BLAINE
TECH SERVICES INC.

985 TIMOTHY DRIVE
SAN JOSE, CA 95133
(408) 995-5535
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August 24, 1994

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

Attn: Lynn Walker

SITE:
Shell WIC #204-1381-0407
2724 Castro Valley Blvd.
Castro Valley, California

QUARTER:
3rd quarter of 1994

QUARTERLY GROUNDWATER SAMPLING REPORT 940804-J-1

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 obtained 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 site 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: Pacific Environmental Group, Inc.
2025 Gateway Place, Suite #440
San Jose, CA 95110
ATTN: Rhonda Barrick

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	8/4/94	TOC	--	NONE	--	--	8.74	14.70
MW-2 *	8/4/94	TOC	--	NONE	--	--	9.38	12.00
MW-3	8/4/94	TOC	--	NONE	--	--	9.62	25.42
MW-5	8/4/94	TOC	--	NONE	--	--	9.22	22.08
MW-7	8/4/94	TOC	--	NONE	--	--	8.68	16.00
OMW-6	8/4/94	TOC	--	NONE	--	--	8.56	22.05
OMW-8	8/4/94	TOC	--	NONE	--	--	8.72	19.45
OMW-9	8/4/94	TOC	--	NONE	--	--	9.92	13.88

* Sample DUP was a duplicate sample taken from well MW-2.

(782

SHELL OIL COMPANY
RETAIL ENVIRONMENTAL ENGINEERING - WEST

CHAIN OF CUSTODY RECORD
Serial No: 940804 J1

Date: 8/4/94
Page 1 of 2

Site Address: 2724 Castro Valley Blvd., Castro Valley

WIC#: 204-1381-0407

Shell Engineer: Lynn Walker — Phone No.: (510) 675-6169 Fax #: 675-6172

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

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

Comments:

Sampled by:

Printed Name: JEAN GATINEAU

LAB: NET

Sample ID	Date	Sludge	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
MW-1	8/4			X		5		X				X								
MW-2																				
MW-3																				
MW-5																				
MW-7																				
OMW-6																				
OMW-8																				
OMW-9																				

CHECK ONE (1) BOX ONLY | GT/DT | TURN AROUND TIME

- Quarterly Monitoring XXX — 6441 — 24 hour ☐
- Site Investigation ☐ — 6441 — 48 hour ☐
- Soil Closure/Disposal ☐ — 6442 — 15 days XX (Normal)
- Water Closure/Disposal ☐ — 6443 — Other ☐ ____
- Soil/Air Rem. or Sys. O & M ☐ — 6462
- Water Rem. or Sys. O & M ☐ — 6463
- Other ☐

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

CUSTODY SEAL

Relinquished By (signature)	Printed Name	Date/Time	Received (signature)	Printed Name	Date/Time
	JEAN GATINEAU	Date: 8/5/94 Time: 12:30		GT Lumbre	Date: 8/5/94 Time: 1626
	GT Lumbre	Date: 8/5/94 Time: 16:30			Date: Time:
Relinquished By (signature): (VIA NCS)		Date: Time:		K Temple	Date: 8/6/94 Time: 1020

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

SHELL OIL COMPANY
RETAIL ENVIRONMENTAL ENGINEERING - WEST

CHAIN OF CUSTODY RECORD
Serial No: 940804J1

Date: 8/4/94
Page 2 of 2

Site Address: 2724 Castro Valley Blvd., Castro Valley

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Shell Engineer: Lynn Walker — Phone No.: (510) 675-6169 Fax #: 675-6172

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

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

Comments:

Sampled by:

Printed Name: JEAN GATINEAU

LAB: NET

CHECK ONE (1) BOX ONLY	CT/DT
Quarterly Monitoring XXX	6441
Site Investigation	6441
Soil Closure/Disposal	6442
Water Closure/Disposal	6443
Soil/Air Rem. or Sys. O & M	6462
Water Rem. or Sys. O & M	6463
Other	

TURN AROUND TIME	
24 hours	
48 hours	
15 days	XX (Normal)
Other	

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

Sample ID	Date	Sludge	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
E.I.B.	8/4			X		5		X				X								
DUP	↓			↓		5		↓				↓								
T.I.B	↓			↓		2		↓				↓								

CUSTODY SEALED 8/5/94

Relinquished By (signature): Jean Gatineau — Printed Name: JEAN GATINEAU — Date: 8/5/94 Time: 16:59 — Received (signature): G.P. Lumbre — Printed Name: G.P. Lumbre — Date: 8/6/94 Time: 12:30

Relinquished By (signature): G.P. Lumbre — Printed Name: G.P. LUMBRE — Date: 8/6/94 Time: 16:30 — Received (signature): — Printed Name: — Date: Time:

Relinquished By (signature): (VIA NES) — Printed Name: — Date: Time: — Received (signature): K. Temple — Printed Name: K. Temple — Date: 8/6/94 Time: 1030

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

NATIONAL ENVIRONMENTAL TESTING, INC.

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: 08/17/1994
NET Client Acct. No: 1821
NET Pacific Job No: 94.03447
Received: 08/06/1994

Client Reference Information

SHELL, 2724 Castro Valley Blvd., Castro Valley, 940804J1

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

Jim Hoch
Operations Manager

Enclosure(s)

Ref: SHELL, 2724 Castro Valley Blvd., Castro Valley, 940804J1

SAMPLE DESCRIPTION: MW-1
Date Taken: 08/04/1994
Time Taken:
NET Sample No: 211229

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed
TPH (Gas/BTXE,Liquid)							
METHOD 5030/M8015	--						08/12/1994
DILUTION FACTOR*	1						08/12/1994
as Gasoline	ND		50	ug/L	5030		08/12/1994
Carbon Range:	--						08/12/1994
METHOD 8020 (GC,Liquid)	--						08/12/1994
Benzene	ND		0.5	ug/L	8020		08/12/1994
Toluene	ND		0.5	ug/L	8020		08/12/1994
Ethylbenzene	ND		0.5	ug/L	8020		08/12/1994
Xylenes (Total)	ND		0.5	ug/L	8020		08/12/1994
SURROGATE RESULTS	--						08/12/1994
Bromofluorobenzene (SURR)	95			% Rec.	5030		08/12/1994
METHOD M8015 (EXT., Liquid)						08/09/1994	
DILUTION FACTOR*	1						08/11/1994
as Diesel	80	DX	50	ug/L	3510		08/11/1994
Carbon Range:	<C10-C16						08/11/1994

DX : The result for Diesel is an unk. HC which consists of several peaks.

Ref: SHELL, 2724 Castro Valley Blvd., Castro Valley, 940804J1

SAMPLE DESCRIPTION: MW-2
Date Taken: 08/04/1994
Time Taken:
NET Sample No: 211230

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed
TPH (Gas/BTXE,Liquid)							
METHOD 5030/M8015	--						08/12/1994
DILUTION FACTOR*	1						08/12/1994
as Gasoline	ND		50	ug/L	5030		08/12/1994
Carbon Range:	--						08/12/1994
METHOD 8020 (GC,Liquid)	--						08/12/1994
Benzene	ND		0.5	ug/L	8020		08/12/1994
Toluene	ND		0.5	ug/L	8020		08/12/1994
Ethylbenzene	ND		0.5	ug/L	8020		08/12/1994
Xylenes (Total)	ND		0.5	ug/L	8020		08/12/1994
SURROGATE RESULTS	--						08/12/1994
Bromofluorobenzene (SURR)	89			% Rec.	5030		08/12/1994
METHOD M8015 (EXT., Liquid)						08/09/1994	
DILUTION FACTOR*	1						08/11/1994
as Diesel	110	DX	50	ug/L	3510		08/11/1994
Carbon Range:	<C10-C16						08/11/1994

DX : The result for Diesel is an unk. HC which consists of several peaks.

Ref: SHELL, 2724 Castro Valley Blvd., Castro Valley, 940804J1

SAMPLE DESCRIPTION: MW-3
Date Taken: 08/04/1994
Time Taken:
NET Sample No: 211231

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed
TPH (Gas/BTXE,Liquid)							
METHOD 5030/M8015	--						08/12/1994
DILUTION FACTOR*	1						08/12/1994
as Gasoline	ND		50	ug/L	5030		08/12/1994
Carbon Range:	--						08/12/1994
METHOD 8020 (GC,Liquid)	--						08/12/1994
Benzene	ND		0.5	ug/L	8020		08/12/1994
Toluene	ND		0.5	ug/L	8020		08/12/1994
Ethylbenzene	ND		0.5	ug/L	8020		08/12/1994
Xylenes (Total)	ND		0.5	ug/L	8020		08/12/1994
SURROGATE RESULTS	--						08/12/1994
Bromofluorobenzene (SURR)	92			% Rec.	5030		08/12/1994
METHOD M8015 (EXT., Liquid)						08/09/1994	
DILUTION FACTOR*	1						08/11/1994
as Diesel	80	DX	50	ug/L	3510		08/11/1994
Carbon Range:	<C10-C16						08/11/1994

DX : The result for Diesel is an unk. HC which consists of several peaks.

Ref: SHELL, 2724 Castro Valley Blvd., Castro Valley, 940804J1

SAMPLE DESCRIPTION: MW-5
Date Taken: 08/04/1994
Time Taken:
NET Sample No: 211232

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed
TPH (Gas/BTXE,Liquid)							
METHOD 5030/M8015	--						08/12/1994
DILUTION FACTOR*	1						08/12/1994
as Gasoline	ND		50	ug/L	5030		08/12/1994
Carbon Range:	--						08/12/1994
METHOD 8020 (GC,Liquid)	--						08/12/1994
Benzene	ND		0.5	ug/L	8020		08/12/1994
Toluene	ND		0.5	ug/L	8020		08/12/1994
Ethylbenzene	ND		0.5	ug/L	8020		08/12/1994
Xylenes (Total)	ND		0.5	ug/L	8020		08/12/1994
SURROGATE RESULTS	--						08/12/1994
Bromofluorobenzene (SURR)	95			% Rec.	5030		08/12/1994
METHOD M8015 (EXT., Liquid)						08/09/1994	
DILUTION FACTOR*	1						08/11/1994
as Diesel	80	DX	50	ug/L	3510		08/11/1994
Carbon Range:	<C10-C16						08/11/1994

DX : The result for Diesel is an unk. HC which consists of several peaks.

Ref: SHELL, 2724 Castro Valley Blvd., Castro Valley, 940804J1

SAMPLE DESCRIPTION: MW-7
Date Taken: 08/04/1994
Time Taken:
NET Sample No: 211233

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed
TPH (Gas/BTXE,Liquid)							
METHOD 5030/M8015	--						08/12/1994
DILUTION FACTOR*	1						08/12/1994
as Gasoline	ND		50	ug/L	5030		08/12/1994
Carbon Range:	--						08/12/1994
METHOD 8020 (GC,Liquid)	--						08/12/1994
Benzene	ND		0.5	ug/L	8020		08/12/1994
Toluene	ND		0.5	ug/L	8020		08/12/1994
Ethylbenzene	ND		0.5	ug/L	8020		08/12/1994
Xylenes (Total)	ND		0.5	ug/L	8020		08/12/1994
SURROGATE RESULTS	--						08/12/1994
Bromofluorobenzene (SURR)	95			% Rec.	5030		08/12/1994
METHOD M8015 (EXT., Liquid)						08/09/1994	
DILUTION FACTOR*	1						08/11/1994
as Diesel	90	DX	50	ug/L	3510		08/11/1994
Carbon Range:	<C10-C16						08/11/1994

DX : The result for Diesel is an unk. HC which consists of several peaks.

Ref: SHELL, 2724 Castro Valley Blvd., Castro Valley, 940804J1

SAMPLE DESCRIPTION: OMW-6
Date Taken: 08/04/1994
Time Taken:
NET Sample No: 211234

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed
TPH (Gas/BTXE,Liquid)							
METHOD 5030/M8015	--						08/14/1994
DILUTION FACTOR*	1						08/14/1994
as Gasoline	ND		50	ug/L	5030		08/14/1994
Carbon Range:	--						08/14/1994
METHOD 8020 (GC,Liquid)	--						08/14/1994
Benzene	ND		0.5	ug/L	8020		08/14/1994
Toluene	ND		0.5	ug/L	8020		08/14/1994
Ethylbenzene	ND		0.5	ug/L	8020		08/14/1994
Xylenes (Total)	ND		0.5	ug/L	8020		08/14/1994
SURROGATE RESULTS	--						08/14/1994
Bromofluorobenzene (SURR)	72			% Rec.	5030		08/14/1994
METHOD M8015 (EXT., Liquid)						08/09/1994	
DILUTION FACTOR*	1						08/13/1994
as Diesel	ND		50	ug/L	3510		08/13/1994
Carbon Range:	--						08/13/1994

Ref: SHELL, 2724 Castro Valley Blvd., Castro Valley, 940804J1

SAMPLE DESCRIPTION: OMW-8
Date Taken: 08/04/1994
Time Taken:
NET Sample No: 211235

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed
TPH (Gas/BTXE,Liquid)							
METHOD 5030/M8015	--						08/12/1994
DILUTION FACTOR*	1						08/12/1994
as Gasoline	ND		50	ug/L	5030		08/12/1994
Carbon Range:	--						08/12/1994
METHOD 8020 (GC,Liquid)	--						08/12/1994
Benzene	ND		0.5	ug/L	8020		08/12/1994
Toluene	ND		0.5	ug/L	8020		08/12/1994
Ethylbenzene	ND		0.5	ug/L	8020		08/12/1994
Xylenes (Total)	ND		0.5	ug/L	8020		08/12/1994
SURROGATE RESULTS	--						08/12/1994
Bromofluorobenzene (SURR)	94			% Rec.	5030		08/12/1994
METHOD M8015 (EXT., Liquid)						08/09/1994	
DILUTION FACTOR*	1						08/11/1994
as Diesel	50	DX	50	ug/L	3510		08/11/1994
Carbon Range:	<C10-C16						08/11/1994

DX : The result for Diesel is an unk. HC which consists of several peaks.

Ref: SHELL, 2724 Castro Valley Blvd., Castro Valley, 940804J1

SAMPLE DESCRIPTION: OMW-9
Date Taken: 08/04/1994
Time Taken:
NET Sample No: 211236

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed
TPH (Gas/BTXE,Liquid)							
METHOD 5030/M8015	--						08/12/1994
DILUTION FACTOR*	1						08/12/1994
as Gasoline	ND		50	ug/L	5030		08/12/1994
Carbon Range:	--						08/12/1994
METHOD 8020 (GC,Liquid)	--						08/12/1994
Benzene	ND		0.5	ug/L	8020		08/12/1994
Toluene	ND		0.5	ug/L	8020		08/12/1994
Ethylbenzene	ND		0.5	ug/L	8020		08/12/1994
Xylenes (Total)	ND		0.5	ug/L	8020		08/12/1994
SURROGATE RESULTS	--						08/12/1994
Bromofluorobenzene (SURR)	96			% Rec.	5030		08/12/1994
METHOD M8015 (EXT., Liquid)						08/09/1994	
DILUTION FACTOR*	1						08/11/1994
as Diesel	ND		50	ug/L	3510		08/11/1994
Carbon Range:	--						08/11/1994

Ref: SHELL, 2724 Castro Valley Blvd., Castro Valley, 940804J1

SAMPLE DESCRIPTION: E.B.
Date Taken: 08/04/1994
Time Taken:
NET Sample No: 211237

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed
TPH (Gas/BTXE,Liquid)							
METHOD 5030/M8015	--						08/12/1994
DILUTION FACTOR*	1						08/12/1994
as Gasoline	ND		50	ug/L	5030		08/12/1994
Carbon Range:	--						08/12/1994
METHOD 8020 (GC,Liquid)	--						08/12/1994
Benzene	ND		0.5	ug/L	8020		08/12/1994
Toluene	ND		0.5	ug/L	8020		08/12/1994
Ethylbenzene	ND		0.5	ug/L	8020		08/12/1994
Xylenes (Total)	ND		0.5	ug/L	8020		08/12/1994
SURROGATE RESULTS	--						08/12/1994
Bromofluorobenzene (SURR)	90			% Rec.	5030		08/12/1994
METHOD M8015 (EXT., Liquid)						08/09/1994	
DILUTION FACTOR*	1						08/11/1994
as Diesel	ND		50	ug/L	3510		08/11/1994
Carbon Range:	--						08/11/1994

Ref: SHELL, 2724 Castro Valley Blvd., Castro Valley, 940804J1

SAMPLE DESCRIPTION: DUP
Date Taken: 08/04/1994
Time Taken:
NET Sample No: 211238

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed
TPH (Gas/BTXE,Liquid)							
METHOD 5030/M8015	--						08/12/1994
DILUTION FACTOR*	1						08/12/1994
as Gasoline	70	C	50	ug/L	5030		08/12/1994
Carbon Range:	C5-C14						08/12/1994
METHOD 8020 (GC,Liquid)	--						08/12/1994
Benzene	ND		0.5	ug/L	8020		08/12/1994
Toluene	ND		0.5	ug/L	8020		08/12/1994
Ethylbenzene	ND		0.5	ug/L	8020		08/12/1994
Xylenes (Total)	ND		0.5	ug/L	8020		08/12/1994
SURROGATE RESULTS	--						08/12/1994
Bromofluorobenzene (SURR)	101			% Rec.	5030		08/12/1994
METHOD M8015 (EXT., Liquid)						08/09/1994	
DILUTION FACTOR*	1						08/11/1994
as Diesel	110	DX	50	ug/L	3510		08/11/1994
Carbon Range:	<C10-C16						08/11/1994

DX : The result for Diesel is an unk. HC which consists of several peaks.
C : Positive result confirmed by secondary column or GC/MS analysis.

Ref: SHELL, 2724 Castro Valley Blvd., Castro Valley, 940804J1

SAMPLE DESCRIPTION: T.B.
Date Taken: 08/04/1994
Time Taken:
NET Sample No: 211239

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed
TPH (Gas/BTXE,Liquid)							
METHOD 5030/M8015	--						08/12/1994
DILUTION FACTOR*	1						08/12/1994
as Gasoline	ND		50	ug/L	5030		08/12/1994
Carbon Range:	--						08/12/1994
METHOD 8020 (GC,Liquid)	--						08/12/1994
Benzene	ND		0.5	ug/L	8020		08/12/1994
Toluene	ND		0.5	ug/L	8020		08/12/1994
Ethylbenzene	ND		0.5	ug/L	8020		08/12/1994
Xylenes (Total)	ND		0.5	ug/L	8020		08/12/1994
SURROGATE RESULTS	--						08/12/1994
Bromofluorobenzene (SURR)	90			% Rec.	5030		08/12/1994

Ref: SHELL, 2724 Castro Valley Blvd., Castro Valley, 940804J1

CONTINUING CALIBRATION VERIFICATION STANDARD REPORT

Parameter	CCV Standard % Recovery	CCV Standard Amount Found	CCV Standard Amount Expected	Units	Date Analyzed	Analyst Initials
TPH (Gas/BTXE,Liquid)						
as Gasoline	105.0	1.05	1.00	mg/L	08/12/1994	aal
Benzene	114.0	5.70	5.00	ug/L	08/12/1994	aal
Toluene	86.6	4.33	5.00	ug/L	08/12/1994	aal
Ethylbenzene	101.6	5.08	5.00	ug/L	08/12/1994	aal
Xylenes (Total)	100.0	15.0	15.0	ug/L	08/12/1994	aal
Bromofluorobenzene (SURR)	95.0	95	100	% Rec.	08/12/1994	aal
TPH (Gas/BTXE,Liquid)						
as Gasoline	107.0	1.07	1.00	mg/L	08/14/1994	lss
Benzene	109.4	5.47	5.00	ug/L	08/14/1994	lss
Toluene	108.6	5.43	5.00	ug/L	08/14/1994	lss
Ethylbenzene	103.2	5.16	5.00	ug/L	08/14/1994	lss
Xylenes (Total)	105.3	15.8	15.0	ug/L	08/14/1994	lss
Bromofluorobenzene (SURR)	103.0	103	100	% Rec.	08/14/1994	lss
METHOD M8015 (EXT., Liquid)						
as Diesel	109.2	1092	1000	mg/L	08/11/1994	tdn

Ref: SHELL, 2724 Castro Valley Blvd., Castro Valley, 940804J1

METHOD BLANK REPORT

Parameter	Method Blank Amount Found	Reporting Limit	Units	Date Analyzed	Analyst Initials
TPH (Gas/BTXE,Liquid)					
as Gasoline	ND	0.05	mg/L	08/12/1994	aal
Benzene	ND	0.5	ug/L	08/12/1994	aal
Toluene	ND	0.5	ug/L	08/12/1994	aal
Ethylbenzene	ND	0.5	ug/L	08/12/1994	aal
Xylenes (Total)	ND	0.5	ug/L	08/12/1994	aal
Bromofluorobenzene (SURR)	101		% Rec.	08/12/1994	aal
TPH (Gas/BTXE,Liquid)					
as Gasoline	ND	0.05	mg/L	08/14/1994	lss
Benzene	ND	0.5	ug/L	08/14/1994	lss
Toluene	ND	0.5	ug/L	08/14/1994	lss
Ethylbenzene	ND	0.5	ug/L	08/14/1994	lss
Xylenes (Total)	ND	0.5	ug/L	08/14/1994	lss
Bromofluorobenzene (SURR)	86		% Rec.	08/14/1994	lss
METHOD M8015 (EXT., Liquid)					
as Diesel	ND	0.05	mg/L	08/11/1994	tdn

Ref: SHELL, 2724 Castro Valley Blvd., Castro Valley, 940804J1

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.	Units	Date Analyzed	Analyst Initials
TPH (Gas/BTXE,Liquid)										
as Gasoline	104.0	106.0	1.9	1.00	ND	1.04	1.06	mg/L	08/12/1994	aal
Benzene	94.7	95.3	0.6	33.8	ND	32.0	32.2	ug/L	08/12/1994	aal
Toluene	95.1	95.2	0.1	104.8	ND	99.7	99.8	ug/L	08/12/1994	aal
TPH (Gas/BTXE,Liquid)										
as Gasoline	83.0	83.0	0.0	1.00	0.17	1	1	mg/L	08/14/1994	lss
Benzene	99.5	103.3	3.6	39.3	2.9	42.0	43.5	ug/L	08/14/1994	lss
Toluene	102.0	102.5	0.5	83.7	ND	85.4	85.8	ug/L	08/14/1994	lss
METHOD M8015 (EXT., Liquid)										
as Diesel	110.0	95.0	14.6	2.00	0.08	2.28	1.98	mg/L	08/11/1994	tdn

Ref: SHELL, 2724 Castro Valley Blvd., Castro Valley, 940804J1

LABORATORY CONTROL SAMPLE REPORT

Parameter	LCS % Recovery	RPD	LCS Amount Found	LCS Amount Expected	Units	Date Analyzed	Analyst Initials
METHOD M8015 (EXT., Liquid) as Diesel	79.5		0.795	1.00	mg/L	08/11/1994	tdn

NET®

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. Actual reporting limits and results have been multiplied by the listed dilution factor. **Do not** multiply the reporting limits or reported values by the dilution factor.
dw	:	Result expressed as dry weight.
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 the 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., Rev. 1, December 1987.

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

Revised September, 1993
abb.93

COOLER RECEIPT FORM

Project: Shell Castro Valley, 9408471 Log No: 1782
Cooler received on: 8-6-94 and checked on 8-8-94 by I. Sorensen
(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 1.4°C

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
Note which voas (if any) had bubbles:*

Sample descriptor:	Number of vials:
T.B.	2 of 2

*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)

SHELL WELL MONITORING DATA SHEET

Project #: 940804J1	Wic # 204-1381-0407
Sampler: J.G	Date Sampled: 8/4/94
Well I.D.: MW-1	Well Diameter: (circle one) 2 3 (4) 6 ___
Total Well Depth: Before 14.70 After	Depth to Water: Before 8.74 After
Depth to Free Product:	Thickness of Free Product (feet):
Measurements referenced to: (PVC) Grade Other --	

Volume Conversion Factor (VCF):
$(22 \times (d^2/4) \times \pi)/231$
Where
22 = in./foot
d = diameter (in.)
π = 3.1416
231 = in.^{3}/gal

Well dia.	VCF
2"	= 0.16
3"	= 0.37
4"	= 0.65
6"	= 1.47
8"	= 4.08
12"	= 5.87

3.9 (1 Case Volume) x 3 (Specified Volumes) = 11.7 gallons

Purging: Bailer ☐ Middleburg ☐ Electric Submersible ☒ Suction Pump ☐ Type of Installed Pump ___

Sampling: Bailer ☒ Middleburg ☐ Electric Submersible ☐ Suction Pump ☐ Installed Pump ☐

TIME	TEMP. (F)	pH	COND.	TURBIDITY:	VOLUME REMOVED:	OBSERVATIONS:
13:12	77.8	8.2	700	>200	4	
13:14	79.2	8.3	900	>200	8	
13:16	78.2	8.4	940	>200	12	

Did Well Dewater? NO If yes, gals. Gallons Actually Evacuated: 12

Sampling Time:

Sample I.D.: MW-1 Laboratory: NET

Analyzed for: TPH-G, BTEX, TPH-D

Duplicate I.D.: Cleaning Blank I.D.:

Analyzed for:

Shipping Notations:

Additional Notations:

SHELL WELL MONITORING DATA SHEET

Project #: 940804 SI	Wic # 204-1381-0407
Sampler: J. G.	Date Sampled: 8/4/94
Well I.D.: MW-2	Well Diameter: (circle one) 2 3 (4) 6 ___
Total Well Depth: Before 12.00 After	Depth to Water: Before 9.38 After
Depth to Free Product:	Thickness of Free Product (feet):
Measurements referenced to: (PVC) Grade	Other --

Volume Conversion Factor (VCF):
$(12 \times (d^2/4) \times \pi)/231$
where
12 = in./foot
d = diameter (in.)
π = 3.1416
231 = in.³/gal.

Well dia.	VCF
2"	= 0.16
3"	= 0.37
4"	= 0.65
6"	= 1.47
8"	= 2.60
12"	= 5.87

1.7 (1 Case Volume) x 3 (Specified Volumes) = 5.1 gallons

Purging: Bailer ~~X~~ ~~X~~
Middleburg ~~X~~
Electric Submersible ☐
Suction Pump ☐
Type of Installed Pump _____

Sampling: Bailer ☑
Middleburg ☐
Electric Submersible ☐
Suction Pump ☐
Installed Pump ☐

TIME	TEMP. (F)	pH	COND.	TURBIDITY:	VOLUME REMOVED:	OBSERVATIONS:
15:45	73.2	8.0	700	>200	2	
15:48	73.0	7.8	600	>200	4	
15:51	72.0	7.8	640	>200	5.5	

Did Well Dewater? NO If yes, gals. Gallons Actually Evacuated: 5.5

Sampling Time: 16:00

Sample I.D.: MW-2 Laboratory: NET

Analyzed for: TPH-G, BTEX, TPH-D

Duplicate I.D.: DUP Cleaning Blank I.D.:

Analyzed for: TPH-G, BTEX, TPH-D

Shipping Notations:

Additional Notations:

SHELL WELL MONITORING DATA SHEET

Project #: 940804 J1	Wic # 204-1381-0407
Sampler: J.G.	Date Sampled: 8/4/94
Well I.D.: MW-3	Well Diameter: (circle one) 2 3 (4) 6 ___
Total Well Depth: Before 25,42 After	Depth to Water: Before 9,62 After
Depth to Free Product:	Thickness of Free Product (feet):
Measurements referenced to: (PVC) Grade	Other --

Volume Conversion Factor (VCF):

$(12 \times (d^2/4) \times \pi)/231$

where

12 = in/foot
d = diameter (in.)
π = 3.1416
231 = in3/gal

Well dia.	VCF
2"	0.16
3"	0.37
4"	0.65
6"	1.47
10"	4.08
12"	5.87

10.3 (1 Case Volume) x 3 (Specified Volumes) = 30.9 gallons

Purging: Bailer ☐ Middleburg ☐ Electric Submersible ☒ Suction Pump ☐ Type of Installed Pump ___

Sampling: Bailer ☒ Middleburg ☐ Electric Submersible ☐ Suction Pump ☐ Installed Pump ☐

TIME	TEMP. (F)	pH	COND.	TURBIDITY:	VOLUME REMOVED:	OBSERVATIONS:
14:28	75.2	7.4	2200	88	10.5	
14:30	73.2	7.8	2300	75	21	
14:33	72.4	7.4	3000	135	32	

Did Well Dewater? NO If yes, gals. Gallons Actually Evacuated: 32

Sampling Time: 2:45

Sample I.D.: MW-3 Laboratory: NET

Analyzed for: ~~TPH-G~~, BTEX, TPH-D

Duplicate I.D.: Cleaning Blank I.D.:

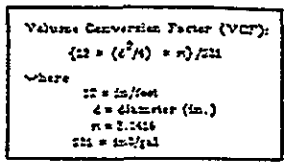
Analyzed for:

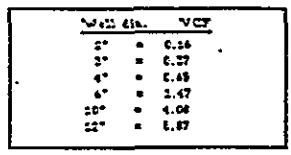
Shipping Notations:

Additional Notations:

SHELL WELL MONITORING DATA SHEET

Project #: 940804 31	Wic # 204-1381-0407
Sampler: J.G.	Date Sampled: 8/4/94
Well I.D.: MW-5	Well Diameter: (circle one) 2 3 (4) 6 ___
Total Well Depth: Before 22.08 After	Depth to Water: Before 9.29 After
Depth to Free Product:	Thickness of Free Product (feet):
Measurements referenced to: (PVC) Grade Other --	





8.4	x	3	=	25.2
1 Case Volume		Specified Volumes		gallons

Purging: Bailer ☐ Middleburg ☐ Electric Submersible ☒ Suction Pump ☐ Type of Installed Pump ___

Sampling: Bailer ☒ Middleburg ☐ Electric Submersible ☐ Suction Pump ☐ Installed Pump ☐

TIME	TEMP. (F)	pH	COND.	TURBIDITY:	VOLUME REMOVED:	OBSERVATIONS:
13:52	75.6	7.6	1000	>200	8.5	
13:55	72.0	7.6	1000	>200	17	
13:57	75.4	7.8	1000	>200	27	

Did Well Dewater? NO If yes, gals. Gallons Actually Evacuated: 27

Sampling Time: 14:00

Sample I.D.: MW-5 Laboratory: NET

Analyzed for: ~~TPH-G~~ BTEX ~~TPH-D~~

Duplicate I.D.: Cleaning Blank I.D.:

Analyzed for:

Shipping Notations:

Additional Notations:

SHELL WELL MONITORING DATA SHEET

Project #: 940804J1	Wic # 204-1381-0407
Sampler: J.G.	Date Sampled: 8/4/94
Well I.D.: MW-7	Well Diameter: (circle one) 2 3 4 6 ___
Total Well Depth: Before 16.00 After	Depth to Water: Before 8.68 After
Depth to Free Product:	Thickness of Free Product (feet):
Measurements referenced to: (PVC) Grade Other --	

Volume Conversion Factor (VCF):
(22 = (d²/4) = π)/231
Where
22 = in./foot
d = diameter (in.)
π = 3.1416
231 = in.³/gal

Well dia.	VCF
2"	0.16
3"	0.37
4"	0.65
6"	1.47
10"	4.08
12"	5.87

1.2	x	3	3.6
1 Case Volume		Specified Volumes	= gallons

Purging: Bailer ☒
Middleburg ☐
Electric Submersible ☐
Suction Pump ☐
Type of Installed Pump _____

Sampling: Bailer ☒
Middleburg ☐
Electric Submersible ☐
Suction Pump ☐
Installed Pump ☐

TIME	TEMP. (F)	pH	COND.	TURBIDITY:	VOLUME REMOVED:	OBSERVATIONS:
14:59	69.2	7.8	1000	>200	1.5	
15:02	68.4	7.9	1000	>200	3	
15:05	68.8	7.8	900	>200	4	

Did Well Dewater? No If yes, gals. Gallons Actually Evacuated: 4

Sampling Time: 15:11

Sample I.D.: MW-7 Laboratory: NET

Analyzed for: TPH-G, BTEX, TPH-D

Duplicate I.D.: Cleaning Blank I.D.:

Analyzed for:

Shipping Notations:

Additional Notations:

SHELL WELL MONITORING DATA SHEET

Project #: 940804 J1	Wic # 204-1381-0407
Sampler: J.G.	Date Sampled: 8/4/94
Well I.D.: OMW-6	Well Diameter: (circle one) 2 3 (4) 6 ___
Total Well Depth: Before 22.05 After	Depth to Water: Before 8.56 After
Depth to Free Product:	Thickness of Free Product (feet):
Measurements referenced to: (PVC)	Grade Other --

Volume Conversion Factor (VCF):
$(12 \times (d^2/4) \times \pi)/231$
where
12 = in/foot
d = diameter (in.)
π = 3.1416
231 = in3/gal

Well dia.	VCF
2"	= 0.16
3"	= 0.37
4"	= 0.65
6"	= 1.47
10"	= 4.08
12"	= 5.87

8.8	x	3	=	26.4
1 Case Volume		Specified Volumes		gallons

Purging: Bailer ☐ Middleburg ☐ Electric Submersible ☒ Suction Pump ☐ Type of Installed Pump _____

Sampling: Bailer ☒ Middleburg ☐ Electric Submersible ☐ Suction Pump ☐ Installed Pump ☐

TIME	TEMP. (F)	pH	COND.	TURBIDITY:	VOLUME REMOVED:	OBSERVATIONS:
10:07	72.4	7.1	2800	13.5	9	
10:11	72.4	7.0	2600	8.6	18	
10:15	72.0	7.0	3000	12.6	27	

Did Well Dewater? NO If yes, gals. Gallons Actually Evacuated: 27

Sampling Time: 10:25

Sample I.D.: OMW-6 Laboratory: NET

Analyzed for: TPH-G, BTEX, TPH-D

Duplicate I.D.: Cleaning Blank I.D.:

Analyzed for:

Shipping Notations:

Additional Notations:

SHELL WELL MONITORING DATA SHEET

Project #: 94080401	Wic # 204-1381-0407
Sampler: J.G.	Date Sampled: 8/4/94
Well I.D.: OMW-8	Well Diameter: (circle one) 2 3 (4) 6 ___
Total Well Depth: Before 19.45 After	Depth to Water: Before 8.72 After
Depth to Free Product:	Thickness of Free Product (feet):
Measurements referenced to: (PVC) Grade Other --	

Volume Conversion Factor (VCF):

$(12 \times (d^2/4) \times \pi)/231$

where

12 = in./foot
d = diameter (in.)
π = 3.1416
231 = in.³/gal

Well dia.	VCF
2"	= 0.16
3"	= 0.37
4"	= 0.65
6"	= 1.47
10"	= 4.08
12"	= 5.87

1 Case Volume		Specified Volumes		gallons
7.0	x	3	=	21.

Purging: Bailer ☐ Middleburg ☒ Electric Submersible ☐ Suction Pump ☐ Type of Installed Pump ___

Sampling: Bailer ☒ Middleburg ☐ Electric Submersible ☐ Suction Pump ☐ Installed Pump ☐

TIME	TEMP. (F)	pH	COND.	TURBIDITY:	VOLUME REMOVED:	OBSERVATIONS:
11:02	74.6	7.3	2000	19.0	8	
11:05	73.6	7.4	1600	28.4	16	
11:07	70.0	7.3	1600	34.1	24	

Did Well Dewater? NO If yes, gals. Gallons Actually Evacuated: 24

Sampling Time: 11:15

Sample I.D.: OMW-8 Laboratory: NET

Analyzed for: ~~TPH-G~~, BTEX, ~~TPH-D~~

Duplicate I.D.: Cleaning Blank I.D.:

Analyzed for:

Shipping Notations:

Additional Notations:

SHELL WELL MONITORING DATA SHEET

Project #: 940804J1	Wic # 204-1381-0407
Sampler: J.G.	Date Sampled: 8/4/94
Well I.D.: OMW-9	Well Diameter: (circle one) 2 (3) 4 6 ___
Total Well Depth: Before 13.88 After	Depth to Water: Before 9.92 After
Depth to Free Product:	Thickness of Free Product (feet):
Measurements referenced to: (PVC) Grade Other --	

Volume Conversion Factor (VCF):
$(12 \times (d^2/4) \times \pi)/231$
where
12 = in./foot
d = diameter (in.)
π = 3.1416
231 = in.³/gal.

Well dia.	VCF
2"	0.16
3"	0.37
4"	0.65
6"	1.47
10"	4.08
12"	5.87

1.5 (1 Case Volume) x 3 (Specified Volumes) = 4.5 gallons

Purging: Bailer (X)
Middleburg ☐
Electric Submersible ☐
Suction Pump ☐
Type of Installed Pump _____

Sampling: Bailer (X)
Middleburg ☐
Electric Submersible ☐
Suction Pump ☐
Installed Pump ☐

TIME	TEMP. (F)	pH	COND.	TURBIDITY:	VOLUME REMOVED:	OBSERVATIONS:
12:34	72.4	8.4	700	>200	2	
12:37	72.6	8.4	650	>200	4	
12:40	72.4	8.2	680	>200	6	

Did Well Dewater? NO If yes, gals. Gallons Actually Evacuated: 6

Sampling Time: 12:47

Sample I.D.: OMW-9 Laboratory: NET

Analyzed for: TPH-G, BTEX, TPH-D

Duplicate I.D.: Cleaning Blank I.D.:

Analyzed for:

Shipping Notations:

Additional Notations: