File
RO343
94607

SHELL OIL COMPANY
7th/BROADWAY
OAKLAND

1/9/89

JE found this in Dec 94

BRIEF HISTORY

Shell prior to 10/88, Look @ Plume & PSA dated 6-30-93 by GeoStrategies for history prior to 1988

- On January 10, 1979, BART notified Shell that gasoline was leaking into an underground BART tube near the intersection of 7th and Broadway in Oakland.

- See the attached chronological list of events of all actions taken regarding the gasoline that was leaking into the BART tube from January 10, 1979 to December 3, 1981.

- Groundwater recovery system installed in October of 1982.

- The discharge permit was revoked in March of 1983 because the gasoline concentrations of the effluent water exceeded the discharge requirements.

- A recovery system removal report dated June 26, 1986, was prepared by Emcon Associates.

- Due to the presence of separate phase product in well 5, (approximately 0.5 feet), pumped well (which is adjacent to an active BART tube) continuously with a vacuum truck to remove the product on October 31, 1987.

- Met with BART personnel regarding the presence of separate phase product in well 5 on November 9, 1987. Inspected the KE line of the BART tube for the presence of gasoline seepage and/or gasoline vapors. No evidence of gasoline seepage observed.

WORK COMPLETED THIS PERIOD

- The groundwater monitoring wells were sampled on October 26, 1988. A copy of the groundwater sampling report and analytical results is attached.

GROUNDWATER MONITORING **FREQUENCY: WEEKLY**

- INITIAL: Seven (7) groundwater monitoring wells (1 through 7) and one recovery well (MW). Groundwater at 17 feet to 18 feet below grade. No separate phase product in any of the wells.

- HISTORICAL: Six groundwater monitoring wells (1 through 6) and one recovery well (MW). Well 7 destroyed during freeway construction. Groundwater fluctuated from 17 feet to 21 feet below grade. Separate phase product in well 5 ranging from film to 0.6 feet. No separate phase product in any of the other wells.

- CURRENT: Three groundwater monitoring wells (4 through 6) and one recovery well (MW). Wells 1 through 3 are inaccessible. Groundwater is encountered at depths of 14 to 21 feet below grade. A product sheen has been observed in well S-5.

- PRODUCT RECOVERED: Approximately 50 gallons of separate phase product was pumped from well 5 in October of 1987.

GROUNDWATER SAMPLING **FREQUENCY: QUARTERLY**

- HISTORICAL: Groundwater monitoring wells 2, 5, and 6 were sampled on April 16, 1988. Gasoline concentrations ranged from 47.0 ppm to 130.0 ppm. Benzene concentrations ranged from 8.2 ppm to 16.0 ppm. See attached table summarizing the results.

- CURRENT: Groundwater samples collected on October 26, 1988 contained benzene concentrations ranging from 0.0038 ppm to 29 ppm.

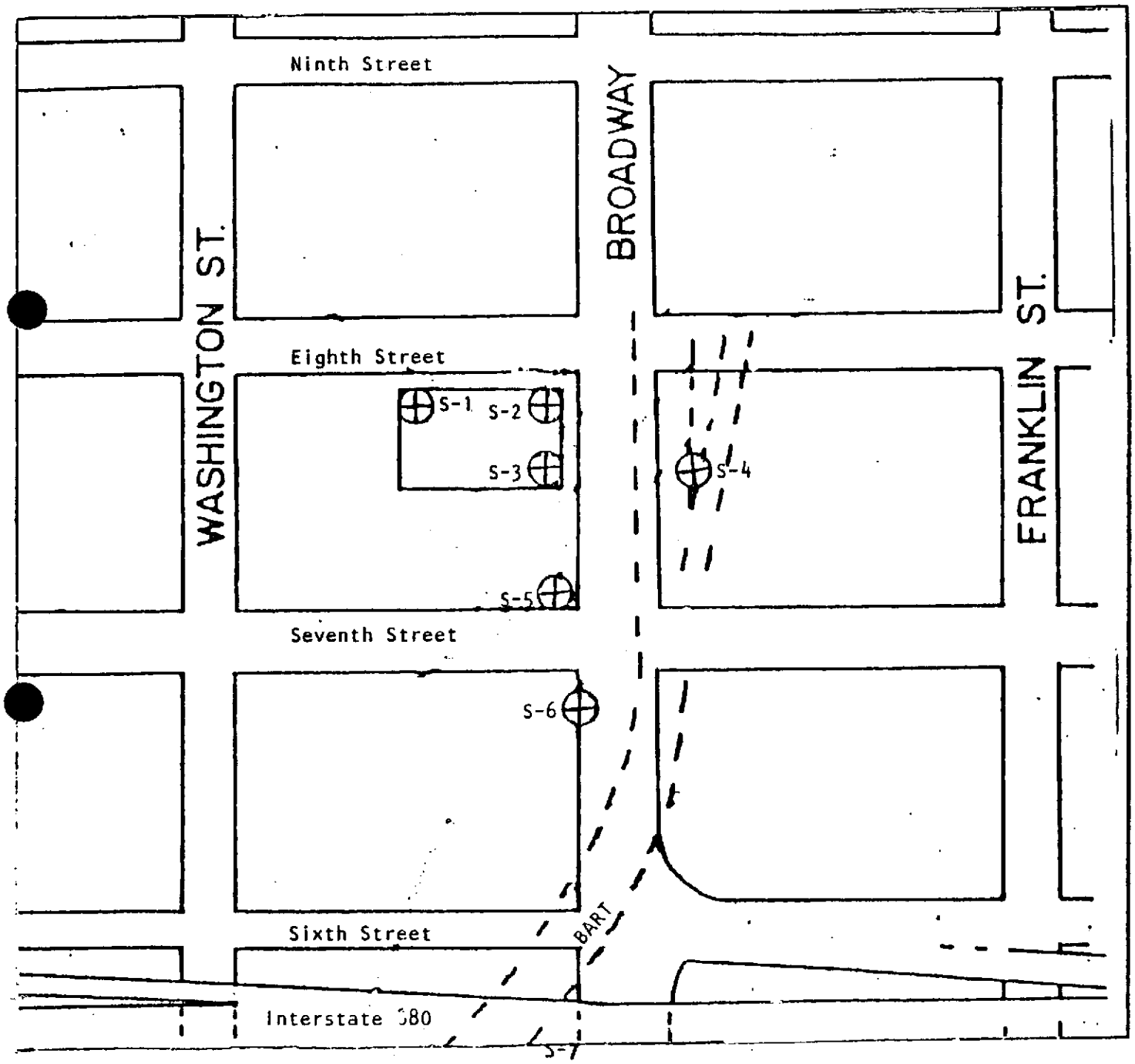
PROPOSED ACTION:

- Prepare a work plan to define the extent of soil and groundwater contamination at the site. The work plan will be prepared under the direction of a registered professional.

- Perform field work upon receipt of all necessary permits.

- Continue quarterly groundwater sampling.

- Periodically make contact with BART personnel to assure there are no gasoline vapors in the KE line of the BART tube.



LEGEND

SITE:

Shell Service Station

SITE LOC.:

7th and Broadway
Oakland, California

JOB #

FIGURE

ANALYTICAL LOG

DATE	SAMPLE POINT	TVHC (PPM)	BENZENE (PPM)	TOLUENE (PPM)	XYLENES (PPM)
DETECTION LIMITS ---------		0.05	0.0005	0.001	0.004
16-Apr-87	2	47.00	8.2000	4.700	3.100
16-Apr-87	5	130.00	15.0000	16.000	14.000
16-Apr-87	6	81.00	16.0000	9.000	6.400

DATE	SAMPLE POINT	TVHC (PPM)	BENZENE (PPM)	TOLUENE (PPM)	E.B. (PPM)	XYLENES (PPM)
DETECTION LIMITS ---------		0.05	0.0005	0.001	0.001	0.003
26-Oct-88	S-4	0.13	0.0038	0.013	0.004	0.030
26-Oct-88	S-5	110.00	20.0000	25.000	2.300	10.000
26-Oct-88	S-6	110.00	29.0000	18.000	2.500	8.200

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MONITOR DATA LOG

****

DATE - Date site monitored.

WELL - Well number.

DTH - Depth to Hydrocarbon.
Measured to the nearest hundredth of a foot from the top of the sidewalk box only if hydrocarbon is present. Space will be left blank if no hydrocarbon is present.

DTW - Depth to Water
Measured to the nearest hundredth of a foot from the top of the sidewalk box only if no hydrocarbon is present. If hydorcarbon is found, a negative one (1.00) is entered, which is used by the computer for specific hydraulic calculations. DW in this column denotes a dry well.

HT - Hydrocarbon Thickness.
Measured to the nearest hundredth of a foot. .00 is entered to indicate a trace or film of hydrocarbon.

BAILED - Amount of Product Bailed from the well in Gallons.

FLOWMETER- Flowmeter Reading in Cumulative Gallons.

PT-LIQ. - Total Inches of Liquid in Product Tank.

PT-H2O - Total Inches of Water in Product Tank.
Amount of product in Product Tank = PT-LIQ. - PT-H2O.

EMP - Gettler-Ryan Inc. - internal use only.

C.ELEV. - Surface Elevation of Sidewalk Box.

PPM - Vapor Readings in Parts Per Million.

LEL - Vapor Readings in % of the Lower Explosive Limit

NORM - Established Normal Vapor Reading for the Well.
Measured in PPM unless specified as LEL.

DTB - Depth to Bottom of Well.

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DATE	WELL	DTH	DTW	HT	BAILED	FLOWMETER	PT-LIQ.	PT-H2O	EMP	C.ELEV
02-Dec-88	RW		18.60	0.00						
09-Dec-88	RW		18.64	0.00						
16-Dec-88	RW		18.71	0.00						
22-Dec-88	RW		18.68	0.00						
30-Dec-88	RW		18.75	0.00						
02-Dec-88	4		14.29	0.00					SM	
09-Dec-88	4		14.45	0.00					GS	
16-Dec-88	4		14.53	0.00					CA	
22-Dec-88	4		N/A	FLOODED					SM	
30-Dec-88	4		13.71	0.00					SM	
02-Dec-88	5	19.58	(1.00)	.00						
09-Dec-88	5	19.66	(1.00)	.00						
16-Dec-88	5		19.80	0.00						
22-Dec-88	5		N/A	FLOODED						
30-Dec-88	5	19.88	(1.00)	.00						
02-Dec-88	6		20.60	0.00						
09-Dec-88	6		20.70	0.00						
16-Dec-88	6		20.75	0.00						
22-Dec-88	6		N/A	FLOODED						
30-Dec-88	6		20.79	0.00						

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general contractors

December 6, 1988

GROUNDWATER SAMPLING REPORT

Shell Oil Company
Post Office Box 4023
Concord, California

Referenced Site: Former Shell Service Station
Seventh / Broadway
Oakland, California

Sampling Date: October 26, 1988

This report presents the results of the quarterly groundwater sampling and analytical program conducted by Gettler-Ryan Inc. on October 26, 1988, at the referenced location. **The site is a vacant lot located on the southeast corner of Broadway & Seventh.** The former service station had underground storage tanks which contained petroleum products.

There are currently three groundwater monitoring wells on site at the locations shown on the attached site map. Prior to sampling, all wells were inspected for total well depth, water levels, and presence of separate phase product using an electronic interface probe. A clean acrylic bailer was used to visually confirm the presence and thickness of separate phase product. Groundwater depths ranged from approximately 3.4 to 20.8 feet below grade.

Wells that did not contain separate phase product were purged and sampled. Standard sampling procedure calls for a minimum of four case volumes to be purged from each well. Each well was purged while pH, temperature, and conductivity measurements were monitored for stability. In cases where a well dewatered or less than four case volumes were purged, groundwater samples were obtained after the physical parameters had stabilized. Details of the final well purging results are presented on the attached Table of Monitoring Data.

Samples were collected, using a teflon bailer or bladder pump, in properly cleaned and laboratory prepared containers. All sampling equipment was thoroughly cleaned after each well was sampled and steam cleaned upon completion of work at the site. The samples were labeled, stored on blue ice, and transported to the laboratory for analysis. Chain of custody records were established noting sample identification numbers, time, date, and custody signatures.

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The samples were analyzed at International Technology Corporation - Santa Clara Valley Laboratory located at 2055 Junction Avenue, San Jose, California. The laboratory is assigned a California DHS-HMTL Certification number of 137. The results are presented as a Certified Analytical Report, a copy of which is attached to this report.

Tom Paulson
Sampling Manager

attachments

TABLE OF MONITORING DATA
GROUNDWATER WELL SAMPLING REPORT

WELL I.D.	S-4	S-5	S-6
Casing Diameter (inches)	4		4
Total Well Depth (feet)	19.5	40.5	38
Depth to Water (feet)	3.38	20.82	20.48
Free Product (feet)	none	none	none
Reason Not Sampled	----	----	----
Ideal 5 Case Vol.(gallons)	53	64	58
Did Well Dewater?	yes	no	no
Volume Evacuated (gallons)	16	64	60
Purging Device	Air Lift	Bladder	Air Lift
Sampling Device	Bailer	Bladder	Bailer
Time	16:20	15:30	18:38
Temperature (F) *	66.9	67.4	67.1
pH *	7.35	6.42	6.43
Conductivity (umhos/cm) *	755	540	1143

* Indicates stabilized value

IT Santa Clara Valley Lab to Gettler-Ryan
ATTN: John Werfal

November 15, 1988

ND = None Detected

Summary of Results - Milligrams per Liter

Lab Number	Sample Identification	Low Boiling Hydrocarbons (calculated as gasoline)	Benzene	Toluene	Ethyl Benzene	Xylenes
S8-10-285-01	S4	0.13	0.0038	0.013	0.004	0.030
Detection Limits		0.05	0.0005	0.001	0.001	0.003
S8-10-285-02	S5	110.	20.	25.	2.3	10.
Detection Limits		10.	0.5	1.	0.2	0.6
S8-10-285-03	S6	110.	29.	18.	2.5	8.2
Detection Limits		10.	0.5	1.	0.2	0.6

INTERNATIONAL TECHNOLOGY CORPORATION

November 15, 1988

Gettler-Ryan
1992 National Avenue
Hayward, CA 94545

ATTN: John Werfal

Following are the results of analyses on the samples described below.

Project:	GR #83137, Shell, Seventh and Broadway, Oakland, CA
Lab Numbers:	S8-10-285-01 through S8-10-285-03
Number of Samples:	3
Sample Type:	Water
Date Received:	10/26/88
Analyses Requested:	Low Boiling Hydrocarbons

The method of analysis for low boiling hydrocarbons is taken from EPA Methods 8015, 8020 and 5030. The sample is examined using the purge and trap technique. Final detection is by gas chromatography using a flame ionization detector as well as a photoionization detector. The result for total low boiling hydrocarbons is calculated as gasoline and includes benzene, toluene, ethyl benzene and xylenes.

Fred Rouse

FR/mlh

1 Page Following - Table of Results

Gettler - Ryan Inc. ENVIRONMENTAL DIVISION — **Chain of Custody**

COMPANY [redacted] Oil Company — JOB NO. 83137

JOB LOCATION Seventh & Broadway

CITY Oakland CA — PHONE NO. 415-783-7500

AUTHORIZED John Werfal — DATE 10-26-88 — P.O. NO. 85200

SAMPLE ID	NO. OF CONTAINERS	SAMPLE MATRIX	DATE/TIME SAMPLED	ANALYSIS REQUIRED	SAMPLE CONDITION LAB ID
S-4	3	Liquid	THC Gasoline	10-26-88/16:20	Ok/Cold
S-5	3	↓	↓	/15:32	↓ ↓
S-6	3	↓	↓	18:32	↓ ↓

Normal turnaround Time Due Date 11-10-88

RELINQUISHED BY: [signature] 10/27/88 11:15 am — RECEIVED BY: Larry

RELINQUISHED BY: — RECEIVED BY:

RELINQUISHED BY: — RECEIVED BY LAB: Larry [illegible] IT-SCV 10/27/88 11:16 am

DESIGNATED LABORATORY: IT/SCV San Jose — DHS #: 137

REMARKS:

DATE COMPLETED 10-26-88 — Sampler/FOREMAN [signature]

ORIGINAL