.5			75		200	ug/L	02/07/1995	sjg	668
Nitrobenzene-d5 (SURR)	81.0			81		100	% Rec.	02/07/1995	sjg	668
2-Fluorobiphenyl (SURR)	73.0			73		100	% Rec.	02/07/1995	sjg	668
p-Terphenyl-d14 (SURR)	53.0			53		100	% Rec.	02/07/1995	sjg	668
Phenol-d5 (SURR)	47.0			47		100	% Rec.	02/07/1995	sjg	668
2-Fluorophenol (SURR)	63.0			63		100	% Rec.	02/07/1995	sjg	668

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KEY TO ABBREVIATIONS and METHOD REFERENCES

 Less than; When appearing in results column indicates analyte not detected at the value following. This datum supercedes the listed Reporting Limit.

: Reporting Limits are a function of the dilution factor for any given sample. To obtain the actual reporting limits for this sample, multiply the stated Reporting Limits by the dilution factor (but do not multiply reported values).

ICVS : Initial Calibration Verification Standard (External Standard).

mean : Average; sum of measurements divided by number of measurements.

mg/Kg (ppm): Concentration in units of milligrams of analyte per kilogram of sample,

wet-weight basis (parts per million).

mg/L : Concentration in units of milligrams of analyte per liter of sample.

mL/L/hr : Milliliters per liter per hour.

MPN/100 mL : Most probable number of bacteria per one hundred milliliters of sample.

N/A : Not applicable.

NA : Not analyzed.

ND : Not detected; the analyte concentration is less than applicable listed

reporting limit.

NTU : Nephelometric turbidity units.

RPD : Relative percent difference, 100 [Value 1 - Value 2]/mean value.

SNA : Standard not available.

ug/Kg (ppb) : Concentration in units of micrograms of analyte per kilogram of sample,

wet-weight basis (parts per billion).

ug/L : Concentration in units of micrograms of analyte per liter of sample.

umhos/cm : Micromhos per centimeter.

Method References

<u>Methods 100</u> through 493: see "Methods for Chemical Analysis of Water & Wastes", U.S. EPA, 600/4-79-020, rev. 1983.

Methods 601 through 625: see "Guidelines Establishing Test Procedures for the Analysis of Pollutants" U.S. EPA, 40 CFR, Part 136, rev. 1988.

Methods 1000 through 9999: see "Test Methods for Evaluating Solid Waste", U.S. EPA SW-846, 3rd edition, 1986.

 \underline{SM} : see "Standard Methods for the Examination of Water & Wastewater, 17th Edition, APHA, 1989.

COOLER RECEIPT FORM

Project:	<u>450201-K2</u>		Log	No: 5340)
Cooler received	i on: <u>0 3 95 </u>	nd checked o	n 2/3/95	by	
			(signature)	Para CX	
√ere custody pa	apers present?	• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •	YES	NO
Were custody pa	apers properly fi	lled out?		YES	ИО
Vere the custoo	dy papers signed?	• • • • • • • • • • • • • • • • • • • •		YES	ио
Nas sufficient	ice used?		• • • • • • • • • •	YES	NO TEMP. ! 0.200.
oid all bottles	arrive in good	condition (u	nbroken) 🤋	YES	ИО
oid bottle labe	els match COC?	• • • • • • • • • • •	• • • • • • • • • •	YES (NO 400-3: ~0 CEX
Vere proper bot	tles used for an	alysis indic	ated?	YES	NO YOUSVOCEN HO
Correct preserv	atives used?	• • • • • • • • • • • • • • • • • • • •		YES	ИО
/OA vials check Note wh	ked for headspace nich voas (if any	bubbles?) had bubble	 s:*	YES	NO
Sample descript	cor:	Number of v	ials:		

	<u>. </u>				
	 .				
All VOAs with used for analy	headspace bubble	s have been	set aside so	they will	ll not be NO
sist here all o	other jobs receive	ed in the sa	me cooler:		•
lient Job #		NET log #			
	<u> </u>				

(coolerrec)