GeoStrategies Inc.

September 22, 1993

Shell Oil Company
P.O. Box 5278
Concord, California 94520

Attn: Mr. Dan Kirk

Re: QUARTERLY REPORT
Shell Service Station
3790 Hopyard Road
Pleasanton, California
WIC #204-6138-0501

Mr. Kirk:

This Quarterly Report has been prepared by GeoStrategies Inc. (GSI) and presents the results of the 1993 second quarter sampling for the above referenced site (Plate 1). Also included in this report are the results of the trench sampling associated with the partial station renovation conducted in July, 1993. Sampling data were furnished by the Shell Oil Company sampling contractor.

EXECUTIVE SUMMARY

- The dissolved hydrocarbon plume appears delineated to the east, south, and west of the site.
- Five of the nine wells (S-3 and S-7 through S-10) sampled were none-detected (ND) for benzene during the second quarter of 1993.
- Groundwater elevations dropped an average of approximately 1.0 foot during the second quarter of 1993.
- The groundwater gradient and flow direction remained consistent with historical observations.

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SITE DESCRIPTION

There are currently twelve monitoring wells at the site; Wells S-2 through S-10, SR-1, SR-2, and SR-3 (Plate 2). These wells were installed between 1986 and 1989 by EMCON Associates, Woodward-Clyde Consultants, Pacific Environmental Group and GSI. Well S-1 was destroyed in 1988.

CURRENT QUARTER SAMPLING RESULTS

Depth to water-level measurements were obtained in each monitoring well on June 3, 1993. Static ground-water levels were measured from the surveyed top of each well box and recorded to the nearest $\pm$0.01 foot. Water-level measurements are presented in the Blaine Tech Services Inc. (Blaine) Groundwater Sampling Report (Appendix A). Water-level data were used to construct a quarterly potentiometric map (Plate 2). Shallow ground-water flow is to the southeast at an approximate hydraulic gradient of 0.012.

Each well was checked for the presence of separate-phase hydrocarbons. Separate-phase hydrocarbons were not observed in the wells this quarter.

Groundwater samples were collected on June 3, 1993. Samples were analyzed for Total Petroleum Hydrocarbons calculated as Gasoline (TPH-Gasoline), according to EPA Method 8015 (Modified) and for Benzene, Toluene, Ethylbenzene, and Xylenes (BTEX) according to EPA Method 8020. The groundwater samples were analyzed by Anametrix Inc., a California State-certified laboratory located in San Jose, California. The Blaine Groundwater Sampling Report and Chain-of-Custody form are presented in Appendix A. These data are summarized and included with the historical chemical analytical data presented in Table 1. A chemical concentration map for benzene is presented on Plate 3.

TPH-Gasoline was detected in Wells S-4, S-5, S-6, SR-1, SR-2, and SR-3 at concentrations ranging from 51 parts per million (ppm) to 460 ppm. Benzene was also detected in these wells and Well S-2 at concentrations ranging from 10.7 ppm to 140 ppm.

PRODUCT-LINE TRENCHING AND SAMPLING

A site renovation project was performed in July 1993 which included removal of the northwestern island and canopy and repiping of the other island. During the removal of the canopy and dispenser islands at the site, soil was removed from five product-line trenches (ST-1 through ST-5). The depths of the trenches ranged from 2.5 feet to 7.5 feet below ground surface (bgs). The product-line trenches were sampled on July 20 and July 22, 1993 by a GSI geologist at the locations shown on Plate 5. Soil samples were collected from the trenches at depths of 2.5, 3.5, 4, and 7.5 feet bgs. Soil samples collected deeper than 5 feet were collected with the assistance of a backhoe bucket. All soil samples were collected by pushing a clean, stainless-steel sample tube into native soil and immediately covering both ends with teflon tape and plastic end caps. The sample tubes were then labeled, entered on a chain-of-custody form and transported in a cooler with blue ice to a State-certified analytical laboratory located in Redwood City, California.

TPH-Gasoline was not detected in soil samples ST-1A, -1B, ST-2A, -2B, -2C, ST-4A, ST-5A, and -5B. TPH-Gasoline was detected in soil samples ST-2B, ST-3A, -3B, and ST-4B at concentrations ranging from 1.7 ppm to 160 ppm. Benzene was ND in soil samples ST-1B, ST-5A, and ST-5B. Benzene concentrations ranging from 0.01 ppm to 11 ppm were detected in trench samples ST-1A, ST -2A, ST-2B, ST-2C, ST-3A, ST-3B, ST-4A, and ST-4B. The chemical analytical results are presented in Table 3 and the analytical soil sampling report presented in Appendix B.

All excavated trench soils, totaling approximately 25 cubic yards, were stockpiled and sampled. Upon receipt of the chemical analytical data, the stockpiled soil was removed and transported to the appropriate disposal facility. The chemical analytical report for the stockpiled soil is presented in Appendix B.

DISCUSSION

The dissolved hydrocarbon plume is well-defined in the downgradient and cross-gradient directions. All site wells (except Wells S-4 and S-5) have been near or below the detection limits for TPH-Gasoline and BTEX during at least the past 7 quarters, and Wells S-3, S-7 and S-10 have been ND since August 1989.

If you have any questions, please call.

GeoStrategies Inc. by,

Timothy J. Walker
Geologist

John F. Vargas
Senior Geologist
R.G. 5046

REGISTERED GEOLOGIST
JOHN F. VARGAS
NO. 5046
STATE OF CALIFORNIA

TJW/JFV

Plate 1. Vicinity Map
Plate 2. Site Plan
Plate 3. Potentiometric Map
Plate 4. Benzene Isoconcentration Map
Plate 5. Soil Sampling Map

Appendix A: Blaine Tech Services Groundwater Sampling Report and Chain-of-Custody Form
Appendix B Soil Analytical Report and Chain-of-Custody Form

QC Review: _____

cc: Mr. Rick Mueller, City of Pleasanton Fire Department
Mr. Lester Feldman, Regional Water Quality Control Board

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TABLE 1

FIELD MONITORING DATA
Shell Service Station
3750 Hopyard Road
Pleasanton, California
WIC # 204-6138-0501

Well No.	Monitoring Date	Casing Diameter (inches)	Well Depth (feet)	Well Elevation (feet/MSL)	Depth to Water (feet)	Product Thickness (feet)	Static Water Elevation	Total Vol. Purged (gallons)	pH	Conductivity (uMHOS/cm)	Temp (F)	Turbidity (NTU)
S-2	3-Jun-93	3	35.15	329.21	14.55	- - -	314.66	23.0	7.3	4400	70.6	>200
S-3	3-Jun-93	3	35.09	327.67	12.59	- - -	315.08	25.0	7.1	4800	68.0	>200
S-4	3-Jun-93	3	36.08	328.53	13.86	- - -	314.67	14.0	6.8	3000	68.8	>200
S-5	3-Jun-93	3	35.88	329.66	16.31	- - -	313.35	22.0	6.8	2400	66.2	>200
S-6	3-Jun-93	3	34.75	327.62	14.14	- - -	313.48	24.0	6.8	2200	66.8	>200
S-7	3-Jun-93	3	34.97	328.67	16.54	- - -	312.13	21.0	6.8	4000	67.4	>200
S-8	3-Jun-93	3	34.30	327.00	14.65	- - -	312.35	22.0	6.9	5400	68.4	>200
S-9	3-Jun-93	3	34.86	328.24	17.31	- - -	310.93	20.0	6.4	5800	66.6	>200
S-10	3-Jun-93	3	34.30	326.55	13.41	- - -	313.14	24.0	7.2	2200	66.0	>200
SR-1	3-Jun-93	4	35.10	329.78	16.22	- - -	313.56	- - -	- - -	- - -	- - -	- - -
SR-2	3-Jun-93	4	35.29	328.35	14.10	- - -	314.25	- - -	- - -	- - -	- - -	- - -
SR-3	3-Jun-93	4	35.07	329.11	14.59	- - -	314.52	- - -	- - -	- - -	- - -	- - -

NOTES:
1. Well MW-1 has been abandoned.
2. Static water elevation referenced to Mean Sea Level (MSL).
3. Physical parameter measurements prepresent stabilized values.

TABLE 2

HISTORICAL GROUNDWATER QUALITY DATABASE

SAMPLE DATE	SAMPLE POINT	TPH-G (PPB)	BENZENE (PPB)	TOLUENE (PPB)	ETHYLBENZENE (PPB)	XYLENES (PPB)
06-Nov-87	S-1	920	230	<5	150	150
14-Feb-88	S-1	3,500	1,300	<40	500	500
06-Aug-88	S-1	Well abandoned				
06-Nov-87	S-2	16,000	870	100	2,700	2,700
14-Feb-88	S-2	1,800	440	<10	140	140
13-Oct-88	S-2	550	110	1	45	15
31-Jan-89	S-2	620	170	2	62	14
07-Mar-89	S-2	1,900	260	270	130	260
26-Jun-89	S-2	320	88	1	32	10
08-Sep-89	S-2	230	80	1	30	15
14-Dec-89	S-2	160	56	0.5	21	3
05-Mar-90	S-2	710	57	<0.5	<0.5	88
14-Jun-90	S-2	110	39	0.5	11	2
02-Oct-90	S-2	290	84	1.7	160	8.1
18-Dec-90	S-2	61	18	1.4	2.2	2.4
20-Mar-91	S-2	110	30	2.2	10	7
26-Jun-91	S-2	50*	6.3	<0.5	3.3	1.9
05-Sep-91	S-2	90	12	3.2	2.5	2.3
13-Dec-91	S-2	<50	12	<0.5	<0.5	<0.5
11-Mar-92	S-2	<30	<0.3	<0.3	<0.3	<0.3
15-Jun-92	S-2	<50	0.9	<0.5	<0.5	<0.5
17-Sep-92	S-2	78	2.6	<0.5	1.3	0.9
11-Dec-92	S-2	<50	0.8	<0.5	<0.5	<0.5
04-Feb-93	S-2	55	1.3	<0.5	0.7	<0.5
03-Jun-93	S-2	<50	0.7	<0.5	<0.5	<0.5
14-Feb-88	S-3	<50	<0.5	<1	<4	<4
13-Oct-88	S-3	<50	<0.5	<1	<1	<3
31-Jan-89	S-3	<50	<0.5	<1	<1	<3
07-Mar-89	S-3	<50	<0.5	<1	<1	<3
26-Jun-89	S-3	<50	<0.5	<1	<1	<3
08-Sep-89	S-3	<50	<0.5	<1	<1	<3
14-Dec-89	S-3	<50	<0.5	<0.5	<0.5	<1
05-Mar-90	S-3	<50	<0.5	<0.5	<0.5	<1

TABLE 2

HISTORICAL GROUNDWATER QUALITY DATABASE

SAMPLE DATE	SAMPLE POINT	TPH-G (PPB)	BENZENE (PPB)	TOLUENE (PPB)	ETHYLBENZENE (PPB)	XYLENES (PPB)
14-Jun-90	S-3	<500	<0.5	<0.5	<0.5	<1
02-Oct-90	S-3	<50	<0.5	<0.5	<0.5	1
18-Dec-90	S-3	<50	<0.5	1.6	<0.5	2
20-Mar-91	S-3	70	2.3	8.9	4	23
26-Jun-91	S-3	<50	<0.5	<0.5	<0.5	<0.5
05-Sep-91	S-3	<50	<0.5	<0.5	<0.5	<0.5
13-Dec-91	S-3	<50	<0.5	<0.5	<0.5	<0.5
11-Mar-92	S-3	<30	<0.3	<0.3	<0.3	<0.3
15-Jun-92	S-3	<50	<0.5	<0.5	<0.5	<0.5
17-Sep-92	S-3	<50	<0.5	<0.5	<0.5	<0.5
11-Dec-92	S-3	<50	<0.5	<0.5	<0.5	<0.5
04-Feb-93	S-3	<50	<0.5	<0.5	<0.5	<0.5
03-Jun-93	S-3	<50	<0.5	<0.5	<0.5	<0.5
14-Feb-88	S-4	5,100	160	8	730	730
13-Oct-88	S-4	530	24	1	25	16
31-Jan-89	S-4	1,100	33	2	20	24
07-Mar-89	S-4	650	37	1	35	27
26-Jun-89	S-4	670	110	<1	85	71
08-Sep-89	S-4	380	32	<1	36	26
14-Dec-89	S-4	210	21	<0.5	30	23
05-Mar-90	S-4	350	43	<0.5	24	47
14-Jun-90	S-4	430	74	<0.5	71	46
02-Oct-90	S-4	700	74	2.2	100	55
18-Dec-90	S-4	1,400	180	2.9	280	230
20-Mar-91	S-4	1,200	100	<2	210	130
26-Jun-91	S-4	220	14	<0.5	34	17
05-Sep-91	S-4	580	31	0.8	53	26
13-Dec-91	S-4	370	24	0.9	1.3	46
11-Mar-92	S-4	1,600	23	1.2	12	20
16-Jun-92	S-4	480	48	<1	95	22
17-Sep-92	S-4	260	35	1.2	51	7.8
11-Dec-92	S-4	270	34	0.6	28	4.5
05-Feb-93	S-4	1,100	12	<5	69	100

TABLE 2

HISTORICAL GROUNDWATER QUALITY DATABASE

SAMPLE DATE	SAMPLE POINT	TPH-G (PPB)	BENZENE (PPB)	TOLUENE (PPB)	ETHYLBENZENE (PPB)	XYLENES (PPB)
03-Jun-93	S-4	210	48	1.1	42	4.0
14-Feb-88	S-5	1,000	40	86	180	180
13-Oct-88	S-5	560	66	20	18	36
31-Jan-89	S-5	180	27	8	9	13
07-Mar-89	S-5	3,800	520	530	260	570
26-Jun-89	S-5	<50	3.8	<1	2	<3
08-Sep-89	S-5	110	25	2	2	12
14-Dec-89	S-5	1,700	300	86	67	140
05-Mar-90	S-5	1,100	100	110	79	240
14-Jun-90	S-5	600	94	36	40	62
02-Oct-90	S-5	4,500	1,400	160	260	300
20-Nov-90	S-5	16,000	4,600	720	790	1,000
18-Dec-90	S-5	25,000	7,600	1,100	1,300	2,300
20-Mar-91	S-5	310	39	12	18	30
26-Jun-91	S-5	1,300	250	62	120	160
05-Sep-91	S-5	4,700	660	150	170	280
13-Dec-91	S-5	1,400	580	19	110	80
11-Mar-92	S-5	<30	<0.3	<0.3	<0.3	<0.3
16-Jun-92	S-5	1,800	380	52	120	180
17-Sep-92	S-5	2,200	750	91	170	170
11-Dec-92	S-5	8,700	1,600	86	48	340
04-Feb-93	S-5	150	15	0.7	4.7	4
03-Jun-93	S-5	460	140	3.4	17	14
13-Oct-88	S-6	1,100	13	1	42	33
31-Jan-89	S-6	340	3.8	<1	8	3
07-Mar-89	S-6	190	3.8	<1	7	3
26-Jun-89	S-6	480	15	<1	6	<3
08-Sep-89	S-6	270	1.3	1	7	<3
15-Dec-89	S-6	320	1	<0.5	2.6	<1
06-Mar-90	S-6	420	3.1	<0.5	14	<1
14-Jun-90	S-6	370	3.7	0.9	4.8	3
02-Oct-90	S-6	190	6.6	1.6	1.9	2.8
18-Dec-90	S-6	430	10	0.7	1.6	1.5

TABLE 2

HISTORICAL GROUNDWATER QUALITY DATABASE

SAMPLE DATE	SAMPLE POINT	TPH-G (PPB)	BENZENE (PPB)	TOLUENE (PPB)	ETHYLBENZENE (PPB)	XYLENES (PPB)
20-Mar-91	S-6	130*	6.6	0.6	0.7	3
26-Jun-91	S-6	120*	3.8	0.8	<0.5	1.7
05-Sep-91	S-6	60	<0.5	0.8	<0.5	0.5
13-Dec-91	S-6	150	2.3	<0.5	<0.5	150
11-Mar-92	S-6	<30	<0.3	<0.3	<0.3	<0.3
15-Jun-92	S-6	170	<0.5	<0.5	<0.5	<0.5
17-Sep-92	S-6	190	<0.5	1.6	<0.5	1.2
11-Dec-92	S-6	180	<0.5	0.8	<0.5	0.7
05-Feb-93	S-6	290	<0.5	<0.5	<0.5	0.7
03-Jun-93	S-6	100	1.2	<0.5	<0.5	<0.5
13-Oct-88	S-7	<50	0.6	1	<1	<3
31-Jan-89	S-7	<50	<0.5	<1	<1	<3
07-Mar-89	S-7	<50	<0.5	<1	<1	<3
26-Jun-89	S-7	<50	<0.5	<1	<1	<3
08-Sep-89	S-7	<50	<0.5	<1	<1	<3
15-Dec-89	S-7	<50	<0.5	<0.5	<0.5	<1
06-Mar-90	S-7	<50	<0.5	<0.5	<0.5	<1
14-Jun-90	S-7	<50	<0.5	<0.5	<0.5	<1
02-Oct-90	S-7	<50	<0.5	0.6	<0.5	0.9
18-Dec-90	S-7	<50	0.5	<0.5	<0.5	0.8
20-Mar-91	S-7	<50	<0.5	<0.5	<0.5	<0.5
26-Jun-91	S-7	<50	<0.5	<0.5	<0.5	<0.5
05-Sep-91	S-7	<50	<0.5	0.6	<0.5	<0.5
13-Dec-91	S-7	<50	<0.5	<0.5	<0.5	<0.5
11-Mar-92	S-7	<30	<0.3	<0.3	<0.3	<0.3
15-Jun-92	S-7	<50	<0.5	<0.5	<0.5	<0.5
17-Sep-92	S-7	<50	0.6	0.6	<0.5	<0.5
11-Dec-92	S-7	<50	<0.5	<0.5	<0.5	<0.5
05-Feb-93	S-7	<50	<0.5	<0.5	<0.5	<0.5
03-Jun-93	S-7	<50	<0.5	<0.5	<0.5	<0.5
07-Mar-89	S-8	<50	1.2	1	<1	<3
26-Jun-89	S-8	<50	0.8	1	<1	<3
08-Sep-89	S-8	<50	<0.5	<1	<1	<3

TABLE 2

HISTORICAL GROUNDWATER QUALITY DATABASE

SAMPLE DATE	SAMPLE POINT	TPH-G (PPB)	BENZENE (PPB)	TOLUENE (PPB)	ETHYLBENZENE (PPB)	XYLENES (PPB)
14-Dec-89	S-8	<50	<0.5	<0.5	<0.5	<1
05-Mar-90	S-8	<50	<0.5	0.5	<0.5	<1
14-Jun-90	S-8	<50	<0.5	<0.5	<0.5	<1
02-Oct-90	S-8	<50	<0.5	<0.5	<0.5	<0.5
18-Dec-90	S-8	<50	2.9	7	1	6.4
20-Mar-91	S-8	50*	0.8	1.6	2.6	5.2
26-Jun-91	S-8	<50	<0.5	<0.5	<0.5	<0.5
05-Sep-91	S-8	<50	<0.5	<0.5	<0.5	<0.5
13-Dec-91	S-8	<50	<0.5	<0.5	<0.5	<0.5
11-Mar-92	S-8	<30	<0.3	<0.3	<0.3	<0.3
15-Jun-92	S-8	<50	1.4	1.9	<0.5	<0.5
17-Sep-92	S-8	<50	<0.5	<0.5	<0.5	<0.5
11-Dec-92	S-8	<50	<0.5	<0.5	<0.5	<0.5
04-Feb-93	S-8	<50	<0.5	<0.5	<0.5	<0.5
03-Jun-93	S-8	<50	<0.5	<0.5	<0.5	<0.5
07-Mar-89	S-9	<50	<0.5	<1	<1	<3
26-Jun-89	S-9	<50	<0.5	<1	<1	<3
08-Sep-89	S-9	<50	1.7	2	<1	<3
15-Dec-89	S-9	<50	0.5	<0.5	<0.5	<1
06-Mar-90	S-9	<50	<0.5	<0.5	<0.5	<1
14-Jun-90	S-9	<50	<0.5	<0.5	<0.5	<1
02-Oct-90	S-9	<50	<0.5	<0.5	<0.5	<0.5
18-Dec-90	S-9	<50	20	27	7.1	35
20-Mar-91	S-9	70*	0.7	0.7	<0.5	1
26-Jun-91	S-9	<50	<0.5	<0.5	<0.5	<0.5
05-Sep-91	S-9	<50	<0.5	0.8	<0.5	<0.5
13-Dec-91	S-9	<50	<0.5	<0.5	<0.5	<0.5
11-Mar-92	S-9	<30	<0.3	<0.3	<0.3	<0.3
16-Jun-92	S-9	<50	<0.5	<0.5	<0.5	<0.5
17-Sep-92	S-9	<50	<0.5	<0.5	<0.5	<0.5
11-Dec-92	S-9	<50	<0.5	<0.5	<0.5	<0.5
04-Feb-93	S-9	<50	<0.5	<0.5	<0.5	<0.5
03-Jun-93	S-9	<50	<0.5	<0.5	<0.5	<0.5

TABLE 2

HISTORICAL GROUNDWATER QUALITY DATABASE

SAMPLE DATE	SAMPLE POINT	TPH-G (PPB)	BENZENE (PPB)	TOLUENE (PPB)	ETHYLBENZENE (PPB)	XYLENES (PPB)
11-Aug-89	S-10	<50	<0.5	<1	<1	<3
08-Sep-89	S-10	<50	<0.5	<1	<1	<3
15-Dec-89	S-10	<50	<0.5	<0.5	<0.5	<1
06-Mar-90	S-10	<50	<0.5	<0.5	<0.5	<1
14-Jun-90	S-10	<50	<0.5	<0.5	<0.5	<1
02-Oct-90	S-10	<50	<0.5	<0.5	<0.5	1
18-Dec-90	S-10	<50	<0.5	<0.5	<0.5	1.4
20-Mar-91	S-10	<50	<0.5	<0.5	<0.5	<0.5
26-Jun-91	S-10	50	1.8	5.8	1.9	13
05-Sep-91	S-10	<50	<0.5	<0.5	<0.5	<0.5
13-Dec-91	S-10	<50	<0.5	<0.5	<0.5	<0.5
11-Mar-92	S-10	<30	<0.3	<0.3	<0.3	<0.3
15-Jun-92	S-10	<50	<0.5	<0.5	<0.5	<0.5
17-Sep-92	S-10	<50	<0.5	<0.5	<0.5	<0.5
11-Dec-92	S-10	<50	<0.5	<0.5	<0.5	<0.5
05-Feb-93	S-10	<50	<0.5	<0.5	<0.5	<0.5
03-Jun-93	S-10	<50	<0.5	<0.5	<0.5	<0.5
11-Oct-89	SR-1	200	100	<1	10	10
14-Dec-89	SR-1	500	210	<0.5	16	16
05-Mar-90	SR-1	64	20	<0.5	1.5	4
14-Jun-90	SR-1	60	17	<0.5	1.9	1
02-Oct-90	SR-1	<50	5	<0.5	<0.5	<0.5
18-Dec-90	SR-1	<50	28	5.5	4.5	4.5
20-Mar-91	SR-1	<50*	4.2	<0.5	1.4	0.5
26-Jun-91	SR-1	<50	5	<0.5	0.5	<0.5
05-Sep-91	SR-1	<50	8.6	<0.5	0.7	<0.5
13-Dec-91	SR-1	70	9.4	7.1	6.6	22
11-Mar-92	SR-1	<30	<0.3	<0.3	<0.3	<0.3
15-Jun-92	SR-1	<50	<0.5	<0.5	<0.5	<0.5
17-Sep-92	SR-1	51	1.4	<0.5	<0.5	<0.5
11-Oct-89	SR-2	880	<10	1	29	33
14-Dec-89	SR-2	1,100	17	<0.5	100	67
05-Mar-90	SR-2	140	3	<0.5	12	7

TABLE 2

HISTORICAL GROUNDWATER QUALITY DATABASE

SAMPLE DATE	SAMPLE POINT	TPH-G (PPB)	BENZENE (PPB)	TOLUENE (PPB)	ETHYLBENZENE (PPB)	XYLENES (PPB)
14-Jun-90	SR-2	<50	<0.5	<0.5	2.6	<1
02-Oct-90	SR-2	<50	<0.5	<0.5	0.5	<0.5
18-Dec-90	SR-2	<50	1.6	1.4	1.6	2.7
20-Mar-91	SR-2	90	1.3	<0.5	6.1	1.4
26-Jun-91	SR-2	<50	0.6	<0.5	1.7	<0.5
05-Sep-91	SR-2	<50	1.2	<0.5	1.2	<0.5
13-Dec-91	SR-2	<50	<0.5	<0.5	<0.5	<0.5
11-Mar-92	SR-2	<30	0.5	<0.3	<0.3	<0.3
15-Jun-92	SR-2	120	6	1	0.7	2.1
17-Sep-92	SR-2	140	8.3	0.6	0.9	0.7
11-Oct-89	SR-3	500	92	10	43	100
14-Dec-89	SR-3	2,400	310	27	170	340
05-Mar-90	SR-3	70	15	0.8	5.8	10
14-Jun-90	SR-3	470	59	2.3	35	50
02-Oct-90	SR-3	1,700	91	6.2	7	100
18-Dec-90	SR-3	140	10	0.8	7.5	14
20-Mar-91	SR-3	1,350	970	3.6	64	79
26-Jun-91	SR-3	240	48	15	20	N/AO
26-Jun-91	SR-3	240	48	4.2	15	20
05-Sep-91	SR-3	160	19	<0.5	6	5.9
13-Dec-91	SR-3	50	13	<0.5	3.1	4.7
11-Mar-92	SR-3	410	28	1.6	22	24
16-Jun-92	SR-3	600	55	2.1	2.8	33
17-Sep-92	SR-3	210	25	1.8	17	20

TPH-G = Total Petroleum Hydrocarbons calculated as Gasoline
PPB = Parts Per Billion

* Compounds detected and calculated as low boiling hydrocarbons consist of compounds eluting within the chromatographic range of gasoline, but are not characteristic of the standard gasoline standard pattern.

Notes:

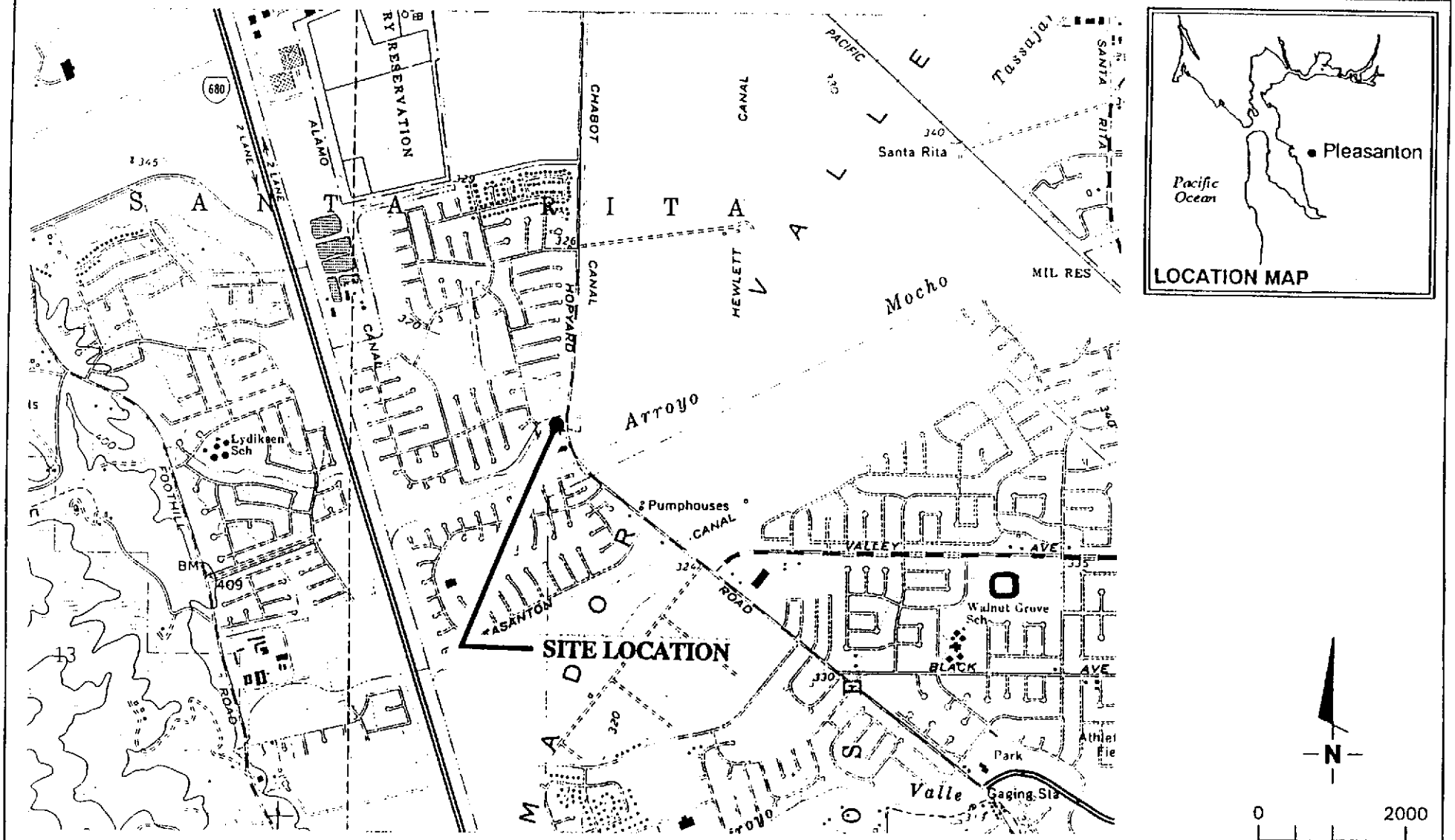
1. All data shown as <x are reported as ND (none detected).]
2. Wells SR-1, SR-2, and SR-3 were monitored only subsequent to the September 17, 1992 sampling.

Table 3

Trench Soil Sample Analytical Results
Shell Service Station
3750 Hopyard Road
Pleasanton California

Sample ID	Depth (feet)	Date Collected	Date Analyzed	TPH-G (ppm)	Benzene (ppm)	Toluene (ppm)	Ethylbenzene (ppm)	Xylenes (ppm)
ST-1A	2.5	20-Jul-93	20-Jul-93	<1.0	0.01	<0.005	0.03	0.016
ST-1B	2.5	20-Jul-93	20-Jul-93	<1.0	<0.005	<0.005	<0.005	<0.005
ST-1C	7.5	20-Jul-93	20-Jul-93	NOT ANALYZED				
ST-2A	2.5	20-Jul-93	20-Jul-93	<1.0	0.053	<0.005	0.012	0.005
ST-2B	2.5	20-Jul-93	20-Jul-93	1.7	11	<0.005	0.017	0.009
ST-2C	7.5	20-Jul-93	20-Jul-93	<1.0	0.11	<0.005	0.009	0.019
ST-3A	3.5	22-Jul-93	25-Jul-93	5.2	0.085	0.025	0.077	0.17
ST-3B	4	22-Jul-93	25-Jul-93	160	0.9	2.7	2.5	13
ST-4A	3.5	22-Jul-93	25-Jul-93	<1.0	0.013	<0.005	0.014	0.13
ST-4B	3.5	22-Jul-93	25-Jul-93	1.7	0.032	0.007	0.048	0.028
ST-5A	4	22-Jul-93	25-Jul-93	<1.0	<0.005	<0.005	<0.005	0.045
ST-5B	4	22-Jul-93	25-Jul-93	<1.0	<0.005	<0.005	<0.005	<0.005

Notes:
1. TPH-G = Total Petroleum Hydrocarbons calculated as gasoline.
2. ppm = parts per million.
3. Analysis method: EPA 5030/8015/8020

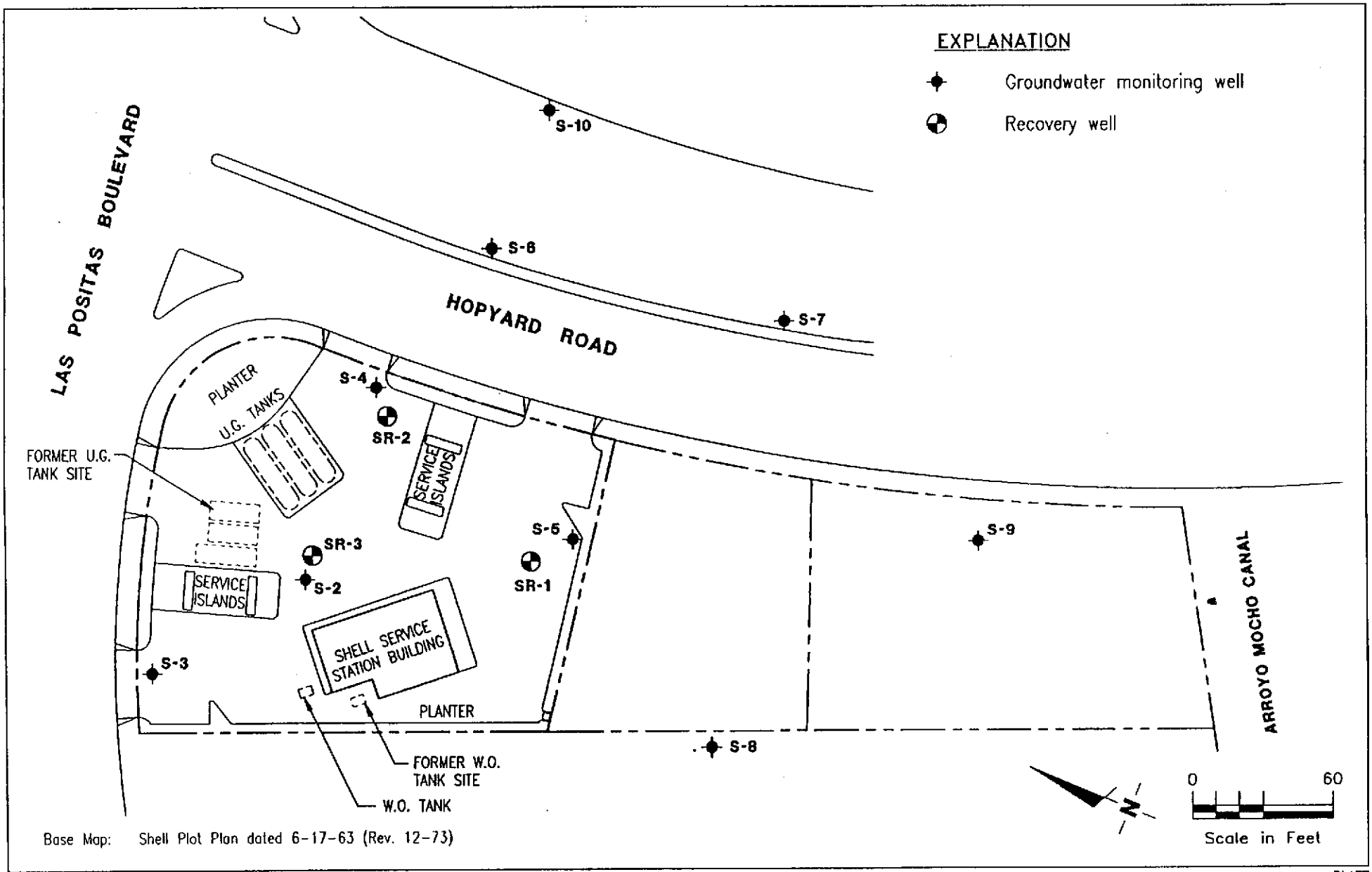


GeoStrategies Inc.

VICINITY MAP
Shell Service Station
3790 Hopyard Road
Pleasanton, California

PLATE 1

JOB NUMBER	REVIEWED BY	DATE	REVISED DATE
7632		2/91	



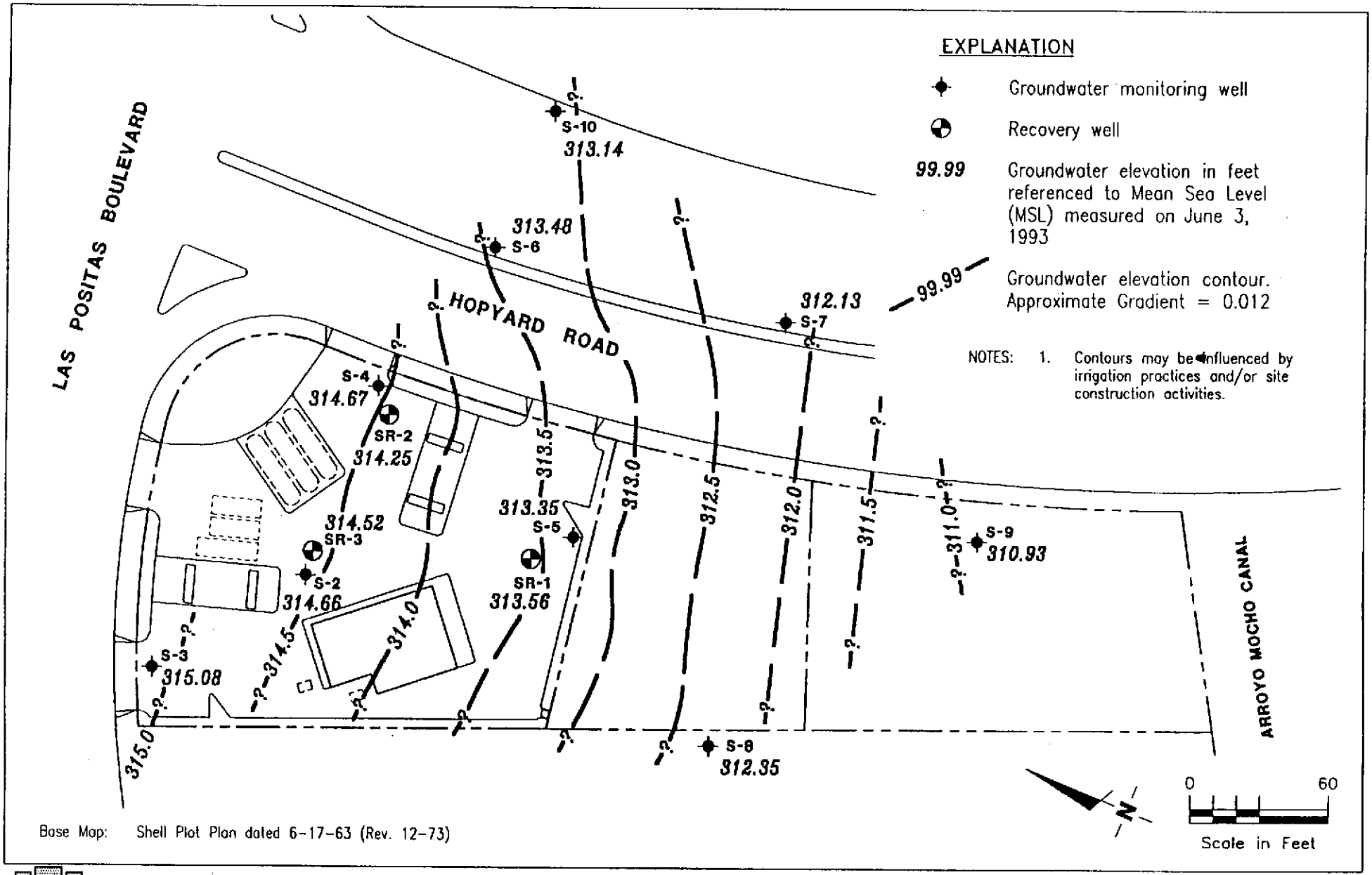
Base Map: Shell Plot Plan dated 6-17-63 (Rev. 12-73)

GeoStrategies Inc.

SITE PLAN
Shell Service Station
3790 Hopyard Road
Pleasanton, California

PLATE
2

JOB NUMBER	REVIEWED BY	DATE	REVISED DATE
7632		9/93	



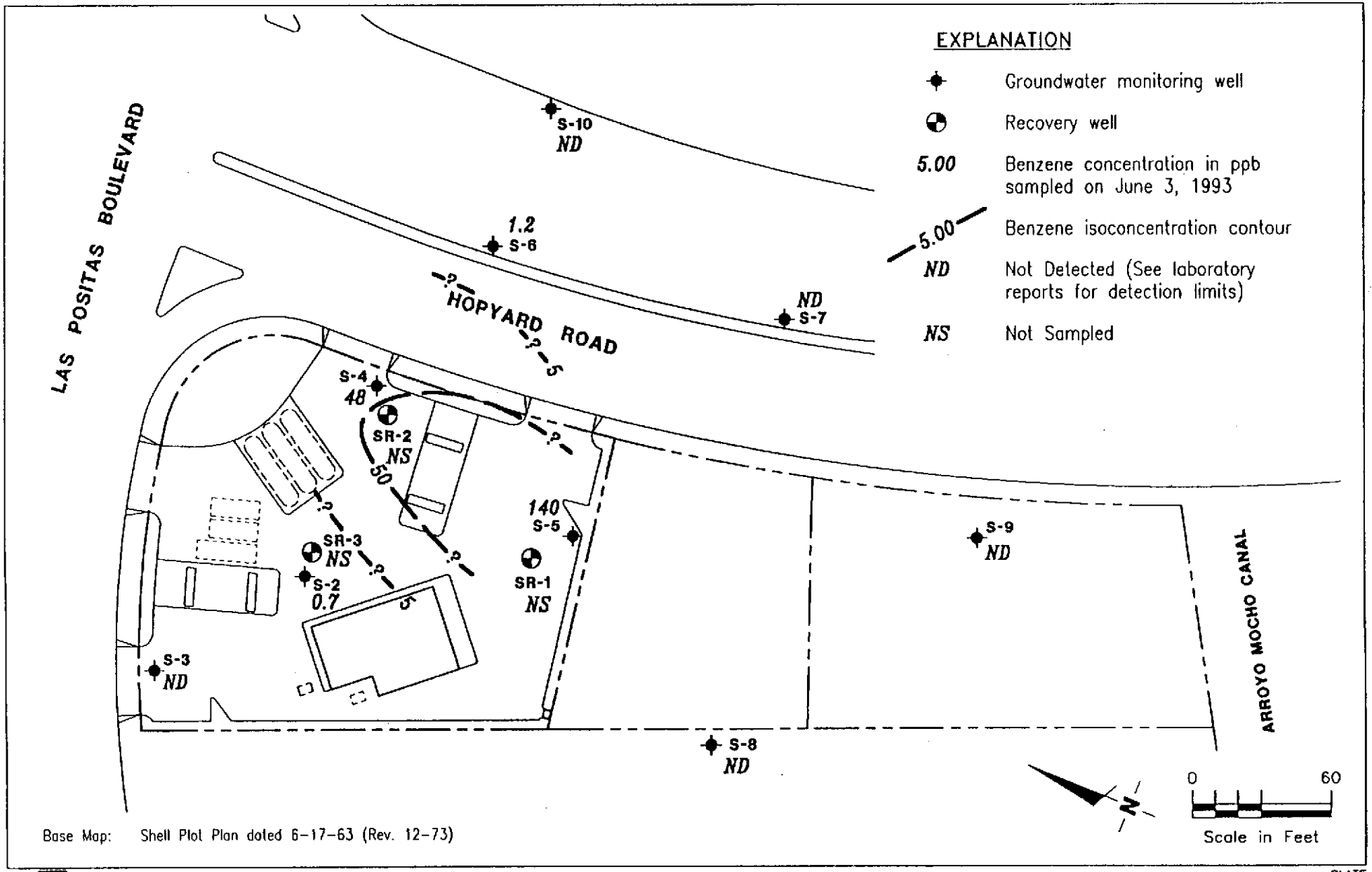
Base Map: Shell Plot Plan dated 6-17-63 (Rev. 12-73)

GeoStrategies Inc.

POTENTIOMETRIC MAP
Shell Service Station
3790 Hopyard Road
Pleasanton, California

PLATE 3

JOB NUMBER	REVIEWED BY	DATE	REVISED DATE
763201-18		9/93	

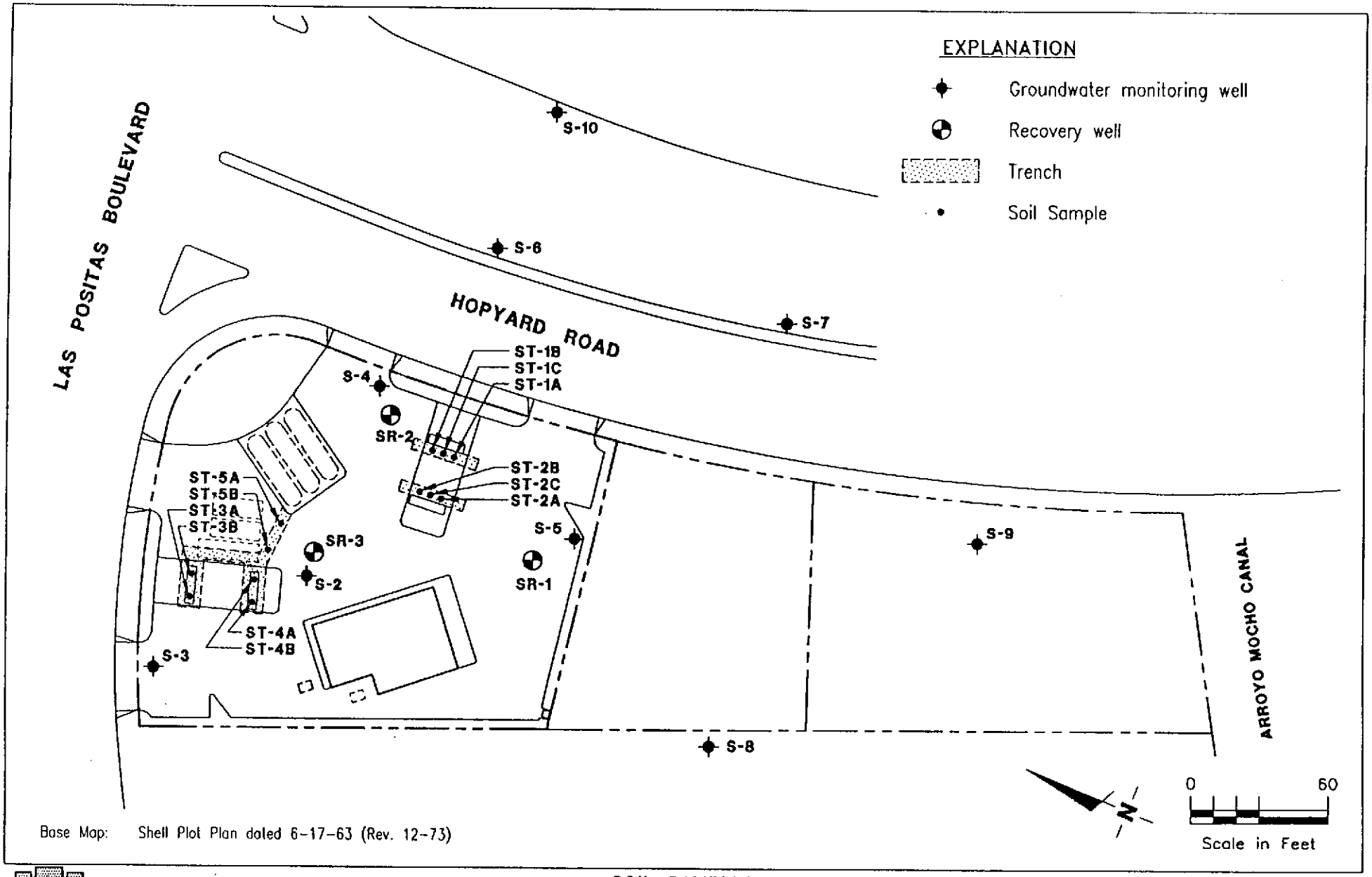


GeoStrategies Inc.

BENZENE CONCENTRATION MAP
Shell Service Station
3790 Hopyard Road
Pleasanton, California

PLATE **4**

JOB NUMBER	REVIEWED BY	DATE	REVISED DATE
763201-18		9/93	



Base Map: Shell Plot Plan dated 6-17-63 (Rev. 12-73)

GeoStrategies Inc.

SOIL SAMPLING MAP
Shell Service Station
3790 Hopyard Road
Pleasanton, California

PLATE **5**

JOB NUMBER 763201-18

REVIEWED BY

DATE 9/93

REVISED DATE

BLAINE
TECH SERVICES INC.

985 TIMOTHY DR.
SAN JOSE, CA 95
(408) 995-5
FAX (408) 293-8

June 22, 1993

Shell Oil Company
P.O. Box 5278
Concord, CA 94520-9998

Attn: Daniel T. Kirk

SITE:
Shell WIC # 204-6138-0501
3790 Hopyard Road
Pleasanton, California

QUARTER:
2nd quarter of 1993

QUARTERLY GROUNDWATER SAMPLING REPORT 930603-W-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 the 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.

7632-A

TABLE OF WELL GAUGING DATA

WELL I.D.	WELL DIAMETER (inches)	DATA COLLECTION DATE	MEASUREMENTS REFERENCED TO	QUALITATIVE OBSERVATIONS (sheen)	DEPTH TO FIRST IMMISCIBLE LIQUID (FPZ) (feet)	THICKNESS OF IMMISCIBLE LIQUID ZONE (feet)	VOLUME OF IMMISCIBLES REMOVED (ml)	DEPTH TO WATER (feet)	DEPTH TO WELL BOTTOM (feet)
S-2 *	3	06-03-93	TOB	--	NONE	--	--	14.55	35.15
S-3	3	06-03-93	TOB	--	NONE	--	--	12.59	35.09
S-4	3	06-03-93	TOB	ODOR	NONE	--	--	13.86	36.08
S-5	3	06-03-93	TOB	ODOR	NONE	--	--	16.31	35.88
S-6	3	06-03-93	TOB	--	NONE	--	--	14.14	34.75
S-7	3	06-03-93	TOB	--	NONE	--	--	16.54	34.97
S-8	3	06-03-93	TOB	--	NONE	--	--	14.64	34.30
S-9	3	06-03-93	TOB	--	NONE	--	--	17.31	34.86
S-10	3	06-03-93	TOB	--	NONE	--	--	13.41	34.30
SR-1	4	06-03-93	TOB	--	--	--	--	16.22	35.10
SR-2	4	06-03-93	TOB	--	--	--	--	14.10	35.29
SR-3	4	06-03-93	TOB	ODOR	--	--	--	14.59	35.07

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

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 may be removed in cases where more evacuation is needed to achieve stabilization of water parameters. Less than three case volumes of water may be obtained in cases where the well dewaters and does not recharge to 80% of its original volume within two hours and any additional time our personnel have reason to remain at the site. In such cases, our personnel return to the site within twenty four hours and collect sample material from the water which has recharged into the well case.

Decontamination

All apparatus is brought to the site in clean and serviceable condition. The equipment is decontaminated after each use and before leaving the site.

Free Product Skimmer

The column headed, VOLUME OF IMMISCIBLES REMOVED (ml) is included in the TABLE OF WELL GAUGING DATA to cover situations where a free product skimming device must be removed from the well prior to gauging. Skimmers are installed in wells with a free product zone on the surface of the water. The skimmer is a free product recovery device which often prevents normal well gauging and free product zone measurements. The 2.0" and 3.0" PetroTraps fall into the category of devices that obstruct normal gauging. In cases where the consultant elects to have our personnel pull the skimmers out of the well and gauge the well, our personnel perform the additional task of draining the accumulated free product out of the PetroTrap before putting it back in the well. This recovered free product is measured and logged in the VOLUME OF IMMISCIBLES REMOVED column. Gauging at such site is performed in accordance with specific directions from the professional consulting firm overseeing work at the site on Shell's behalf.

Sample Containers

Sample material is collected in specially prepared containers which are provided by the laboratory that performs the analyses.

Sampling

Sample material is collected in stainless steel bailer type devices normally fitted with both a top and a bottom check valve. Water is promptly decanted into new sample containers in a manner which reduces the loss of volatile constituents and follows the applicable EPA standard for handling volatile organic and semi-volatile compounds.

Following collection, samples are promptly placed in an ice chest containing prefrozen blocks of an inert ice substitute such as Blue Ice or Super Ice. The samples are maintained in either an ice chest or a refrigerator until delivered into the custody of the laboratory.

Sample Designations

All sample containers are identified with a site designation and a discrete sample identification number specific to that particular groundwater well. Additional standard notations (e.g. time, date, sampler) are also made on the label. Either the requested analyses or the specific analytes are written on the sample label (e.g. TPH-G, BTEX).

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 Anametrix, Inc. in San Jose, California. Anametrix, Inc. is a California Department of Health Services certified Hazardous Materials Testing Laboratory and is listed as DOHS HMTL #1234.

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/cdk

attachments: chain of custody
certified analytical report

cc: GeoStrategies, Inc.
2140 W. Winton Ave.
Hayward, CA 94545
ATTN: Ellen Fostersmith

9306084 (18) 18:30

SHELL OIL COMPANY
RETAIL ENVIRONMENTAL ENGINEERING - WEST

CHAIN OF CUSTODY RECORD
Serial No:

Date: 6/3/93
Page 1 of 2

Site Address: 3790 Hopyard Rd.
WIC #: 204-6138-0501
Shell Engineer: Dan Kirk
Phone No.: (510) 675-6168
Fax #: 675-6172
Consultant Name & Address: Blaine Tech Services
Geostrategies, Inc.
Consultant Contact: Jim Keller
Phone No.: (408) 995-8855
Fax #: 273-8773
Comments:
Sampled by: Tom Carson / Don White
Printed Name: Don White / Tom Carson

LAB: Anametrix

CHECK ONE (1) BOX ONLY — CT/01

- Quarterly Monitoring ☒ 6441
- Site Investigation ☐ 6441
- Soil Closure/Disposal ☐ 6443
- Water Closure/Disposal ☐ 6443
- Soil/Air Rem. or Sys. O & M ☐ 6442
- Water Rem. or Sys. O & M ☐ 6443
- Other ☐

TURN AROUND TIME

- 24 hours ☐
- 48 hours ☐
- 72 days ☐ (Normal)
- Other ☐ ____

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

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			Asbestos	Container Size	Preparation Used	Composite Y/N	MATERIAL DESCRIPTION	SAMPLE CONDITION/ COMMENTS
1	S-9	6/3			X		3						X				40 ml	11A	N	Groundwater	
2	S-8	6/3			X		3						X							"	
3	S-10	6/3			X		3						X							"	
4	S-7	6/3			X		3						X							"	
5	S-6	6/3			X		3						X							"	
6	S-3	6/3			X		3						X							"	
7	S-2	6/3			X		3						X							"	
8	S-5	6/3			X		3						X							"	

Relinquished By (signature):	Printed Name: DON WERT	Date: 6/4/93 Time: 1800	Received (signature):	Printed Name: J.L. THOMPSON	Date: 6/4/93 Time: 1130
Relinquished By (signature):	Printed Name: J.L. THOMPSON	Date: 6/4/93 Time: 1830	Received (signature): Michele D. Aguilar	Printed Name: MICHELE D. AGUILAR	Date: 6/4/93 Time: 1830
Relinquished By (signature):	Printed Name:	Date: Time:	Received (signature):	Printed Name:	Date: Time:

9306084 (18) 17:30

SHELL OIL COMPANY
RETAIL ENVIRONMENTAL ENGINEERING - WEST

CHAIN OF CUSTODY RECORD
Serial No:

Date: 6/3/93
Page 2 of 2

Site Address: 3790 Hopyard Rd
WIC#: 204-6138-0501
Shell Engineer: Dan Kirk
Phone No.:
Fax #:
Consultant Name & Address: Blaine Tech ~~Geo Strategies Inc~~ Services
Consultant Contact: Jim Keller ~~Ellen Fostersmith~~
Phone No.:
Fax #:
Comments:
Sampled by: ~~Tom Carson~~ [signature]
Printed Name: Don White ~~Tom Carson~~

LAB: Anametrix

CHECK ONE (1) BOX ONLY	CT/DT
Quarterly Monitoring [X]	5461
Site Investigation [ ]	5441
Soil Classify/Disposal [ ]	5443
Water Classify/Disposal [ ]	5443
Soil/Air Rem. or Sys. O & M [ ]	5452
Water Rem. or Sys. O & M [ ]	5453
Other [ ]	

TURN AROUND TIME: 24 hours [ ] 48 hours [ ] 15 days [X] (Normal) Other [ ]

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

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			Asbestos	Container Size	Preparation Used	Composite Y/N	MATERIAL DESCRIPTION	SAMPLE CONDITION/ COMMENTS
(9) S-4	6/3			X		3						X				40 ml	ice	N	Groundwater	
(10) Dup	6/3			X		3						X				↓	↓	↓	"	
(11) Trip Blanks	6/1			X		2						X							trip blank	

Relinquished By (signature):	Printed Name:	Date/Time:	Received (signature):	Printed Name:	Date/Time:
[signature]	DON WHITE	Date: 6/4/93 Time: 1800	[signature]	J L THOMPSON	Date: 6/4/93 Time: 1800
[signature]	J L THOMPSON	Date: 6/4/93 Time: 1830	Michele D. Aguilar	Michele D Aguilar	Date: 6-4-93 Time: 1830
		Date: Time:			Date: Time:

Inchcape Testing Services
Anametrix Laboratories

1961 Concourse Drive #E
San Jose, CA 95131
Tel: 408-432-8192
Fax: 408-432-8198

MR. JIM KELLER
BLAINE TECH
985 TIMOTHY STREET
SAN JOSE, CA 95133

Workorder # : 9306084
Date Received : 06/04/93
Project ID : 204-6138-0501
Purchase Order: MOH-B813

The following samples were received at Anametrix, Inc. for analysis :

ANAMETRIX ID	CLIENT SAMPLE ID
9306084- 1	S-9
9306084- 2	S-8
9306084- 3	S-10
9306084- 4	S-7
9306084- 5	S-6
9306084- 6	S-3
9306084- 7	S-2
9306084- 8	S-5
9306084- 9	S-4
9306084-10	DUP
9306084-11	T. BLANK

This report consists of 9 pages not including the cover letter, and is organized in sections according to the specific Anametrix laboratory group or section which performed the analysis(es) and generated the data. The Report Summary that precedes each section will help you determine which Anametrix group is responsible for those test results, and will bear the signatures of the department supervisor and the chemist who have reviewed the analytical data. Please refer all questions to the department supervisor who signed the form.

Anametrix is certified by the California Department of Health Services (DHS) to perform environmental testing under Certificate Number 1234. A detailed list of the approved fields of testing can be obtained by calling our office, or the DHS Environmental Laboratory Accreditation Program at (415)540-2800.

If you have any further questions or comments on this report, please give us a call as soon as possible. Thank you for using Anametrix.

Corinne Khan for
Sarah Schoen, Ph.D.
Laboratory Director

06/18/93
Date

REPORT SUMMARY
ANAMETRIX, INC. (408)432-8192

MR. JIM KELLER
BLAINE TECH
985 TIMOTHY STREET
SAN JOSE, CA 95133

Workorder # : 9306084
Date Received : 06/04/93
Project ID : 204-6138-0501
Purchase Order: MOH-B813
Department : GC
Sub-Department: TPH

QA/QC SUMMARY :

- No QA/QC problems encountered for these samples.

Chuck Palmer 6/17/93
Department Supervisor Date

Lucia Shor 6/18/93
Chemist Date

REPORT SUMMARY
ANAMETRIX, INC. (408)432-8192

MR. JIM KELLER
BLAINE TECH
985 TIMOTHY STREET
SAN JOSE, CA 95133

Workorder # : 9306084
Date Received : 06/04/93
Project ID : 204-6138-0501
Purchase Order: MOH-B813
Department : GC
Sub-Department: TPH

SAMPLE INFORMATION:

ANAMETRIX SAMPLE ID	CLIENT SAMPLE ID	MATRIX	DATE SAMPLED	METHOD
9306084- 1	S-9	WATER	06/03/93	TPHgBTEX
9306084- 2	S-8	WATER	06/03/93	TPHgBTEX
9306084- 3	S-10	WATER	06/03/93	TPHgBTEX
9306084- 4	S-7	WATER	06/03/93	TPHgBTEX
9306084- 5	S-6	WATER	06/03/93	TPHgBTEX
9306084- 6	S-3	WATER	06/03/93	TPHgBTEX
9306084- 7	S-2	WATER	06/03/93	TPHgBTEX
9306084- 8	S-5	WATER	06/03/93	TPHgBTEX
9306084- 9	S-4	WATER	06/03/93	TPHgBTEX
9306084-10	DUP	WATER	06/03/93	TPHgBTEX
9306084-11	T. BLANK	WATER	06/01/93	TPHgBTEX

ANALYSIS DATA SHEET - TOTAL PETROLEUM HYDROCARBONS
(GASOLINE WITH BTEX)
ANAMETRIX, INC. - (408) 432-8192

Anametrix W.O.: 9306084
Matrix : WATER
Date Sampled : 06/03/93

Project Number : 204-6138-0501
Date Released : 06/17/93

COMPOUNDS	Reporting Limit (ug/L)	Sample I.D.# S-9 -01	Sample I.D.# S-8 -02	Sample I.D.# S-10 -03	Sample I.D.# S-7 -04	Sample I.D.# S-6 -05
Benzene	0.5	ND	ND	ND	ND	1.2
Toluene	0.5	ND	ND	ND	ND	ND
Ethylbenzene	0.5	ND	ND	ND	ND	ND
Total Xylenes	0.5	ND	ND	ND	ND	ND
TPH as Gasoline	50	ND	ND	ND	ND	100
% Surrogate Recovery		108%	110%	106%	114%	114%
Instrument I.D.		HP12	HP12	HP12	HP12	HP12
Date Analyzed		06/11/93	06/11/93	06/11/93	06/11/93	06/11/93
RLMF		1	1	1	1	1

ND - Not detected at or above the practical quantitation limit for the method.
TPHg - Total Petroleum Hydrocarbons as gasoline is determined by GCFID using modified EPA Method 8015 following sample purge and trap by EPA Method 5030.
BTEX - Benzene, Toluene, Ethylbenzene, and Total Xylenes are determined by modified EPA Method 8020 following sample purge and trap by EPA Method 5030.
RLMF - Reporting Limit Multiplication Factor.

Anametrix control limits for surrogate p-Bromofluorobenzene recovery are 61-139%

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

Reggie Davisson 6/18/93
Analyst Date

Cheryl Brelmer 6/18/93
Supervisor Date

ANALYSIS DATA SHEET - TOTAL PETROLEUM HYDROCARBONS
(GASOLINE WITH BTEX)
ANAMETRIX, INC. - (408) 432-8192

Anametrix W.O.: 9306084
Matrix : WATER
Date Sampled : 06/03/93

Project Number : 204-6138-0501
Date Released : 06/17/93

COMPOUNDS	Reporting Limit (ug/L)	Sample I.D.# S-3 -06	Sample I.D.# S-2 -07	Sample I.D.# S-5 -08	Sample I.D.# S-4 -09	Sample I.D.# DUP -10
Benzene	0.5	ND	0.7	140	48	0.8
Toluene	0.5	ND	ND	3.4	1.1	ND
Ethylbenzene	0.5	ND	ND	17	42	ND
Total Xylenes	0.5	ND	ND	14	4.0	ND
TPH as Gasoline	50	ND	ND	460	210	ND
% Surrogate Recovery		105%	106%	133%	132%	102%
Instrument I.D.		HP12	HP12	HP12	HP12	HP12
Date Analyzed		06/11/93	06/11/93	06/13/93	06/13/93	06/11/93
RLMF		1	1	2	2	1

ND - Not detected at or above the practical quantitation limit for the method.
TPHg - Total Petroleum Hydrocarbons as gasoline is determined by GCFID using modified EPA Method 8015 following sample purge and trap by EPA Method 5030.
BTEX - Benzene, Toluene, Ethylbenzene, and Total Xylenes are determined by modified EPA Method 8020 following sample purge and trap by EPA Method 5030.
RLMF - Reporting Limit Multiplication Factor.

Anametrix control limits for surrogate p-Bromofluorobenzene recovery are 61-139%.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

Lucia Shor 6/18/93
Analyst Date

Cheryl Balmer 6/17/93
Supervisor Date

ANALYSIS DATA SHEET - TOTAL PETROLEUM HYDROCARBONS
(GASOLINE WITH BTEX)
ANAMETRIX, INC. - (408) 432-8192

Anametrix W.O.: 9306084
Matrix : WATER
Date Sampled : 06/01/93

Project Number : 204-6138-0501
Date Released : 06/17/93

COMPOUNDS	Reporting Limit (ug/L)	Sample I.D.# T. BLANK -11	Sample I.D.# BU1001E2 BLANK	Sample I.D.# BU1101E2 BLANK	Sample I.D.# BU1201E2 BLANK
Benzene	0.5	ND	ND	ND	ND
Toluene	0.5	ND	ND	ND	ND
Ethylbenzene	0.5	ND	ND	ND	ND
Total Xylenes	0.5	ND	ND	ND	ND
TPH as Gasoline	50	ND	ND	ND	ND
% Surrogate Recovery		108%	109%	103%	113%
Instrument I.D.		HP12	HP12	HP12	HP12
Date Analyzed		06/11/93	06/10/93	06/11/93	06/12/93
RLMF		1	1	1	1

ND - Not detected at or above the practical quantitation limit for the method.
TPHg - Total Petroleum Hydrocarbons as gasoline is determined by GCFID using modified EPA Method 8015 following sample purge and trap by EPA Method 5030.
BTEX - Benzene, Toluene, Ethylbenzene, and Total Xylenes are determined by modified EPA Method 8020 following sample purge and trap by EPA Method 5030.
RLMF - Reporting Limit Multiplication Factor.

Anametrix control limits for surrogate p-Bromofluorobenzene recovery are 61-139%

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

Analyst 6/18/93 Date

Supervisor 6/17/93 Date

TOTAL VOLATILE HYDROCARBON MATRIX SPIKE REPORT
EPA METHOD 5030 WITH GC/FID
ANAMETRIX, INC. (408) 432-8192

Sample I.D.	: 204-6138-0501 S-7	Anametrix I.D.	: 06084-04
Matrix	: WATER	Analyst	: JS
Date Sampled	: 06/03/93	Supervisor	: [illegible]
Date Analyzed	: 06/11/93	Date Released	: 06/17/93
		Instrument ID	: HP12

COMPOUND	SPIKE AMT (ug/L)	SAMPLE AMT (ug/L)	REC MS (ug/L)	% REC MS	REC MD (ug/L)	% REC MD	RPD	% REC LIMITS
GASOLINE	500	0	470	94%	480	96%	2%	48-149
P-BFB				98%		94%		61-139

* Limits established by Anametrix, Inc.

TOTAL VOLATILE HYDROCARBON LABORATORY CONTROL SAMPLE REPORT
EPA METHOD 5030 WITH GC/FID
ANAMETRIX, INC. (408) 432-8192

Sample I.D. : LAB CONTROL SAMPLE
Matrix : WATER
Date Sampled : N/A
Date Analyzed : 06/11/93

Anametrix I.D. : MU1001E1
Analyst : IS
Supervisor : [illegible]
Date Released : 06/17/93
Instrument I.D.: HP12

COMPOUND	SPIKE AMT. (ug/L)	REC LCS (ug/L)	%REC LCS	% REC LIMITS
GASOLINE	500	450	90%	67-127
SURROGATE			100%	61-139

* Quality control established by Anametrix, Inc.

TOTAL VOLATILE HYDROCARBON LABORATORY CONTROL SAMPLE REPORT
EPA METHOD 5030 WITH GC/PID
ANAMETRIX, INC. (408) 432-8192

Sample I.D.	: LAB CONTROL SAMPLE	Anametrix I.D.	: MU1101E1
Matrix	: WATER	Analyst	: IS
Date Sampled	: N/A	Supervisor	: CB
Date Analyzed	: 06/11/93	Date Released	: 06/17/93
		Instrument I.D.	: HP12

COMPOUND	SPIKE AMT. (ug/L)	LCS (ug/L)	REC LCS	%REC LIMITS
Benzene	20.0	22.5	113%	52-133
Toluene	20.0	21.8	109%	57-136
Ethylbenzene	20.0	23.6	118%	56-139
TOTAL Xylenes	20.0	22.5	113%	61-139
P-BFB			103%	61-139

* Limits established by Anametrix, Inc.

TOTAL VOLATILE HYDROCARBON LABORATORY CONTROL SAMPLE REPORT
EPA METHOD 5030 WITH GC/FID
ANAMETRIX, INC. (408) 432-8192

Sample I.D. : LAB CONTROL SAMPLE
Matrix : WATER
Date Sampled : N/A
Date Analyzed : 06/12/93

Anametrix I.D. : MU1201E1
Analyst : IS
Supervisor : [illegible]
Date Released : 06/17/93
Instrument I.D.: HP12

COMPOUND	SPIKE AMT. (ug/L)	REC LCS (ug/L)	%REC LCS	% REC LIMITS
GASOLINE	500	460	92%	67-127
SURROGATE			101%	61-139

* Quality control established by Anametrix, Inc.

WELL GAUGING DATA

Shell WIC # 204-6138-0501

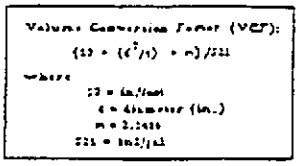
Project # 930603W1 Date 6-3-93 Client Shell

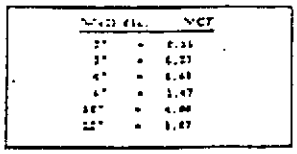
Site 3790 Hopyard Rd. Pleasanton Sampler TC/BW

Well I.D.	Well Size (in.)	Sheen/ Odor	Depth to Immisible Liquid (feet)	Thickness of Immisible Liquid (ft.)	Volume of Immisibles Removed (ml)	Depth to Water (feet)	Depth to Well Bottom (feet)	Measured to: Top of Pipe or Grade
S-9	3					17.31	34.86	Grade
S-8	3					14.64	34.30	"
S-~~10~~	3					13.41	34.36	"
S-7	3					16.54	34.97	"
S-6	3					14.14	34.75	"
S-~~3~~	3					12.59	35.09	"
S-2	3					14.55	35.15	"
S-4	3	odor				13.86	36.08	"
S-~~5~~SR-1	3	odor				16.31	35.88	"
SR-~~SR-2~~	4					16.22	35.10	"
SR-2~~SR-3~~	4					14.10	35.29	"
SR-3	4	odor				14.59	35.07	"

SHELL WELL MONITORING DATA SHEET

Project #: 930603-W	Wic # 204-6138-0501
Sampler: MW	Date Sampled: 6/3/93
Well I.D.: S-2	Well Diameter: (circle one) 2 (3) 4 6 ____
Total Well Depth: Before 35.15 After	Depth to Water: Before 14.55 After
Depth to Free Product: none	Thickness of Free Product (feet):
Measurements referenced to: PVC (Grade)	Other --





1 Case Volume	x	Specified Volumes	=	gallons
7.6	x	3	=	22.8

Purging: Bailer ☐ Middleburg ☐ Electric Submersible ☑ Suction Pump ☐ Type of Installed Pump ____

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

TIME	TEMP. (F)	pH	COND.	TURBIDITY:	VOLUME REMOVED:	OBSERVATIONS:
1354	69.6	7.5	4300	7200	8	-
14:00	68.8	6.9	5000	>200	16	
14:08	70.6	7.3	4400	>200	23	

Did Well Dewater? N If yes, gals. Gallons Actually Evacuated: 23

Sampling Time: 14:15

Sample I.D.: S-2 Laboratory: Anametrics

Analyzed for: TPH, Gas / BTEX

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

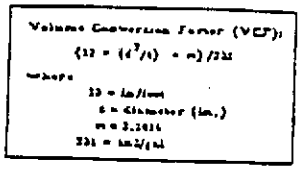
Analyzed for: TPH, Gas / BTEX

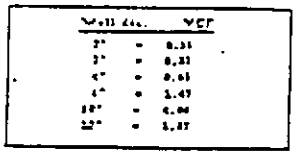
Shipping Notations:

Additional Notations:

SHELL WELL MONITORING DATA SHEET

Project #: 930603-W1	Wic # 204-6138-0504
Sampler: MW / TC	Date Sampled: 6/3/93
Well I.D.: S-3	Well Diameter: (circle one) 2 (3) 4 6 ___
Total Well Depth: Before 35.09 After	Depth to Water: Before 12.59 After
Depth to Free Product: none	Thickness of Free Product (feet): ___
Measurements referenced to: PVC (Grade) Other --	





8.33	x	3	=	24.99
1 Case Volume		Specified Volumes		gallons

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

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

TIME	TEMP. (F)	pH	COND.	TURBIDITY:	VOLUME REMOVED:	OBSERVATIONS:
1326	69.0	7.0	4600	>200	9	
1330	68.4	7.1	4800	>200	17	
1335	68.0	7.1	4800	>200	25	

Did Well Dewater? No If yes, gals. Gallons Actually Evacuated: 25

Sampling Time: 1345

Sample I.D.: S-3 Laboratory: Anametrix

Analyzed for: TPH / BTEX

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

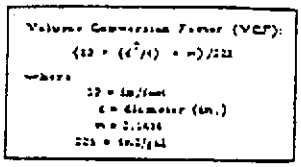
Analyzed for:

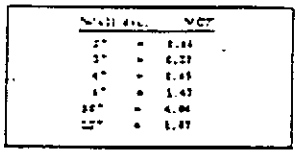
Shipping Notations:

Additional Notations:

SHELL WELL MONITORING DATA SHEET

Project #: 930603W1	Wic # 204-6138-0501
Sampler: DW/TC	Date Sampled: 6/3/93
Well I.D.: S-4	Well Diameter: (circle one) 2 (3) 4 6 ___
Total Well Depth: Before 36.08 After	Depth to Water: Before 13.86 After
Depth to Free Product:	Thickness of Free Product (feet):
Measurements referenced to: PVC (Grade) Other --	





8.22 (1 Case Volume) x 3 (Specified Volumes) = 24.66 gallons

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

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

TIME	TEMP. (F)	pH	COND.	TURBIDITY:	VOLUME REMOVED:	OBSERVATIONS:
14:57	67.8	6.8	2900	>200	9	
14:56	67.0	6.6	4000	>200	12	
15:03	68.8	6.8	3000	>200	14	Dewatered
	67.8	6.8	3900	>200		returned to sample.

Did Well Dewater? Yes If yes, gals. 14 Gallons Actually Evacuated: 14

Sampling Time: 15:30

Sample I.D.: S-4 Laboratory: Anametrics

Analyzed for: TPH Gas/BTEX

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

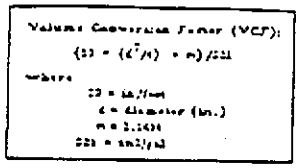
Analyzed for:

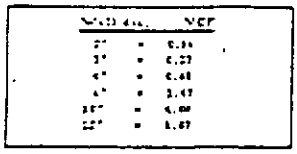
Shipping Notations:

Additional Notations: Odor

SHELL WELL MONITORING DATA SHEET

Project #: 930603 W1	Wic # 204-6138-0501
Sampler: DW/TC	Date Sampled: 6/3/93
Well I.D.: S-5	Well Diameter: (circle one) 2 (3) 4 6 ___
Total Well Depth: Before 35.88 After	Depth to Water: Before 16.31 After
Depth to Free Product:	Thickness of Free Product (feet):
Measurements referenced to: PVC (Grade) Other --	





7.24 (1 Case Volume) x 3 (Specified Volumes) = 21.72 (gallons)

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

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

TIME	TEMP. (F)	pH	COND.	TURBIDITY:	VOLUME REMOVED:	OBSERVATIONS:
14:26	67.2	7.1	2400	>200	8	
14.32	67.2	6.8	2400	>200	15	
14:35	66.2	6.8	2400	>200	22	

Did Well Dewater? N If yes, gals. Gallons Actually Evacuated: 22

Sampling Time: 14:45

Sample I.D.: S-5 Laboratory:

Analyzed for: TPH, Gas/BTEX

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

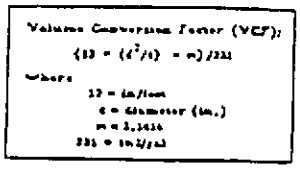
Analyzed for:

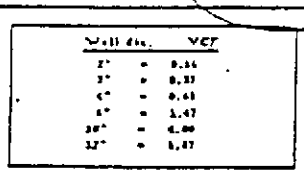
Shipping Notations:

Additional Notations: Odor

SHELL WELL MONITORING DATA SHEET

Project #: 930603W1	Wic # 204-6138-0501
Sampler: DW/TC	Date Sampled: 6/3/93
Well I.D.: S-6	Well Diameter: (circle one) 2 (3) 4 6 ___
Total Well Depth: Before 34.75 After	Depth to Water: Before 14.14 After
Depth to Free Product: none	Thickness of Free Product (feet): ___
Measurements referenced to: PVC (Grade) Other --	





7.63	x	3	=	22.89
1 Case Volume		Specified Volumes		gallons

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

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

TIME	TEMP. (F)	pH	COND.	TURBIDITY:	VOLUME REMOVED:	OBSERVATIONS:
12:28	66.8	7.0	2000	>200	8	
12:33	67.0	6.8	2200	>200	16	
12:38	66.8	6.8	2200	>200	24	

Did Well Dewater? N If yes, gals. Gallons Actually Evacuated: 24

Sampling Time: 12:45

Sample I.D.: S-6 Laboratory:

Analyzed for: TPH, Gas / BTEX

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

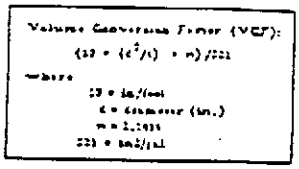
Analyzed for:

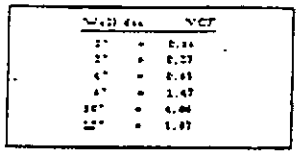
Shipping Notations:

Additional Notations:

SHELL WELL MONITORING DATA SHEET

Project #: 930603-W1	Wic # 204-6138-0501
Sampler: MW	Date Sampled: 6/3/93
Well I.D.: S-7	Well Diameter: (circle one) 2 (3) 4 6 ___
Total Well Depth: Before 34.97 After	Depth to Water: Before 16.54 After
Depth to Free Product: None	Thickness of Free Product (feet): ___
Measurements referenced to: PVC (Grade) Other --	





6.82 ~~3.47~~ 1 Case Volume x 3 Specified Volumes = 20.46 gallons

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

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

TIME	TEMP. (F)	pH	COND.	TURBIDITY:	VOLUME REMOVED:	OBSERVATIONS:
11:57	66~~8~~	7.0	2900	>200	7	
12:02	67.0	6.6	4400	>200	14	
12:08	67.4	6.8	4000	>200	21	

Did Well Dewater? N If yes, gals. Gallons Actually Evacuated: 21

Sampling Time: 12:15

Sample I.D.: S-7 Laboratory:

Analyzed for: TPH, Gas / BTEX

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

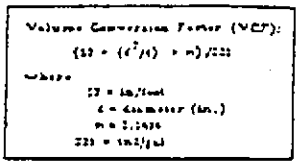
Analyzed for:

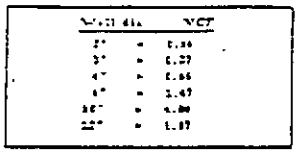
Shipping Notations:

Additional Notations:

SHELL WELL MONITORING DATA SHEET

Project #: 930603W1	Wic # 204-6138-0501
Sampler: DW/TC	Date Sampled: 6/3/93
Well I.D.: S-8	Well Diameter: (circle one) 2 (3) 4 6 ___
Total Well Depth: Before 34.30 After	Depth to Water: Before 14.64 After
Depth to Free Product: none	Thickness of Free Product (feet): —
Measurements referenced to: PVC (Grade) Other --	





7.27 (1 Case Volume) x 3 (Specified Volumes) = 21.8 gallons

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

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

TIME	TEMP. (F)	pH	COND.	TURBIDITY:	VOLUME REMOVED:	OBSERVATIONS:
10:53	67.4	6.5	4900	>200	8	
10:58	68.0	7.4	5800	>200	16	
11:06	68.4	6.9	5400	>200	22	

Did Well Dewater? No If yes, gals. Gallons Actually Evacuated: 22

Sampling Time: 11:15

Sample I.D.: S-8 Laboratory: Anametrics

Analyzed for: TPH, Gas / BTEX

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

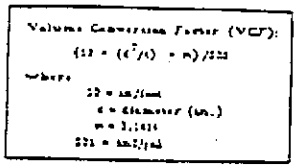
Analyzed for:

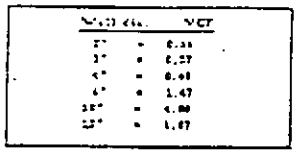
Shipping Notations:

Additional Notations:

SHELL WELL MONITORING DATA SHEET

Project #: 930603-W1	Wic # 204-6132-0501
Sampler: DW/TC	Date Sampled: 6/3/93
Well I.D.: S-9	Well Diameter: (circle one) 2 (3) 4 6 ___
Total Well Depth: Before 34.86 After	Depth to Water: Before 17.31 After
Depth to Free Product: none	Thickness of Free Product (feet): ___
Measurements referenced to: PVC (Grade) Other --	





6.5 (1 Case Volume) x 3 (Specified Volumes) = 19.5 gallons

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

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

TIME	TEMP. (F)	pH	COND.	TURBIDITY:	VOLUME REMOVED:	OBSERVATIONS:
10:26	67.4	7.2	5600	>200	6.5	
10:30	67.0	6.8	5200	>200	13	
10:37	66.6	6.4	5800	>200	20	

Did Well Dewater? N If yes, gals. Gallons Actually Evacuated: 20

Sampling Time: 10:45

Sample I.D.: S-9 Laboratory: Anametrics

Analyzed for: TPH, Gas/BTEX

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

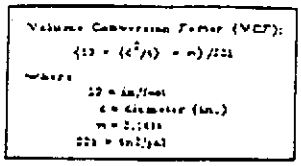
Analyzed for:

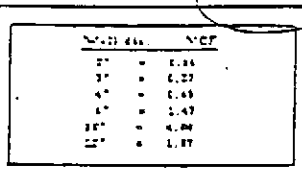
Shipping Notations:

Additional Notations:

SHELL WELL MONITORING DATA SHEET

Project #: 930603-W1	Wic # 204-613P-0501
Sampler: DW/TC	Date Sampled: 6/3/93
Well I.D.: S-10	Well Diameter: (circle one) 2 (3) 4 6 ___
Total Well Depth: Before 34.36 After	Depth to Water: Before 13.41 After
Depth to Free Product: none	Thickness of Free Product (feet): ___
Measurements referenced to: PVC ~~Grade~~	Other --





7.8	x	3		23.4
1 Case Volume		Specified Volumes	=	gallons

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

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

TIME	TEMP. (F)	pH	COND.	TURBIDITY:	VOLUME REMOVED:	OBSERVATIONS:
11:27	66.0	8.0	400	>200	8	
11:31	66.0	6.8	1800	>200	16	
11:36	66.0	7.2	2200	>200	24	

Did Well Dewater? N If yes, gals. Gallons Actually Evacuated: 24

Sampling Time: 11:45

Sample I.D.: S-10 Laboratory: Anametrics

Analyzed for: TPH, Gas/BTEX

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

Analyzed for:

Shipping Notations:

Additional Notations: H_2S odor - Well cap collar not watertight

SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Gettler Ryan / Geostrategies
2150 W. Winton Boulevard
Hayward, CA 94545
Attention: Tim Walker/John Vargas

Project: 7632, Shell-Pleasanton

Enclosed are the results from 5 soil samples received at Sequoia Analytical on July 20,1993. The requested analyses are listed below:

SAMPLE #	SAMPLE DESCRIPTION	DATE OF COLLECTION	TEST METHOD
3G91401	Soil, ST-1A	7/20/93	EPA 5030/8015/8020
3G91402	Soil, ST-1B	7/20/93	EPA 5030/8015/8020
3G91403	Soil, ST-2A	7/20/93	EPA 5030/8015/8020
3G91404	Soil, ST-2B	7/20/93	EPA 5030/8015/8020
3G91405	Soil, ST-2C	7/20/93	EPA 5030/8015/8020

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

Nokowhat D. Herrera
Project Manager

632-A

SEQUOIA ANALYTICAL

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Gettler Ryan / Geostrategies	Client Project ID:	7632, Shell-Pleasanton	Sampled:	Jul 20, 1993
2150 W. Winton Boulevard	Sample Matrix:	Soil	Received:	Jul 20, 1993
Hayward, CA 94545	Analysis Method:	EPA 5030/8015/8020	Reported:	Jul 21, 1993
Attention: Tim Walker/John Vargas	First Sample #:	3G91401		

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Analyte	Reporting Limit mg/kg	Sample I.D. 3G91401 ST-1A	Sample I.D. 3G91402 ST-1B	Sample I.D. 3G91403 ST-2A	Sample I.D. 3G91404 ST-2B	Sample I.D. 3G91405 ST-2C
Purgeable Hydrocarbons	1.0	N.D.	N.D.	N.D.	1.7	N.D.
Benzene	0.0050	0.010	N.D.	0.053	N.D.	0.11
Toluene	0.0050	N.D.	N.D.	N.D.	N.D.	N.D.
Ethyl Benzene	0.0050	0.030	N.D.	0.012	0.017	0.0090
Total Xylenes	0.0050	0.016	N.D.	0.0050	0.022	0.019
Chromatogram Pattern:		Gas	--	Gas	Gas	Gas

Quality Control Data

Report Limit Multiplication Factor:	1.0	1.0	1.0	1.0	1.0
Date Analyzed:	7/20/93	7/20/93	7/20/93	7/20/93	7/20/93
Instrument Identification:	GCHP-1	GCHP-1	GCHP-18	GCHP-1	GCHP-1
Surrogate Recovery, %: (QC Limits = 70-130%)	113	104	112	100	102

Purgeable Hydrocarbons are quantitated against a fresh gasoline standard.
Analytes reported as N.D. were not detected above the stated reporting limit.

SEQUOIA ANALYTICAL

Nokowhat D. Herrera
Project Manager

SEQUOIA ANALYTICAL

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(415) 364-9600 • FAX (415) 364-9233

Gettler Ryan / Geostrategies
2150 W. Winton Boulevard
Hayward, CA 94545
Attention: Tim Walker/John Vargas

Client Project ID: 7632, Shell-Pleasanton
Matrix: Soil
QC Sample Group: 3G91401-05

Reported: Jul 21, 1993

QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl-Benzene	Xylenes
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Analyst:	C. Donohue	C. Donohue	C. Donohue	C. Donohue
Conc. Spiked:	0.20	0.20	0.20	0.20
Units:	mg/kg	mg/kg	mg/kg	mg/kg
LCS Batch#:	GBLK072093	GBLK072093	GBLK072093	GBLK072093
Date Prepared:	7/20/93	7/20/93	7/20/93	7/20/93
Date Analyzed:	7/20/93	7/20/93	7/20/93	7/20/93
Instrument I.D.#:	GCHP-7	GCHP-7	GCHP-7	GCHP-7
LCS % Recovery:	95	100	95	95
Control Limits:	60-140	60-140	60-140	60-140
MS/MSD Batch #:	G3G56610	G3G56610	G3G56610	G3G56610
Date Prepared:	7/20/93	7/20/93	7/20/93	7/20/93
Date Analyzed:	7/20/93	7/20/93	7/20/93	7/20/93
Instrument I.D.#:	GCHP-7	GCHP-7	GCHP-7	GCHP-7
Matrix Spike % Recovery:	80	85	85	85
Matrix Spike Duplicate % Recovery:	90	95	95	95
Relative % Difference:	12	11	11	11

SEQUOIA ANALYTICAL

Nokowhat D. Herrera
Project Manager

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 LCS % recovery data is used for validation of sample batch results. Due to matrix effects, the QC limits for MS/MSD's are advisory only and are not used to accept or reject batch results.

SHELL OIL COMPANY
RETAIL ENVIRONMENTAL ENGINEERING - WEST

CHAIN OF CUSTODY RECORD
Serial No.: _____

Date:
Page 1 of 1

Site Address: 3790 Hopyard Road
Pleasanton

WIC#: 204-6128-0501

Shell Engineer: Dan Kirk
Phone No. 675-6165
Fax #: (510) 675-6172

Consultant Name & Address: Gettler-Ryan / GeoStrategies
2150 W. Winton Ave.
Hayward, California 94545

Consultant Contact: TIM WALKER / JOHN VARGAS
Phone No. 783-7500
Fax #: 783-1089

Comments: * HOLD SAMPLE ST-1C ~~FOR~~ UNTIL RESULTS OF ST-1A & 1B ARE AVAILBLE
7632

Sampled By: Tim Walker

Printed Name: TIM WALKER

LAB: SEQUOIA

CHECK ONE (1) BOX ONLY	CTAT
Quarterly Monitoring	[ ] 5461
Site Investigation	[X] 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 [X]
48 hours [ ]
15 days [ ] (Normal)
Other [ ] _____
NOTE: Notify Lab as soon as possible of 24/48 hrs. TAT.

Analysis Required

Sample ID	Date	Soil	Water	Air	No. of cont.	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
ST-1A	7-20-93	X			1	X		X		930794-01A	4"	N	N	UST/soil/GAS	
ST-1B	7-20-93	X			1	X		X		-02A	4"	N	N	UST/soil/GAS	
ST-1C	7-20-93	X			1	X		X		-03A	4"	N	N	UST/soil/GAS	HOLD *
ST-2A	7-20-93	X			1	X		X		930794-03A	4"	N	N	UST/soil/GAS	
ST-2B	7-20-93	X			1	X		X		-04A	4"	N	N	UST/soil/GAS	
ST-2C	7-20-93	X			1	X		X		-05A	4"	N	N	UST/soil/GAS	

Relinquished By (signature): [signature]
Printed name: TIM WALKER
Date: 7-20-93
Time: 1345

Relinquished By (signature): [signature]
Printed name: L. Stenstrom
Date: 7-20-93
Time: 1515

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

Received (signature): Lisa Stenstrom
Received (signature):
Received (signature): John Miller

Printed name: L. Stenstrom
Printed name:
Printed name: John Miller

Date: 7-20-93
Time: 1345
Date:
Time:
Date: 7/20/93
Time: 15:15

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

Last Revision Date: 10/15/91

SEQUOIA ANALYTICAL

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(415) 364-9600 • FAX (415) 364-9233

Gettler Ryan/Geostrategies
2150 W. Winton Avenue
Hayward, CA 94545
Attention: Tim Walker/John Vargas

Project: 7632, Shell-Pleasanton

Enclosed are the results from 6 soil samples received at Sequoia Analytical on July 23,1993. The requested analyses are listed below:

SAMPLE #	SAMPLE DESCRIPTION	DATE OF COLLECTION	TEST METHOD
3GB2801	Soil, ST-3A	7/22/93	EPA 5030/8015/8020
3GB2802	Soil, ST-3B	7/22/93	EPA 5030/8015/8020
3GB2803	Soil, ST-4A	7/22/93	EPA 5030/8015/8020
3GB2804	Soil, ST-4B	7/22/93	EPA 5030/8015/8020
3GB2805	Soil, ST-5A	7/22/93	EPA 5030/8015/8020
3GB2806	Soil, ST-5B	7/22/93	EPA 5030/8015/8020

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

Nokowhat D. Herrera
Project Manager

SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Gettler Ryan/Geostrategies	Client Project ID:	7632, Shell-Pleasanton	Sampled:	Jul 22, 1993
2150 W. Winton Avenue	Sample Matrix:	Soil	Received:	Jul 23, 1993
Hayward, CA 94545	Analysis Method:	EPA 5030/8015/8020	Reported:	Jul 26, 1993
Attention: Tim Walker/John Vargas	First Sample #:	3GB2801		

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Analyte	Reporting Limit mg/kg	Sample I.D. 3GB2801 ST-3A	Sample I.D. 3GB2802 ST-3B	Sample I.D. 3GB2803 ST-4A	Sample I.D. 3GB2804 ST-4B	Sample I.D. 3GB2805 ST-5A	Sample I.D. 3GB2806 ST-5B
Purgeable Hydrocarbons	1.0	5.2	160	N.D.	1.7	N.D.	N.D.
Benzene	0.0050	0.085	0.90	0.013	0.032	N.D.	N.D.
Toluene	0.0050	0.025	2.7	N.D.	0.0070	N.D.	N.D.
Ethyl Benzene	0.0050	0.077	2.5	0.014	0.048	N.D.	N.D.
Total Xylenes	0.0050	0.17	13	0.13	0.028	0.045	N.D.
Chromatogram Pattern:		Gas	Gas	Gas	Gas	Gas	--

Quality Control Data

Report Limit Multiplication Factor:	1.0	100	1.0	1.0	1.0	1.0
Date Analyzed:	7/25/93	7/25/93	7/25/93	7/25/93	7/25/93	7/25/93
Instrument Identification:	GCHP-7	GCHP-8	GCHP-7	GCHP-7	GCHP-7	GCHP-7
Surrogate Recovery, %: (QC Limits = 70-130%)	89	86	98	97	95	100

Purgeable Hydrocarbons are quantitated against a fresh gasoline standard.
Analytes reported as N.D. were not detected above the stated reporting limit.

SEQUOIA ANALYTICAL

Nokowhat D. Herrera
Project Manager

SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Gettler Ryan/Geostrategies
2150 W. Winton Avenue
Hayward, CA 94545
Attention: Tim Walker/John Vargas

Client Project ID: 7632, Shell-Pleasanton
Matrix: Soil
QC Sample Group: 3GB2801 - 06

Reported: Jul 26, 1993

QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl-Benzene	Xylenes
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Analyst:	A. Maralit	A. Maralit	A. Maralit	A. Maralit
Conc. Spiked:	0.20	0.20	0.20	0.60
Units:	mg/kg	mg/kg	mg/kg	mg/kg
LCS Batch#:	GBLK072593	GBLK072593	GBLK072593	GBLK072593
Date Prepared:	7/25/93	7/25/93	7/25/93	7/25/93
Date Analyzed:	7/25/93	7/25/93	7/25/93	7/25/93
Instrument I.D.#:	GCHP-7	GCHP-7	GCHP-7	GCHP-7
LCS % Recovery:	110	110	110	107
Control Limits:	60-140	60-140	60-140	60-140
MS/MSD Batch #:	G3GA4503	G3GA4503	G3GA4503	G3GA4503
Date Prepared:	7/25/93	7/25/93	7/25/93	7/25/93
Date Analyzed:	7/25/93	7/25/93	7/25/93	7/25/93
Instrument I.D.#:	GCHP-7	GCHP-7	GCHP-7	GCHP-7
Matrix Spike % Recovery:	100	100	95	97
Matrix Spike Duplicate % Recovery:	100	100	100	98
Relative % Difference:	0.0	0.0	5.1	1.0

SEQUOIA ANALYTICAL

Nokowhat D. Herrera
Project Manager

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 LCS % recovery data is used for validation of sample batch results. Due to matrix effects, the QC limits for MS/MSD's are advisory only and are not used to accept or reject batch results.

SHELL OIL COMPANY
RETAIL ENVIRONMENTAL ENGINEERING - WEST

CHAIN OF CUSTODY RECORD
Serial No.: _____

Date:
Page 1 of 1

Site Address: 3790 Hopyard Road Pleasanton

WIC#: 204-6128-0501

Shell Engineer: Dan Kirk — Phone No. 675-6166 Fax #: (510) 675-6172

Consultant Name & Address: Gettler-Ryan / GeoStrategies
2150 W. Winton Ave.
Hayward, California 94545

Consultant Contact: Jim Walker / John Vargas — Phone No. 783-7500 Fax #: 783-1089

Comments:
7632

Sampled By: T. Walker

Printed Name: TIM WALKER

LAB: SEQUOIA

CHECK ONE (1) BOX ONLY | C/ADT

Quarterly Monitoring	[ ]	5461
Site Investigation	[X]	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 [X]
48 hours [ ]
15 days [ ] (Normal)
Other [ ] _____
NOTE: Notify Lab as soon as possible of 24/48 hrs TAT.

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
ST-3A	7-22-93	X			one	X		X			4"	N	N	UST/SOIL/GAS	9307B28-01A
ST-3B	7-22-93	X			one	X		X			4"	N	N	UST/SOIL/GAS	-02A
ST-4A	7-22-93	X			one	X		X			4"	N	N	UST/SOIL/GAS	-03A
ST-4B	7-22-93	X			one	X		X			4"	N	N	UST/SOIL/GAS	-04A
ST-5A	7-22-93	X			one	X		X			4"	N	N	UST/SOIL/GAS	-05
ST-5B	7-22-93	X			one	X		X			4"	N	N	UST/SOIL/GAS	-06A

Relinquished By (signature): T. Walker	Printed name: TIM WALKER	Date: 7-23-93 Time: 1550	Received (signature): L. Stenstrom
Relinquished By (signature): L. Stenstrom	Printed name: L. Stenstrom	Date: 7-23-93 Time: 1630	Received (signature):
Relinquished By (signature):	Printed name:	Date: Time:	Received (signature): John Miller
			Printed name: L. Stenstrom
			Printed name:
			Printed name: John Miller
			Date: 7/23/93 Time: 15:50
			Date: Time:
			Date: 7-23-93 Time: 16:30

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

Last Revision Date: 10/15/91

SEQUOIA ANALYTICAL

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(415) 364-9600 • FAX (415) 364-9233

Gettler Ryan/Geostrategies
2150 W. Winton Avenue
Hayward, CA 94545
Attention: Tim Walker/John Vargas

Project: 7632, Shell-Pleasanton

Enclosed are the results from 1 soil sample received at Sequoia Analytical on July 20,1993. The requested analyses are listed below:

SAMPLE #	SAMPLE DESCRIPTION	DATE OF COLLECTION	TEST METHOD
3G92901	Soil Composite, SP-1A-1D	7/20/93	California LUFT Manual, 12/87 EPA 5030/8015/8020

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

Nokowhat D. Herrera
Project Manager

SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Gettler Ryan/Geostrategies	Client Project ID:	7632, Shell-Pleasanton	Sampled:	Jul 20, 1993
2150 W. Winton Avenue	Sample Matrix:	Soil Composite	Received:	Jul 20, 1993
Hayward, CA 94545	Analysis Method:	EPA 5030/8015/8020	Reported:	Jul 23, 1993
Attention: Tim Walker/John Vargas	First Sample #:	3G9-2901		

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Analyte	Reporting Limit mg/kg	Sample I.D. 3G9-2901 SP-1A-1D	Sample I.D.	Sample I.D.	Sample I.D.	Sample I.D.	Sample I.D.
Purgeable Hydrocarbons	1.0	N.D.					
Benzene	0.0050	0.0060					
Toluene	0.0050	N.D.					
Ethyl Benzene	0.0050	0.0070					
Total Xylenes	0.0050	N.D.					
Chromatogram Pattern:		Gas					

Quality Control Data

Report Limit Multiplication Factor:	1.0
Date Analyzed:	7/21/93
Instrument Identification:	GCHP-18
Surrogate Recovery, %: (QC Limits = 70-130%)	105

Purgeable Hydrocarbons are quantitated against a fresh gasoline standard.
Analytes reported as N.D. were not detected above the stated reporting limit.

SEQUOIA ANALYTICAL

Nokowhat D. Herrera
Project Manager

SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Gettler Ryan/Geostrategies	Client Project ID:	7632, Shell-Pleasanton	Sampled:	Jul 20, 1993
2150 W. Winton Avenue	Sample Descript:	Soil Composite	Received:	Jul 20, 1993
Hayward, CA 94545	Analysis Method:	California LUFT Manual, 12/87		
Attention: Tim Walker/John Vargas	First Sample #:	3G92901	Analyzed:	Jul 23, 1993
			Reported:	Jul 23, 1993

ORGANIC LEAD

Sample Number	Sample Description	Sample Results mg/kg (ppm)
3G92901	SP-1A-1D	N.D.

Detection Limits:	0.50

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

SEQUOIA ANALYTICAL

Nokowhat D. Herrera
Project Manager

SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Gettler Ryan/Geostrategies
2150 W. Winton Avenue
Hayward, CA 94545
Attention: Tim Walker/John Vargas

Client Project ID: 7632, Shell-Pleasanton
Matrix: Soil
QC Sample Group: 3G92901

Reported: Jul 23, 1993

QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl-Benzene	Xylenes	Organic Lead
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020	LUFT
Analyst:	C. Donohue	C. Donohue	C. Donohue	C. Donohue	J.Martinez
Conc. Spiked:	0.20	0.20	0.20	0.60	500
Units:	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
LCS Batch#:	GBLK072193	GBLK072193	GBLK072193	GBLK072193	BLK072393
Date Prepared:	7/21/93	7/21/93	7/21/93	7/21/93	7/23/93
Date Analyzed:	7/21/93	7/21/93	7/21/93	7/21/93	7/23/93
Instrument I.D.#:	GCHP-6	GCHP-6	GCHP-6	GCHP-6	MV-1
LCS % Recovery:	100	100	100	100	113
Control Limits:	60-140	60-140	60-140	60-140	75-125
MS/MSD Batch #:	G3G91402	G3G91402	G3G91402	G3G91402	3G92901
Date Prepared:	7/21/93	7/21/93	7/21/93	7/21/93	7/23/93
Date Analyzed:	7/21/93	7/21/93	7/21/93	7/21/93	7/23/93
Instrument I.D.#:	GCHP-6	GCHP-6	GCHP-6	GCHP-6	MV-1
Matrix Spike % Recovery:	90	90	90	92	150
Matrix Spike Duplicate % Recovery:	90	95	90	93	136
Relative % Difference:	0.0	5.4	0.0	1.1	9.8

SEQUOIA ANALYTICAL

Nokowhat D. Herrera
Project Manager

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 LCS % recovery data is used for validation of sample batch results. Due to matrix effects, the QC limits for MS/MSD's are advisory only and are not used to accept or reject batch results.