GeoStrategies Inc.
2140 WEST WINTON AVENUE
HAYWARD, CALIFORNIA 94545
(510) 352-4800

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April 8, 1992

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

Reference: Former Shell Service Station
2800 Telegraph Avenue
Oakland, California
WIC 204-5508-2303

609

Gentlemen:

As requested by Mr. Dan Kirk of Shell Oil Company, we are forwarding a copy of the Quarterly Report dated April 8, 1992. The enclosed report presents the first quarter 1992 ground-water sampling conducted at the above referenced location.

If you have any questions, please call.

Sincerely,

Ellen Fostersmith

Ellen Fostersmith
Geologist

enclosure

cc: Mr. Dan Kirk, Shell Oil Company
Mr. Tom Callaghan, Regional Water Quality Control Board
Mr. Larry Turner, Shell Oil Company

GeoStrategies Inc.

QUARTERLY REPORT

Former Shell Service Station
2800 Telegraph Avenue
Oakland, California
WIC 204-5508-2303

761001-19

April 8, 1992

GeoStrategies Inc.
2140 WEST WINTON AVENUE
HAYWARD, CALIFORNIA 94545
(510) 352-4800

April 8, 1992

Shell Oil Company
P.O. Box 5278
Concord, California

Attn: Mr. Dan Kirk

Re: QUARTERLY REPORT
Former Shell Service Station
2800 Telegraph Avenue
Oakland, California
WIC# 204-5508-2303

Gentlemen:

This Quarterly Report has been prepared by GeoStrategies Inc. (GSI) and presents the results of the 1992 first quarter sampling for the above referenced site (Plate 1). Sampling data were furnished by the Shell Oil Company sampling contractor.

There are currently eleven monitoring wells and one recovery well at the site; Wells S-1 through S-11 and SR-1 (Plate 2). These wells were installed in 1988 and 1989.

CURRENT QUARTER SAMPLING RESULTS

Depth to water-level measurements were obtained in each monitoring well. Static ground-water levels were measured from the surveyed top of the well box and recorded to the nearest ± 0.01 foot. Water-level elevations, referenced to Mean Sea Level (MSL) datum and the stabilized values of measured physical parameters are presented in the EMCON Report included in Appendix A. Water-level data were used to construct a quarterly potentiometric map (Plate 2). Shallow ground-water flow is to the south at an approximate hydraulic gradient of 0.015

Each well was checked for the presence of floating product. Floating product was not observed in the wells this quarter.

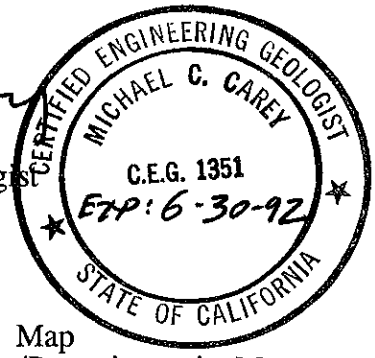
Ground-water samples were collected on January 29, 1992. Samples were analyzed for Total Petroleum Hydrocarbons calculated as Gasoline (TPH-Gasoline), according to EPA Method 8015 (Modified) and for BTEX according to EPA Method 8020. The ground-water samples were analyzed by International Technology (IT) Analytical Services, a California State-certified laboratory located in San Jose, California. These data are summarized in the EMCON Report (Appendix A). A chemical isoconcentration map for benzene is presented on Plate 3. Historical chemical analytical data are attached.

If you have any questions, please call.

GeoStrategies Inc. by,

Ellen C. Fostersmith
Geologist

Michael C. Carey
Engineering Geologist
C.E.G. 1351



ECF/MCC/dls

Plate 1. Vicinity Map
Plate 2. Site Plan/Potentiometric Map
Plate 3. Benzene Isoconcentration Map

Appendix A: EMCON Monitoring Report and Chain-of-Custody Form

QC Review _____

761001-19

HISTORICAL GROUND-WATER QUALITY DATABASE

2800 Telegraph Avenue

Oakland, CA

SAMPLE DATE	SAMPLE POINT	TPH-G (PPM)	BENZENE (PPM)	TOLUENE (PPM)	ETHYLBENZENE (PPM)	XYLENES (PPM)	TPH-D (PPM)	OIL (PPM)
02-May-88	S-1	<0.05	0.5	<0.001	----	<0.004	<1.	<5.
08-Nov-88	S-1	<0.05	<0.0005	<0.001	<0.001	<0.003	N/A	N/A
02-May-89	S-1	<0.05	<0.0005	<0.001	<0.001	<0.003	N/A	N/A
03-Aug-89	S-1	<0.05	<0.0005	<0.001	<0.001	<0.003	N/A	N/A
03-Oct-89	S-1	<0.05	<0.0005	<0.001	<0.001	<0.003	N/A	N/A
16-Jan-90	S-1	<0.050	<0.0005	<0.0005	<0.0005	<0.001	N/A	N/A
13-Apr-90	S-1	<0.050	<0.0005	0.0006	<0.0005	<0.001	N/A	N/A
05-Jul-90	S-1	<0.05	<0.0005	<0.0005	<0.0005	<0.001	N/A	N/A
12-Oct-90	S-1	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	N/A	N/A
22-Jan-91	S-1	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	N/A	N/A
30-Apr-91	S-1	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	N/A	N/A
12-Jul-91	S-1	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	N/A	N/A
04-Oct-91	S-1	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	N/A	N/A
29-Jan-92	S-1	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	N/A	N/A
02-May-88	S-2	1.6	0.079	0.089	----	0.048	N/A	N/A
08-Nov-88	S-2	0.2	0.022	0.001	0.016	0.008	N/A	N/A
02-May-89	S-2	2.2	0.5	0.052	0.12	0.18	N/A	N/A
03-Aug-89	S-2	0.43	0.073	0.001	0.014	0.007	N/A	N/A
03-Oct-89	S-2	0.37	0.012	0.019	0.013	0.078	N/A	N/A
16-Jan-90	S-2	0.42	0.075	0.0099	0.032	0.052	N/A	N/A
13-Apr-90	S-2	0.34	0.063	0.0025	0.019	0.015	N/A	N/A
05-Jul-90	S-2	0.10	0.01	<0.0005	0.0018	0.002	N/A	N/A
12-Oct-90	S-2	<0.05	0.0020	<0.0005	<0.0005	<0.0005	N/A	N/A
22-Jan-91	S-2	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	N/A	N/A
30-Apr-91	S-2	0.60	0.060	0.0036	0.016	0.015	N/A	N/A
12-Jul-91	S-2	0.15	0.022	<0.0005	0.0036	0.0027	N/A	N/A
04-Oct-91	S-2	0.09	0.015	<0.0005	0.0007	0.0012	N/A	N/A
29-Jan-92	S-2	0.28	0.045	0.0008	0.0053	0.0052	N/A	N/A

HISTORICAL GROUND-WATER QUALITY DATABASE
2800 Telegraph Avenue
Oakland, CA

SAMPLE DATE	SAMPLE POINT	TPH-G (PPM)	BENZENE (PPM)	TOLUENE (PPM)	ETHYLBENZENE (PPM)	XYLENES (PPM)	TPH-D (PPM)	OIL (PPM)
02-May-88	S-3	46.	2.7	10.	----	10.	N/A	N/A
02-May-89	S-3	47.	2.0	6.0	1.7	7.2	N/A	N/A
13-Apr-90	S-3	16.	0.54	2.4	0.81	3.9	N/A	N/A
05-Jul-90	S-3	16.	0.42	1.7	0.64	3.1	N/A	N/A
12-Oct-90	S-3	Free Product	0.12 ft					
22-Jan-91	S-3	Free Product	0.15 ft					
30-Apr-91	S-3	Free Product	0.13 ft					
12-Jul-91	S-3	Free Product	0.13 ft					
04-Oct-91	S-3	Free Product	0.11 ft					
08-Nov-88	S-4	<0.05	<0.0005	<0.001	<0.001	<0.003	N/A	N/A
22-Feb-89	S-4	<0.05	<0.0005	<0.001	<0.001	<0.003	N/A	N/A
02-May-89	S-4	<0.05	<0.0005	<0.001	<0.001	<0.003	N/A	N/A
03-Aug-89	S-4	<0.05	<0.0005	<0.001	<0.001	<0.003	N/A	N/A
03-Oct-89	S-4	<0.05	<0.0005	<0.001	<0.001	<0.003	N/A	N/A
16-Jan-90	S-4	<0.050	<0.0005	<0.0005	<0.0005	0.001	N/A	N/A
13-Apr-90	S-4	<0.050	<0.0005	<0.0005	<0.0005	<0.001	N/A	N/A
05-Jul-90	S-4	<0.05	<0.0005	<0.0005	<0.0005	<0.001	N/A	N/A
12-Oct-90	S-4	<0.05	0.0010	0.0047	0.0010	0.0032	N/A	N/A
22-Jan-91	S-4	<0.05	<0.0005	<0.0005	<0.0005	0.0029	N/A	N/A
30-Apr-91	S-4	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	N/A	N/A
12-Jul-91	S-4	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	N/A	N/A
04-Oct-91	S-4	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	N/A	N/A
29-Jan-92	S-4	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	N/A	N/A
08-Nov-88	S-5	<0.05	<0.0005	<0.001	<0.001	<0.003	N/A	N/A
22-Feb-89	S-5	<0.05	<0.0005	<0.001	<0.001	<0.003	N/A	N/A
02-May-89	S-5	<0.05	<0.0005	<0.001	<0.001	<0.003	N/A	N/A
03-Aug-89	S-5	<0.05	<0.0005	<0.001	<0.001	<0.003	N/A	N/A

HISTORICAL GROUND-WATER QUALITY DATABASE
2800 Telegraph Avenue
Oakland, CA

SAMPLE DATE	SAMPLE POINT	TPH-G (PPM)	BENZENE (PPM)	TOLUENE (PPM)	ETHYLBENZENE (PPM)	XYLENES (PPM)	TPH-D (PPM)	OIL (PPM)
03-Oct-89	S-5	<0.05	<0.0005	<0.001	<0.001	<0.003	N/A	N/A
16-Jan-90	S-5	<0.050	<0.0005	<0.0005	<0.0005	0.001	N/A	N/A
13-Apr-90	S-5	<0.050	<0.0005	<0.0005	<0.0005	<0.001	N/A	N/A
05-Jul-90	S-5	<0.050	<0.0005	<0.0005	<0.0005	<0.001	N/A	N/A
12-Oct-90	S-5	<0.05	0.0005	0.0026	0.0005	0.0017	N/A	N/A
22-Jan-91	S-5	<0.05	<0.0005	<0.0005	<0.0005	0.0010	N/A	N/A
30-Apr-91	S-5	<0.05	<0.0005	<0.0005	<0.0005	0.0008	N/A	N/A
12-Jul-91	S-5	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	N/A	N/A
04-Oct-91	S-5	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	N/A	N/A
29-Jan-92	S-5	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	N/A	N/A
08-Nov-88	S-6	5.5	1.7	0.02	0.02	0.12	N/A	N/A
22-Feb-89	S-6	6.0	2.4	0.05	0.11	0.3	N/A	N/A
02-May-89	S-6	9.1	3.7	0.12	0.28	0.3	N/A	N/A
03-Aug-89	S-6	7.1	2.4	<0.05	0.07	<0.2	N/A	N/A
03-Oct-89	S-6	5.9	1.6	0.033	0.058	0.10	N/A	N/A
16-Jan-90	S-6	5.9	1.8	0.15	0.16	0.41	N/A	N/A
13-Apr-90	S-6	5.9	1.8	0.07	0.02	0.16	N/A	N/A
05-Jul-90	S-6	4.2	1.2	0.02	0.03	0.08	N/A	N/A
12-Oct-90	S-6	1.7	0.39	0.0065	0.0036	0.016	N/A	N/A
22-Jan-91	S-6	2.2	0.44	0.015	<0.01	0.059	N/A	N/A
30-Apr-91	S-6	4.8	0.64	0.15	0.17	0.48	N/A	N/A
12-Jul-91	S-6	2.9	0.66	0.02	0.02	0.08	N/A	N/A
04-Oct-91	S-6	4.0	0.40	0.0060	0.0047	0.0095	N/A	N/A
29-Jan-92	S-6	2.1	0.34	0.018	0.020	0.097	N/A	N/A
08-Nov-88	S-7	2.6	0.088	0.43	0.086	0.43	N/A	N/A
22-Feb-89	S-7	0.8	0.025	0.027	0.029	0.17	N/A	N/A
02-May-89	S-7	0.8	0.032	0.014	0.021	0.11	N/A	N/A
03-Aug-89	S-7	5.0	0.66	0.38	0.23	0.71	N/A	N/A

HISTORICAL GROUND-WATER QUALITY DATABASE
2800 Telegraph Avenue
Oakland, CA

SAMPLE DATE	SAMPLE POINT	TPH-G (PPM)	BENZENE (PPM)	TOLUENE (PPM)	ETHYLBENZENE (PPM)	XYLENES (PPM)	TPH-D (PPM)	OIL (PPM)
03-Oct-89	S-7	0.96	0.11	0.008	0.013	0.046	N/A	N/A
16-Jan-90	S-7	0.23	0.0010	0.0018	0.0031	0.017	N/A	N/A
13-Apr-90	S-7	0.32	0.0051	0.0008	0.0023	0.012	N/A	N/A
05-Jul-90	S-7	0.27	0.0055	0.001	0.0006	0.005	N/A	N/A
12-Oct-90	S-7	0.63	0.043	0.0053	0.0048	0.012	N/A	N/A
22-Jan-91	S-7	1.2	0.077	0.027	0.057	0.16	N/A	N/A
30-Apr-91	S-7	0.24	0.0032	0.0023	0.0036	0.010	N/A	N/A
12-Jul-91	S-7	0.96	0.067	0.0043	0.0068	0.032	N/A	N/A
04-Oct-91	S-7	1.2	0.10	0.0074	0.0018	0.014	N/A	N/A
29-Jan-92	S-7	0.18	0.0041	0.0006	0.0005	0.0036	N/A	N/A
03-Aug-89	S-8	<0.05	<0.0005	<0.001	<0.001	<0.003	N/A	N/A
03-Oct-89	S-8	1.6	0.022	0.11	0.053	0.24	N/A	N/A
16-Jan-90	S-8	2.0	0.040	0.15	0.090	0.40	N/A	N/A
13-Apr-90	S-8	1.6	0.027	0.071	0.048	0.21	N/A	N/A
05-Jul-90	S-8	1.5	0.025	0.075	0.067	0.25	N/A	N/A
12-Oct-90	S-8	1.0	0.017	0.031	0.034	0.12	N/A	N/A
22-Jan-91	S-8	0.82	0.017	0.037	0.030	0.12	N/A	N/A
30-Apr-91	S-8	2.9	0.046	0.11	0.12	0.33	N/A	N/A
12-Jul-91	S-8	0.82	0.034	0.038	0.041	0.11	N/A	N/A
04-Oct-91	S-8	0.96	0.018	0.024	0.038	0.13	N/A	N/A
29-Jan-92	S-8	1.4	0.013	0.037	0.054	0.23	N/A	N/A
03-Aug-89	S-9	1.6	0.032	0.12	0.052	0.25	N/A	N/A
03-Oct-89	S-9	<0.05	<0.0005	0.001	<0.001	0.003	N/A	N/A
16-Jan-90	S-9	<0.050	<0.0005	<0.0005	<0.0005	0.001	N/A	N/A
13-Apr-90	S-9	<0.050	0.0007	0.0023	<0.0005	0.003	N/A	N/A
05-Jul-90	S-9	<0.05	<0.0005	<0.0005	<0.0005	<0.001	N/A	N/A
12-Oct-90	S-9	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	N/A	N/A
22-Jan-91	S-9	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	N/A	N/A

HISTORICAL GROUND-WATER QUALITY DATABASE
2800 Telegraph Avenue
Oakland, CA

SAMPLE DATE	SAMPLE POINT	TPH-G (PPM)	BENZENE (PPM)	TOLUENE (PPM)	ETHYLBENZENE (PPM)	XYLENES (PPM)	TPH-D (PPM)	OIL (PPM)
30-Apr-91	S-9	<0.05	<0.0005	<0.0005	<0.0005	0.0006	N/A	N/A
12-Jul-91	S-9	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	N/A	N/A
04-Oct-91	S-9	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	N/A	N/A
29-Jan-92	S-9	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	N/A	N/A
03-Aug-89	S-10	<0.05	<0.0005	<0.001	<0.001	<0.003	N/A	N/A
03-Oct-89	S-10	<0.05	<0.0005	<0.001	<0.001	<0.003	N/A	N/A
16-Jan-90	S-10	<0.050	<0.0005	<0.0005	<0.0005	0.001	N/A	N/A
13-Apr-90	S-10	<0.050	<0.0005	<0.0005	<0.0005	<0.001	N/A	N/A
05-Jul-90	S-10	<0.05	<0.0005	<0.0005	<0.0005	<0.001	N/A	N/A
12-Oct-90	S-10	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	N/A	N/A
22-Jan-91	S-10	<0.05	0.0007	0.0082	0.0022	0.014	N/A	N/A
30-Apr-91	S-10	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	N/A	N/A
12-Jul-91	S-10	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	N/A	N/A
04-Oct-91	S-10	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	N/A	N/A
29-Jan-92	S-10	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	N/A	N/A
16-Oct-89	S-11	0.65	0.042	0.047	0.024	0.16	N/A	N/A
16-Jan-90	S-11	0.35	0.027	0.035	0.020	0.11	N/A	N/A
13-Apr-90	S-11	0.90	0.057	0.11	0.037	0.24	N/A	N/A
05-Jul-90	S-11	2.0	0.11	0.21	0.093	0.53	N/A	N/A
12-Oct-90	S-11	1.2	0.14	0.10	0.064	0.22	N/A	N/A
22-Jan-91	S-11	1.4	0.085	0.093	0.088	0.30	N/A	N/A
30-Apr-91	S-11	5.4	0.048	0.026	0.080	0.37	N/A	N/A
12-Jul-91	S-11	0.19	0.012	0.0023	0.010	0.044	N/A	N/A
04-Oct-91	S-11	0.44	0.020	0.0085	0.014	0.049	N/A	N/A
29-Jan-92	S-11	1.7	0.030	0.023	0.048	0.27	N/A	N/A

HISTORICAL GROUND-WATER QUALITY DATABASE

2800 Telegraph Avenue

Oakland, CA

SAMPLE DATE	SAMPLE POINT	TPH-G (PPM)	BENZENE (PPM)	TOLUENE (PPM)	ETHYLBENZENE (PPM)	XYLENES (PPM)	TPH-D (PPM)	OIL (PPM)

Current Regional Water Quality Control Board Maximum Contaminant Levels

Benzene 0.001 ppm Xylenes 1.750 ppm Ethylbenzene 0.680 ppm

Current DHS Action Levels Toluene 0.1000 ppm

TPH-G = Total Petroleum Hydrocarbons calculated as Gasoline

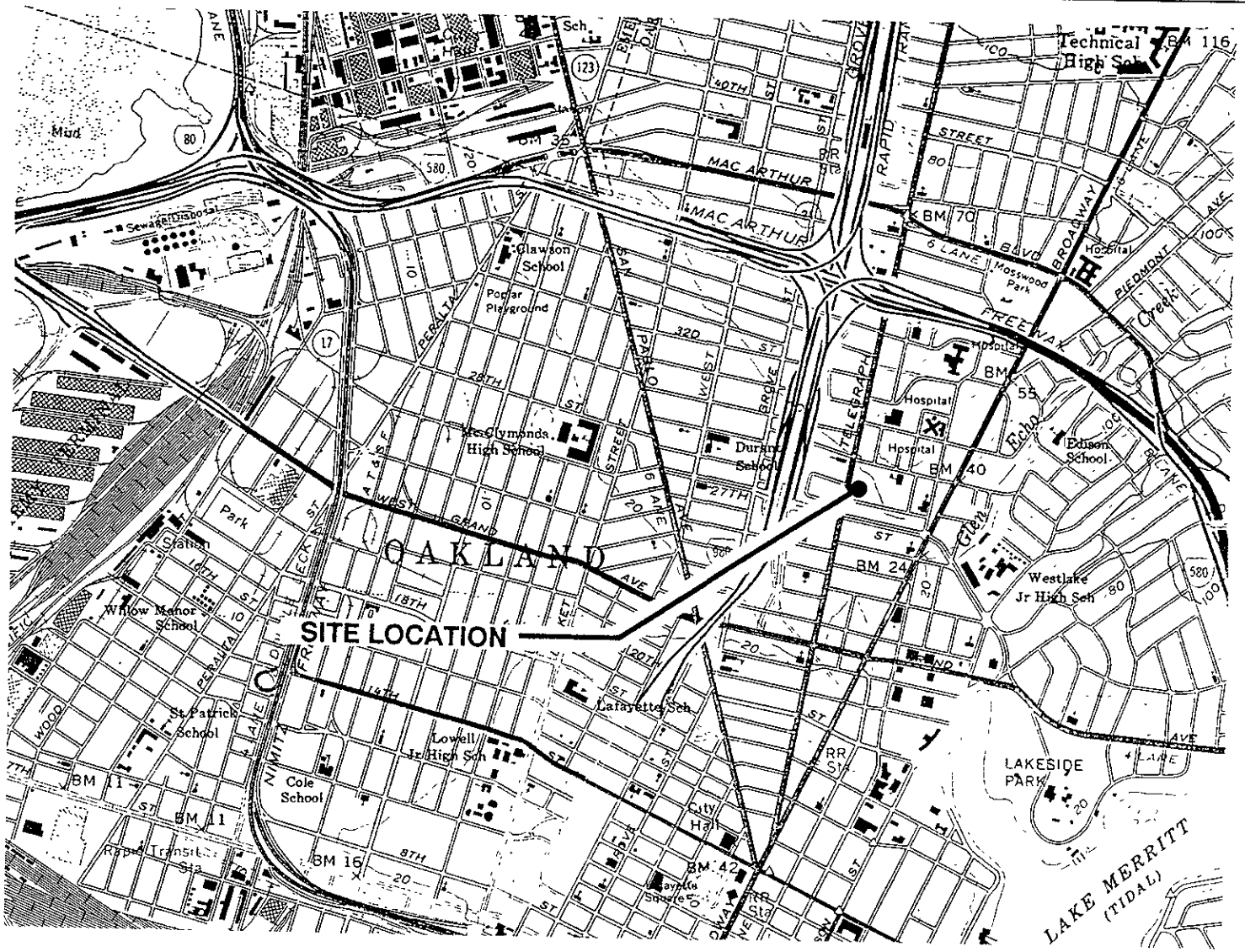
PPM = Parts Per Million

NOTE: 1. DHS Action levels and MCL's are subject to change pending State of California review.

2. All data shown as <X are reported as ND (none detected).

3. Ethylbenzene and Xylenes were combined prior to May 1989.

ILLUSTRATIONS



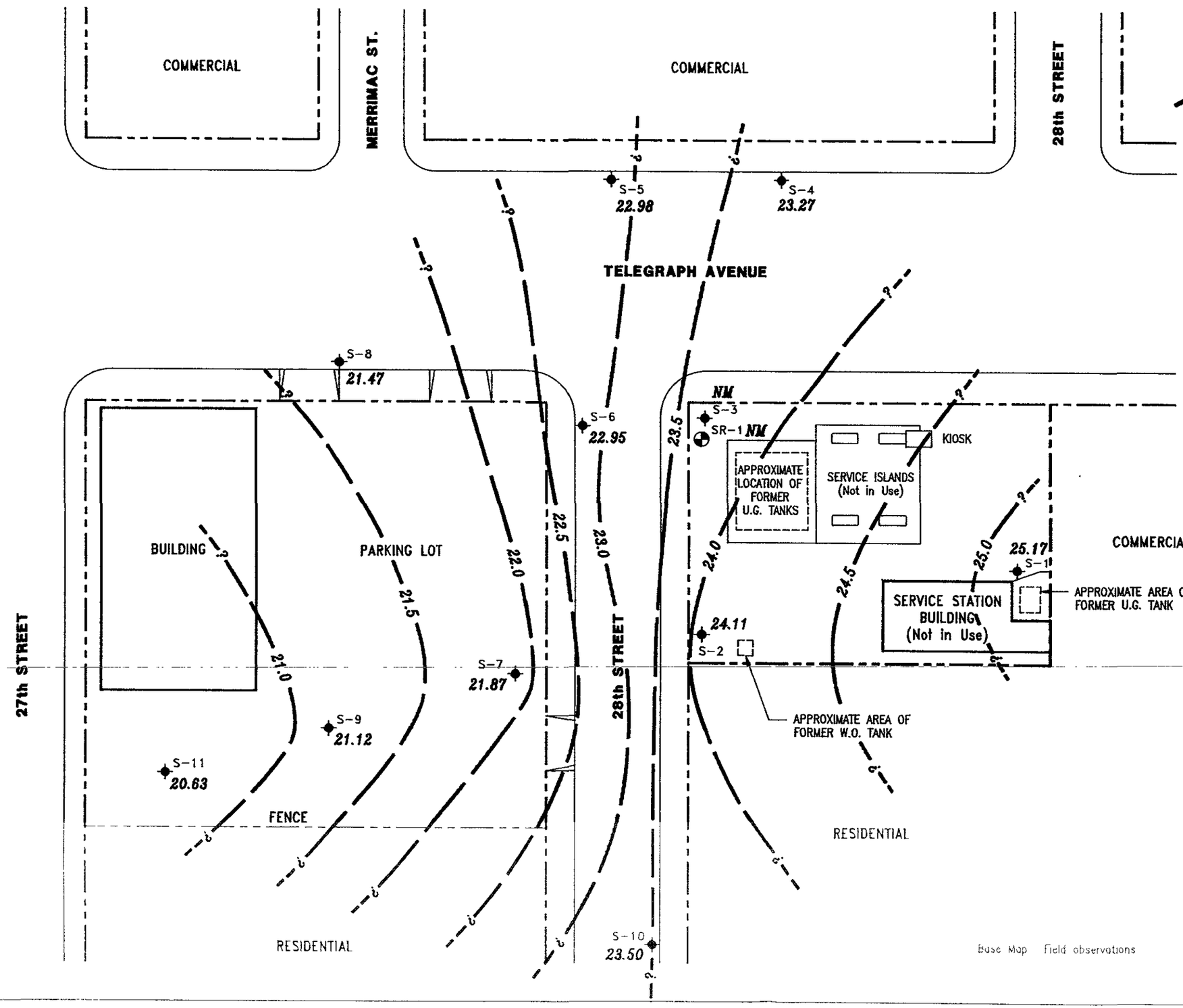
Base Map: USGS Topographic Map

GeoStrategies Inc.

VICINITY MAP
Former Shell Service Station
2800 Telegraph Avenue
Oakland, California

PLATE
1

JOB NUMBER	REVIEWED BY	DATE	REVISED DATE
7610		3/91	



EXPLANATION

- Ground–water monitoring well
- Ground–water recovery well
- 99.99 — Ground–water elevation contour Approximate Gradient = 0.015
- 99.99 — Ground–water elevation in feet referenced to Mean Sea Level (MSL) measured on January 29, 1992
- NM — Not Measured

Note: Contours may be influenced by irrigation practices and/or site construction activities.

PLATE 2

SITE PLAN/POTENTIOMETRIC MAP
Former Shell Service Station
2800 Telegraph Avenue
Oakland, California

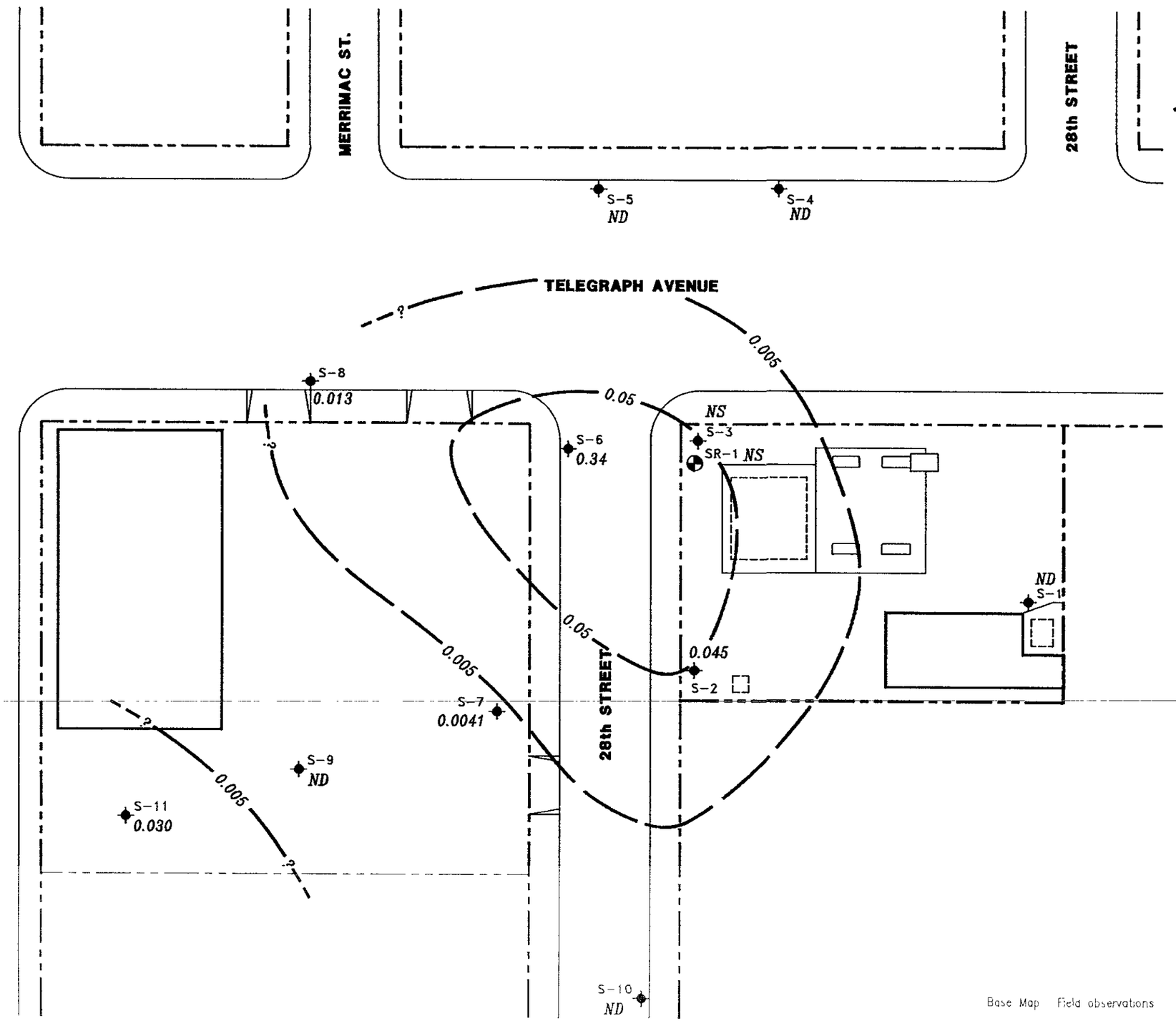
REVISED DATE

GeoStrategies Inc.

JOB NUMBER 761001-19

REVIEWED BY

DATE 3/18



EXPLANATION

- Ground-water monitoring well
- Ground-water recovery well
- 0.05 — Benzene isoconcentration contour
- 0.05 — Benzene concentration in ppm sampled on January 29, 1992
- ND — Not Detected (See laboratory reports for detection limits)
- NS — Not sampled

Base Map Field observations

0 40
Scale in Feet

PLATE 3

BENZENE ISOCONCENTRATION MAP
Former Shell Service Station
2800 Telegraph Avenue
Oakland, California

DATE 3/92
REVISED DATE
REVIEWED BY
JOB NUMBER 761001-19

GeoStrategies Inc.
GSI

APPENDIX A
EMCON MONITORING REPORT
AND
CHAIN-OF-CUSTODY

emcon
ASSOCIATES
Consultants in Wastes
Management and
Environmental Control

March 3, 1992
Project: G67-22.01
WIC#: 204-5508-2308
Revision 1

Ms. Ellen Fostersmith
Geo Strategies Inc.
2140 West Winton Avenue
Hayward, California 94545

Re: First quarter 1992 ground-water monitoring report, Shell Oil Company, 2800 Telegraph Avenue, Oakland, California

Dear Ms. Fostersmith:

This revised letter presents the results of the first quarter 1992 ground-water monitoring event for the Shell Oil Company (Shell) service station located at 2800 Telegraph Avenue, Oakland, California. First quarter results were originally reported in our letter dated February 21, 1992. First quarter monitoring was conducted on January 29, 1992. The site is monitored quarterly.

GROUND-WATER LEVEL SURVEY

A water-level survey preceded the purging and sampling of the monitoring wells. The wells included in the survey are identified in figure 1 (supplied by Geo Strategies, Inc.). During the survey, wells S-1, S-2, S-4 through S-11 and SR-1 were measured for depth to water, floating product thickness, and total depth. Depth to water and floating product thickness were measured to the nearest 0.01 foot with an oil/water interface probe. No floating product was observed in the wells. Total depth was measured to the nearest 0.1 foot. Results of the water-level survey are summarized in table 1.

SAMPLING AND ANALYSIS

Ground-water samples were collected from wells S-1, S-2, and S-4 through S-11 on January 29, 1992. Prior to sample collection, the wells were purged with a polyvinyl chloride (PVC) bailer. During the purging operation, ground water was monitored for pH, electrical conductivity, and temperature as a function of volume of water removed. Purging continued until these parameters were stable and a minimum of three casing volumes of ground water were removed. Field measurements from first quarter monitoring are summarized in table 1. Purge water from the

1938 Junction Avenue, San Jose, California 95131, (408) 453-0719 Fax (408) 453-0452

monitoring wells was contained in 55-gallon drums. The drums were identified with Shell-approved labels and secured for on-site storage.

Ground water samples were collected with a Teflon® bailer, labeled, placed on ice, and transported to a Shell-approved and state-certified analytical laboratory for analysis. Shell chain-of-custody documents accompanied all samples to the laboratory.

All equipment that was placed down a well or that came in contact with ground water was steam cleaned on site with steaming hot deionized water prior to use at each well.

Quality control samples included one duplicate sample (SD-10) collected from well S-10, and a trip blank (TB). All water samples from the first quarter 1992 monitoring event were analyzed for total petroleum hydrocarbons (TPH) as gasoline and benzene, toluene, ethylbenzene, and total xylenes (BTEX).

ANALYTICAL RESULTS

Analytical results for the first quarter 1992 monitoring event are summarized in table 2. Copies of the certified analytical reports and of the final chain-of-custody documents are attached.

Well S-3 was not included in the first quarter 1992 monitoring event. Vadose well SV-1 was incorrectly identified in the field as well S-3. Well SV-1 was not labeled in the field, and the well was not shown on the site plan that was supplied to EMCON Associates (EMCON) by Geo Strategies, Inc. (GSI). A new site plan, showing the location of well SV-1, has been supplied by GSI. EMCON will attempt to locate and sample well S-3 during the second quarter 1992 ground-water monitoring event.

If you have any questions, please call.

Very truly yours,

EMCON Associates

David Larsen
Environmental Sampling Coordinator

Orrin Childs
Environmental Sampling Supervisor

DL/OC:dl

G672201A.DOC

Attachments: Table 1 - Monitoring well field measurement data, first quarter 1992
Table 2 - Summary of analytical results, first quarter 1992
Figure 1 - Site map
Certified analytical reports
Chain-of-custody documents

Table 1

Monitoring Well Field Measurement Data
First Quarter 1992

Shell Station: 2800 Telegraph Avenue
Oakland, California

WIC#: 204-5508-2303

Well Identification	Water Level Survey Date	Depth To Water (feet)	Well Total Depth (feet)	Floating Product Thickness (feet)	Well Sampling Date	pH (stnd. units)[1]	Electrical Conductivity (µmhos/cm)[2]	Temperature (°F)[3]	Turbidity (NTU)[4]
S-1	01/29/92	10.14	27.8	ND.[5]	01/29/92	6.35	457	63.9	>200
S-2	01/29/92	9.80	25.4	ND.	01/29/92	6.28	616	60.0	>200
S-3	NR.[6]	NR.	NR.	NR.	NR.	NR.	NR.	NR.	NR.
S-4	01/29/92	10.81	28.7	ND.	01/29/92	6.59	456	65.6	>200
S-5	01/29/92	10.44	30.5	ND.	01/29/92	7.51	1,020	60.3	>200
S-6	01/29/92	9.64	22.1	ND.	01/29/92	6.64	668	64.8	>200
S-7	01/29/92	11.46	30.6	ND.	01/29/92	7.02	645	70 1	>200
S-8	01/29/92	10.50	19.1	ND.	01/29/92	6.74	482	68.7	>200
S-9	01/29/92	10.74	30.0	ND.	01/29/92	6.79	653	61.4	>200
S-10	01/29/92	9.45	24.2	ND.	01/29/92	7.10	208	63 0	>200
S-11	01/29/92	10.15	19.1	ND.	01/29/92	6.43	495	63.2	>200
SR-1	01/29/92	9.18	34.0	ND.	01/29/92	NA.[7]	NA.	NA.	NA.

1. Standard pH units
2. µmhos/cm = micromhos per centimeter
3. °F = degrees Fahrenheit
4. NTU = nephelometric turbidity units
5. ND. = not detected
6. NR. = not reported; well SV-1 was incorrectly identified in the field as well S-3.
7. NA. = not applicable; well SR-1 was not scheduled for sampling.

Table 2

Summary of Analytical Results
First Quarter 1992
milligrams per liter (mg/l) or parts per million (ppm)

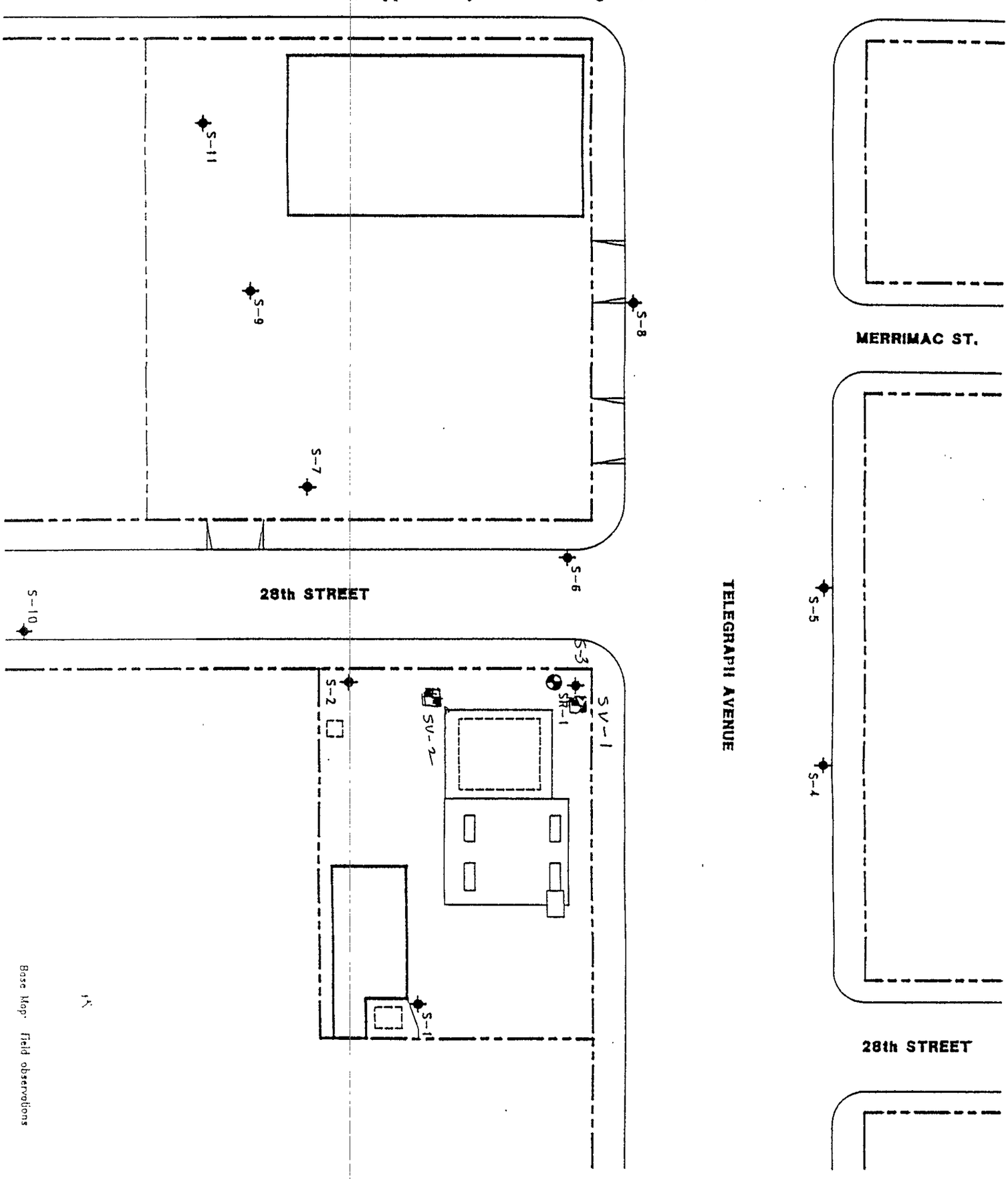
Shell Station: 2800 Telegraph Avenue
Oakland, California

WIC#: 204-5508-2303

Sample Designation	Sampling Date	TPH[1] as Gasoline (mg/l)	Benzene (mg/l)	Toluene (mg/l)	Ethyl-benzene (mg/l)	Total Xylenes (mg/l)
S-1	01/29/92	<0.05	<0.0005	<0.0005	<0.0005	<0.0005
S-2	01/29/92	0.28	0.045	0.0008	0.0053	0.0052
S-3	NR.[2]	NR.	NR.	NR.	NR	NR.
S-4	01/29/92	<0.05	<0.0005	<0.0005	<0.0005	<0.0005
S-5	01/29/92	<0.05	<0.0005	<0.0005	<0.0005	<0.0005
S-6	01/29/92	2.1	0 34	0.018	0.020	0.097
S-7	01/29/92	0.18	0.0041	0.0006	0.0005	0.0036
S-8	01/29/92	1.4	0.013	0.037	0.054	0.23
S-9	01/29/92	<0.05	<0.0005	<0.0005	<0.0005	<0.0005
S-10	01/29/92	<0.05	<0.0005	<0.0005	<0.0005	<0.0005
S-11	01/29/92	1.7	0.030	0.023	0.048	0.27
SD-10	01/29/92	<0.05	<0.0005	<0.0005	<0.0005	<0.0005
TB	01/29/92	<0.05	<0.0005	<0.0005	<0.0005	<0.0005

1. TPH = total petroleum hydrocarbons
2. NR. = not reported; well SV-1 was incorrectly identified in the field as well S-3.

Figure 1
(Supplied by Geo Strategies, Inc.)



GeoStrategies Inc.

Former Shell Service Station
2800 Telegraph Avenue
Oakland, California

PLATE

JOB NUMBER 7610 | REVIEWED BY | DATE | REVISED DATE

INTERNATIONAL TECHNOLOGY CORPORATION

ANALYTICAL SERVICES

CERTIFICATE OF ANALYSIS

Shell Oil Company
Emcon Associates
1938 Junction Ave.
San Jose, CA 95131
David Larson

Date: 02/12/92

Work Order: T2-01-206

P.O. Number: MOH 880-021 Vendor #I0002402

This is the Certificate of Analysis for the following samples:

Client Work ID: G6722, 2800 Telegraph, Oklnd
Date Received: 01/29/92
Number of Samples: 8
Sample Type: aqueous

TABLE OF CONTENTS FOR ANALYTICAL RESULTS

Reviewed and Approved:

David A. Pichette
Project Manager

IT ANALYTICAL SERVICES
SAN JOSE, CA
(408) 943-1540

Company: Shell Oil Company
Date: 02/12/92
Client Work ID: G6722, 2800 Telegraph, Oklnd

Work Order: T2-01-206

TEST NAME: **Petroleum Hydrocarbons**

SAMPLE ID: S-1
SAMPLE DATE: 01/29/92
LAB SAMPLE ID: T201206-01
SAMPLE MATRIX: aqueous
RECEIPT CONDITION: Cool pH < 2

RESULTS in Milligrams per Liter:

	METHOD	EXTRACTION DATE	ANALYSIS DATE
BTEX	8020		02/05/92
Low Boiling Hydrocarbons	Mod.8015		02/05/92

PARAMETER	DETECTION LIMIT	DETECTED
Low Boiling Hydrocarbons calculated as Gasoline	0.05	None
BTEX		
Benzene	0.0005	None
Toluene	0.0005	None
Ethylbenzene	0.0005	None
Xylenes (total)	0.0005	None

SURROGATES	% REC
1,3-Dichlorobenzene (Gasoline)	102.
1,3-Dichlorobenzene (BTEX)	100.

IT ANALYTICAL SERVICES
SAN JOSE, CA
(408) 943-1540

Company: Shell Oil Company
Date: 02/12/92
Client Work ID: G6722, 2800 Telegraph, Oklnd

Work Order: T2-01-206

TEST NAME: **Petroleum Hydrocarbons**

SAMPLE ID: **S-4**
SAMPLE DATE: **01/29/92**
LAB SAMPLE ID: **T201206-02**
SAMPLE MATRIX: **aqueous**
RECEIPT CONDITION: **Cool pH < 2**

RESULTS in Milligrams per Liter:

	METHOD	EXTRACTION DATE	ANALYSIS DATE
BTEX	8020		02/05/92
Low Boiling Hydrocarbons	Mod.8015		02/05/92

PARAMETER	DETECTION LIMIT	DETECTED
Low Boiling Hydrocarbons calculated as Gasoline	0.05	None
BTEX		
Benzene	0.0005	None
Toluene	0.0005	None
Ethylbenzene	0.0005	None
Xylenes (total)	0.0005	None

SURROGATES	% REC
1,3-Dichlorobenzene (Gasoline)	108.
1,3-Dichlorobenzene (BTEX)	101.

IT ANALYTICAL SERVICES
SAN JOSE, CA
(408) 943-1540

Company: Shell Oil Company
Date: 02/12/92
Client Work ID: G6722, 2800 Telegraph, Oklnd

Work Order: T2-01-206

TEST NAME: **Petroleum Hydrocarbons**

SAMPLE ID: S-5
SAMPLE DATE: 01/29/92
LAB SAMPLE ID: T201206-03
SAMPLE MATRIX: aqueous
RECEIPT CONDITION: Cool pH < 2

RESULTS in Milligrams per Liter:

	METHOD	EXTRACTION DATE	ANALYSIS DATE
BTEX	8020		02/05/92
Low Boiling Hydrocarbons	Mod.8015		02/05/92

PARAMETER	DETECTION LIMIT	DETECTED
Low Boiling Hydrocarbons calculated as Gasoline	0.05	None
BTEX		
Benzene	0.0005	None
Toluene	0.0005	None
Ethylbenzene	0.0005	None
Xylenes (total)	0.0005	None

SURROGATES	% REC
1,3-Dichlorobenzene (Gasoline)	106.
1,3-Dichlorobenzene (BTEX)	100.

IT ANALYTICAL SERVICES
SAN JOSE, CA
(408) 943-1540

Company: Shell Oil Company
Date: 02/12/92
Client Work ID: G6722, 2800 Telegraph, Oklnd

Work Order: T2-01-206

TEST NAME: **Petroleum Hydrocarbons**

SAMPLE ID: S-9
SAMPLE DATE: 01/29/92
LAB SAMPLE ID: T201206-04
SAMPLE MATRIX: aqueous
RECEIPT CONDITION: Cool pH < 2

RESULTS in Milligrams per Liter:

	METHOD	EXTRACTION DATE	ANALYSIS DATE
BTEX	8020		02/05/92
Low Boiling Hydrocarbons	Mod.8015		02/05/92

PARAMETER	DETECTION LIMIT	DETECTED
Low Boiling Hydrocarbons calculated as Gasoline	0.05	None
BTEX		
Benzene	0.0005	None
Toluene	0.0005	None
Ethylbenzene	0.0005	None
Xylenes (total)	0.0005	None

SURROGATES	% REC
1,3-Dichlorobenzene (Gasoline)	110.
1,3-Dichlorobenzene (BTEX)	100.

IT ANALYTICAL SERVICES
SAN JOSE, CA
(408) 943-1540

Company: Shell Oil Company
Date: 02/12/92
Client Work ID: G6722, 2800 Telegraph, Oklnd

Work Order: T2-01-206

TEST NAME: **Petroleum Hydrocarbons**

SAMPLE ID: **S-10**
SAMPLE DATE: **01/29/92**
LAB SAMPLE ID: **T201206-05**
SAMPLE MATRIX: **aqueous**
RECEIPT CONDITION: **Cool pH < 2**

RESULTS in Milligrams per liter:

	METHOD	EXTRACTION DATE	ANALYSIS DATE
BTEX	8020		02/05/92
Low Boiling Hydrocarbons	Mod.8015		02/05/92

PARAMETER	DETECTION LIMIT	DETECTED
Low Boiling Hydrocarbons calculated as Gasoline	0.05	None
BTEX		
Benzene	0.0005	None
Toluene	0.0005	None
Ethylbenzene	0.0005	None
Xylenes (total)	0.0005	None

SURROGATES	% REC
1,3-Dichlorobenzene (Gasoline)	105.
1,3-Dichlorobenzene (BTEX)	100.

IT ANALYTICAL SERVICES
SAN JOSE, CA
(408) 943-1540

Company: Shell Oil Company
Date: 02/12/92
Client Work ID: G6722, 2800 Telegraph, Oklnd

Work Order: T2-01-206

TEST NAME: **Petroleum Hydrocarbons**

SAMPLE ID: S-2
SAMPLE DATE: 01/29/92
LAB SAMPLE ID: T201206-06
SAMPLE MATRIX: aqueous
RECEIPT CONDITION: Cool pH < 2

RESULTS in Milligrams per Liter:

	METHOD	EXTRACTION DATE	ANALYSIS DATE
BTEX	8020		02/05/92
Low Boiling Hydrocarbons	Mod.8015		02/05/92

PARAMETER	DETECTION LIMIT	DETECTED
Low Boiling Hydrocarbons calculated as Gasoline	0.05	0.28
BTEX		
Benzene	0.0005	0.045
Toluene	0.0005	0.0008
Ethylbenzene	0.0005	0.0053
Xylenes (total)	0.0005	0.0052

SURROGATES	% REC
1,3-Dichlorobenzene (Gasoline)	114.
1,3-Dichlorobenzene (BTEX)	106.

IT ANALYTICAL SERVICES
SAN JOSE, CA
(408) 943-1540

Company: Shell Oil Company
Date: 02/12/92
Client Work ID: G6722, 2800 Telegraph, Oklnd

Work Order: T2-01-206

TEST NAME: **Petroleum Hydrocarbons**

SAMPLE ID: S-11
SAMPLE DATE: 01/29/92
LAB SAMPLE ID: T201206-07
SAMPLE MATRIX: aqueous
RECEIPT CONDITION: Cool pH < 2

RESULTS in Milligrams per Liter:

	METHOD	EXTRACTION DATE	ANALYSIS DATE
BTEX	8020		02/05/92
Low Boiling Hydrocarbons	Mod.8015		02/05/92

PARAMETER	DETECTION LIMIT	DETECTED
Low Boiling Hydrocarbons calculated as Gasoline	0.05	1.7
BTEX		
Benzene	0.0005	0.030
Toluene	0.0005	0.023
Ethylbenzene	0.0005	0.048
Xylenes (total)	0.0005	0.27

SURROGATES	% REC
1,3-Dichlorobenzene (Gasoline)	137*.
1,3-Dichlorobenzene (BTEX)	114.

* Hydrocarbon interference

IT ANALYTICAL SERVICES
SAN JOSE, CA
(408) 943-1540

Company: Shell Oil Company
Date: 02/12/92
Client Work ID: G6722, 2800 Telegraph, Oklnd

Work Order: T2-01-206

TEST NAME: **Petroleum Hydrocarbons**

SAMPLE ID: **S-8**
SAMPLE DATE: **01/29/92**
LAB SAMPLE ID: **T201206-08**
SAMPLE MATRIX: **aqueous**
RECEIPT CONDITION: **Cool pH < 2**

RESULTS in Milligrams per Liter:

	METHOD	EXTRACTION DATE	ANALYSIS DATE
BTEX	8020		02/05/92
Low Boiling Hydrocarbons	Mod.8015		02/05/92

PARAMETER	DETECTION LIMIT	DETECTED
Low Boiling Hydrocarbons calculated as Gasoline	0.25	1.4
BTEX		
Benzene	0.0025	0.013
Toluene	0.0025	0.037
Ethylbenzene	0.0025	0.054
Xylenes (total)	0.0025	0.23

SURROGATES	% REC
1,3-Dichlorobenzene (Gasoline)	107.
1,3-Dichlorobenzene (BTEX)	104.

IT ANALYTICAL SERVICES
SAN JOSE, CA
(408) 943-1540

Company: Shell Oil Company
Date: 02/12/92
Client Work ID: G6722, 2800 Telegraph, Oklnd

Work Order: T2-01-206

TEST NAME: **Spike and Spike Duplicates**

SAMPLE ID: **Quality Control**
SAMPLE DATE: **not spec**
LAB SAMPLE ID: T201206-09A
EXTRACTION DATE:
ANALYSIS DATE: 02/04/92
ANALYSIS METHOD: **Mod.8015**

QUALITY CONTROL REPORT

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Analyses

RESULTS in Milligrams per Liter

PARAMETER	Sample Amt	Spike Amt	MS Result	MSD Result	MS %Rec	MSD %Rec	RPD
Gasoline	None	500	464	450	93	90	3

SURROGATES	MS %Rec	MSD %Rec
1,3-Dichlorobenzene	109	107

IT ANALYTICAL SERVICES
SAN JOSE, CA
(408) 943-1540

Company: Shell Oil Company
Date: 02/12/92
Client Work ID: G6722, 2800 Telegraph, Oklnd

Work Order: T2-01-206

TEST CODE QC TEST NAME Quality Control

Quality control (QC) samples are analyzed and used to assess the laboratory control measures. Routine QC samples include method blanks, spikes and duplicates. The purpose of the method blank (MB) analysis is to demonstrate that artifacts of the test do not yield false positives. The laboratory control spike (LS) and /or matrix spike (MS) analysis is used to evaluate the ability of the test to recover analytes of interest, i.e. accuracy. Accuracy is expressed as percent (%) recovery. The laboratory spike duplicate (LSD), matrix spike duplicate (MSD), or duplicate sample (DUP) is used to determine the precision of the test, by comparing the result from the original spike (or sample) to the duplicate spike (or sample). Precision is expressed as relative percent difference (RPD).

The results of appropriate QC samples from QC batches associated with the listed samples are included in this report.

TEST CODE TPHVB TEST NAME TPH Gas,BTEX by 8015/8020

The method of analysis for low boiling hydrocarbons is taken from EPA Methods modified 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 in series with a photoionization detector. The result for total low boiling hydrocarbons is calculated as gasoline. Results in soils are corrected for moisture content and are reported on a dry soil basis unless otherwise noted.

INTERNATIONAL TECHNOLOGY CORPORATION

ANALYTICAL SERVICES

CERTIFICATE OF ANALYSIS

Shell Oil Company
Emcon Associates
1938 Junction Ave.
San Jose, CA 95131
David Larsen

Date: 02/12/92

Work Order: T2-01-207

P.O. Number: MOH 880-021 Vendor #I0002402

This is the Certificate of Analysis for the following samples:

Client Work ID: G6722, 2800 Telegraph, Oklnd
Date Received: 01/29/92
Number of Samples: 4
Sample Type: aqueous

TABLE OF CONTENTS FOR ANALYTICAL RESULTS

Reviewed and Approved:

David A. Pichette
Project Manager

IT ANALYTICAL SERVICES
SAN JOSE, CA
(408) 943-1540

Company: Shell Oil Company
Date: 02/12/92
Client Work ID: G6722, 2800 Telegraph, Oklnd

Work Order: T2-01-207

TEST NAME: **Petroleum Hydrocarbons**

SAMPLE ID: **S-7**
SAMPLE DATE: **01/29/92**
LAB SAMPLE ID: **T201207-01**
SAMPLE MATRIX: **aqueous**
RECEIPT CONDITION: **Cool pH < 2**

RESULTS in Milligrams per Liter:

	METHOD	EXTRACTION DATE	ANALYSIS DATE
BTEX	8020		02/04/92
Low Boiling Hydrocarbons	Mod.8015		02/04/92

PARAMETER	DETECTION LIMIT	DETECTED
Low Boiling Hydrocarbons calculated as Gasoline	0.05	0.18
BTEX		
Benzene	0.0005	0.0041
Toluene	0.0005	0.0006
Ethylbenzene	0.0005	0.0005
Xylenes (total)	0.0005	0.0036

SURROGATES	% REC
1,3-Dichlorobenzene (Gasoline)	105.
1,3-Dichlorobenzene (BTEX)	101.

IT ANALYTICAL SERVICES
SAN JOSE, CA
(408) 943-1540

Company: Shell Oil Company
Date: 02/12/92
Client Work ID: G6722, 2800 Telegraph, Oklnd

Work Order: T2-01-207

TEST NAME: **Petroleum Hydrocarbons**

SAMPLE ID: **S-6**
SAMPLE DATE: **01/29/92**
LAB SAMPLE ID: **T201207-02**
SAMPLE MATRIX: **aqueous**
RECEIPT CONDITION: **Cool pH < 2**

RESULTS in Milligrams per Liter:

	METHOD	EXTRACTION DATE	ANALYSIS DATE
BTEX	8020		02/05/92
Low Boiling Hydrocarbons	Mod.8015		02/05/92

PARAMETER	DETECTION LIMIT	DETECTED
Low Boiling Hydrocarbons calculated as Gasoline	0.25	2.1
BTEX		
Benzene	0.0025	0.34
Toluene	0.0025	0.018
Ethylbenzene	0.0025	0.020
Xylenes (total)	0.0025	0.097

SURROGATES	% REC
1,3-Dichlorobenzene (Gasoline)	111*.
1,3-Dichlorobenzene (BTEX)	106.

* Hydrocarbon interference

IT ANALYTICAL SERVICES
SAN JOSE, CA
(408) 943-1540

Company: Shell Oil Company
Date: 02/12/92
Client Work ID: G6722, 2800 Telegraph, Oklnd

Work Order: T2-01-207

TEST NAME: **Petroleum Hydrocarbons**

SAMPLE ID: **TRIP BLANK**
SAMPLE DATE: **not spec**
LAB SAMPLE ID: T201207-03
SAMPLE MATRIX: **aqueous**
RECEIPT CONDITION: Cool pH < 2

RESULTS in Milligrams per Liter:

	METHOD	EXTRACTION DATE	ANALYSIS DATE
BTEX	8020		02/04/92
Low Boiling Hydrocarbons	Mod.8015		02/04/92

PARAMETER	DETECTION LIMIT	DETECTED
Low Boiling Hydrocarbons calculated as Gasoline	0.05	None
BTEX		
Benzene	0.0005	None
Toluene	0.0005	None
Ethylbenzene	0.0005	None
Xylenes (total)	0.0005	None

SURROGATES	% REC
1,3-Dichlorobenzene (Gasoline)	94.
1,3-Dichlorobenzene (BTEX)	98.

IT ANALYTICAL SERVICES
SAN JOSE, CA
(408) 943-1540

Company: Shell Oil Company
Date: 02/12/92
Client Work ID: G6722, 2800 Telegraph, Oklnd

Work Order: T2-01-207

TEST NAME: **Petroleum Hydrocarbons**

SAMPLE ID: SD-10
SAMPLE DATE: 01/29/92
LAB SAMPLE ID: T201207-04
SAMPLE MATRIX: aqueous
RECEIPT CONDITION: Cool pH < 2

RESULTS in Milligrams per Liter:

	METHOD	EXTRACTION DATE	ANALYSIS DATE
BTEX	8020		02/12/92
Low Boiling Hydrocarbons	Mod.8015		02/12/92

PARAMETER	DETECTION LIMIT	DETECTED
Low Boiling Hydrocarbons calculated as Gasoline	0.05	None
BTEX		
Benzene	0.0005	None
Toluene	0.0005	None
Ethylbenzene	0.0005	None
Xylenes (total)	0.0005	None

SURROGATES	% REC
1,3-Dichlorobenzene (Gasoline)	102.
1,3-Dichlorobenzene (BTEX)	97.

IT ANALYTICAL SERVICES
SAN JOSE, CA
(408) 943-1540

Company: Shell Oil Company
Date: 02/12/92
Client Work ID: G6722, 2800 Telegraph, Oklnd

Work Order: T2-01-207

TEST NAME: **Spike and Spike Duplicates**

SAMPLE ID: **Quality Control**
SAMPLE DATE: **not spec**
LAB SAMPLE ID: T201207-05A
EXTRACTION DATE:
ANALYSIS DATE: 02/04/92
ANALYSIS METHOD: **Mod.8015**

QUALITY CONTROL REPORT

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Analyses

RESULTS in Milligrams per Liter

PARAMETER	Sample Amt	Spike Amt	MS Result	MSD Result	MS %Rec	MSD %Rec	RPD
Gasoline	None	500	464	450	93	90	3

SURROGATES	MS %Rec	MSD %Rec
1,3-Dichlorobenzene	109	107

IT ANALYTICAL SERVICES
SAN JOSE, CA
(408) 943-1540

Company: Shell Oil Company
Date: 02/12/92
Client Work ID: G6722, 2800 Telegraph, Oklnd

Work Order: T2-01-207

TEST NAME: **Spike and Spike Duplicates**

SAMPLE ID: **Quality Control**
SAMPLE DATE: **not spec**
LAB SAMPLE ID: T201207-05B
EXTRACTION DATE:
ANALYSIS DATE: 02/12/92
ANALYSIS METHOD: Mod.8015

QUALITY CONTROL REPORT

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Analyses

RESULTS in Milligrams per Liter

PARAMETER	Sample Amt	Spike Amt	MS Result	MSD Result	MS %Rec	MSD %Rec	RPD
Gasoline	None	500	402	423	80	85	5

SURROGATES	MS %Rec	MSD %Rec
1,3-Dichlorobenzene	110	112

IT ANALYTICAL SERVICES
SAN JOSE, CA
(408) 943-1540

Company: Shell Oil Company
Date: 02/12/92
Client Work ID: G6722, 2800 Telegraph, Oklnd

Work Order: T2-01-207

TEST CODE QC TEST NAME Quality Control

Quality control (QC) samples are analyzed and used to assess the laboratory control measures. Routine QC samples include method blanks, spikes and duplicates. The purpose of the method blank (MB) analysis is to demonstrate that artifacts of the test do not yield false positives. The laboratory control spike (LS) and /or matrix spike (MS) analysis is used to evaluate the ability of the test to recover analytes of interest, i.e. accuracy. Accuracy is expressed as percent (%) recovery. The laboratory spike duplicate (LSD), matrix spike duplicate (MSD), or duplicate sample (DUP) is used to determine the precision of the test, by comparing the result from the original spike (or sample) to the duplicate spike (or sample). Precision is expressed as relative percent difference (RPD).

The results of appropriate QC samples from QC batches associated with the listed samples are included in this report.

TEST CODE TPHVB TEST NAME TPH Gas,BTEX by 8015/8020

The method of analysis for low boiling hydrocarbons is taken from EPA Methods modified 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 in series with a photoionization detector. The result for total low boiling hydrocarbons is calculated as gasoline. Results in soils are corrected for moisture content and are reported on a dry soil basis unless otherwise noted.

SHELL OIL COMPANY
RETAIL ENVIRONMENTAL ENGINEERING - WEST

CHAIN OF CUSTODY RECORD
Serial No.: I2-01-2066

Date:
Page 1 of 2

Site Address: 2800 Telegraph Ave, Oakland, CA

WIC#: 204-5508-2303

Shell Engineer: Kurt Miller — **Phone No.** (510) — **Fax #:** 685-3853

Consultant Name & Address: EMCON Assoc. — 1938 Junction Ave. San Jose, CA 95131

Consultant Contact: David Larsen — **Phone No.** (408) — **Fax #:** 453-2269

Comments:

Sampled By: X Lisle Reedy

Printed Name: X Lisle Reedy

LAB: IT Analytical - San Jose

CHECK ONE (1) BOX ONLY		CT/DT
Quarterly Monitoring	XX	5461
Site Investigation	[ ]	5441
Soil for disposal	[ ]	5442
Water for disposal	[ ]	5443
Air Sample- Sys O&M	[ ]	5452
Water Sample - Sys O&M	[ ]	5453
Other	[ ]	

TURN AROUND TIME

24 hours [ ]
48 hours [ ]
15 days XX (Normal)
Other [ ] _____

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

Analysis Required

Sample ID	Date	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	Container Size	Preparation Used	Composite Y/N	MATERIAL DESCRIPTION	SAMPLE CONDITION/ COMMENTS
S-1	1-29-92		X		3	X		X			40 ml	HCl	No		Cool & Intact 1-29-92
S-4					3	X		X							
S-5					3	X		X							
S-9					3	X		X							
S-10					6	X		X							
S-2					3	X		X							
S-11					3	X		X							
S-8					3	X		X							

Relinquished By (signature): X Lisle Reedy — **Printed name:** X Lisle Reedy — **Date:** 1-29 — **Time:** 1617

Received (signature): M. LeGrande — **Printed name:** M. LeGrande — **Date:** 1-29-92 — **Time:** 1620

Relinquished By (signature): — **Printed name:** — **Date:** — **Time:**

Received (signature): — **Printed name:** — **Date:** — **Time:**

Relinquished By (signature): — **Printed name:** — **Date:** — **Time:**

Received (signature): — **Printed name:** — **Date:** — **Time:**

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

Last Revision Date: 10/15/91

SHELL OIL COMPANY
RETAIL ENVIRONMENTAL ENGINEERING - WEST

CHAIN OF CUSTODY RECORD
Serial No.: T2-01-207

Date: . .

Site Address: 2800 Telegraph Ave, Oakland, CA

WIC#: 204-5508-2303

Shell Engineer: Kurt Miller	**Phone No.** (510) **Fax #:** 685-3853
Consultant Name & Address: EMCON Assoc.	1938 Junction Ave. San Jose, CA 95131
Consultant Contact: David Larsen	**Phone No.** (408) **Fax #:** 453-2269
Comments:	

Sampled By: Lisle Rath

Printed Name: Lisle Rath

Analysis Required

LAB: IT Analytical - San Jose

CHECK ONE (1) BOX ONLY		CT/DT	TURN AROUND TIME
Quarterly Monitoring	X	5461	24 hours [ ]
Site Investigation	[ ]	5441	48 hours [ ]
Soil for disposal	[ ]	5442	15 days X (Normal)
Water for disposal	[ ]	5443	Other [ ] ____
Air Sample- Sys O&M	[ ]	5452	NOTE: Notify Lab as soon as possible of 24/48 hrs. TAT.
Water Sample - Sys O&M	[ ]	5453	
Other	[ ]		

Sample ID	Date	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	Container Size	Preservation Used	Composite Y/N	MATERIAL DESCRIPTION	SAMPLE CONDITION/ COMMENTS
S-7	1-29-92		X		3	X		X			40 ml	HCl	No		cool on ice (1-29-92)
S-6					3	X		X							
S-3 dry					3	X		X							
TB					1	X		X							
SD-	CR				3	X		X							

Relinquished By (signature): Lisle Rath	**Printed name:** Lisle Rath	Date: 1-29 Time: 1611	**Received (signature):** M. LeGrande FEDEX	**Printed name:** M. LeGrande	Date: 1-29-92 Time: 1630
Relinquished By (signature):	**Printed name:**	Date: Time:	**Received (signature):**	**Printed name:**	Date: Time:
Relinquished By (signature):	**Printed name:**	Date: Time:	**Received (signature):**	**Printed name:**	Date: Time:

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

Last Revision Date: 10/15/91