Weiss Associates

FROM: 6-13-95 report

ATTACHMENT A

BLAINE TECH SERVICES GROUND WATER MONITORING REPORT

BLAINE
TECH SERVICES INC.

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

April 13, 1995

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

Attn: Daniel T. Kirk

SITE:
Shell WIC #204-6852-1404
1784 150th Avenue
San Leandro, California

QUARTER:
1st quarter of 1995

QUARTERLY GROUNDWATER SAMPLING REPORT 950228-K-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 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

ecovered 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: Grady Glasser

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	2/28/95	TOC	–	NONE	–	–	20.90	44.10
MW-2 *	2/28/95	TOC	ODOR	NONE	–	–	17.51	43.85
MW-3	2/28/95	TOC	ODOR	NONE	–	–	23.45	41.06

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

5789

SHELL OIL COMPANY
RETAIL ENVIRONMENTAL ENGINEERING - WEST

CHAIN OF CUSTODY RECORD
Serial No: 950228-K3

Date: 2/28/95
Page 1 of 1

Site Address: 1784 150th Avenue, San Leandro

WIC#: 204-6852-1404

Shell Engineer: Dan Kirk — Phone No.: (510) 675-6188 Fax #: 675-6160

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

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

Comments:

Sampled by: KCB

Printed Name: Keith Brown

LAB: Vet

Analysis Required

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	VOC's (8010)	Asbestos	Container Size	Preparation Used	Composite Y/N	MATERIAL DESCRIPTION	SAMPLE CONDITION/ COMMENTS
MW1	2/28			W		6						X	X						
MW2												X	X						
MW3												X	X						
DUP												X	X						
EB												X	X						
TB						2						X							

CHECK ONE (1) BOX ONLY — CT/DT — TURN AROUND TIME

- Quarterly Monitoring XX — 6441
- Site Investigation — 6441
- Soil Closure/Disposal — 6442
- Water Closure/Disposal — 6443
- Soil/Air Rem. or Sys. O & M — 6452
- Water Rem. or Sys. O & M — 6453
- 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.

(3/1/95 GPL) Seal intact J.L.

Relinquished By (signature)	Printed Name	Date	Time	Received (signature)	Printed Name	Date	Time
Keith Brown	Keith Brown	3/1	11:00	[illegible]	G P Lemore	3/1	1100
G P Lemore	G P Lemore	3/1	1610	J. LeBaudour	J. LeBaudour	3/2/95	0700

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

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: 03/27/1995
NET Client Acct. No: 1821
NET Pacific Job No: 95.00968
Received: 03/02/1995

Client Reference Information

SHELL, 1784 150th Avenue, San Leandro, Job No. 950228-K3

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:

Thomas F. Cullen, Jr.
Division Manager

Linda DeMartino
Project Coordinator

Enclosure(s)

Ref: SHELL, 1784 150th Avenue, San Leandro, Job No. 950228-K3

SAMPLE DESCRIPTION: MW1
Date Taken: 02/28/1995
Time Taken:
NET Sample No: 237250

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed	Run Batch No.
TPH (Gas/BTXE,Liquid)								
METHOD 5030/M8015	--						03/08/1995	2659
DILUTION FACTOR*	1						03/08/1995	2659
as Gasoline	500		50	ug/L	5030		03/08/1995	2659
Carbon Range:	C5-C12						03/08/1995	2659
METHOD 8020 (GC,Liquid)	--						03/08/1995	2659
Benzene	59	FB	0.5	ug/L	8020		03/09/1995	2663
Toluene	32		0.5	ug/L	8020		03/08/1995	2659
Ethylbenzene	6.8		0.5	ug/L	8020		03/08/1995	2659
Xylenes (Total)	68		0.5	ug/L	8020		03/08/1995	2659
SURROGATE RESULTS	--						03/08/1995	2659
Bromofluorobenzene (SURR)	102			% Rec.	5030		03/08/1995	2659

FB : Compound quantitated at a 5X dilution factor.

Ref: SHELL, 1784 150th Avenue, San Leandro, Job No. 950228-K3

SAMPLE DESCRIPTION: MW1
Date Taken: 02/28/1995
Time Taken:
NET Sample No: 237250

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed	Run Batch No.
METHOD 8010 (GC,Liquid)								
DILUTION FACTOR*	1						03/03/1995	817
Bromodichloromethane	ND		0.4	ug/L	8010		03/03/1995	817
Bromoform	ND		0.4	ug/L	8010		03/03/1995	817
Bromomethane	ND		0.4	ug/L	8010		03/03/1995	817
Carbon tetrachloride	ND		0.4	ug/L	8010		03/03/1995	817
Chlorobenzene	ND		0.4	ug/L	8010		03/03/1995	817
Chloroethane	ND		0.4	ug/L	8010		03/03/1995	817
2-Chloroethylvinyl ether	ND		1.0	ug/L	8010		03/03/1995	817
Chloroform	ND		0.4	ug/L	8010		03/03/1995	817
Chloromethane	ND		0.4	ug/L	8010		03/03/1995	817
Dibromochloromethane	ND		0.4	ug/L	8010		03/03/1995	817
1,2-Dichlorobenzene	ND		0.4	ug/L	8010		03/03/1995	817
1,3-Dichlorobenzene	ND		0.4	ug/L	8010		03/03/1995	817
1,4-Dichlorobenzene	ND		0.4	ug/L	8010		03/03/1995	817
Dichlorodifluoromethane	ND		0.4	ug/L	8010		03/03/1995	817
1,1-Dichloroethane	ND		0.4	ug/L	8010		03/03/1995	817
1,2-Dichloroethane	5.0		0.4	ug/L	8010		03/03/1995	817
1,1-Dichloroethene	ND		0.4	ug/L	8010		03/03/1995	817
trans-1,2-Dichloroethene	ND		0.4	ug/L	8010		03/03/1995	817
1,2-Dichloropropane	ND		0.4	ug/L	8010		03/03/1995	817
cis-1,3-Dichloropropene	ND		0.4	ug/L	8010		03/03/1995	817
trans-1,3-Dichloropropene	ND		0.4	ug/L	8010		03/03/1995	817
Methylene chloride	ND		10	ug/L	8010		03/03/1995	817
1,1,2,2-Tetrachloroethane	ND		0.4	ug/L	8010		03/03/1995	817
Tetrachloroethene	ND		0.4	ug/L	8010		03/03/1995	817
1,1,1-Trichloroethane	ND		0.4	ug/L	8010		03/03/1995	817
1,1,2-Trichloroethane	ND		1	ug/L	8010		03/03/1995	817
Trichloroethene	ND		0.4	ug/L	8010		03/03/1995	817
Trichlorofluoromethane	ND		0.4	ug/L	8010		03/03/1995	817
Vinyl chloride	ND		0.4	ug/L	8010		03/03/1995	817
SURROGATE RESULTS	--						03/03/1995	817
1,4-Difluorobenzene (SURR)	102			% Rec.			03/03/1995	817
1,4-Dichlorobutane (SURR)	100			% Rec.			03/03/1995	817
Bromochloromethane (SURR)	NA			% Rec.			03/03/1995	817

Ref: SHELL, 1784 150th Avenue, San Leandro, Job No. 950228-K3

SAMPLE DESCRIPTION: MW2
Date Taken: 02/28/1995
Time Taken:
NET Sample No: 237251

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed	Run Batch No.
TPH (Gas/BTXE,Liquid)								
METHOD 5030/M8015	--						03/09/1995	2663
DILUTION FACTOR*	1,000						03/09/1995	2663
as Gasoline	100,000		50,000	ug/L	5030		03/09/1995	2663
Carbon Range:	C5-C12						03/09/1995	2663
METHOD 8020 (GC,Liquid)	--						03/09/1995	2663
Benzene	24,000		500	ug/L	8020		03/09/1995	2663
Toluene	18,000		500	ug/L	8020		03/09/1995	2663
Ethylbenzene	2,300		500	ug/L	8020		03/09/1995	2663
Xylenes (Total)	17,000		500	ug/L	8020		03/09/1995	2663
SURROGATE RESULTS	--						03/09/1995	2663
Bromofluorobenzene (SURR)	95			% Rec.	5030		03/09/1995	2663

Ref: SHELL, 1784 150th Avenue, San Leandro, Job No. 950228-K3

SAMPLE DESCRIPTION: MW2
Date Taken: 02/28/1995
Time Taken:
NET Sample No: 237251

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed	Run Batch No.
METHOD 8010 (GC,Liquid)								
DILUTION FACTOR*	1						03/02/1995	817
Bromodichloromethane	ND		0.4	ug/L	8010		03/02/1995	817
Bromoform	ND		0.4	ug/L	8010		03/02/1995	817
Bromomethane	ND		0.4	ug/L	8010		03/02/1995	817
Carbon tetrachloride	ND		0.4	ug/L	8010		03/02/1995	817
Chlorobenzene	ND		0.4	ug/L	8010		03/02/1995	817
Chloroethane	ND		0.4	ug/L	8010		03/02/1995	817
2-Chloroethylvinyl ether	ND		1.0	ug/L	8010		03/02/1995	817
Chloroform	ND		0.4	ug/L	8010		03/02/1995	817
Chloromethane	ND		0.4	ug/L	8010		03/02/1995	817
Dibromochloromethane	ND		0.4	ug/L	8010		03/02/1995	817
1,2-Dichlorobenzene	ND		0.4	ug/L	8010		03/02/1995	817
1,3-Dichlorobenzene	ND		0.4	ug/L	8010		03/02/1995	817
1,4-Dichlorobenzene	ND		0.4	ug/L	8010		03/02/1995	817
Dichlorodifluoromethane	ND		0.4	ug/L	8010		03/02/1995	817
1,1-Dichloroethane	ND		0.4	ug/L	8010		03/02/1995	817
1,2-Dichloroethane	ND		0.4	ug/L	8010		03/02/1995	817
1,1-Dichloroethene	ND		0.4	ug/L	8010		03/02/1995	817
trans-1,2-Dichloroethene	ND		0.4	ug/L	8010		03/02/1995	817
1,2-Dichloropropane	ND		0.4	ug/L	8010		03/02/1995	817
cis-1,3-Dichloropropene	ND		0.4	ug/L	8010		03/02/1995	817
trans-1,3-Dichloropropene	ND		0.4	ug/L	8010		03/02/1995	817
Methylene chloride	ND		10	ug/L	8010		03/02/1995	817
1,1,2,2-Tetrachloroethane	ND		0.4	ug/L	8010		03/02/1995	817
Tetrachloroethene	ND		0.4	ug/L	8010		03/02/1995	817
1,1,1-Trichloroethane	ND		0.4	ug/L	8010		03/02/1995	817
1,1,2-Trichloroethane	ND		1	ug/L	8010		03/02/1995	817
Trichloroethene	ND		0.4	ug/L	8010		03/02/1995	817
Trichlorofluoromethane	ND		0.4	ug/L	8010		03/02/1995	817
Vinyl chloride	ND		0.4	ug/L	8010		03/02/1995	817
SURROGATE RESULTS	--						03/02/1995	817
1,4-Difluorobenzene (SURR)	79			% Rec.			03/02/1995	817
1,4-Dichlorobutane (SURR)	106			% Rec.			03/02/1995	817
Bromochloromethane (SURR)	NA			% Rec.			03/02/1995	817

Ref: SHELL, 1784 150th Avenue, San Leandro, Job No. 950228-K3

SAMPLE DESCRIPTION: MW3
Date Taken: 02/28/1995
Time Taken:
NET Sample No: 237252

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed	Run Batch No.
TPH (Gas/BTXE,Liquid)								
METHOD 5030/M8015	--						03/08/1995	2659
DILUTION FACTOR*	1						03/08/1995	2659
as Gasoline	4,000		50	ug/L	5030		03/08/1995	2659
Carbon Range:	C5-C14						03/08/1995	2659
METHOD 8020 (GC,Liquid)	--						03/08/1995	2659
Benzene	58	FA	0.5	ug/L	8020		03/09/1995	2663
Toluene	ND		0.5	ug/L	8020		03/08/1995	2659
Ethylbenzene	7.1		0.5	ug/L	8020		03/08/1995	2659
Xylenes (Total)	3.5		0.5	ug/L	8020		03/08/1995	2659
SURROGATE RESULTS	--						03/08/1995	2659
Bromofluorobenzene (SURR)	128			% Rec.	5030		03/08/1995	2659

FA : Compound quantitated at a 2X dilution factor.

Ref: SHELL, 1784 150th Avenue, San Leandro, Job No. 950228-K3

SAMPLE DESCRIPTION: MW3
Date Taken: 02/28/1995
Time Taken:
NET Sample No: 237252

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed	Run Batch No.
METHOD 8010 (GC,Liquid)								
DILUTION FACTOR*	1						03/02/1995	817
Bromodichloromethane	ND		0.4	ug/L	8010		03/02/1995	817
Bromoform	ND		0.4	ug/L	8010		03/02/1995	817
Bromomethane	ND		0.4	ug/L	8010		03/02/1995	817
Carbon tetrachloride	ND		0.4	ug/L	8010		03/02/1995	817
Chlorobenzene	ND		0.4	ug/L	8010		03/02/1995	817
Chloroethane	ND		0.4	ug/L	8010		03/02/1995	817
2-Chloroethylvinyl ether	ND		1.0	ug/L	8010		03/02/1995	817
Chloroform	ND		0.4	ug/L	8010		03/02/1995	817
Chloromethane	ND		0.4	ug/L	8010		03/02/1995	817
Dibromochloromethane	ND		0.4	ug/L	8010		03/02/1995	817
1,2-Dichlorobenzene	ND		0.4	ug/L	8010		03/02/1995	817
1,3-Dichlorobenzene	ND		0.4	ug/L	8010		03/02/1995	817
1,4-Dichlorobenzene	ND		0.4	ug/L	8010		03/02/1995	817
Dichlorodifluoromethane	ND		0.4	ug/L	8010		03/02/1995	817
1,1-Dichloroethane	ND		0.4	ug/L	8010		03/02/1995	817
1,2-Dichloroethane	18		0.4	ug/L	8010		03/02/1995	817
1,1-Dichloroethene	ND		0.4	ug/L	8010		03/02/1995	817
trans-1,2-Dichloroethene	ND		0.4	ug/L	8010		03/02/1995	817
1,2-Dichloropropane	ND		0.4	ug/L	8010		03/02/1995	817
cis-1,3-Dichloropropene	ND		0.4	ug/L	8010		03/02/1995	817
trans-1,3-Dichloropropene	ND		0.4	ug/L	8010		03/02/1995	817
Methylene chloride	ND		10	ug/L	8010		03/02/1995	817
1,1,2,2-Tetrachloroethane	ND		0.4	ug/L	8010		03/02/1995	817
Tetrachloroethene	ND		0.4	ug/L	8010		03/02/1995	817
1,1,1-Trichloroethane	ND		0.4	ug/L	8010		03/02/1995	817
1,1,2-Trichloroethane	ND		1	ug/L	8010		03/02/1995	817
Trichloroethene	ND		0.4	ug/L	8010		03/02/1995	817
Trichlorofluoromethane	ND		0.4	ug/L	8010		03/02/1995	817
Vinyl chloride	ND		0.4	ug/L	8010		03/02/1995	817
SURROGATE RESULTS	--						03/02/1995	817
1,4-Difluorobenzene (SURR)	80			% Rec.			03/02/1995	817
1,4-Dichlorobutane (SURR)	98			% Rec.			03/02/1995	817
Bromochloromethane (SURR)	NA			% Rec.			03/02/1995	817

Ref: SHELL, 1784 150th Avenue, San Leandro, Job No. 950228-K3

SAMPLE DESCRIPTION: DUP
Date Taken: 02/28/1995
Time Taken:
NET Sample No: 237253

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed	Run Batch No.
TPH (Gas/BTXE,Liquid)								
METHOD 5030/M8015	--						03/09/1995	2663
DILUTION FACTOR*	1,000						03/09/1995	2663
as Gasoline	100,000		50,000	ug/L	5030		03/09/1995	2663
Carbon Range:	C5-C12						03/09/1995	2663
METHOD 8020 (GC,Liquid)	--						03/09/1995	2663
Benzene	31,000		500	ug/L	8020		03/09/1995	2663
Toluene	21,000		500	ug/L	8020		03/09/1995	2663
Ethylbenzene	3,200		500	ug/L	8020		03/09/1995	2663
Xylenes (Total)	18,000		500	ug/L	8020		03/09/1995	2663
SURROGATE RESULTS	--						03/09/1995	2663
Bromofluorobenzene (SURR)	99			% Rec.	5030		03/09/1995	2663

Ref: SHELL, 1784 150th Avenue, San Leandro, Job No. 950228-K3

SAMPLE DESCRIPTION: DUP
Date Taken: 02/28/1995
Time Taken:
NET Sample No: 237253

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed	Run Batch No.
METHOD 8010 (GC,Liquid)								
DILUTION FACTOR*	1						03/02/1995	817
Bromodichloromethane	ND		0.4	ug/L	8010		03/02/1995	817
Bromoform	ND		0.4	ug/L	8010		03/02/1995	817
Bromomethane	ND		0.4	ug/L	8010		03/02/1995	817
Carbon tetrachloride	ND		0.4	ug/L	8010		03/02/1995	817
Chlorobenzene	ND		0.4	ug/L	8010		03/02/1995	817
Chloroethane	ND		0.4	ug/L	8010		03/02/1995	817
2-Chloroethylvinyl ether	ND		1.0	ug/L	8010		03/02/1995	817
Chloroform	ND		0.4	ug/L	8010		03/02/1995	817
Chloromethane	ND		0.4	ug/L	8010		03/02/1995	817
Dibromochloromethane	ND		0.4	ug/L	8010		03/02/1995	817
1,2-Dichlorobenzene	ND		0.4	ug/L	8010		03/02/1995	817
1,3-Dichlorobenzene	ND		0.4	ug/L	8010		03/02/1995	817
1,4-Dichlorobenzene	ND		0.4	ug/L	8010		03/02/1995	817
Dichlorodifluoromethane	ND		0.4	ug/L	8010		03/02/1995	817
1,1-Dichloroethane	ND		0.4	ug/L	8010		03/02/1995	817
1,2-Dichloroethane	ND		0.4	ug/L	8010		03/02/1995	817
1,1-Dichloroethene	ND		0.4	ug/L	8010		03/02/1995	817
trans-1,2-Dichloroethene	ND		0.4	ug/L	8010		03/02/1995	817
1,2-Dichloropropane	ND		0.4	ug/L	8010		03/02/1995	817
cis-1,3-Dichloropropene	ND		0.4	ug/L	8010		03/02/1995	817
trans-1,3-Dichloropropene	ND		0.4	ug/L	8010		03/02/1995	817
Methylene chloride	ND		10	ug/L	8010		03/02/1995	817
1,1,2,2-Tetrachloroethane	ND		0.4	ug/L	8010		03/02/1995	817
Tetrachloroethene	ND		0.4	ug/L	8010		03/02/1995	817
1,1,1-Trichloroethane	ND		0.4	ug/L	8010		03/02/1995	817
1,1,2-Trichloroethane	ND		1	ug/L	8010		03/02/1995	817
Trichloroethene	ND		0.4	ug/L	8010		03/02/1995	817
Trichlorofluoromethane	ND		0.4	ug/L	8010		03/02/1995	817
Vinyl chloride	ND		0.4	ug/L	8010		03/02/1995	817
SURROGATE RESULTS	--						03/02/1995	817
1,4-Difluorobenzene (SURR)	84			% Rec.			03/02/1995	817
1,4-Dichlorobutane (SURR)	105			% Rec.			03/02/1995	817
Bromochloromethane (SURR)	NA			% Rec.			03/02/1995	817

Ref: SHELL, 1784 150th Avenue, San Leandro, Job No. 950228-K3

SAMPLE DESCRIPTION: EB
Date Taken: 02/28/1995
Time Taken:
NET Sample No: 237254

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed	Run Batch No.
TPH (Gas/BTXE,Liquid)								
METHOD 5030/M8015	--						03/08/1995	2659
DILUTION FACTOR*	1						03/08/1995	2659
as Gasoline	ND		50	ug/L	5030		03/08/1995	2659
Carbon Range:	--						03/08/1995	2659
METHOD 8020 (GC,Liquid)	--						03/08/1995	2659
Benzene	ND		0.5	ug/L	8020		03/08/1995	2659
Toluene	ND		0.5	ug/L	8020		03/08/1995	2659
Ethylbenzene	ND		0.5	ug/L	8020		03/08/1995	2659
Xylenes (Total)	ND		0.5	ug/L	8020		03/08/1995	2659
SURROGATE RESULTS	--						03/08/1995	2659
Bromofluorobenzene (SURR)	94			% Rec.	5030		03/08/1995	2659

Ref: SHELL, 1784 150th Avenue, San Leandro, Job No. 950228-K3

SAMPLE DESCRIPTION: EB
Date Taken: 02/28/1995
Time Taken:
NET Sample No: 237254

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed	Run Batch No.
METHOD 8010 (GC,Liquid)								
DILUTION FACTOR*	1						03/02/1995	817
Bromodichloromethane	ND		0.4	ug/L	8010		03/02/1995	817
Bromoform	ND		0.4	ug/L	8010		03/02/1995	817
Bromomethane	ND		0.4	ug/L	8010		03/02/1995	817
Carbon tetrachloride	ND		0.4	ug/L	8010		03/02/1995	817
Chlorobenzene	ND		0.4	ug/L	8010		03/02/1995	817
Chloroethane	ND		0.4	ug/L	8010		03/02/1995	817
2-Chloroethylvinyl ether	ND		1.0	ug/L	8010		03/02/1995	817
Chloroform	ND		0.4	ug/L	8010		03/02/1995	817
Chloromethane	ND		0.4	ug/L	8010		03/02/1995	817
Dibromochloromethane	ND		0.4	ug/L	8010		03/02/1995	817
1,2-Dichlorobenzene	ND		0.4	ug/L	8010		03/02/1995	817
1,3-Dichlorobenzene	ND		0.4	ug/L	8010		03/02/1995	817
1,4-Dichlorobenzene	ND		0.4	ug/L	8010		03/02/1995	817
Dichlorodifluoromethane	ND		0.4	ug/L	8010		03/02/1995	817
1,1-Dichloroethane	ND		0.4	ug/L	8010		03/02/1995	817
1,2-Dichloroethane	ND		0.4	ug/L	8010		03/02/1995	817
1,1-Dichloroethene	ND		0.4	ug/L	8010		03/02/1995	817
trans-1,2-Dichloroethene	ND		0.4	ug/L	8010		03/02/1995	817
1,2-Dichloropropane	ND		0.4	ug/L	8010		03/02/1995	817
cis-1,3-Dichloropropene	ND		0.4	ug/L	8010		03/02/1995	817
trans-1,3-Dichloropropene	ND		0.4	ug/L	8010		03/02/1995	817
Methylene chloride	ND		10	ug/L	8010		03/02/1995	817
1,1,2,2-Tetrachloroethane	ND		0.4	ug/L	8010		03/02/1995	817
Tetrachloroethene	ND		0.4	ug/L	8010		03/02/1995	817
1,1,1-Trichloroethane	ND		0.4	ug/L	8010		03/02/1995	817
1,1,2-Trichloroethane	ND		1	ug/L	8010		03/02/1995	817
Trichloroethene	ND		0.4	ug/L	8010		03/02/1995	817
Trichlorofluoromethane	ND		0.4	ug/L	8010		03/02/1995	817
Vinyl chloride	ND		0.4	ug/L	8010		03/02/1995	817
SURROGATE RESULTS	--						03/02/1995	817
1,4-Difluorobenzene (SURR)	85			% Rec.			03/02/1995	817
1,4-Dichlorobutane (SURR)	90			% Rec.			03/02/1995	817
Bromochloromethane (SURR)	NA			% Rec.			03/02/1995	817

Ref: SHELL, 1784 150th Avenue, San Leandro, Job No. 950228-K3

SAMPLE DESCRIPTION: TB
Date Taken: 02/28/1995
Time Taken:
NET Sample No: 237255

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed	Run Batch No.
TPH (Gas/BTXE,Liquid)								
METHOD 5030/M8015	--						03/09/1995	2663
DILUTION FACTOR*	1						03/09/1995	2663
as Gasoline	ND		50	ug/L	5030		03/09/1995	2663
Carbon Range:	--						03/09/1995	2663
METHOD 8020 (GC,Liquid)	--						03/09/1995	2663
Benzene	ND		0.5	ug/L	8020		03/09/1995	2663
Toluene	ND		0.5	ug/L	8020		03/09/1995	2663
Ethylbenzene	ND		0.5	ug/L	8020		03/09/1995	2663
Xylenes (Total)	ND		0.5	ug/L	8020		03/09/1995	2663
SURROGATE RESULTS	--						03/09/1995	2663
Bromofluorobenzene (SURR)	94			% Rec.	5030		03/09/1995	2663

Client Name: Blaine Tech Services
Client Acct: 1821
NET Job No: 95.00968

Date: 03/27/1995
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Ref: SHELL, 1784 150th Avenue, San Leandro, Job No. 950228-K3

CONTINUING CALIBRATION VERIFICATION STANDARD REPORT

Parameter	CCV Standard % Recovery	CCV Standard Amount Found	CCV Standard Amount Expected	Units	Date Analyzed	Analyst Initials	Run Batch Number
TPH (Gas/BTXE,Liquid)							
as Gasoline	93.0	0.93	1.00	mg/L	03/08/1995	tts	2659
Benzene	105.0	5.25	5.00	ug/L	03/08/1995	tts	2659
Toluene	107.4	5.37	5.00	ug/L	03/08/1995	tts	2659
Ethylbenzene	93.4	4.67	5.00	ug/L	03/08/1995	tts	2659
Xylenes (Total)	111.3	16.7	15.0	ug/L	03/08/1995	tts	2659
Bromofluorobenzene (SURR)	100.0	100	100	% Rec.	03/08/1995	tts	2659
TPH (Gas/BTXE,Liquid)							
as Gasoline	109.0	1.09	1.00	mg/L	03/09/1995	lss	2663
Benzene	87.6	4.38	5.00	ug/L	03/09/1995	lss	2663
Toluene	94.0	4.70	5.00	ug/L	03/09/1995	lss	2663
Ethylbenzene	85.0	4.25	5.00	ug/L	03/09/1995	lss	2663
Xylenes (Total)	101.3	15.2	15.0	ug/L	03/09/1995	lss	2663
Bromofluorobenzene (SURR)	99.0	99	100	% Rec.	03/09/1995	lss	2663

Ref: SHELL, 1784 150th Avenue, San Leandro, Job No. 950228-K3

CONTINUING CALIBRATION VERIFICATION STANDARD REPORT

Parameter	CCV Standard % Recovery	CCV Standard Amount Found	CCV Standard Amount Expected	Units	Date Analyzed	Analyst Initials	Run Batch Number
METHOD 8010 (GC,Liquid)							
Bromodichloromethane	91.5	18.3	20.0	ug/L	03/02/1995	ltg	817
Bromoform	114.0	22.8	20.0	ug/L	03/02/1995	ltg	817
Bromomethane	92.0	18.4	20.0	ug/L	03/02/1995	ltg	817
Carbon tetrachloride	87.0	17.4	20.0	ug/L	03/02/1995	ltg	817
Chlorobenzene	100.0	20.0	20.0	ug/L	03/02/1995	ltg	817
Chloroethane	88.5	17.7	20.0	ug/L	03/02/1995	ltg	817
2-Chloroethylvinyl ether	98.0	19.6	20.0	ug/L	03/02/1995	ltg	817
Chloroform	90.0	18.0	20.0	ug/L	03/02/1995	ltg	817
Chloromethane	85.0	17.0	20.0	ug/L	03/02/1995	ltg	817
Dibromochloromethane	100.0	20.0	20.0	ug/L	03/02/1995	ltg	817
1,2-Dichlorobenzene	98.0	19.6	20.0	ug/L	03/02/1995	ltg	817
1,3-Dichlorobenzene	89.0	17.8	20.0	ug/L	03/02/1995	ltg	817
1,4-Dichlorobenzene	95.5	19.1	20.0	ug/L	03/02/1995	ltg	817
Dichlorodifluoromethane	92.0	18.4	20.0	ug/L	03/02/1995	ltg	817
1,1-Dichloroethane	94.0	18.8	20.0	ug/L	03/02/1995	ltg	817
1,2-Dichloroethane	85.5	17.1	20.0	ug/L	03/02/1995	ltg	817
1,1-Dichloroethene	79.5	15.9	20.0	ug/L	03/02/1995	ltg	817
trans-1,2-Dichloroethene	83.5	16.7	20.0	ug/L	03/02/1995	ltg	817
1,2-Dichloropropene	92.5	18.5	20.0	ug/L	03/02/1995	ltg	817
cis-1,3-Dichloropropene	91.0	18.2	20.0	ug/L	03/02/1995	ltg	817
trans-1,3-Dichloropropene	96.0	19.2	20.0	ug/L	03/02/1995	ltg	817
Methylene chloride	103.5	20.7	20.0	ug/L	03/02/1995	ltg	817
1,1,2,2-Tetrachloroethane	101.5	20.3	20.0	ug/L	03/02/1995	ltg	817
Tetrachloroethene	87.0	17.4	20.0	ug/L	03/02/1995	ltg	817
1,1,1-Trichloroethane	89.5	17.9	20.0	ug/L	03/02/1995	ltg	817
1,1,2-Trichloroethane	97.0	19.4	20.0	ug/L	03/02/1995	ltg	817
Trichloroethene	88.5	17.7	20.0	ug/L	03/02/1995	ltg	817
Trichlorofluoromethane	86.0	17.2	20.0	ug/L	03/02/1995	ltg	817
Vinyl chloride	84.0	16.8	20.0	ug/L	03/02/1995	ltg	817
1,4-Difluorobenzene (SURR)	97.0	97	100	% Rec.	03/02/1995	ltg	817
1,4-Dichlorobutane (SURR)	104.0	104	100	% Rec.	03/02/1995	ltg	817
Bromochloromethane (SURR)		NA	100	% Rec.	03/02/1995	ltg	817

Ref: SHELL, 1784 150th Avenue, San Leandro, Job No. 950228-K3

CONTINUING CALIBRATION VERIFICATION STANDARD REPORT

Parameter	CCV Standard % Recovery	CCV Standard Amount Found	CCV Standard Amount Expected	Units	Date Analyzed	Analyst Initials	Run Batch Number
METHOD 8010 (GC,Liquid)							
Bromodichloromethane	96.0	19.2	20.0	ug/L	03/03/1995	ltg	817
Bromoform	110.0	22.0	20.0	ug/L	03/03/1995	ltg	817
Bromomethane	90.5	18.1	20.0	ug/L	03/03/1995	ltg	817
Carbon tetrachloride	91.0	18.2	20.0	ug/L	03/03/1995	ltg	817
Chlorobenzene	103.5	20.7	20.0	ug/L	03/03/1995	ltg	817
Chloroethane	94.0	18.8	20.0	ug/L	03/03/1995	ltg	817
2-Chloroethylvinyl ether	139.5	27.9	20.0	ug/L	03/03/1995	ltg	817
Chloroform	93.5	18.7	20.0	ug/L	03/03/1995	ltg	817
Chloromethane	94.0	18.8	20.0	ug/L	03/03/1995	ltg	817
Dibromochloromethane	103.0	20.6	20.0	ug/L	03/03/1995	ltg	817
1,2-Dichlorobenzene	98.0	19.6	20.0	ug/L	03/03/1995	ltg	817
1,3-Dichlorobenzene	91.0	18.2	20.0	ug/L	03/03/1995	ltg	817
1,4-Dichlorobenzene	95.0	19.0	20.0	ug/L	03/03/1995	ltg	817
Dichlorodifluoromethane	91.5	18.3	20.0	ug/L	03/03/1995	ltg	817
1,1-Dichloroethane	97.5	19.5	20.0	ug/L	03/03/1995	ltg	817
1,2-Dichloroethane	95.0	19.0	20.0	ug/L	03/03/1995	ltg	817
1,1-Dichloroethene	79.0	15.8	20.0	ug/L	03/03/1995	ltg	817
trans-1,2-Dichloroethene	84.0	16.8	20.0	ug/L	03/03/1995	ltg	817
1,2-Dichloropropane	95.0	19.0	20.0	ug/L	03/03/1995	ltg	817
cis-1,3-Dichloropropene	96.0	19.2	20.0	ug/L	03/03/1995	ltg	817
trans-1,3-Dichloropropene	99.5	19.9	20.0	ug/L	03/03/1995	ltg	817
Methylene chloride	103.0	20.6	20.0	ug/L	03/03/1995	ltg	817
1,1,2,2-Tetrachloroethane	96.5	19.3	20.0	ug/L	03/03/1995	ltg	817
Tetrachloroethene	90.0	18.0	20.0	ug/L	03/03/1995	ltg	817
1,1,1-Trichloroethane	93.5	18.7	20.0	ug/L	03/03/1995	ltg	817
1,1,2-Trichloroethane	98.0	19.6	20.0	ug/L	03/03/1995	ltg	817
Trichloroethene	95.5	19.1	20.0	ug/L	03/03/1995	ltg	817
Trichlorofluoromethane	88.5	17.7	20.0	ug/L	03/03/1995	ltg	817
Vinyl chloride	81.0	16.2	20.0	ug/L	03/03/1995	ltg	817
1,4-Difluorobenzene (SURR)	82.0	82	100	% Rec.	03/03/1995	ltg	817
1,4-Dichlorobutane (SURR)	95.0	95	100	% Rec.	03/03/1995	ltg	817
Bromochloromethane (SURR)		NA	100	% Rec.	03/03/1995	ltg	817

Ref: SHELL, 1784 150th Avenue, San Leandro, Job No. 950228-K3

METHOD BLANK REPORT

Parameter	Method Blank Amount Found	Reporting Limit	Units	Date Analyzed	Analyst Initials	Run Batch Number
TPH (Gas/BTXE,Liquid)						
as Gasoline	ND	0.05	mg/L	03/08/1995	tts	2659
Benzene	ND	0.5	ug/L	03/08/1995	tts	2659
Toluene	ND	0.5	ug/L	03/08/1995	tts	2659
Ethylbenzene	ND	0.5	ug/L	03/08/1995	tts	2659
Xylenes (Total)	ND	0.5	ug/L	03/08/1995	tts	2659
Bromofluorobenzene (SURR)	96		% Rec.	03/08/1995	tts	2659
TPH (Gas/BTXE,Liquid)						
as Gasoline	ND	0.05	mg/L	03/09/1995	lss	2663
Benzene	ND	0.5	ug/L	03/09/1995	lss	2663
Toluene	ND	0.5	ug/L	03/09/1995	lss	2663
Ethylbenzene	ND	0.5	ug/L	03/09/1995	lss	2663
Xylenes (Total)	ND	0.5	ug/L	03/09/1995	lss	2663
Bromofluorobenzene (SURR)	91		% Rec.	03/09/1995	lss	2663

Ref: SHELL, 1784 150th Avenue, San Leandro, Job No. 950228-K3

METHOD BLANK REPORT

Parameter	Method Blank Amount Found	Reporting Limit	Units	Date Analyzed	Analyst Initials	Run Batch Number
METHOD 8010 (GC,Liquid)						
Bromodichloromethane	ND	0.4	ug/L	03/03/1995	ltg	817
Bromoform	ND	0.4	ug/L	03/03/1995	ltg	817
Bromomethane	ND	0.4	ug/L	03/03/1995	ltg	817
Carbon tetrachloride	ND	0.4	ug/L	03/03/1995	ltg	817
Chlorobenzene	ND	0.4	ug/L	03/03/1995	ltg	817
Chloroethane	ND	0.4	ug/L	03/03/1995	ltg	817
2-Chloroethylvinyl ether	ND	1.0	ug/L	03/03/1995	ltg	817
Chloroform	ND	0.4	ug/L	03/03/1995	ltg	817
Chloromethane	ND	0.4	ug/L	03/03/1995	ltg	817
Dibromochloromethane	ND	0.4	ug/L	03/03/1995	ltg	817
1,2-Dichlorobenzene	ND	0.4	ug/L	03/03/1995	ltg	817
1,3-Dichlorobenzene	ND	0.4	ug/L	03/03/1995	ltg	817
1,4-Dichlorobenzene	ND	0.4	ug/L	03/03/1995	ltg	817
Dichlorodifluoromethane	ND	0.4	ug/L	03/03/1995	ltg	817
1,1-Dichloroethane	ND	0.4	ug/L	03/03/1995	ltg	817
1,2-Dichloroethane	ND	0.4	ug/L	03/03/1995	ltg	817
1,1-Dichloroethene	ND	0.4	ug/L	03/03/1995	ltg	817
trans-1,2-Dichloroethene	ND	0.4	ug/L	03/03/1995	ltg	817
1,2-Dichloropropane	ND	0.4	ug/L	03/03/1995	ltg	817
cis-1,3-Dichloropropene	ND	0.4	ug/L	03/03/1995	ltg	817
trans-1,3-Dichloropropene	ND	0.4	ug/L	03/03/1995	ltg	817
Methylene chloride	ND	10	ug/L	03/03/1995	ltg	817
1,1,2,2-Tetrachloroethane	ND	0.4	ug/L	03/03/1995	ltg	817
Tetrachloroethene	ND	0.4	ug/L	03/03/1995	ltg	817
1,1,1-Trichloroethane	ND	0.4	ug/L	03/03/1995	ltg	817
1,1,2-Trichloroethane	ND	0.4	ug/L	03/03/1995	ltg	817
Trichloroethene	ND	0.4	ug/L	03/03/1995	ltg	817
Trichlorofluoromethane	ND	0.4	ug/L	03/03/1995	ltg	817
Vinyl chloride	ND	0.4	ug/L	03/03/1995	ltg	817
1,4-Difluorobenzene (SURR)	94		% Rec.	03/03/1995	ltg	817
1,4-Dichlorobutane (SURR)	96		% Rec.	03/03/1995	ltg	817
Bromochloromethane (SURR)	NA		% Rec.	03/03/1995	ltg	817

Ref: SHELL, 1784 150th Avenue, San Leandro, Job No. 950228-K3

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	Run Batch	Sample Spiked
TPH (Gas/BTXE,Liquid)											237242
as Gasoline	108.0	109.0	0.9	1.00	ND	1.08	1.09	mg/L	03/08/1995	2659	237242
Benzene	113.8	114.4	0.5	18.8	ND	21.4	21.5	ug/L	03/08/1995	2659	237242
Toluene	109.0	109.2	0.2	75.8	ND	82.6	82.8	ug/L	03/08/1995	2659	237242
TPH (Gas/BTXE,Liquid)											237334
as Gasoline	103.0	96.0	6.9	1.00	ND	1.03	0.96	mg/L	03/09/1995	2663	237334
Benzene	85.1	79.6	6.7	23.5	ND	20.0	18.7	ug/L	03/09/1995	2663	237334
Toluene	90.7	85.3	6.1	85.2	ND	77.3	72.7	ug/L	03/09/1995	2663	237334
TPH (Gas/BTXE,Liquid)											237289
as Gasoline	110.0	112.0	1.8	1.00	ND	1.10	1.12	mg/L	03/09/1995	2663	237289
Benzene	109.5	110.5	0.9	20.0	ND	21.9	22.1	ug/L	03/09/1995	2663	237289
Toluene	140.3	141.2	0.6	60.0	ND	84.2	84.7	ug/L	03/09/1995	2663	237289

Ref: SHELL, 1784 150th Avenue, San Leandro, Job No. 950228-K3

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	Run Batch	Sample Spiked
METHOD 8010 (GC,Liquid)											237250
Chlorobenzene	97.5	95.5	2.1	20.0	ND	19.5	19.1	ug/L	03/03/1995	817	237250
1,1-Dichloroethene	73.0	74.5	2.0	20.0	ND	14.6	14.9	ug/L	03/03/1995	817	237250
Trichloroethene	83.0	81.5	1.8	20.0	ND	16.6	16.3	ug/L	03/03/1995	817	237250

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. 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: 950228-K3 Log No: 5789
Cooler received on: 3/2/95 and checked on 3/2/95 by
(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 -0.4°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:

*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)

#6188

SHELL OIL COMPANY
RETAIL ENVIRONMENTAL ENGINEERING - WEST

CHAIN OF CUSTODY RECORD
Serial No: 950324-LZ

Date: 3-24-95
Page 1 of 1

Site Address: 1784 150th Avenue, San Leandro

WIC#: 204-6852-1404

Shell Engineer: Dan Kirk
Phone No.: (510) 675-6188
Fax #: 675-6160

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

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

Comments:

Sampled by: [signature]

Printed Name: LAD BOLVER

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	EPA 8010		Asbestos	Container Size	Preparation Used	Composite Y/N	MATERIAL DESCRIPTION	SAMPLE CONDITION/ COMMENTS
MW-4	3/24			X		6						X	X							
T.B.	3/24			X		2						X								

(3/27/95 BB Seal Intact)

CHECK ONE (1) BOX ONLY | CT/DT
- Quarterly Monitoring XXX 8441
- Site Investigation 8441
- Soil Closure/Disposal 8442
- Water Closure/Disposal 8443
- Soil/Air Rem. or Sys. O & M 8452
- Water Rem. or Sys. O & M 8453
- Other

TURN AROUND TIME
- 24 hours
- 48 hours
- 15 days XXX (Normal)
- Other ____

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

Relinquished By (signature)	Printed Name	Date	Time	Received (signature)	Printed Name	Date	Time
[signature]	LAD BOLVER	3/27	9:50	[signature]	[signature]	3/27	9:50
[signature]	[signature]	3/27	18:31	[signature]			
				[signature]	PAM GREENE	3/28/95	08:00

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

VIA: NCS

White Yellow Pink Goldenrod

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: 04/10/1995
NET Client Acct. No: 1821
NET Pacific Job No: 95.01357
Received: 03/28/1995

Client Reference Information

Shell 1784 150th Avenue, San Leandro, CA/950324-L2

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:

Thomas F. Cullen, Jr.
Division Manager

Linda DeMartino
Project Coordinator

Enclosure(s)

Ref: Shell 1784 150th Avenue, San Leandro, CA/950324-L2

SAMPLE DESCRIPTION: MW-4
Date Taken: 03/24/1995
Time Taken:
NET Sample No: 239025

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed	Run Batch No.
TPH (Gas/BTXE,Liquid)								
METHOD 5030/M8015	--						04/06/1995	2730
DILUTION FACTOR*	1						04/06/1995	2730
as Gasoline	ND		50	ug/L	5030		04/06/1995	2730
Carbon Range:	--						04/06/1995	2730
METHOD 8020 (GC,Liquid)	--						04/06/1995	2730
Benzene	ND		0.5	ug/L	8020		04/06/1995	2730
Toluene	ND		0.5	ug/L	8020		04/06/1995	2730
Ethylbenzene	ND		0.5	ug/L	8020		04/06/1995	2730
Xylenes (Total)	ND		0.5	ug/L	8020		04/06/1995	2730
SURROGATE RESULTS	--						04/06/1995	2730
Bromofluorobenzene (SURR)	86			% Rec.	5030		04/06/1995	2730

Ref: Shell 1784 150th Avenue, San Leandro, CA/950324-L2

SAMPLE DESCRIPTION: MW-4
Date Taken: 03/24/1995
Time Taken:
NET Sample No: 239025

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed	Run Batch No.
METHOD 8010 (GC,Liquid)								
DILUTION FACTOR*	1						03/29/1995	828
Bromodichloromethane	ND		0.4	ug/L	8010		03/29/1995	828
Bromoform	ND		0.4	ug/L	8010		03/29/1995	828
Bromomethane	ND		0.4	ug/L	8010		03/29/1995	828
Carbon tetrachloride	ND		0.4	ug/L	8010		03/29/1995	828
Chlorobenzene	ND		0.4	ug/L	8010		03/29/1995	828
Chloroethane	ND		0.4	ug/L	8010		03/29/1995	828
2-Chloroethylvinyl ether	ND		1.0	ug/L	8010		03/29/1995	828
Chloroform	ND		0.4	ug/L	8010		03/29/1995	828
Chloromethane	ND		0.4	ug/L	8010		03/29/1995	828
Dibromochloromethane	ND		0.4	ug/L	8010		03/29/1995	828
1,2-Dichlorobenzene	ND		0.4	ug/L	8010		03/29/1995	828
1,3-Dichlorobenzene	ND		0.4	ug/L	8010		03/29/1995	828
1,4-Dichlorobenzene	ND		0.4	ug/L	8010		03/29/1995	828
Dichlorodifluoromethane	ND		0.4	ug/L	8010		03/29/1995	828
1,1-Dichloroethane	ND		0.4	ug/L	8010		03/29/1995	828
1,2-Dichloroethane	ND		0.4	ug/L	8010		03/29/1995	828
1,1-Dichloroethene	ND		0.4	ug/L	8010		03/29/1995	828
trans-1,2-Dichloroethene	ND		0.4	ug/L	8010		03/29/1995	828
1,2-Dichloropropane	ND		0.4	ug/L	8010		03/29/1995	828
cis-1,3-Dichloropropene	ND		0.4	ug/L	8010		03/29/1995	828
trans-1,3-Dichloropropene	ND		0.4	ug/L	8010		03/29/1995	828
Methylene chloride	ND		10	ug/L	8010		03/29/1995	828
1,1,2,2-Tetrachloroethane	ND		0.4	ug/L	8010		03/29/1995	828
Tetrachloroethene	ND		0.4	ug/L	8010		03/29/1995	828
1,1,1-Trichloroethane	ND		0.4	ug/L	8010		03/29/1995	828
1,1,2-Trichloroethane	ND		1	ug/L	8010		03/29/1995	828
Trichloroethene	ND		0.4	ug/L	8010		03/29/1995	828
Trichlorofluoromethane	ND		0.4	ug/L	8010		03/29/1995	828
Vinyl chloride	ND		0.4	ug/L	8010		03/29/1995	828
SURROGATE RESULTS	--						03/29/1995	828
1,4-Difluorobenzene (SURR)	100			% Rec.			03/29/1995	828
1,4-Dichlorobutane (SURR)	84			% Rec.			03/29/1995	828
Bromochloromethane (SURR)	NA			% Rec.			03/29/1995	828

Ref: Shell 1784 150th Avenue, San Leandro, CA/950324-L2

SAMPLE DESCRIPTION: T.B.
Date Taken: 03/24/1995
Time Taken:
NET Sample No: 239026

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed	Run Batch No.
TPH (Gas/BTXE,Liquid)								
METHOD 5030/M8015	--						04/06/1995	2730
DILUTION FACTOR*	1						04/06/1995	2730
as Gasoline	ND		50	ug/L	5030		04/06/1995	2730
Carbon Range:	--						04/06/1995	2730
METHOD 8020 (GC,Liquid)	--						04/06/1995	2730
Benzene	ND		0.5	ug/L	8020		04/06/1995	2730
Toluene	ND		0.5	ug/L	8020		04/06/1995	2730
Ethylbenzene	ND		0.5	ug/L	8020		04/06/1995	2730
Xylenes (Total)	ND		0.5	ug/L	8020		04/06/1995	2730
SURROGATE RESULTS	--						04/06/1995	2730
Bromofluorobenzene (SURR)	97			% Rec.	5030		04/06/1995	2730

Ref: Shell 1784 150th Avenue, San Leandro, CA/950324-L2

CONTINUING CALIBRATION VERIFICATION STANDARD REPORT

Parameter	CCV Standard % Recovery	CCV Standard Amount Found	CCV Standard Amount Expected	Units	Date Analyzed	Analyst Initials	Run Batch Number
TPH (Gas/BTXE,Liquid)							
as Gasoline	110.0	1.10	1.00	mg/L	04/06/1995	caf	2730
Benzene	99.2	4.96	5.00	ug/L	04/06/1995	caf	2730
Toluene	91.4	4.57	5.00	ug/L	04/06/1995	caf	2730
Ethylbenzene	92.6	4.63	5.00	ug/L	04/06/1995	caf	2730
Xylenes (Total)	107.0	16.05	15.0	ug/L	04/06/1995	caf	2730
Bromofluorobenzene (SURR)	105.0	105	100	% Rec.	04/06/1995	caf	2730
TPH (Gas/BTXE,Liquid)							
as Gasoline	97.0	0.97	1.00	mg/L	04/06/1995	caf	2733
Benzene	107.0	5.35	5.00	ug/L	04/06/1995	caf	2733
Toluene	104.2	5.21	5.00	ug/L	04/06/1995	caf	2733
Ethylbenzene	98.4	4.92	5.00	ug/L	04/06/1995	caf	2733
Xylenes (Total)	97.9	14.69	15.0	ug/L	04/06/1995	caf	2733
Bromofluorobenzene (SURR)	89.0	89	100	% Rec.	04/06/1995	caf	2733

Ref: Shell 1784 150th Avenue, San Leandro, CA/950324-L2

CONTINUING CALIBRATION VERIFICATION STANDARD REPORT

Parameter	CCV Standard % Recovery	CCV Standard Amount Found	CCV Standard Amount Expected	Units	Date Analyzed	Analyst Initials	Run Batch Number
METHOD 8010 (GC,Liquid)							
Bromodichloromethane	105.5	21.1	20.0	ug/L	03/28/1995	ltg	828
Bromoform	100.0	20.0	20.0	ug/L	03/28/1995	ltg	828
Bromomethane	112.0	22.4	20.0	ug/L	03/28/1995	ltg	828
Carbon tetrachloride	111.5	22.3	20.0	ug/L	03/28/1995	ltg	828
Chlorobenzene	107.0	21.4	20.0	ug/L	03/28/1995	ltg	828
Chloroethane	105.0	21.0	20.0	ug/L	03/28/1995	ltg	828
2-Chloroethylvinyl ether	96.0	19.2	20.0	ug/L	03/28/1995	ltg	828
Chloroform	110.0	22.0	20.0	ug/L	03/28/1995	ltg	828
Chloromethane	103.0	20.6	20.0	ug/L	03/28/1995	ltg	828
Dibromochloromethane	117.0	23.4	20.0	ug/L	03/28/1995	ltg	828
1,2-Dichlorobenzene	105.0	21.0	20.0	ug/L	03/28/1995	ltg	828
1,3-Dichlorobenzene	101.0	20.2	20.0	ug/L	03/28/1995	ltg	828
1,4-Dichlorobenzene	101.5	20.3	20.0	ug/L	03/28/1995	ltg	828
Dichlorodifluoromethane	98.0	19.6	20.0	ug/L	03/28/1995	ltg	828
1,1-Dichloroethane	102.5	20.5	20.0	ug/L	03/28/1995	ltg	828
1,2-Dichloroethane	105.5	21.1	20.0	ug/L	03/28/1995	ltg	828
1,1-Dichloroethene	93.0	18.6	20.0	ug/L	03/28/1995	ltg	828
trans-1,2-Dichloroethene	99.5	19.9	20.0	ug/L	03/28/1995	ltg	828
1,2-Dichloropropane	106.5	21.3	20.0	ug/L	03/28/1995	ltg	828
cis-1,3-Dichloropropene	115.0	23.0	20.0	ug/L	03/28/1995	ltg	828
trans-1,3-Dichloropropene	109.0	21.8	20.0	ug/L	03/28/1995	ltg	828
Methylene chloride	92.0	18.4	20.0	ug/L	03/28/1995	ltg	828
1,1,2,2-Tetrachloroethane	112.5	22.5	20.0	ug/L	03/28/1995	ltg	828
Tetrachloroethene	118.0	23.6	20.0	ug/L	03/28/1995	ltg	828
1,1,1-Trichloroethane	108.0	21.6	20.0	ug/L	03/28/1995	ltg	828
1,1,2-Trichloroethane	112.5	22.5	20.0	ug/L	03/28/1995	ltg	828
Trichloroethene	106.5	21.3	20.0	ug/L	03/28/1995	ltg	828
Trichlorofluoromethane	100.0	20.0	20.0	ug/L	03/28/1995	ltg	828
Vinyl chloride	101.0	20.2	20.0	ug/L	03/28/1995	ltg	828
1,4-Difluorobenzene (SURR)	102.0	102	100	% Rec.	03/28/1995	ltg	828
1,4-Dichlorobutane (SURR)	105.0	105	100	% Rec.	03/28/1995	ltg	828
Bromochloromethane (SURR)		NA	100	% Rec.	03/28/1995	ltg	828

Ref: Shell 1784 150th Avenue, San Leandro, CA/950324-L2

CONTINUING CALIBRATION VERIFICATION STANDARD REPORT

Parameter	CCV Standard % Recovery	CCV Standard Amount Found	CCV Standard Amount Expected	Units	Date Analyzed	Analyst Initials	Run Batch Number
METHOD 8010 (GC,Liquid)							
Bromodichloromethane	101.5	20.3	20.0	ug/L	03/29/1995	ltg	828
Bromoform	100.0	20.0	20.0	ug/L	03/29/1995	ltg	828
Bromomethane	108.0	21.6	20.0	ug/L	03/29/1995	ltg	828
Carbon tetrachloride	99.0	19.8	20.0	ug/L	03/29/1995	ltg	828
Chlorobenzene	101.0	20.2	20.0	ug/L	03/29/1995	ltg	828
Chloroethane	100.5	20.1	20.0	ug/L	03/29/1995	ltg	828
2-Chloroethylvinyl ether	140.0	28.0	20.0	ug/L	03/29/1995	ltg	828
Chloroform	109.5	21.9	20.0	ug/L	03/29/1995	ltg	828
Chloromethane	97.5	19.5	20.0	ug/L	03/29/1995	ltg	828
Dibromochloromethane	111.0	22.2	20.0	ug/L	03/29/1995	ltg	828
1,2-Dichlorobenzene	102.0	20.4	20.0	ug/L	03/29/1995	ltg	828
1,3-Dichlorobenzene	96.5	19.3	20.0	ug/L	03/29/1995	ltg	828
1,4-Dichlorobenzene	99.5	19.9	20.0	ug/L	03/29/1995	ltg	828
Dichlorodifluoromethane	87.5	17.5	20.0	ug/L	03/29/1995	ltg	828
1,1-Dichloroethane	96.0	19.2	20.0	ug/L	03/29/1995	ltg	828
1,2-Dichloroethane	97.0	19.4	20.0	ug/L	03/29/1995	ltg	828
1,1-Dichloroethene	96.5	19.3	20.0	ug/L	03/29/1995	ltg	828
trans-1,2-Dichloroethene	95.0	19.0	20.0	ug/L	03/29/1995	ltg	828
1,2-Dichloropropane	101.0	20.2	20.0	ug/L	03/29/1995	ltg	828
cis-1,3-Dichloropropene	102.5	20.5	20.0	ug/L	03/29/1995	ltg	828
trans-1,3-Dichloropropene	101.0	20.2	20.0	ug/L	03/29/1995	ltg	828
Methylene chloride	89.0	17.8	20.0	ug/L	03/29/1995	ltg	828
1,1,2,2-Tetrachloroethane	96.5	19.3	20.0	ug/L	03/29/1995	ltg	828
Tetrachloroethene	107.0	21.4	20.0	ug/L	03/29/1995	ltg	828
1,1,1-Trichloroethane	109.0	21.8	20.0	ug/L	03/29/1995	ltg	828
1,1,2-Trichloroethane	105.5	21.1	20.0	ug/L	03/29/1995	ltg	828
Trichloroethene	103.5	20.7	20.0	ug/L	03/29/1995	ltg	828
Trichlorofluoromethane	97.5	19.5	20.0	ug/L	03/29/1995	ltg	828
Vinyl chloride	95.0	19.0	20.0	ug/L	03/29/1995	ltg	828
1,4-Difluorobenzene (SURR)	104.0	104	100	% Rec.	03/29/1995	ltg	828
1,4-Dichlorobutane (SURR)	95.0	95	100	% Rec.	03/29/1995	ltg	828
Bromochloromethane (SURR)		NA	100	% Rec.	03/29/1995	ltg	828

Ref: Shell 1784 150th Avenue, San Leandro, CA/950324-L2

METHOD BLANK REPORT

Parameter	Method Blank Amount Found	Reporting Limit	Units	Date Analyzed	Analyst Initials	Run Batch Number
TPH (Gas/BTXE,Liquid)						
as Gasoline	ND	0.05	mg/L	04/06/1995	caf	2730
Benzene	ND	0.5	ug/L	04/06/1995	caf	2730
Toluene	ND	0.5	ug/L	04/06/1995	caf	2730
Ethylbenzene	ND	0.5	ug/L	04/06/1995	caf	2730
Xylenes (Total)	ND	0.5	ug/L	04/06/1995	caf	2730
Bromofluorobenzene (SURR)	102		% Rec.	04/06/1995	caf	2730
TPH (Gas/BTXE,Liquid)						
as Gasoline	ND	0.05	mg/L	04/06/1995	lss	2733
Benzene	ND	0.5	ug/L	04/06/1995	lss	2733
Toluene	ND	0.5	ug/L	04/06/1995	lss	2733
Ethylbenzene	ND	0.5	ug/L	04/06/1995	lss	2733
Xylenes (Total)	ND	0.5	ug/L	04/06/1995	lss	2733
Bromofluorobenzene (SURR)	87		% Rec.	04/06/1995	lss	2733

Ref: Shell 1784 150th Avenue, San Leandro, CA/950324-L2

METHOD BLANK REPORT

Parameter	Method Blank Amount Found	Reporting Limit	Units	Date Analyzed	Analyst Initials	Run Batch Number
METHOD 8010 (GC,Liquid)						
Bromodichloromethane	ND	0.4	ug/L	03/28/1995	ltg	828
Bromoform	ND	0.4	ug/L	03/28/1995	ltg	828
Bromomethane	ND	0.4	ug/L	03/28/1995	ltg	828
Carbon tetrachloride	ND	0.4	ug/L	03/28/1995	ltg	828
Chlorobenzene	ND	0.4	ug/L	03/28/1995	ltg	828
Chloroethane	ND	0.4	ug/L	03/28/1995	ltg	828
2-Chloroethylvinyl ether	ND	1.0	ug/L	03/28/1995	ltg	828
Chloroform	ND	0.4	ug/L	03/28/1995	ltg	828
Chloromethane	ND	0.4	ug/L	03/28/1995	ltg	828
Dibromochloromethane	ND	0.4	ug/L	03/28/1995	ltg	828
1,2-Dichlorobenzene	ND	0.4	ug/L	03/28/1995	ltg	828
1,3-Dichlorobenzene	ND	0.4	ug/L	03/28/1995	ltg	828
1,4-Dichlorobenzene	ND	0.4	ug/L	03/28/1995	ltg	828
Dichlorodifluoromethane	ND	0.4	ug/L	03/28/1995	ltg	828
1,1-Dichloroethane	ND	0.4	ug/L	03/28/1995	ltg	828
1,2-Dichloroethane	ND	0.4	ug/L	03/28/1995	ltg	828
1,1-Dichloroethene	ND	0.4	ug/L	03/28/1995	ltg	828
trans-1,2-Dichloroethene	ND	0.4	ug/L	03/28/1995	ltg	828
1,2-Dichloropropane	ND	0.4	ug/L	03/28/1995	ltg	828
cis-1,3-Dichloropropene	ND	0.4	ug/L	03/28/1995	ltg	828
trans-1,3-Dichloropropene	ND	0.4	ug/L	03/28/1995	ltg	828
Methylene chloride	ND	10	ug/L	03/28/1995	ltg	828
1,1,2,2-Tetrachloroethane	ND	0.4	ug/L	03/28/1995	ltg	828
Tetrachloroethene	ND	0.4	ug/L	03/28/1995	ltg	828
1,1,1-Trichloroethane	ND	0.4	ug/L	03/28/1995	ltg	828
1,1,2-Trichloroethane	ND	0.4	ug/L	03/28/1995	ltg	828
Trichloroethene	ND	0.4	ug/L	03/28/1995	ltg	828
Trichlorofluoromethane	ND	0.4	ug/L	03/28/1995	ltg	828
Vinyl chloride	ND	0.4	ug/L	03/28/1995	ltg	828
1,4-Difluorobenzene (SURR)	102		% Rec.	03/28/1995	ltg	828
1,4-Dichlorobutane (SURR)	88		% Rec.	03/28/1995	ltg	828
Bromochloromethane (SURR)	NA		% Rec.	03/28/1995	ltg	828

Ref: Shell 1784 150th Avenue, San Leandro, CA/950324-L2

METHOD BLANK REPORT

Parameter	Method Blank Amount Found	Reporting Limit	Units	Date Analyzed	Analyst Initials	Run Batch Number
METHOD 8010 (GC,Liquid)						
Bromodichloromethane	ND	0.4	ug/L	03/29/1995	ltg	828
Bromoform	ND	0.4	ug/L	03/29/1995	ltg	828
Bromomethane	ND	0.4	ug/L	03/29/1995	ltg	828
Carbon tetrachloride	ND	0.4	ug/L	03/29/1995	ltg	828
Chlorobenzene	ND	0.4	ug/L	03/29/1995	ltg	828
Chloroethane	ND	0.4	ug/L	03/29/1995	ltg	828
2-Chloroethylvinyl ether	ND	1.0	ug/L	03/29/1995	ltg	828
Chloroform	ND	0.4	ug/L	03/29/1995	ltg	828
Chloromethane	ND	0.4	ug/L	03/29/1995	ltg	828
Dibromochloromethane	ND	0.4	ug/L	03/29/1995	ltg	828
1,2-Dichlorobenzene	ND	0.4	ug/L	03/29/1995	ltg	828
1,3-Dichlorobenzene	ND	0.4	ug/L	03/29/1995	ltg	828
1,4-Dichlorobenzene	ND	0.4	ug/L	03/29/1995	ltg	828
Dichlorodifluoromethane	ND	0.4	ug/L	03/29/1995	ltg	828
1,1-Dichloroethane	ND	0.4	ug/L	03/29/1995	ltg	828
1,2-Dichloroethane	ND	0.4	ug/L	03/29/1995	ltg	828
1,1-Dichloroethene	ND	0.4	ug/L	03/29/1995	ltg	828
trans-1,2-Dichloroethene	ND	0.4	ug/L	03/29/1995	ltg	828
1,2-Dichloropropane	ND	0.4	ug/L	03/29/1995	ltg	828
cis-1,3-Dichloropropene	ND	0.4	ug/L	03/29/1995	ltg	828
trans-1,3-Dichloropropene	ND	0.4	ug/L	03/29/1995	ltg	828
Methylene chloride	ND	10	ug/L	03/29/1995	ltg	828
1,1,2,2-Tetrachloroethane	ND	0.4	ug/L	03/29/1995	ltg	828
Tetrachloroethene	ND	0.4	ug/L	03/29/1995	ltg	828
1,1,1-Trichloroethane	ND	0.4	ug/L	03/29/1995	ltg	828
1,1,2-Trichloroethane	ND	0.4	ug/L	03/29/1995	ltg	828
Trichloroethene	ND	0.4	ug/L	03/29/1995	ltg	828
Trichlorofluoromethane	ND	0.4	ug/L	03/29/1995	ltg	828
Vinyl chloride	ND	0.4	ug/L	03/29/1995	ltg	828
1,4-Difluorobenzene (SURR)	106		% Rec.	03/29/1995	ltg	828
1,4-Dichlorobutane (SURR)	119		% Rec.	03/29/1995	ltg	828
Bromochloromethane (SURR)	NA		% Rec.	03/29/1995	ltg	828

Ref: Shell 1784 150th Avenue, San Leandro, CA/950324-L2

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	Run Batch	Sample Spiked
TPH (Gas/BTXE,Liquid)											238743
as Gasoline	110.0	108.0	1.8	1.00	ND	1.10	1.08	mg/L	04/06/1995	2730	238743
Benzene	94.7	91.0	4.0	18.9	ND	17.9	17.2	ug/L	04/06/1995	2730	238743
Toluene	96.6	94.3	2.4	61.5	ND	59.4	58.0	ug/L	04/06/1995	2730	238743
TPH (Gas/BTXE,Liquid)											238898
as Gasoline	99.0	99.0	0.0	1.00	ND	0.99	0.99	mg/L	04/06/1995	2733	238898
Benzene	104.5	104.7	0.2	40.4	ND	42.2	42.3	ug/L	04/06/1995	2733	238898
Toluene	105.5	104.8	0.7	70.7	ND	74.6	74.1	ug/L	04/06/1995	2733	238898

Ref: Shell 1784 150th Avenue, San Leandro, CA/950324-L2

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	Run Batch	Sample Spiked
METHOD 8010 (GC,Liquid)											238894
Chlorobenzene	105.5	105.5	0.0	20.0	ND	21.1	21.1	ug/L	03/28/1995	828	238894
1,1-Dichloroethene	78.5	83.5	6.2	20.0	ND	15.7	16.7	ug/L	03/28/1995	828	238894
Trichloroethene	84.5	90.0	6.3	20.0	32	48.9	50.0	ug/L	03/28/1995	828	238894

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. 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: 950324-L2 Log No: 6188
Cooler, received on: 3/28/95 and checked on 3/28/95 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 Temp 0.2° GA
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:

*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)

ATTACHMENT B

DRILL PERMITS

ZONE 7 WATER AGENCY

5997 PARKSIDE DRIVE PLEASANTON, CALIFORNIA 94588 VOICE (510) 484-2600
FAX (510) 462-3914

DRILLING PERMIT APPLICATION

COPY

FOR APPLICANT TO COMPLETE

ATION OF PROJECT Shell Service Station
1784 150th Avenue
San Leandro, Calif

NT
e Shell Oil Company
ess P.O. Box 4023 Voice
Concord, CA Zip 94524

ICANT
e Weiss Associates
Faith Daverin Fax 510-547-5043
ess 5500 Shellmound St. Voice 510 450-6161
Emeryville, CA Zip 94608

E OF PROJECT
Construction
Cathodic Protection
Water Supply
Monitoring
Geotechnical Investigation
General
Contamination X
Well Destruction

POSED WATER SUPPLY WELL USE
estic Industrial Other
cipal Irrigation

LING METHOD:
Rotary Air Rotary Auger X
e Other

LER'S LICENSE NO. C57-606481

L PROJECTS
Drill Hole Diameter in. Maximum
Casing Diameter in. Depth ft.
Surface Seal Depth ft. Number

TECHNICAL PROJECTS
Number of Borings 3 Maximum
Hole Diameter 6 in. Depth 30 ft.

IMATED STARTING DATE 12/21/94
IMATED COMPLETION DATE 12/22/94

eby agree to comply with all requirements of this permit and Alameda nty Ordinance No. 73-68.

LICANT'S NATURE Faith Daverin Date 12/12/94

FOR OFFICE USE

PERMIT NUMBER 94811
LOCATION NUMBER

PERMIT CONDITIONS

Circled Permit Requirements Apply

(A.) GENERAL
1. A permit application should be submitted so as to arrive at the Zone 7 office five days prior to proposed starting date.
2. Submit to Zone 7 within 60 days after completion of permitted work the original Department of Water Resources Water Well Drillers Report or equivalent for well Projects, or drilling logs and location sketch for geotechnical projects.
3. Permit is void if project not begun within 90 days of approval date.

(B.) WATER WELLS, INCLUDING PIEZOMETERS
1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
2. Minimum seal depth is 50 feet for municipal and industrial wells or 20 feet for domestic and irrigation wells unless a lesser depth is specially approved. Minimum seal depth for monitoring wells is the maximum depth practicable or 20 feet.

C. GEOTECHNICAL. Backfill bore hole with compacted cuttings or heavy bentonite and upper two feet with compacted material. In areas of known or suspected contamination, tremied cement grout shall be used in place of compacted cuttings.

D. CATHODIC. Fill hole above anode zone with concrete placed by tremie.

E. WELL DESTRUCTION. See attached.

One boring may be converted to a monitoring well depending on field conditions.

Approved Wyman Hong Date 20 Dec 94
Wyman Hong

91992

ce No. _____

CITY OF SAN LEANDRO
APPLICATION TO PERFORM WORK
IN THE PUBLIC RIGHT-OF-WAY

94-3350
Permit Number

JAN 26, 1995
Date Approved

Work Site: Portofino Drive, 150th Avenue, Intersection of 150th Ave and Portofino Drive

Applicant: Name Weiss Associates Address 5500 Shellmound St. Emeryville, CA Tel (510) 450-6161

Owner: Name Shell Oil Company Address P.O. Box 4023 Concord, CA 94524 Tel: _____

Purpose of Permit:

☐ Utility ☐ Street Excavation ☐ Curb, Gutter Sidewalk, Driveway ☒ Other Drill (3) Soil Borings

Detailed Description and Dimensions of Work: 3-temporary, 6-in diameter, 20-30 Ft. deep borings; Ground water samples will be collected from each boring. (See attached map). Borings will be grouted with cement and capped with asphalt to match existing road. If necessary traffic control will be per Cal Trans requirments. Soil borings will be located in the street, next to the curb, utilities permitti

Plan Submitted: Yes _____ No _____ Profile Submitted: Yes _____ No _____

Date Work to be Started: 12/20/94 Date Work To Be Completed By: 12/29/94

Building Permit No. _____ State Encroachment Permit No. _____

Oro Loma Permit No. _____ Alameda County Flood Control Permit No. _____

Compliance with State Labor Code: In accordance with Section 3800.

☒ Applicant has on file, with the City of San Leandro, evidence that workman's compensation insurance is carried.

☐ Applicant will not employ anyone so as to become subject to the workman's compensation laws of California.

Statement of State Contractor's License: In accordance with Section 7031.5 of the State Business and Professions Code.

☐ Applicant has State License No. 606481, Class C-57 in full force and effect.

☐ Applicant is exempt from the State Contractor's License Law for the following reason(s): _____

By the application and acceptance of this permit, the undersigned intending to be legally bound does hereby agree that all work performed will be in accordance with all applicable provisions of this permit and all regulations, provisions, and specifications as adopted by the City. Further, the undersigned agrees that this permit is to serve as a guaranty for payment of all permit and/or inspection charges as billed by the City. Any misrepresentation of information requested from the applicant on this form shall make this permit null and void.

Signed: Faith Deverin, Weiss for Shell Oil Company Date: 12/13/94

PLEASE CALL 577-2708 FOR INSPECTIONS

SPECIAL PROVISIONS

Backfill Required ~~—~~ AS PER STANDARD SAMPLE
Pavement Section Required BORING/MONITORING WELL
Minimum Depth of Cover SPECIFICATIONS
Police & Fire Dept. to be notified 24 hours prior to start: YES ___ NO X

SEE REVERSE SIDE FOR GENERAL PROVISIONS APPLICABLE TO ALL PERMIT WORK

PERMIT IS VALID WHEN SIGNED

Any omission on the part of the City to specify on this permit any rule, regulation, provision, or specification shall not excuse the permittee from complying with all requirements of law and appropriate ordinances and all applicable regulations, provisions, and specifications adopted by the City.

ISSUE BY CITY ENGINEER

INSPECTION RECORD

Date	Comments	Insp.	Hrs. Chrgd.

NOTE: 1 hr. minimum charge per inspection stop

Hours forwarded from reverse side: _____

TOTAL HOURS CHARGED: 1

FEES

PERMIT FEE: $ 260.00 TO ACCT #3306

RESTORE/INSPECT DEPOSIT: _____ TO CN# _____

STREET CUT FEE: _____ TO ACCT #3304

TOTAL: _____

☒ All charges collected at permit issuance

☐ All charges to be billed to CN# _____

Rev. Date 8/91

ATTACHMENT C

STANDARD FIELD PROCEDURES

STANDARD FIELD PROCEDURES

WA has developed standard procedures for drilling and sampling soil borings and installing, developing and sampling ground water monitoring wells. These procedures comply with federal, state and local regulatory guidelines. Specific procedures are summarized below.

FIELD WORK PREPARATIONS

Site Safety Plan

WA prepares a site-specific safety plan based upon the site history, previous work and analytic results for soil and water samples previously collected at the site for each phase of work at a particular site. The safety plan will identify potential site hazards and specify procedures to protect site workers and the public.

Utility Lines

Prior to drilling, WA typically visits the site to locate overhead and underground utility lines. WA notifies Underground Service Alert of all scheduled drilling activities and often contracts a private line locator as well. All borings are hand-dug and probed to at least 5 ft depth before drilling.

SOIL BORING AND SAMPLING

Objectives/Supervision

Soil sampling objectives include characterizing subsurface lithology, assessing whether the soils exhibit obvious hydrocarbon or other compound vapor or staining, and collecting samples for analysis at a State-certified laboratory. All borings are logged using the Unified Soil Classification System by a trained geologist working under the supervision of a California Registered Geologist (RG) or a Certified Engineering Geologist (CEG).

Soil Boring and Sampling

Deep soil borings or borings for well installation are typically drilled using hollow-stem augers. Split-barrel samplers lined with steam-cleaned brass or stainless steel tubes are driven through the hollow auger stem into undisturbed sediments at the bottom of the borehole using a 140 pound hammer dropped 30 inches. Soil samples can

also be collected without using hollow-stem augers by progressively driving split-barrel soil samplers to depths of up to 30 ft.

Soil samples are collected at least every five ft to characterize the subsurface sediments and for possible chemical analysis. Near the water table and at lithologic changes, the sampling interval may be less than five ft. Ground water sample may be collected from a soil boring by inserting a temporary slotted casing in the boring, purging the boring of as much water as possible with a steam-cleaned bailer and decanting ground water from the bailer into the appropriate sample containers.

Drilling and sampling equipment is steam-cleaned prior to drilling and between borings to prevent cross-contamination. Sampling equipment is washed between samples with trisodium phosphate or an equivalent EPA-approved detergent.

Sample Analysis

After noting the lithology at each end of the sampling tubes, the tube chosen for analysis is immediately trimmed of excess soil and capped with teflon tape and plastic end caps. The sample is labelled, stored at or below 4°C, and transported under chain-of-custody to a State-certified analytic laboratory.

Screening

One of the remaining tubes is partially emptied leaving about one-third of the soil in the tube. The tube is capped with plastic end caps and set aside to allow hydrocarbons to volatilize from the soil. After ten to fifteen minutes, a portable photoionization detector (PID) measures volatile hydrocarbon vapor concentrations in the tube headspace, extracting the vapor through a slit in the cap. PID measurements are used along with the stratigraphy and ground water depth to select soil samples for analysis.

Grouting

If the borings are not completed as wells, the borings are filled to the ground surface with cement grout poured or pumped through a tremie pipe. If wells are completed in the borings, the well installation, development and sampling procedures summarized below are followed.

MONITORING WELL INSTALLATION, DEVELOPMENT AND SAMPLING

Well Construction and Surveying

Wells are installed to monitor ground water quality and determine the ground water elevation, flow direction and gradient. Well depths and screen lengths are based on ground water depth, occurrence of hydrocarbons or other compounds in the borehole, stratigraphy and State and local regulatory guidelines. Well screens typically extend 15 ft below and 5 ft above the static water level at the time of drilling. However, the well screen will generally not extend into or through a clay layer that is at least three ft thick.

Well casing and screen are flush-threaded, Schedule 40 PVC. Screen slot size varies according to the sediments screened, but slots are generally 0.010 or 0.020 inches wide. A rinsed and graded sand occupies the annular space between the boring and the well screen to about one to two ft above the well screen. A two ft thick hydrated bentonite seal separates the sand from the overlying sanitary surface seal composed of cement with 3-5% bentonite.

Well-heads are secured by locking well-caps inside traffic-rated vaults finished flush with the ground surface. A stovepipe may be installed between the well-head and the vault cap for additional security.

The well top-of-casing elevation is surveyed with respect to mean sea level and the well is surveyed for horizontal location with respect to an onsite or nearby offsite landmark by a California-registered land surveyor.

Well Development

After 24 hours, the wells are developed using a combination of ground water surging and extraction. Surging agitates the ground water and dislodges fine sediments from the sand pack. After about ten minutes of surging, ground water is extracted from the well using bailing, pumping and/or reverse air-lifting through an eductor pipe to remove the sediments from the well. Surging and extraction continue until at least ten well-casing volumes of ground water are extracted and the sediment volume in the ground water is negligible. All equipment is steam-cleaned prior to use and air used for air-lifting is filtered to prevent oil entrained in the compressed air from entering the well. Wells that are developed using air-lift evacuation are not sampled until at least 24 hours after they are developed.

Floating Hydrocarbon Thickness and Water Level Measurements

Prior to sampling, each well is checked for the presence of floating hydrocarbons. If floating hydrocarbons are present, WA will measure the floating hydrocarbon thickness in the well with an oil/water interface probe. The water level in each well is also measured with respect to the top of the PVC casing to the nearest 0.01 ft using an electric sounder. The sounder is thoroughly rinsed with deionized water between measurements to prevent cross-contamination.

Ground Water Sampling

Depending on local regulatory guidelines, three to four well-casing volumes of ground water are purged prior to sampling. Purging continues until ground water pH, conductivity, and temperature have stabilized. Ground water samples are collected using bailers or pumps and are decanted into the appropriate containers supplied by the analytic laboratory. Samples are labelled, placed in protective foam sleeves, stored at 4°C, and transported under chain-of-custody to the laboratory. Laboratory-supplied trip blanks accompany the samples and are analyzed to check for cross-contamination. An equipment blank may be analyzed if non-dedicated sampling equipment is used.

SOIL DISPOSAL

Drill cuttings are temporarily stockpiled on and covered with plastic sheeting or in steel 55-gallon steel at the site. One soil sample is collected for approximately every 12.5 cubic yards of soil. Up to four soil stockpile samples may be composited into one sample for analysis. A certified analytic laboratory generally analyzes the sample(s) for compounds that are suspected to be in the subsurface. Pending the analytic results and acceptance at an appropriate disposal facility, the soil will be transported to the disposal facility by a licensed waste hauler.

ATTACHMENT E

SUBSURFACE INVESTIGATION SOIL AND GROUND WATER ANALYTIC REPORTS AND CHAIN-OF-CUSTODY FORMS

NATIONAL ENVIRONMENTAL TESTING, INC.

Santa Rosa Division
435 Tesconi Circle
Santa Rosa, CA 95401
Tel: (707) 526-7200
Fax: (707) 526-9623

Jonathon Weingast
Weiss Associates
5500 Shellmound St.
Emeryville, CA 94608

Date: 02/22/1995
NET Client Acct. No: 1809
NET Pacific Job No: 95.00745
Received: 02/16/1995

Client Reference Information

Shell 1784 150th Avenue, San Leandro, CA

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:

Thomas F. Cullen, Jr.
Division Manager

Judy Ridley
Project Coordinator

Enclosure(s)

Client Name: Weiss Associates
Client Acct: 1809
NET Job No: 95.00745

Date: 02/22/1995
ELAP Cert: 1386
Page: 2

Ref: Shell 1784 150th Avenue, San Leandro, CA

SAMPLE DESCRIPTION: BH-7-17-W
Date Taken: 02/14/1995
Time Taken:
NET Sample No: 236241

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed	Run Batch No.
TPH (Gas/BTXE,Liquid)								
METHOD 5030/M8015	--						02/20/1995	2601
DILUTION FACTOR*	1						02/20/1995	2601
as Gasoline	0.10		0.05	mg/L	5030		02/20/1995	2601
Carbon Range:	C5-C14						02/20/1995	2601
METHOD 8020 (GC,Liquid)	--						02/20/1995	2601
Benzene	0.001		0.0005	mg/L	8020		02/20/1995	2601
Toluene	0.001		0.0005	mg/L	8020		02/20/1995	2601
Ethylbenzene	ND		0.0005	mg/L	8020		02/20/1995	2601
Xylenes (Total)	ND		0.0005	mg/L	8020		02/20/1995	2601
SURROGATE RESULTS	--						02/20/1995	2601
Bromofluorobenzene (SURR)	100			% Rec.	5030		02/20/1995	2601

Ref: Shell 1784 150th Avenue, San Leandro, CA

SAMPLE DESCRIPTION: BH-9-20-W
Date Taken: 02/14/1995
Time Taken:
NET Sample No: 236242

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed	Run Batch No.
TPH (Gas/BTXE,Liquid)								
METHOD 5030/M8015	--						02/20/1995	2601
DILUTION FACTOR*	1						02/20/1995	2601
as Gasoline	0.09		0.05	mg/L	5030		02/20/1995	2601
Carbon Range:	C5-C14						02/20/1995	2601
METHOD 8020 (GC,Liquid)	--						02/20/1995	2601
Benzene	0.0009		0.0005	mg/L	8020		02/20/1995	2601
Toluene	0.0009		0.0005	mg/L	8020		02/20/1995	2601
Ethylbenzene	ND		0.0005	mg/L	8020		02/20/1995	2601
Xylenes (Total)	ND		0.0005	mg/L	8020		02/20/1995	2601
SURROGATE RESULTS	--						02/20/1995	2601
Bromofluorobenzene (SURR)	77			% Rec.	5030		02/20/1995	2601

Ref: Shell 1784 150th Avenue, San Leandro, CA

SAMPLE DESCRIPTION: Trip Blank
Date Taken: 02/14/1995
Time Taken:
NET Sample No: 236243

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed	Run Batch No.
TPH (Gas/BTXE,Liquid)								
METHOD 5030/M8015	--						02/20/1995	2601
DILUTION FACTOR*	1						02/20/1995	2601
as Gasoline	ND		0.05	mg/L	5030		02/20/1995	2601
Carbon Range:	--						02/20/1995	2601
METHOD 8020 (GC,Liquid)	--						02/20/1995	2601
Benzene	ND		0.0005	mg/L	8020		02/20/1995	2601
Toluene	0.0011	C	0.0005	mg/L	8020		02/20/1995	2601
Ethylbenzene	ND		0.0005	mg/L	8020		02/20/1995	2601
Xylenes (Total)	ND		0.0005	mg/L	8020		02/20/1995	2601
SURROGATE RESULTS	--						02/20/1995	2601
Bromofluorobenzene (SURR)	94			% Rec.	5030		02/20/1995	2601

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

Client Name: Weiss Associates
Client Acct: 1809
NET Job No: 95.00745

Date: 02/22/1995
ELAP Cert: 1386
Page: 5

Ref: Shell 1784 150th Avenue, San Leandro, CA

SAMPLE DESCRIPTION: BH-7-15.8
Date Taken: 02/14/1995
Time Taken:
NET Sample No: 236244

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed	Run Batch No.
TPH (Gas/BTXE,Solid)								
METHOD 5030/M8015	--						02/20/1995	1640
DILUTION FACTOR*	1						02/20/1995	1640
as Gasoline	ND		1	mg/kg	5030		02/20/1995	1640
Carbon Range:	--						02/20/1995	1640
METHOD 8020 (GC,Solid)	--						02/20/1995	1640
Benzene	ND		0.0025	mg/kg	8020		02/20/1995	1640
Toluene	ND		0.0025	mg/kg	8020		02/20/1995	1640
Ethylbenzene	ND		0.0025	mg/kg	8020		02/20/1995	1640
Xylenes (Total)	ND		0.0025	mg/kg	8020		02/20/1995	1640
SURROGATE RESULTS	--						02/20/1995	1640
Bromofluorobenzene (SURR)	88			% Rec.	5030		02/20/1995	1640

Ref: Shell 1784 150th Avenue, San Leandro, CA

SAMPLE DESCRIPTION: BH-8-16.0
Date Taken: 02/14/1995
Time Taken:
NET Sample No: 236245

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed	Run Batch No.
TPH (Gas/BTXE,Solid)								
METHOD 5030/M8015	--						02/20/1995	1640
DILUTION FACTOR*	1						02/20/1995	1640
as Gasoline	ND		1	mg/kg	5030		02/20/1995	1640
Carbon Range:	--						02/20/1995	1640
METHOD 8020 (GC,Solid)	--						02/20/1995	1640
Benzene	ND		0.0025	mg/kg	8020		02/20/1995	1640
Toluene	ND		0.0025	mg/kg	8020		02/20/1995	1640
Ethylbenzene	ND		0.0025	mg/kg	8020		02/20/1995	1640
Xylenes (Total)	ND		0.0025	mg/kg	8020		02/20/1995	1640
SURROGATE RESULTS	--						02/20/1995	1640
Bromofluorobenzene (SURR)	93			% Rec.	5030		02/20/1995	1640

Ref: Shell 1784 150th Avenue, San Leandro, CA

SAMPLE DESCRIPTION: BH-9-19.5
Date Taken: 02/14/1995
Time Taken:
NET Sample No: 236246

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed	Run Batch No.
TPH (Gas/BTXE,Solid)								
METHOD 5030/M8015	--						02/19/1995	1639
DILUTION FACTOR*	1						02/19/1995	1639
as Gasoline	ND		1	mg/kg	5030		02/20/1995	1640
Carbon Range:	--						02/20/1995	1640
METHOD 8020 (GC,Solid)	--						02/19/1995	1639
Benzene	ND		0.0025	mg/kg	8020		02/20/1995	1640
Toluene	ND		0.0025	mg/kg	8020		02/20/1995	1640
Ethylbenzene	ND		0.0025	mg/kg	8020		02/20/1995	1640
Xylenes (Total)	ND		0.0025	mg/kg	8020		02/20/1995	1640
SURROGATE RESULTS	--						02/19/1995	1639
Bromofluorobenzene (SURR)	99			% Rec.	5030		02/20/1995	1640

Ref: Shell 1784 150th Avenue, San Leandro, CA

CONTINUING CALIBRATION VERIFICATION STANDARD REPORT

Parameter	CCV Standard % Recovery	CCV Standard Amount Found	CCV Standard Amount Expected	Units	Date Analyzed	Analyst Initials	Run Batch Number
TPH (Gas/BTXE,Liquid)							
as Gasoline	108.0	1.08	1.00	mg/L	02/20/1995	aal	2601
Benzene	91.8	4.59	5.00	ug/L	02/20/1995	aal	2601
Toluene	100.8	5.04	5.00	ug/L	02/20/1995	aal	2601
Ethylbenzene	85.8	4.29	5.00	ug/L	02/20/1995	aal	2601
Xylenes (Total)	102.0	15.3	15.0	ug/L	02/20/1995	aal	2601
Bromofluorobenzene (SURR)	95.0	95	100	% Rec.	02/20/1995	aal	2601
TPH (Gas/BTXE,Solid)							
as Gasoline	108.0	5.40	5.00	mg/kg	02/20/1995	aal	1640
Benzene	110.8	27.7	25.0	ug/kg	02/20/1995	aal	1640
Toluene	106.4	26.6	25.0	ug/kg	02/20/1995	aal	1640
Ethylbenzene	95.6	23.9	25.0	ug/kg	02/20/1995	aal	1640
Xylenes (Total)	94.4	70.8	75.0	ug/kg	02/20/1995	aal	1640
Bromofluorobenzene (SURR)	97.0	97	100	% Rec.	02/20/1995	aal	1640

Ref: Shell 1784 150th Avenue, San Leandro, CA

METHOD BLANK REPORT

Parameter	Method Blank Amount Found	Reporting Limit	Units	Date Analyzed	Analyst Initials	Run Batch Number
TPH (Gas/BTXE,Liquid)						
as Gasoline	ND	0.05	mg/L	02/20/1995	aal	2601
Benzene	ND	0.5	ug/L	02/20/1995	aal	2601
Toluene	ND	0.5	ug/L	02/20/1995	aal	2601
Ethylbenzene	ND	0.5	ug/L	02/20/1995	aal	2601
Xylenes (Total)	ND	0.5	ug/L	02/20/1995	aal	2601
Bromofluorobenzene (SURR)	98		% Rec.	02/20/1995	aal	2601
TPH (Gas/BTXE,Solid)						
as Gasoline	ND	1	mg/kg	02/20/1995	aal	1640
Benzene	ND	2.5	ug/kg	02/20/1995	aal	1640
Toluene	ND	2.5	ug/kg	02/20/1995	aal	1640
Ethylbenzene	ND	2.5	ug/kg	02/20/1995	aal	1640
Xylenes (Total)	ND	2.5	ug/kg	02/20/1995	aal	1640
Bromofluorobenzene (SURR)	93		% Rec.	02/20/1995	aal	1640

Ref: Shell 1784 150th Avenue, San Leandro, CA

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	Run Batch	Sample Spiked
TPH (Gas/BTXE,Liquid)											236083
as Gasoline	104.0	101.0	2.9	1.00	0.12	1.16	1.13	mg/L	02/20/1995	2601	236083
Benzene	105.5	100.9	4.5	21.8	0.6	23.6	22.3	ug/L	02/20/1995	2601	236083
Toluene	106.0	104.4	1.5	81.9	2.6	89.4	88.1	ug/L	02/20/1995	2601	236083
TPH (Gas/BTXE,Solid)											236303
as Gasoline	78.6	79.0	0.5	5.00	ND	3.93	3.95	mg/kg	02/20/1995	1640	236303
Benzene	88.5	92.0	3.9	105	ND	92.9	96.6	ug/kg	02/20/1995	1640	236303
Toluene	90.4	93.2	3.1	428	ND	387	399	ug/kg	02/20/1995	1640	236303

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. 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.

SHELL OIL COMPANY
RETAIL ENVIRONMENTAL ENGINEERING - WEST

CHAIN OF CUSTODY RECORD
Serial No: 5572

Date:
Page 1 of 1

Site Address: 1784 150 TH AVE SAN LEANDRO CA

WIC#: 204-6852-1404

Shell Engineer: DAN KIRK
Phone No.:
Fax #:

Consultant Name & Address: WEISS ASSOCIATES 5500 SHELLMOUND ST EMERYVILLE CA 94608

Consultant Contact: WA JOB #
Phone No.: (510) 547-5420
Fax #: 547-5043

Comments:

Sampled by: TOM HOWARD
Printed Name:

LAB: NET

CHECK ONE (1) BOX ONLY		CT/DT
G.W. Monitoring	☐	4461
Site Investigation	☒	4441
Soil Classify/Disposal	☐	4442
Water Classify/Disposal	☐	4443
Soil/Air Rem. or Sys. O & M	☐	4452
Water Rem. or Sys. O & M	☐	4453
Other	☐	

TURN AROUND TIME: 24 hours ☐ | 48 hours ☐ | 15 days ☒ (Normal) | Other ☐ ____

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

UST AGENCY: ____

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
BH-7-17-W	2/14/95			X		2						X							HYDROPUNCH GW SAMPLE	EXCELLENT
BH-9-20-W	2/15/95			X		2						X							"	"
TRIP BLANK	2/15/95			X		1						X							BLANK	"
BH-7-15.8	2/14/95		X			1						X							GEOPROBE SOIL SAMPLE	EXCELLENT
BH-8-16.0	2/14/95		X			1						X							"	VERY GOOD
BH-9-19.5	2/15/95		X			1						X							"	EX

Relinquished By (signature)	Printed Name	Date/Time	Received (signature)	Printed Name	Date/Time
	THOMAS M. HOWARD	Date: 2/15/95 Time: 1800		G. LUMBRE	Date: 2/16 Time: 1030
	G. LUMBRE	Date: 2/16 Time: 1030		PAM GREENE	Date: 2/16/95 Time: 1135
	PAM GREENE	Date: 2/16/95 Time: 1135		PAM GREENE	Date: 2/16/95 Time: 1135

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

Rev. 1/1/94

Shell Oil Chn. of Custody

COOLER RECEIPT FORM

roject: 1784 150th AVE. SAN LEANDRO CA Log No: 5512
ooler received on: 2/17/95 and checked on 2/17/95 by
(signature)

ere custody papers present?	YES	NO
ere custody papers properly filled out?	YES	NO
ere the custody papers signed?	YES	NO
as sufficient ice used?	YES	NO TEMP: 1.9°C
id all bottles arrive in good condition (unbroken)?	YES	NO
id bottle labels match COC?	YES	NO
ere proper bottles used for analysis indicated?	YES	NO
orrect preservatives used?	YES	NO
OA vials checked for headspace bubbles?	YES	NO

Note which voas (if any) had bubbles:*

ample descriptor:	Number of vials:

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

ist here all other jobs received in the same cooler:

lient Job #	NET log #

(coolerrec)

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
1900 Bates Avenue, Suite L, Concord, CA 94520, (510) 686-9600, FAX (510) 686-9689
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Weiss Associates
5500 Shellmound
Emeryville, CA 94608
Attention: Tom Howard

Project: Shell, 1784 150th Ave, San Le

Enclosed are the results from samples received at Sequoia Analytical on March 3, 1995. The requested analyses are listed below:

SAMPLE #	SAMPLE DESCRIPTION	DATE COLLECTED	TEST METHOD
9503251 -01	SOLID, BH-10-15.2	03/03/95	TPHGBS Purgeable TPH/BTEX

Please contact me if you have any questions. In the meantime, thank you for the opportunity to work with you on this project.

Very truly yours,

SEQUOIA ANALYTICAL

Mike Gregory
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
1900 Bates Avenue, Suite L, Concord, CA 94520, (510) 686-9600, FAX (510) 686-9689
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Weiss Associates	Client Proj. ID: Shell, 1784 150th Ave, San Le	Sampled: 03/03/95
5500 Shellmound	Sample Descript: BH-10-15.2	Received: 03/03/95
Emeryville, CA 94608	Matrix: SOLID	Extracted: 03/07/95
	Analysis Method: 8015Mod/8020	Analyzed: 03/07/95
Attention: Tom Howard	Lab Number: 9503251-01	Reported: 03/10/95

QC Batch Number: GC030795BTEXEXA
Instrument ID: GCHP18

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TPPH as Gas	1.0	N.D.
Benzene	0.0050	N.D.
Toluene	0.0050	N.D.
Ethyl Benzene	0.0050	N.D.
Xylenes (Total)	0.0050	N.D.
Chromatogram Pattern:		

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	86

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Mike Gregory
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
1900 Bates Avenue, Suite L, Concord, CA 94520, (510) 686-9600, FAX (510) 686-9689
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Weiss & Associates
5500 Shellmound
Emeryville, CA 94608
Attention: Tom Howard

Client Project ID: Shell, 1784 150th Ave., San Leandro
Matrix: Solid
Work Order #: 9503251 -01

Reported: Mar 10, 1995

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC030795BTEXEXA	GC030795BTEXEXA	GC030795BTEXEXA	GC030795BTEXEXA
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	G. Garcia	G. Garcia	G. Garcia	G. Garcia
MS/MSD #:	9503141-03	9503141-03	9503141-03	9503141-03
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	3/7/95	3/7/95	3/7/95	3/7/95
Analyzed Date:	3/7/95	3/7/95	3/7/95	3/7/95
Instrument I.D.#:	GCHP18	GCHP18	GCHP18	GCHP18
Conc. Spiked:	0.20 mg/kg	0.20 mg/kg	0.20 mg/kg	0.60 mg/kg
Result:	0.17	0.17	0.17	0.51
MS % Recovery:	80	85	85	85
Dup. Result:	0.16	0.16	0.17	0.49
MSD % Recov.:	80	80	85	82
RPD:	6.1	6.1	0.0	4.0
RPD Limit:	0-50	0-50	0-50	0-50

LCS #:				
Prepared Date:				
Analyzed Date:				
Instrument I.D.#:				
Conc. Spiked:				
LCS Result:				
LCS % Recov.:				

MS/MSD LCS Control Limits	55-145	47-149	47-155	56-140

Please Note:
The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

SEQUOIA ANALYTICAL

Mike Gregory
Project Manager

** MS = Matrix Spike, MSD = MS Duplicate, RPD = Relative % Difference

SHELL OIL COMPANY
RETAIL ENVIRONMENTAL ENGINEERING - WEST

CHAIN OF CUSTODY RECORD
Serial No: _____

Date: 3/3/95
Page 1 of 1

Site Address: 1784 150th Avenue, San Leandro

WIC#: 204-6852-1404

Shell Engineer: Dan Kirk
Phone No.: (510) 675-6168
Fax #:

Consultant Name & Address: WEISS ASSOCIATES 5500 SHELLMOUND ST EMERYVILLE CA 94608

Consultant Contact: Tom Howard
Phone No.: (510) 547-5420
Fax #: 547-5043
WA JOB # 81-0422

Comments: MW-4 Investigation

Sampled by: Faith Morris Davern

Printed Name: Faith Morris Davern

LAB: Sequoia

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	9503251	Asbestos	Container Size	Preparation Used	Composite Y/N	MATERIAL DESCRIPTION	SAMPLE CONDITION/ COMMENTS
BH-10-15.2'	3/3/95		X			1						X						Soil	-01

Analysis Required

CHECK ONE (1) BOX ONLY	CT/DT	TURN AROUND TIME
G.W. Monitoring	4461	24 hours
Site Investigation	X 4441	48 hours
Soil Classify/Disposal	4442	15 days X (Normal)
Water Classify/Disposal	4443	Other
Soil/Air Rem. or Sys. O & M	4452	NOTE: Notify Lab as soon as Possible of 24/48 hrs. TAT.
Water Rem. or Sys. O & M	4453	
Other		

UST AGENCY: _____

Relinquished By (signature)	Printed Name	Date / Time	Received (signature)	Printed Name	Date / Time
Faith Morris Davern	Faith Morris Davern	Date: 3/3/95 Time: 1713			Date: Time:
		Date: Time:			Date: Time:
		Date: Time:	Charles Allen	Charles Allen	Date: 3-3-95 Time: 1713

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

Rev. 7/12/93

Shell Oil Chain of Custody

ATTACHMENT F

SURVEY REPORT

PLS Surveys, Inc.

2415 Mariner Square Drive, Suite 8
Alameda, California 94501
510-522-1790 FAX 510-522-6207

March 22, 1995

COPY

Mr. Tom Howard
Weiss Associates
5500 Shellmound Street
Emeryville, CA 94608-2411

Subject: Project WIC #204-6852-1404
Shell Service Station

Dear Mr. Howard:

The following are the elevations as found for the wells at the above referenced site.

Structure	12-19-94 Elev.	3-21-95 Elev.
MW-1, Casing	49.13	49.13
MW-2, Casing	45.83	45.824
MW-4, Casing		40.51
MW-4, Vault		40.88

The elevation reading was taken on the north side of the casing/vault, and was marked at the location with a felt tip pen. If you have any questions, please feel free to call.

Sincerely,

Julia E. Terry

Julia E. Terry, PLS
President

ATTACHMENT G

SOIL DISPOSAL CONFIRMATION

DISPOSAL CONFIRMATION

COPY

Consultant:	WEISS ASSOCIATES
Contact:	FAITH DAVERIN
Phone/Fax:	510-547-5420 FAX 510-547-5043
Client:	SHELL OIL CO. - DAN KIRK
Station #/Wic #:	204-6852-1404
Site Address:	1784 150TH AVENUE
City/State:	SAN LEANDRO, CA
Estimated YD/Ton:	2 YARDS
Actual YD/Ton:	2 YARDS
Disposal Facility:	REDWOOD LANDFILL
Disposal Date:	APRIL 5, 1995
Contact:	WHITNEY KING
Phone #:	415-892-2851
Hauler:	MANLEY & SONS TRUCKING, INC.
Contact:	TIM A. MANLEY
Phone #:	(916) 381-6864
Fax #:	(916) 381-1573

Date & Time Faxed

2951