

Shell Oil Company



EAST BAY  
MARKETING DISTRICT

P O Box 4023  
Concord, CA 94524  
(415) 676-1414

November 20, 1989

Mr. Larry Seto  
County of Alameda  
Department of Environmental Health  
Hazardous Materials Division  
80 Swan Way, Room 200  
Oakland, California 94621

SUBJECT: SHELL SERVICE STATION  
2800 TELEGRAPH AVENUE  
OAKLAND, CALIFORNIA

609

89 NOV 20 AM 11:00

Dear Mr. Seto:

Enclosed is a copy of an Addendum to GeoStrategies Inc.'s (GSI) September 22, 1989 report for the subject location. The addendum was prepared to address errors in the report resulting from an incorrect analytical report issued by the laboratory.

If you should have any questions or comments regarding this project please do not hesitate to call me at (415) 676-1414 ext. 127.

Very truly yours,

Diane M. Lundquist  
District Environmental Engineer

DML/jw

enclosure

cc: Mr. Tom Callaghan, Regional Water Quality Control Board  
Mr. John Werfal, Gettler-Ryan Inc.



**GeoStrategies Inc.**

2140 WEST WINTON AVENUE  
HAYWARD, CALIFORNIA 94545

(415) 352-4800

October 31, 1989

**Gettler-Ryan Inc.**  
1992 National Avenue  
Hayward, California 94545

Attn: John Werfal

Re: Addendum to GSI Report (September 22, 1989)  
Former Shell Service Station  
2800 Telegraph Avenue  
Oakland, California

Gentlemen:

The purpose of this letter is to transmit errata to the GeoStrategies Inc. (GSI) report dated September 22, 1989. International Technology Analytical Services (IT) inadvertently switched the chemical analytical results for ground-water samples collected from Wells S-8 and S-9 in their analytical report dated August 23, 1989. The IT report originally stated that Total Petroleum Hydrocarbons calculated as Gasoline (TPH-Gasoline) was detected in Well S-9 [1.6 parts per million (ppm)] and Well S-8 was reported as none detected (ND). The amended IT chemical analytical report indicates a concentration of 1.6 ppm TPH-Gasoline for Well S-8 and Well S-9 was reported as ND (Plate 4).


Benzene was initially reported as ND in Well S-8 and 0.032 ppm in Well S-9. The corrected report shows benzene at a concentration of 0.032 in Well S-8 and ND in Well S-9 (Plate 5).

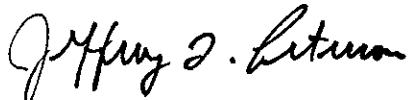
In addition to the amended IT chemical analytical report, an amended Groundwater Sampling Report has also been issued by Gettler-Ryan Inc. Table 2 taken from the September 22, 1989 GSI report has also been corrected and is attached to this correspondence.

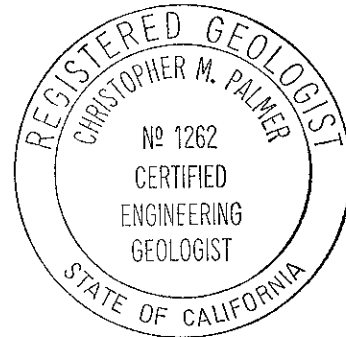
**GeoStrategies Inc.**


Gettler-Ryan Inc.  
October 31, 1989  
Page 2

If you have any questions, please call.

  
Timothy J. Walker  
Geologist

  
Jeffrey L. Peterson  
Senior Hydrologist  
R.E.A. 1021



  
Christopher M. Palmer  
C.E.G. 1262 R.E.A 285

TJW/JLP/mlg

Table 2  
Plate 4. TPH Isoconcentration Map  
Plate 5. Benzene Isoconcentration Map  
Amended G-R Groundwater Sampling Report (August 3, 1989)

TABLE 2

## GROUND-WATER CHEMICAL DATA

WELL NO	SAMPLE DATE	ANALYSIS DATE	TPH (PPM)	BENZENE (PPM)	TOLUENE (PPM)	ETHYLBENZENE (PPM)	XYLENES (PPM)	WELL ELEV (FT)	STATIC WATER ELEV (FT)	PRODUCT THICKNESS (FT)	DEPTH TO WATER (FT)
S-1	03-Aug-89	10-Aug-89	ND	ND	ND	ND	ND	29.31	19.43	----	9.88
S-2	03-Aug-89	10-Aug-89	0.43	0.073	0.001	0.014	0.007	27.91	18.16	----	9.75
S-3	03-Aug-89	----	----	----	----	----	----	27.56	18.38	0.03	9.30
S-4	03-Aug-89	10-Aug-89	ND	ND	ND	ND	ND	28.08	17.13	----	10.95
S-5	03-Aug-89	10-Aug-89	ND	ND	ND	ND	ND	27.42	16.95	----	10.47
S-6	03-Aug-89	10-Aug-89	7.1	2.4	ND	0.07	ND	26.59	17.19	----	9.40
S-7	03-Aug-89	15-Aug-89	5.	0.66	0.38	0.23	0.71	27.33	16.29	----	11.04
S-8	03-Aug-89	10-Aug-89	1.6	0.032	0.12	0.052	0.25	25.97	15.75	----	10.22
S-9	03-Aug-89	10-Aug-89	ND	ND	ND	ND	ND	25.86	15.44	----	10.42

CURRENT REGIONAL WATER QUALITY CONTROL BOARD MAXIMUM  
CONTAMINANT LEVELS

Benzene 0.001 ppm    Xylenes 1.750 ppm    Ethylbenzene 0.68 ppm

## CURRENT DHS ACTION LEVELS

Toluene 0.100 ppm

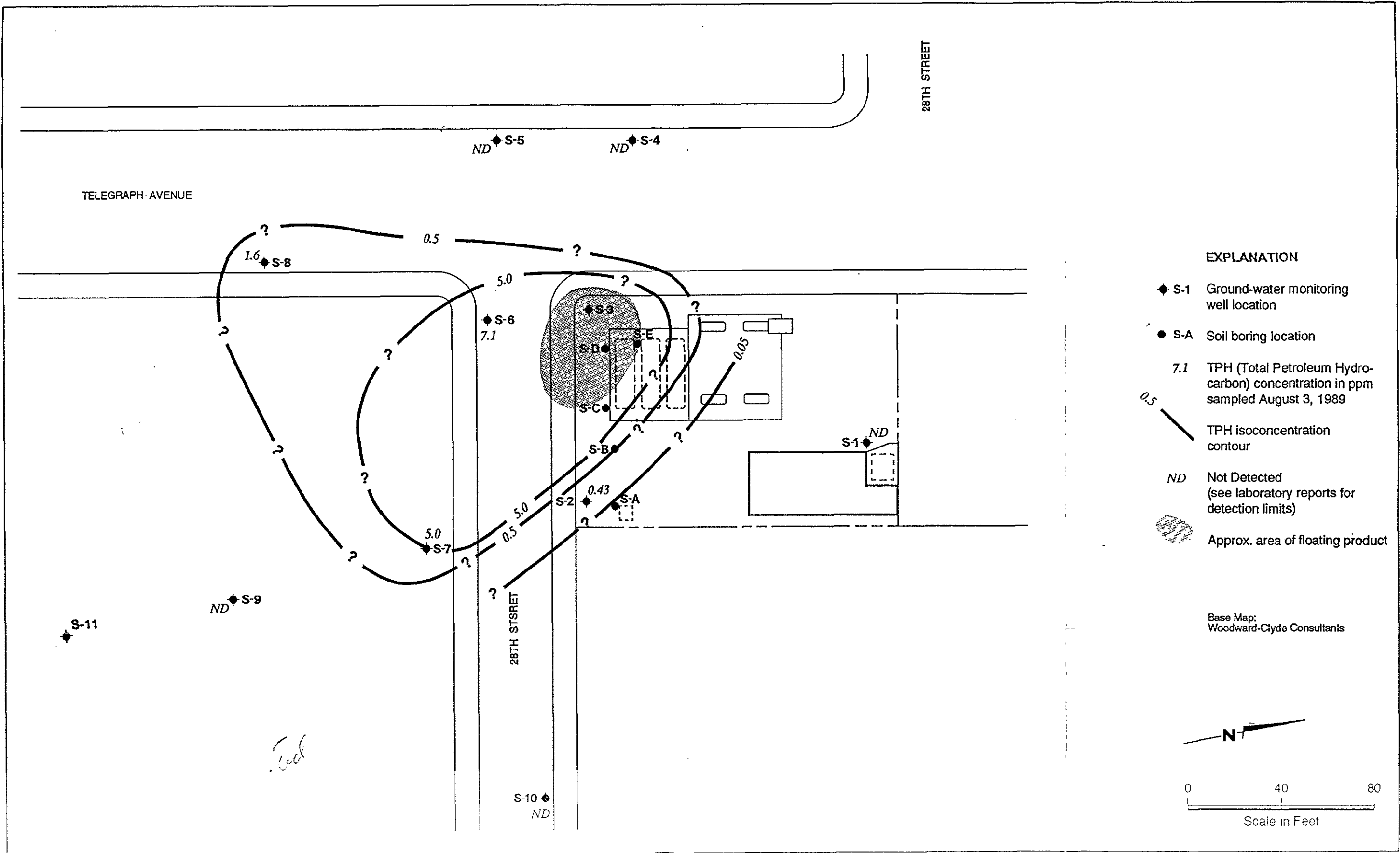
TPH = Total Petroleum Hydrocarbons Calculated as Gasoline  
 PPM = Parts per Million      SF = Field Sample      TB = Trip Blank  
 SD = Duplicate Sample      ND = None Detected

- Note: 1. For chemical parameter detection limits, refer to I.T. laboratory reports in Appendix B  
 2. Water level elevations referenced to mean sea level (MSL)  
 3. Well S-3 had free product and was not sampled

TABLE 2

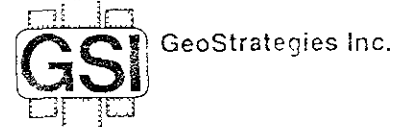
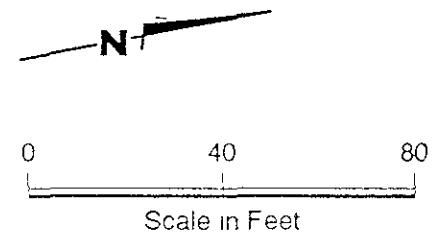
## GROUND-WATER CHEMICAL DATA

WELL NO	SAMPLE DATE	ANALYSIS DATE	TPH (PPM)	BENZENE (PPM)	TOLUENE (PPM)	ETHYLBENZENE (PPM)	XYLENES (PPM)	WELL ELEV (FT)	STATIC WATER ELEV (FT)	PRODUCT THICKNESS (FT)	DEPTH TO WATER (FT)
SD-1	03-Aug-89	10-Aug-89	ND	ND	ND	ND	ND	----	----	----	----
S-10	03-Aug-89	10-Aug-89	ND	ND	ND	ND	ND	26.95	18.70	----	8.25
SF-4	03-Aug-89	10-Aug-89	ND	ND	ND	ND	ND	----	----	----	----
TB	03-Aug-89	10-Aug-89	ND	ND	ND	ND	ND	----	----	----	----



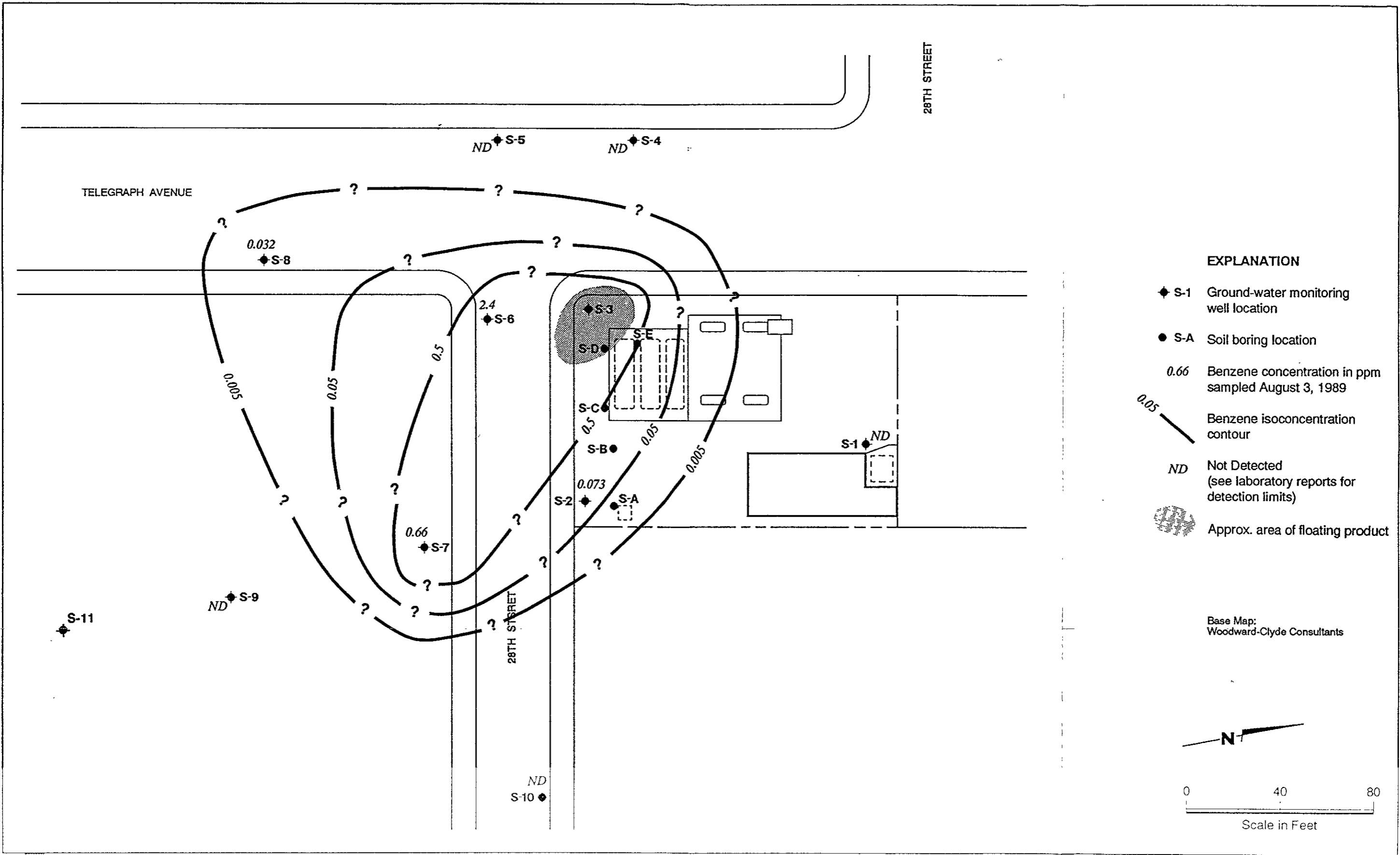
- EXPLANATION**
- ◆ S-1 Ground-water monitoring well location
  - S-A Soil boring location
  - 7.1 TPH (Total Petroleum Hydrocarbon) concentration in ppm sampled August 3, 1989
  - 0.5 / — TPH isoconcentration contour
  - ND Not Detected (see laboratory reports for detection limits)
  - ▨ Approx. area of floating product

Base Map:  
Woodward-Clyde Consultants



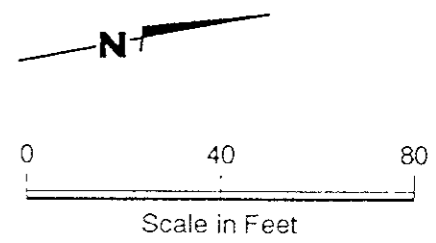
TPH Isoconcentration Map  
Former Shell Service Station  
2800 Telegraph Avenue  
Oakland, California

PLATE  
**4**



- EXPLANATION**
- ◆ S-1 Ground-water monitoring well location
  - S-A Soil boring location
  - 0.66 Benzene concentration in ppm sampled August 3, 1989
  - 0.05 Benzene isoconcentration contour
  - ND Not Detected (see laboratory reports for detection limits)
  - Approx. area of floating product

Base Map:  
Woodward-Clyde Consultants





October 23, 1989

**REVISED GROUNDWATER SAMPLING REPORT \***

Referenced Site: Former Shell Service Station  
2800 Telegraph Avenue  
Oakland, California

Sampling Date: August 3, 1989

This report presents the results of the quarterly groundwater sampling and analytical program conducted by Gettler-Ryan Inc. on August 3, 1989 at the referenced location. The site, located on the northeast corner of Telegraph and 28th Avenue, is no longer an operating service station. The former station had underground storage tanks which contained petroleum products.

There are currently three groundwater monitoring wells on site and seven off site at the locations shown on the attached site map. Prior to sampling, the 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 8.25 to 11.04 feet below grade. Separate phase product was observed in monitoring well S-3.

The wells were then 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. The purge water was contained in drums for proper disposal. Details of the final well purging results are presented on the attached Table of Monitoring Data.

Samples were collected, using Teflon bailers, 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. A field blank (SF-4), and trip blank, supplied by the laboratory, were included and analyzed to assess quality control. A duplicate sample (SD-1), was submitted without well designation, to assess laboratory performance. Analytical results for the blanks are included in the Certified Analytical Report (CAR's). Chain of custody records were established noting sample identification numbers, time, date, and custody signatures.



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.

A handwritten signature in black ink, appearing to read "Paulson", with a long horizontal flourish extending to the right.

Tom Paulson  
Sampling Manager

attachments

\* This Groundwater Sampling Report was issued to amend the previous report issued September 7, 1989. In the September 7th Report, the original laboratory Certified Analytical Report had the results for wells S-8 and S-9 reversed.

TABLE OF MONITORING DATA  
GROUNDWATER WELL SAMPLING REPORT

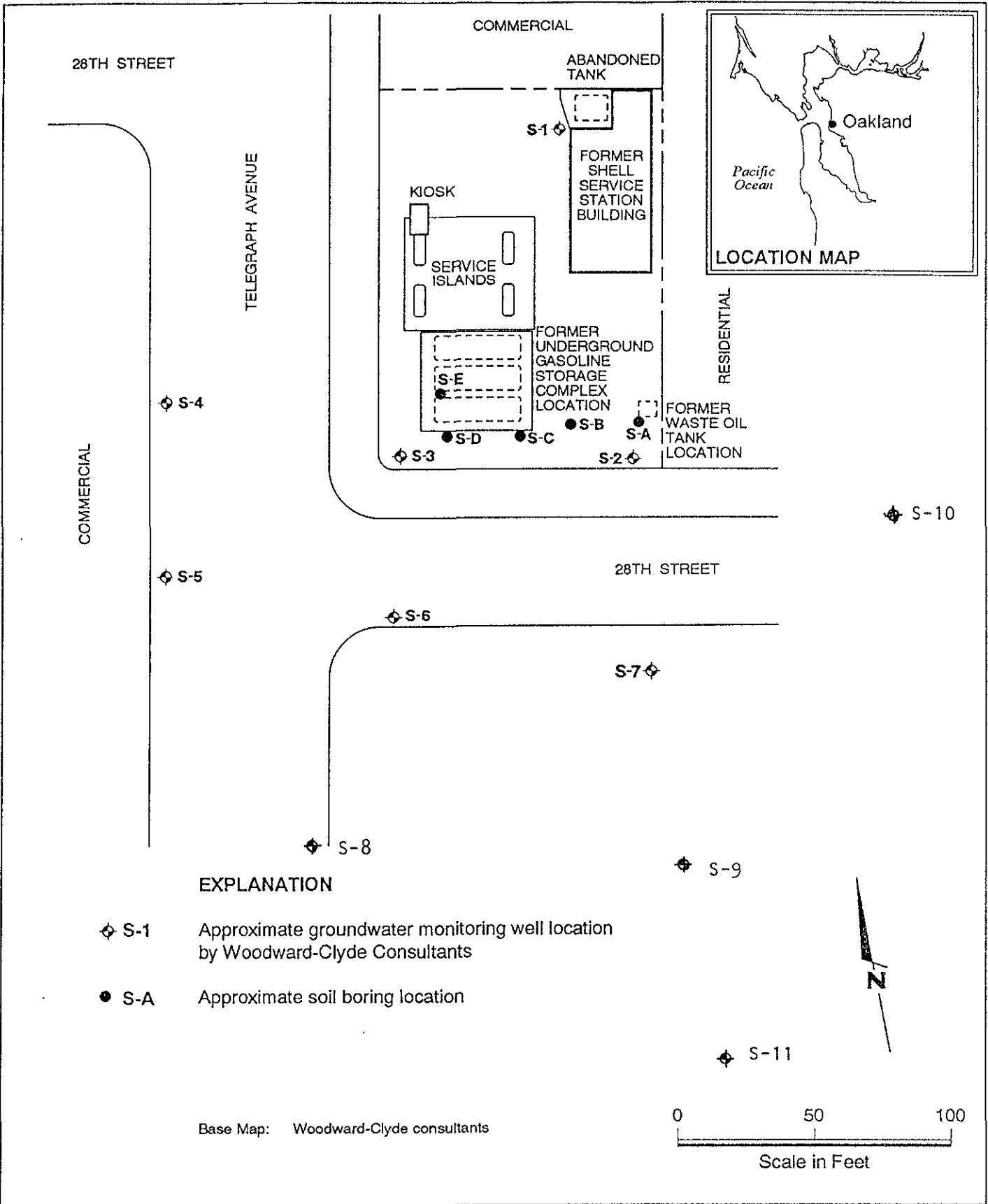
<u>WELL I.D.</u>	S-1 SD-1	S-2	S-3	S-4	S-5	S-6
Casing Diameter (inches)	3	3	3	3	3	3
Total Well Depth (feet)	28.00	25.50	----	29.10	30.58	22.10
Depth to Water (feet)	9.88	9.75	9.30	10.95	10.47	9.40
Free Product (feet)	none	none	0.03	none	none	none
Reason Not Sampled	----	----	free prod.	----	----	----
Calculated 4 Case Vol.(gal.)	27.5	24.0	----	27.6	30.5	19.2
Did Well Dewater?	no	no	----	yes	no	yes
Volume Evacuated (gal.)	37	37	----	21	39	15
Purging Device	Suction	Suction	----	Suction	Suction	Suction
Sampling Device	Bailer	Bailer	----	Bailer	Bailer	Bailer
Time	10:48	11:14	----	13:18	13:01	11:48
Temperature (F)*	66.6	66.0	----	70.2	69.8	71.2
pH*	6.38	6.55	----	6.36	6.56	6.55
Conductivity (umhos/cm)*	478	686	----	454	168	888

\* Indicates Stabilized Value

TABLE OF MONITORING DATA  
GROUNDWATER WELL SAMPLING REPORT

<u>WELL I.D.</u>	S-7	S-8	S-9	S-10
Casing Diameter (inches)	3	3	3	3
Total Well Depth (feet)	30.80	19.30	30.00	24.30
Depth to Water (feet)	11.04	10.22	10.42	8.25
Free Product (feet)	none	none	none	none
Reason Not Sampled	----	----	----	----
Calculated 4 Case Vol.(gal.)	30.0	13.7	29.8	24.4
Did Well Dewater?	no	no	no	yes
Volume Evacuated (gal.)	38	21	38	21
Purging Device	Suction	Suction	Suction	Suction
Sampling Device	Bailer	Bailer	Bailer	Bailer
Time	09:19	12:20	09:45	10:17
Temperature (F)*	69.5	73.3	70.0	69.3
pH*	6.60	6.76	6.55	6.82
Conductivity (umhos/cm)*	873	716	635	437

\* Indicates Stabilized Value



GeoStrategies Inc.

**Site Plan**  
 Former Shell Service Station  
 2800 Telegraph Avenue  
 Oakland, California

PLATE

**1**

CERTIFICATE OF ANALYSIS

Gettler-Ryan  
1992 National Avenue  
Hayward, CA 94545  
ATTN: John Werfal

Date: October 13, 1989

Work Order Number: S9-08-060

P.O. Number: MOH 890501A

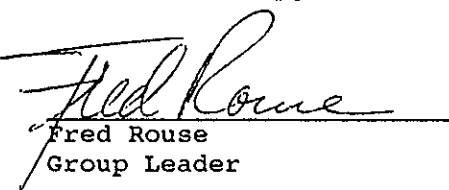
This is the Certificate of Analysis for the following samples:

Client Project ID: GR #3610, Shell, 2800 Telegraph Ave./  
28th St., Oakland, CA, CORRECTED REPORT  
Date Received by Lab: 8/4/89  
Number of Samples: 12  
Sample Type: Water

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.

This Corrected Report has been issued because the analytical results for wells S-8 and S-9 were reversed due to sample mislabeling by the laboratory in the original Certificate of Analysis dated August 23, 1989.

Reviewed and Approved

  
Fred Rouse  
Group Leader

FR/an  
2 Pages Following - Tables of Results

Page: 1 of 2  
 Date: October 13, 1989  
 Client Project ID: GR #3610, Shell, 2800 Telegraph  
 Ave./28th St., Oakland, CORRECTED REPORT

IT ANALYTICAL SERVICES  
 SAN JOSE, CA

Work Order Number: S9-08-060

Lab Sample ID	Client Sample ID	Sample Date	Date Analysis Completed	Sample Condition on Receipt
S9-08-060-01	S-1	8/3/89	8/10/89	cool pH $\leq$ 2
S9-08-060-02	S-2	8/3/89	8/10/89	cool pH $\leq$ 2
S9-08-060-03	S-4	8/3/89	8/10/89	cool pH $\leq$ 2
S9-08-060-04	S-5	8/3/89	8/10/89	cool pH $\leq$ 2
S9-08-060-05	S-6	8/3/89	8/10/89	cool pH $\leq$ 2
S9-08-060-06	S-7	8/3/89	8/15/89	cool pH $\leq$ 2

Total Petroleum Hydrocarbons - Modified E.P.A. Methods 8015, 8020

ND = None Detected

Results - Milligrams per Liter

Lab Sample ID	Client Sample ID	Low Boiling Hydrocarbons (calculated as Gasoline)	Benzene	Toluene	Ethyl Benzene	Xylenes (total)
S9-08-060-01	S-1	ND	ND	ND	ND	ND
Detection Limit		0.05	0.0005	0.001	0.001	0.003
S9-08-060-02	S-2	0.43	0.073	0.001	0.014	0.007
Detection Limit		0.05	0.0005	0.001	0.001	0.003
S9-08-060-03	S-4	ND	ND	ND	ND	ND
Detection Limit		0.05	0.0005	0.001	0.001	0.003
S9-08-060-04	S-5	ND	ND	ND	ND	ND
Detection Limit		0.05	0.0005	0.001	0.001	0.003
S9-08-060-05	S-6	7.1	2.4	ND	0.07	ND
Detection Limit		2.5	0.02	0.05	0.05	0.2
S9-08-060-06	S-7	5.0	0.66	0.38	0.23	0.71
Detection Limit		0.5	0.005	0.01	0.01	0.03

Lab Sample ID	Client Sample ID	Sample Date	Date Analysis Completed	Sample Condition on Receipt
S9-08-060-07	S-8	8/3/89	8/10/89	cool pH $\leq$ 2
S9-08-060-08	S-9	8/3/89	8/10/89	cool pH $\leq$ 2
S9-08-060-09	S-10	8/3/89	8/15/89	cool pH $\leq$ 2
S9-08-060-10	SD-1	8/3/89	8/15/89	cool pH $\leq$ 2
S9-08-060-11	SF-4	8/3/89	8/10/89	cool pH $\leq$ 2
S9-08-060-12	Trip Blank		8/10/89	cool pH $\leq$ 2

Total Petroleum Hydrocarbons - Modified E.P.A. Methods 8015, 8020

ND = None Detected

Results - Milligrams per Liter

Lab Sample ID	Client Sample ID	Low Boiling Hydrocarbons (calculated as Gasoline)	Benzene	Toluene	Ethyl Benzene	Xylenes (total)
S9-08-060-07	S-8	1.6	0.032	0.12	0.052	0.25
Detection Limit		0.1	0.001	0.002	0.002	0.006
S9-08-060-08	S-9	ND	ND	ND	ND	ND
Detection Limit		0.05	0.0005	0.001	0.001	0.003
S9-08-060-09	S-10	ND	ND	ND	ND	ND
Detection Limit		0.05	0.0005	0.001	0.001	0.003
S9-08-060-10	SD-1	ND	ND	ND	ND	ND
Detection Limit		0.05	0.0005	0.001	0.001	0.003
S9-08-060-11	SF-4	ND	ND	ND	ND	ND
Detection Limit		0.05	0.0005	0.001	0.001	0.003
S9-08-060-12	Trip Blank	ND	ND	ND	ND	ND
Detection Limit		0.05	0.0005	0.001	0.001	0.003

*corrected*

COMPANY Shell Oil Company JOB NO. 3610

JOB LOCATION 2800 Telegraph Ave / 28<sup>th</sup> Street

CITY Oakland, CA PHONE NO. \_\_\_\_\_

AUTHORIZED \_\_\_\_\_ DATE 8-3-89 P.O. NO. \_\_\_\_\_

SAMPLE ID	NO. OF CONTAINERS	SAMPLE MATRIX	DATE/TIME SAMPLED	ANALYSIS REQUIRED	SAMPLE CONDITION LAB ID
S-1	3	liquid	8-3-89/10:48	THC(gas), BTXE	
S-2	3	↓	11:01/10:48		
S-4	3		11:43/13:00		
S-5	3		12:30/13:01		
S-6	3		11:48		
S-7	3		9:19		
S-8	3		12:20		
S-9	3		9:45		
S-10	3		10:17		
SD-1	3				
SF-4	3		13:18		
Tr. Blank	2			7-31-89	

RELINQUISHED BY: John P. [Signature] 8-4-89 10:30am  
 RELINQUISHED BY: [Signature] 8-4-89 10:00

RECEIVED BY: [Signature] 8-4-89 10:31am  
 RECEIVED BY: \_\_\_\_\_

RELINQUISHED BY: \_\_\_\_\_  
 DESIGNATED LABORATORY: IT/SCV

RECEIVED BY LAB: [Signature] 8/4/89 11:05  
 DHS #: 137

REMARKS: Normal TAT Results due 8-18-89

DATE COMPLETED 8-3-89 FOREMAN [Signature] SP2 GS