Weiss Associates Environmental and Geologic Services

5500 Shellmound Street, Emeryville, CA 94608-2411 Fax: 510-547-5043 Phone: 510-450-6000

April 9, 1996

Madulla Logan
Alameda Health Care Services
Department of Environmental Health
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577

Re: **First Quarter 1996**
Shell Service Station
WIC #204-5510-0600
4255 MacArthur Blvd.
Oakland, California
WA Job #81-0757-206

Dear Ms. Logan:

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

First Quarter 1996 Activities:

SEPARATE-PHASE HYDROCARBON REMOVAL SUMMARY	
Separate-Phase Hydrocarbons Removed This Quarter (lbs)	***Cumulative Pounds Removed***
4.36	11.1

- Since the Third Quarter 1994, about 11.1 lbs. of SPH have been removed from the wells (Table 1).
- BTS measured depths to ground water and collected ground water samples from the site wells (Figures 1 and 2). The BTS report describing these activities is included as Attachment A.

- In December 1995, Shell began construction activities to upgrade dispensers and product lines at the site. WA will submit a report under separate cover documenting the upgrade activities.

- Weiss Associates (WA) compiled the ground water elevation and analytic data (Tables 2 and 3, respectively) and prepared a ground water elevation contour, and benzene concentrations in ground water map (Figure 2).

Anticipated Second Quarter 1996 Activities:

- BTS will remove separate-phase hydrocarbons from the wells as needed.

- WA will submit a report presenting the results of the second quarter 1996 ground water sampling and ground water depth measurements. The report will include tabulated chemical analytic results, a ground water elevation contour map, a benzene concentration in ground water map and a table presenting separate-phase removal data.

Please call if you have any questions.

Sincerely,
Weiss Associates

Grady S. Glasser
Technical Assistant

James W. Carmody, C.H.G.
Senior Project Hydrogeologist

Attachments: A - Ground Water Monitoring Report and Analytic Report

cc: R. Jeff Granberry, Shell Oil Products Company, P.O. Box 4023, Concord, CA 94524

GSG/JWC:all
I:\SHELL\0757\Q496\1996Q1R.DOC

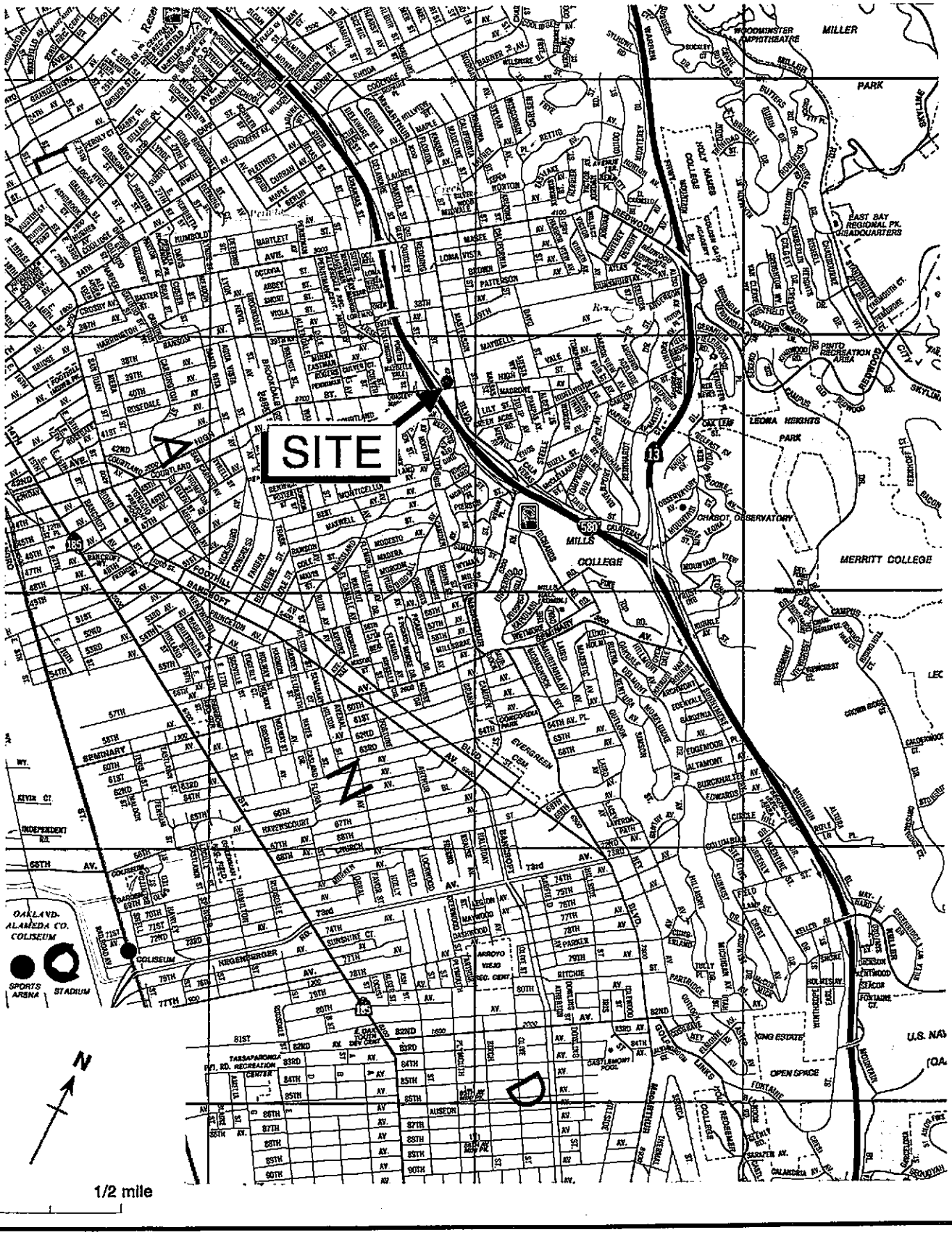
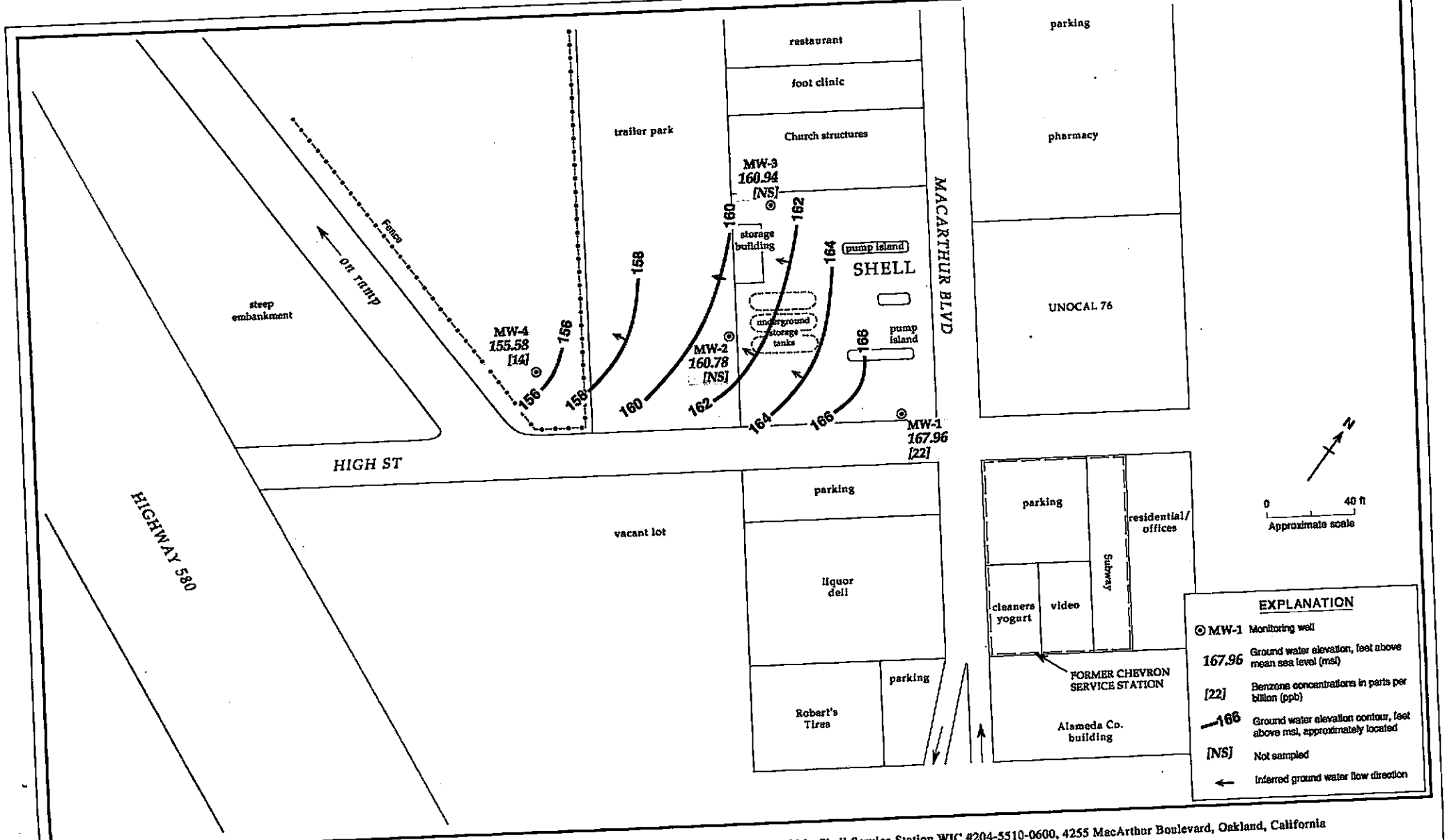


Figure 1. Site Location Map - Shell Service Station WIC# 204-5510-0600, 4255 MacArthur Boulevard, Oakland, California

WEISS ASSOCIATES



Benzene Concentrations in Ground Water - January 17, 1996 - Shell Service Station WIC #204-5510-0600, 4255 MacArthur Boulevard, Oakland, California

04/24/96

Table 1. Separate-Phase Hydrocarbon Removal - Shell Service Station WIC #204-5510-0600, 4255 MacArthur Blvd., Oakland, California

Well ID	Date	Separate-Phase Hydrocarbon Thickness (Ft)	Mass of Separate-Phase Hydrocarbons Removed (lbs)[a]	Cumulative Mass of Hydrocarbons Removed (lbs)
MW-2	11/17/93	0.0	0.0	0.0
	01/20/94	0.0	0.0	0.0
	04/25/94	0.0	0.0	0.0
	07/07/94	0.0	0.0	0.0
	01/13/95	0.0	0.0	0.0
	04/12/95	0.0	0.0	0.0
	08/10/95	0.52	5.98	5.98
	10/18/95	0.13	0.0	5.98
	01/17/96	**0.17**	**1.74**	**7.72**
MW-3	11/17/93	0.0	0.0	0.0
	01/20/94	0.0	0.0	0.0
	04/25/94	0.0	0.0	0.0
	07/07/94	0.0	0.0	0.0
	01/13/95	---	0.02	0.02
	04/12/95	---	0.02	0.04
	08/10/95	0.06	0.69	0.73
	10/18/95	0.05	0.0	0.73
	01/17/96	**0.24**	**2.62**	**3.35**
TOTAL HYDROCARBONS REMOVED				**11.07**

Notes:

--- = not measured

a = Mass of SPH in 10" boring and 4" well estimated by following factor: 1 ft of SPH = 11.5 lbs of SPH.

Table 2. Ground Water Elevations - Shell Service Station WIC #204-5510-0600, 4255 MacArthur Blvd., Oakland, California

Well ID	Date	Top-of-Casing Elevation (ft above msl)	Depth to Water (ft)	Separate-phase Hydrocarbons	Ground Water Elevation (ft above msl)
MW-1	11/17/93	175.79	8.59	—	167.20
	01/20/94		8.22	—	167.57
	04/25/94		7.63	—	168.16
	07/07/94		8.31	—	167.48
	10/27/94		8.84	—	166.95
	11/17/94		7.60	—	168.19
	11/28/94		7.56	—	168.23
	01/13/95		7.11	—	168.68
	04/12/95		7.08	—	168.71
	07/25/95		7.73	—	168.06
	10/18/95		8.42	—	167.37
	01/17/96		**7.83**	**—**	**167.96**
MW-2	11/17/93	170.91	12.31	—	158.60
	01/20/94		11.48	—	159.43
	04/25/94		10.84	—	160.07
	07/07/94		11.89	—	159.02
	10/27/94		12.89	—	158.02
	11/17/94		9.11	—	161.80
	11/28/94		9.22	—	161.69
	01/13/95		8.10	—	162.81
	04/12/95		10.12	—	160.79
	07/25/95		11.53	0.52	159.80
	10/18/95		14.02	0.13	156.99
	01/17/96		**10.27**	**0.17**	**160.78**
MW-3	11/17/93	174.61	15.40	—	159.21
	01/20/94		14.61	—	160.00
	04/25/94		13.12	—	161.49
	07/07/94		14.54	0.02	160.07
	10/27/94		15.62	0.05	159.03
	11/17/94		13.83	—	160.78
	11/28/94		14.02	—	160.59
	01/13/95		12.13	—	162.48
	04/12/95		12.96	—	161.65
	07/25/95		14.28	0.06	160.38
	10/18/95		15.88	0.05	158.77
	01/17/96		**13.86**	**0.24**	**160.94**
MW-4	11/17/94	164.06	6.62	—	157.44
	11/28/94		6.11	—	157.95
	01/13/95		6.05	—	158.01
	04/12/95		6.31	—	157.75

Table 2. Ground Water Elevations - Shell Service Station WIC #204-5510-0600, 4255 MacArthur Blvd., Oakland, California (continued)

Well ID	Date	Top-of-Casing Elevation (ft above msl)	Depth to Water (ft)	Separate-phase Hydrocarbons	Ground Water Elevation (ft above msl)
	07/25/95		7.36	---	156.70
	10/18/95		8.54	---	155.52
	01/17/96		**8.48**	**---**	**155.58**

Notes:

a = When separate-phase hydrocarbons are present, ground water elevation corrected by adding 80% of the separate-phase hydrocarbon thickness measured in the well

--- = Data not available

Table 3. Analytic Results for Ground Water, Shell Service Station WIC #204-5510-0600, 4255 MacArthur Blvd., Oakland, California

Well ID	Date Sampled	Depth to Water (ft)	TPH-G	B	E	T	X
			← parts per billion (µg/L) →				
MW-1	11/17/93	8.59	410	21	7.9	11	47
	01/20/94	8.22	1,200	180	48	19	47
	04/25/94	7.63	3,100	610	130	<10	27
	07/07/94	8.31	2,400	1,000	250	10	20
	10/27/94	8.84	2,200	500	72	3.1	1.8
	01/13/95	7.11	570	75	6.7	2.5	11
	04/12/95	7.08	1,800	480	79	<5.0	<5.0
	07/25/95	7.73	120	15	2.1	1.1	2.9
	07/25/95[dup]	7.73	300	88	11	2.4	6.5
	10/18/95	8.42	130	9.5	1.3	0.8	1.7
	10/18/95[dup]	8.42	120	11	1.4	0.8	1.8
	01/17/96	**7.83**	**250**	**22**	**1.6**	**0.9**	**2.3**
MW-2	11/17/93	12.31	31,000	9,400	1,000	4,600	3,900
	01/20/94	11.48	40,000	6,900	780	5,600	4,100
	01/20/94[dup]	11.48	41,000	7,200	900	6,200	4,800
	04/25/94	10.84	60,000	9,300	1,400	6,100	6,200
	07/07/94	11.89	280,000[a]	40,000	8,100	26,000	32,000
	07/07/94[dup]	11.89	53,000	13,000	2,000	6,600	8,400
	10/27/94	12.89	130,000	14,000	2,400	12,000	13,000
	10/27/94[dup]	12.89	390,000	8,800	1,700	7,000	11,000
	01/13/95	8.10	75,000	5,900	3,100	12,000	17,000
	04/12/95	10.12	100,000	8,500	2,400	11,000	12,000
	04/12/95[dup]	10.12	80,000	4,200	2,500	9,300	12,000
	08/10/95[SPH]	11.53	---	---	---	---	---
	10/18/95[SPH]	14.02	---	---	---	---	---
	01/17/96[SPH]	**10.27**	**---**	**---**	**---**	**---**	**---**
MW-3	11/17/93	15.40	18,000	5,400	720	660	2,200
	01/20/94	14.61	55,000	13,000	2,200	2,600	6,500
	04/25/94	13.12	96,000	11,000	3,100	1,600	9,900
	04/25/94[dup]	13.12	78,000	12,000	2,600	1,900	7,300
	07/07/94[SPH]	14.54	---	---	---	---	---
	10/27/94[SPH]	15.62	---	---	---	---	---
	01/13/95	12.13	180,000	3,200	1,700	2,700	5,200

Table 3. Analytic Results for Ground Water, Shell Service Station WIC #204-5510-0600, 4255 MacArthur Boulevard, Oakland, California (continued)

Well ID	Date Sampled	Depth to Water (ft)	TPH-G	B	E	T	X
			← parts per billion (µg/L) →				
	01/13/95[dup]	12.13	23,000	4,000	960	690	3,000
	04/12/95	12.96	56,000	8,700	2,100	1,500	6,300
	08/10/95[SPH]	14.28	—	—	—	—	—
	10/18/95[SPH]	15.88	—	—	—	—	—
	01/17/96[SPH]	**13.86**	**—**	**—**	**—**	**—**	**—**
MW-4	11/28/94	6.11	2,900	200	76	17	260
	01/13/95	6.05	1,900	130	13	5.6	40
	04/14/95	6.31	680	150	10	<2.0	13
	07/25/95	7.36	340	100	8.8	0.8	3.0
	10/18/95	8.54	150	31	3.5	<0.5	0.8
	01/17/96	**8.48**	**290**	**14**	**1.8**	**<0.5**	**0.8**
Trip Blank	01/20/94		<50	<0.5	<0.5	<0.5	<0.5
	04/25/94		<50	<0.5	<0.5	<0.5	<0.5
	07/07/94		<50	<0.5	<0.5	<0.5	<0.5
	10/27/94		<50	<0.5	<0.5	<0.5	<0.5
	01/13/95		<50	<0.5	<0.5	<0.5	<0.5
	04/12/95		<50	<0.5	<0.5	<0.5	0.89
	07/25/95		<50	<0.5	<0.5	<0.5	<0.5
	10/18/95		<50	<0.5	<0.5	<0.5	<0.5
DTSC MCLs			NE	1	680	100[b]	1,750

Table 2. Analytic Results for Ground Water, Shell Service Station WIC #204-2004-020, 301 North Hartz Avenue Danville, 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
B = Benzene by EPA Method 8020
E = Ethylbenzene by EPA Method 8020
T = Toluene by EPA Method 8020
X = Xylenes by EPA Method 8020
POG = Non-polar Petroleum oil and grease by APHA Method 5520 B/F
SPH = Separate-phase hydrocarbons present, well not sampled
NE = Not established
DTSC MCLs = California Department of Toxic Substances Control maximum contaminant levels for drinking water
--- = Not analyzed
<n = Not detected at detection limits of n ppb
dup = Duplicate sample

Notes:

a = Ground water surface had a sheen when sampled.
b = DTSC recommended action level; MCL not established.

ATTACHMENT A

GROUND WATER MONITORING REPORT AND ANALYTIC REPORT

BLAINE
TECH SERVICES INC.

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

February 7, 1996

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

Attn: R. Jeff Granberry

Shell WIC #204-5510-0600
4255 MacArthur Blvd.
Oakland, California

1st Quarter 1996

Quarterly Groundwater Monitoring Report 960117-A-1

Blaine Tech Services, Inc. performs environmental sampling and documentation as an independent third party. Copies of our Sampling Report along with the laboratory's Certified Analytical Report are forwarded to the consultant overseeing work at this site. Submission of the assembled documents to interested regulatory agencies will be made by the designated consultant.

Groundwater monitoring at this site was performed in accordance with Standard Operating Procedures provided to the interested regulatory agencies. If you have any questions about the work performed at this site please call me at (408) 995-5535 ext. 201.

Yours truly,

Francis Thie

attachments: Table of Well Gauging Data
Chain of Custody
Field Data Sheets
Certified Analytical Report

cc: Weiss Associates
5500 Shellmound Street
Emeryville, CA 94608-2411
Attn: Grady Glasser

(Any professional evaluations or recommendations will be made by the consultant under separate cover.)

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 (ml)	DEPTH TO WATER (feet)	DEPTH TO WELL BOTTOM (feet)
MW-1 *	1/17/96	TOC	–	NONE	–	–	7.83	23.32
MW-2	1/17/96	TOC	FREE PRODUCT	10.10	0.17	1000	10.27	–
MW-3	1/17/96	TOC	FREE PRODUCT	13.62	0.24	1500	13.86	–
MW-4	1/17/96	TOC	–	NONE	–	–	8.48	30.03

* Sample DUP was a duplicate sample taken from well MW-1.

#49774

SHELL OIL COMPANY
RETAIL ENVIRONMENTAL ENGINEERING - WEST

CHAIN OF CUSTODY RECORD
Serial No: 960117-A7

Date: 1-17-96
Page 1 of 1

Site Address: 4255 MacArthur Blvd., Oakland

WIC#: 204-5510-0600

Shell Engineer: R. Jeff Granberry ~~Daniel T. Kirk~~
Phone No.: (510) 675-6168
Fax #: 675-6160

Consultant Name & Address: Blaine Tech Services 985 Timothy Dr. San Jose, CA 95133

Consultant Contact: Jim Keller
Phone No.: (408) 995-5535
Fax #: 293-8773

Comments:

Sampled by: RANDY VALENTINE
Printed Name:

Analysis Required

LAB: NET

CHECK ONE (1) BOX ONLY	CT/DT
Quarterly Monitoring [X]	5461
Site Investigation [ ]	5441
Soil Classify/Disposal [ ]	5442
Water Classify/Disposal [ ]	5443
Soil/Air Rem. or Sys. O & M [ ]	5452
Water Rem. or Sys. O & M [ ]	5453
Other [ ]	

TURN AROUND TIME
- 24 hours [ ]
- 48 hours [ ]
- 16 days [X] (Normal)
- Other [ ]

NOTE: Notify Lab as soon as Possible of 24/48 hrs. TAT.

Sample ID	Date	Time	Soil	Water	Air	No. of conts.	TPH (EPA 8015 Mod. Gas)	TPH (EPA 8015 Mod. Diesel)	BTEX (EPA 8020/602)	Volatile Organics (EPA 8240)	Test for Disposal	Combination TPH 8015 & BTEX 8020			Asbestos	Container Size	Preparation Used	Composite Y/N	MATERIAL DESCRIPTION	SAMPLE CONDITION/ COMMENTS
MW1	1/17	1015		X		3						X								
MW4	↓	1048		X		3						X								
EB	↓	1100		X		3						X								
DUP	↓			X		3						X								

CUSTODY SEALED
Date 1/18/96 Time 1530 Initials [illegible]
SEAL INTACT?
Yes ✓ No____ Initials [illegible]

Relinquished By (signature):	Printed Name:	Date/Time	Received (signature):	Printed Name:	Date/Time
[signature]	RANDY VALENTINE	Date: 1-18 Time: 1007	[signature]	P. Smart	Date: 1-18-96 Time: 1007
[signature]	P. Smart	Date: 1-18-96 Time: 1530	[signature]	PAM GREENE	Date: 1-19-96 Time: 0800
		Date: Time:			Date: Time:

THE LABORATORY MUST PROVIDE A COPY OF THIS CHAIN-OF-CUSTODY WITH INVOICE AND RESULTS

VIA: NCS

NATIONAL ENVIRONMENTAL TESTING, INC.

Santa Rosa Division
3636 North Laughlin Road
Suite 110
Santa Rosa, CA 95403-8226
Tel: (707) 526-7200
Fax: (707) 541-2333

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

Date: 01/29/1996
NET Client Acct. No: 1821
NET Job No: 96.00230
Received: 01/19/1996

Client Reference Information

Shell 4255 MacArthur Blvd., Oakland, CA/960117-A1

Sample analysis in support of the project referenced above has been completed and results are presented on the following pages. Results apply only to the samples analyzed. All positive results have been confirmed as required. 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 free to call me at (707) 541-2305.

Submitted by:

Ginger Brinlee
Project Coordinator

Enclosure(s)

Ref: Shell 4255 MacArthur Blvd., Oakland, CA/960117-A1

SAMPLE DESCRIPTION: MW1
Date Taken: 01/17/1996
Time Taken: 10:15
NET Sample No: 259144

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed	Run Batch No.
5030/8015-M/8020 (Shell)								
DILUTION FACTOR*	1						01/24/1996	3499
Purgeable TPH	250		50	ug/L	5030/M8015		01/24/1996	3499
Carbon Range: C6 to C12	--						01/24/1996	3499
8020 (GC, Liquid)	--						01/24/1996	3499
Benzene	22		0.5	ug/L	8020		01/24/1996	3499
Toluene	0.9		0.5	ug/L	8020		01/24/1996	3499
Ethylbenzene	1.6		0.5	ug/L	8020		01/24/1996	3499
Xylenes (Total)	2.3		0.5	ug/L	8020		01/24/1996	3499
SURROGATE RESULTS	--						01/24/1996	3499
Bromofluorobenzene (SURR)	104			% Rec.	8020		01/24/1996	3499

SAMPLE DESCRIPTION: MW4
Date Taken: 01/17/1996
Time Taken: 10:48
NET Sample No: 259145

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed	Run Batch No.
5030/8015-M/8020 (Shell)								
DILUTION FACTOR*	1						01/24/1996	3499
Purgeable TPH	290		50	ug/L	5030/M8015		01/24/1996	3499
Carbon Range: C6 to C12	--						01/24/1996	3499
8020 (GC, Liquid)	--						01/24/1996	3499
Benzene	14		0.5	ug/L	8020		01/24/1996	3499
Toluene	ND		0.5	ug/L	8020		01/24/1996	3499
Ethylbenzene	1.8		0.5	ug/L	8020		01/24/1996	3499
Xylenes (Total)	0.8		0.5	ug/L	8020		01/24/1996	3499
SURROGATE RESULTS	--						01/24/1996	3499
Bromofluorobenzene (SURR)	101			% Rec.	8020		01/24/1996	3499

Ref: Shell 4255 MacArthur Blvd., Oakland, CA/960117-A1

SAMPLE DESCRIPTION: EB
Date Taken: 01/17/1996
Time Taken: 11:00
NET Sample No: 259146

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed	Run Batch No.
5030/8015-M/8020 (Shell)								
DILUTION FACTOR*	1						01/24/1996	3499
Purgeable TPH	ND		50	ug/L	5030/M8015		01/24/1996	3499
Carbon Range: C6 to C12	--						01/24/1996	3499
8020 (GC, Liquid)	--						01/24/1996	3499
Benzene	ND		0.5	ug/L	8020		01/24/1996	3499
Toluene	ND		0.5	ug/L	8020		01/24/1996	3499
Ethylbenzene	ND		0.5	ug/L	8020		01/24/1996	3499
Xylenes (Total)	ND		0.5	ug/L	8020		01/24/1996	3499
SURROGATE RESULTS	--						01/24/1996	3499
Bromofluorobenzene (SURR)	98			% Rec.	8020		01/24/1996	3499

SAMPLE DESCRIPTION: DUP
Date Taken: 01/17/1996
Time Taken:
NET Sample No: 259147

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed	Run Batch No.
5030/8015-M/8020 (Shell)								
DILUTION FACTOR*	1						01/24/1996	3499
Purgeable TPH	380		50	ug/L	5030/M8015		01/24/1996	3499
Carbon Range: C6 to C12	--						01/24/1996	3499
8020 (GC, Liquid)	--						01/24/1996	3499
Benzene	20	FC	5.0	ug/L	8020		01/26/1996	3506
Toluene	1.6		0.5	ug/L	8020		01/24/1996	3499
Ethylbenzene	5.7		0.5	ug/L	8020		01/24/1996	3499
Xylenes (Total)	6.3		0.5	ug/L	8020		01/24/1996	3499
SURROGATE RESULTS	--						01/24/1996	3499
Bromofluorobenzene (SURR)	103			% Rec.	8020		01/24/1996	3499

FC : Compound quantitated at a 10X dilution factor.

Ref: Shell 4255 MacArthur Blvd., Oakland, CA/960117-A1

CONTINUING CALIBRATION VERIFICATION STANDARD REPORT

Parameter	CCV Standard % Recovery	CCV Standard Amount Found	CCV Standard Amount Expected	Flags	Units	Date Analyzed	Analyst Initials	Run Batch Number
5030/8015-M/8020 (Shell)								
Purgeable TPH	100.0	0.50	0.50		mg/L	01/24/1996	aal	3499
Benzene	91.6	4.58	5.00		ug/L	01/24/1996	aal	3499
Toluene	94.4	4.72	5.00		ug/L	01/24/1996	aal	3499
Ethylbenzene	95.2	4.76	5.00		ug/L	01/24/1996	aal	3499
Xylenes (Total)	96.7	14.5	15.0		ug/L	01/24/1996	aal	3499
Bromofluorobenzene (SURR)	100.0	100	100		% Rec.	01/24/1996	aal	3499
5030/8015-M/8020 (Shell)								
Purgeable TPH	104.0	0.52	0.50		mg/L	01/26/1996	lss	3506
Benzene	97.2	4.86	5.00		ug/L	01/26/1996	lss	3506
Toluene	104.8	5.24	5.00		ug/L	01/26/1996	lss	3506
Ethylbenzene	100.2	5.01	5.00		ug/L	01/26/1996	lss	3506
Xylenes (Total)	102.0	15.3	15.0		ug/L	01/26/1996	lss	3506
Bromofluorobenzene (SURR)	103.0	103	100		% Rec.	01/26/1996	lss	3506

Ref: Shell 4255 MacArthur Blvd., Oakland, CA/960117-A1

METHOD BLANK REPORT

Parameter	Method Blank Amount Found	Reporting Limit	Flags	Units	Date Analyzed	Analyst Initials	Run Batch Number
5030/8015-M/8020 (Shell)							
Purgeable TPH	ND	0.05		mg/L	01/24/1996	aal	3499
Benzene	ND	0.5		ug/L	01/24/1996	aal	3499
Toluene	ND	0.5		ug/L	01/24/1996	aal	3499
Ethylbenzene	ND	0.5		ug/L	01/24/1996	aal	3499
Xylenes (Total)	ND	0.5		ug/L	01/24/1996	aal	3499
Bromofluorobenzene (SURR)	95			% Rec.	01/24/1996	aal	3499
5030/8015-M/8020 (Shell)							
Purgeable TPH	ND	0.05		mg/L	01/26/1996	lss	3506
Benzene	ND	0.5		ug/L	01/26/1996	lss	3506
Toluene	ND	0.5		ug/L	01/26/1996	lss	3506
Ethylbenzene	ND	0.5		ug/L	01/26/1996	lss	3506
Xylenes (Total)	ND	0.5		ug/L	01/26/1996	lss	3506
Bromofluorobenzene (SURR)	96			% Rec.	01/26/1996	lss	3506

Ref: Shell 4255 MacArthur Blvd., Oakland, CA/960117-A1

MATRIX SPIKE / MATRIX SPIKE DUPLICATE

Parameter	Matrix Spike % Rec.	Matrix Spike Dup % Rec.	RPD	Spike Amount	Sample Conc.	Matrix Spike Conc.	Matrix Spike Dup. Conc.	Flags	Units	Date Analyzed	Run Batch	Sample Spiked
5030/8015-M/8020 (Shell)												259138
Purgeable TPH	102.0	106.0	3.8	0.5	ND	0.51	0.53		mg/L	01/24/1996	3499	259138
Benzene	91.4	100.3	9.2	7.30	2.0	8.67	9.32	C	ug/L	01/24/1996	3499	259138
Toluene	95.6	96.8	1.2	24.9	ND	23.8	24.1		ug/L	01/24/1996	3499	259138
5030/8015-M/8020 (Shell)												259342
Purgeable TPH	106.0	104.0	1.9	0.50	ND	0.53	0.52		mg/L	01/26/1996	3506	259342
Benzene	99.9	94.1	6.0	7.63	ND	7.62	7.18		ug/L	01/26/1996	3506	259342
Toluene	99.2	96.2	3.1	26.4	ND	26.2	25.4		ug/L	01/26/1996	3506	259342

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

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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

Methods 100 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.

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

COOLER RECEIPT FORM

Project: 960117-A1 Log No: 9974
Cooler received on: 1/19/96 and checked on 1/19/96 by Pam Greene
(signature)

Were custody papers present?	YES	NO
Were custody papers properly filled out?	YES	NO
Were the custody papers signed?	YES	NO
Was sufficient ice used?	YES	NO
Did all bottles arrive in good condition (unbroken)?	YES	NO
Did bottle labels match COC?	YES	NO
Were proper bottles used for analysis indicated?	YES	NO
Correct preservatives used?	YES	NO
VOA vials checked for headspace bubbles?	YES	NO

Temp 0°

Note which voas (if any) had bubbles:*

Sample descriptor:	Number of vials:

*All VOAs with headspace bubbles have been set aside so they will not be used for analysis..... YES NO

List here all other jobs received in the same cooler:

Client Job #	NET log #

(coolerrec)