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

June 23, 1992

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

Reference: Shell Service Station
999 San Pablo Avenue
Albany, California
WIC# 204-0079-0109

Mr. Wistar:

As requested by Mr. Dan Kirk of Shell Oil Company, we are forwarding a copy of the June 23, 1992 Quarterly Report for the above referenced location. The report presents the results of the ground-water sampling conducted during the second quarter of 1992.

If you have any questions, please call.

Sincerely,

Ellen Fostersmith

Ellen Fostersmith
Geologist

EF/shl

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

GeoStrategies Inc.

QUARTERLY REPORT

Shell Service Station
999 San Pablo Avenue
Albany, California
WIC 204-0079-0109

766601-11

June 23, 1992

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

June 23, 1992

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

Attn: Mr. Dan Kirk

Re: QUARTERLY REPORT
Shell Service Station
999 San Pablo Avenue
Albany, California
WIC# 204-0079-0109

Mr. Kirk:

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

There are currently seven monitoring wells at the site; Wells S-1 through S-7 (Plate 2). These wells were installed in 1990.

CURRENT QUARTER SAMPLING RESULTS

Depth to water-level measurements were obtained in each monitoring well on May 6, 1992. Static ground-water levels were measured from the surveyed top of each 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 Monitoring Report (Appendix A). Water-level data were used to construct a quarterly potentiometric map (Plate 2). Shallow ground-water flow is to the south and west at an approximate hydraulic gradient of 0.04.

Each well was checked for the presence of floating product. Floating product was observed in Well S-5 at a measured thickness of 5.66 feet.

Ground-water samples were collected on January 28, 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 Anametrix Inc., a California State-certified laboratory located in San Jose, California. The laboratory analytical 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 Appendix A. A chemical isoconcentration map for benzene is presented on Plate 3.

If you have any questions, please call.

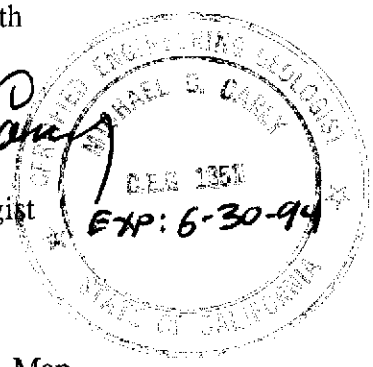
GeoStrategies Inc. by,

Ellen C. Fostersmith

Ellen C. Fostersmith
Geologist

Michael Carey

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



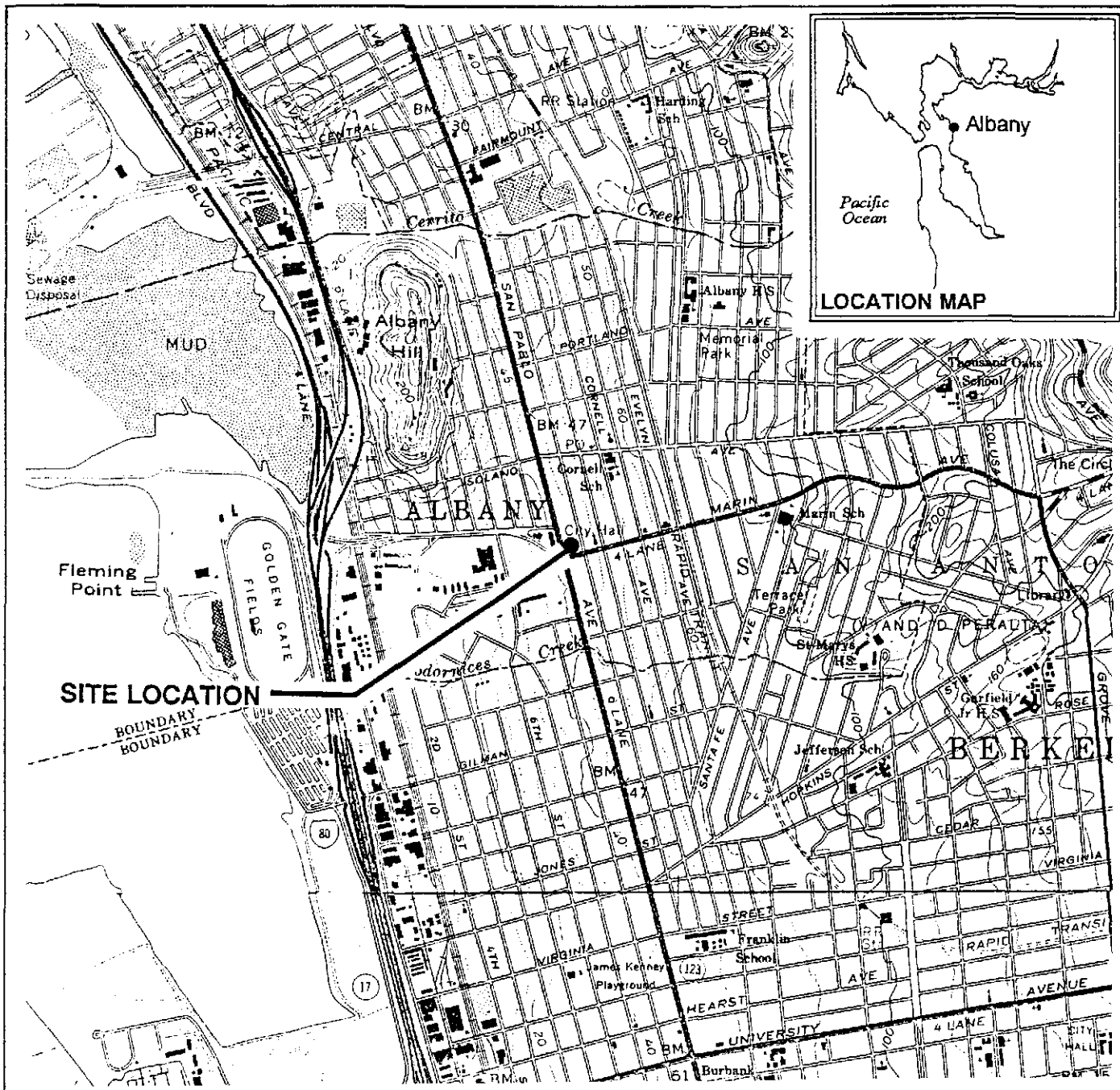
ECF/MCC/shl

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

766601-11

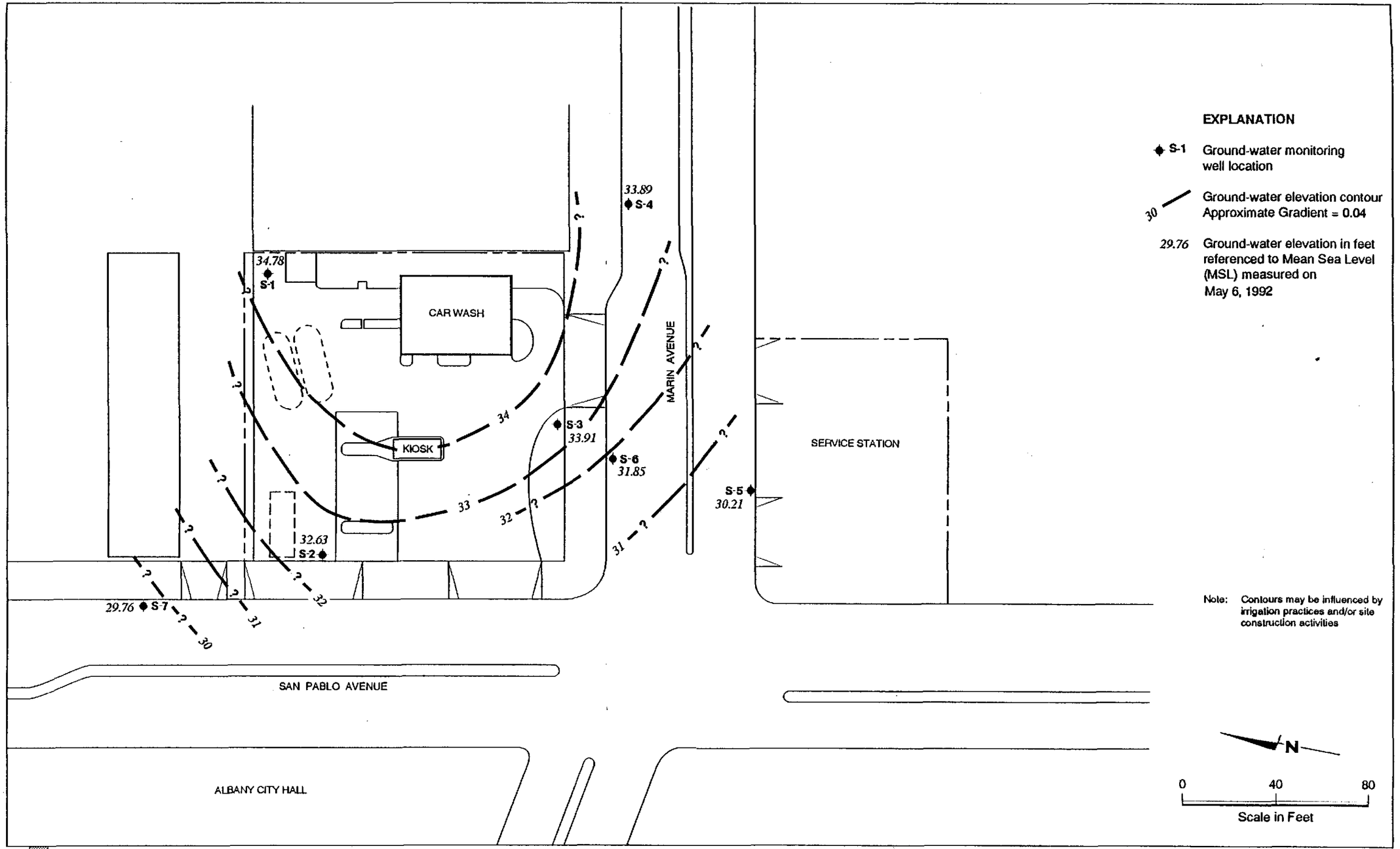


GeoStrategies Inc.

Vicinity Map
Shell Service Station
999 San Pablo Avenue
Albany, California

PLATE
1

JOB NUMBER	REVIEWED BY	DATE	REVISED DATE	REVISED DATE
7666	EY	1/90		

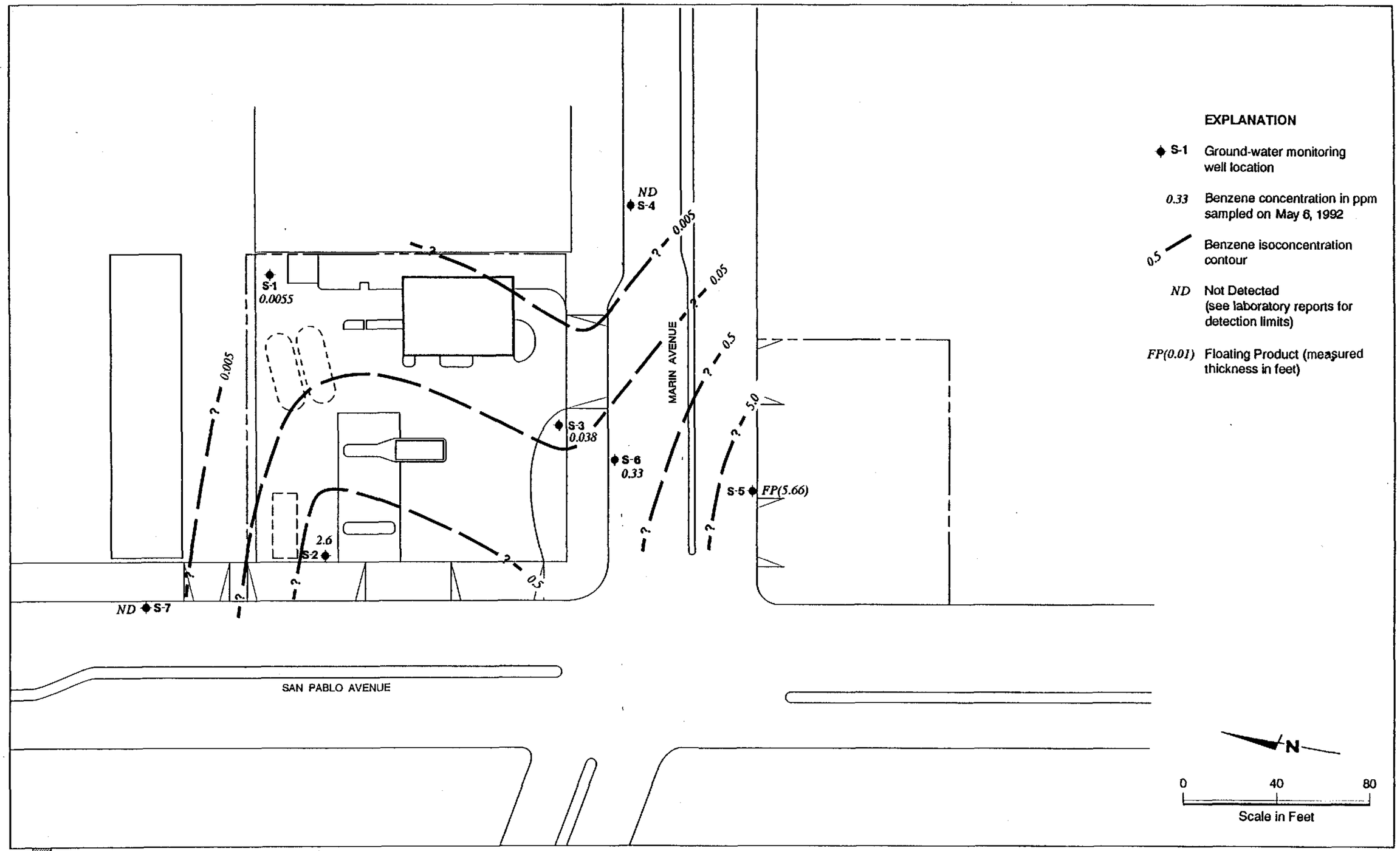


GeoStrategies Inc.

SITE PLAN/POTENTIOMETRIC MAP
Shell Service Station
999 San Pablo Avenue
Albany, California

PLATE **2**

JOB NUMBER	REVIEWED BY	DATE	REVISED DATE	REVISED DATE
766601-11		6/92		



GeoStrategies Inc.

BENZENE ISOCONCENTRATION MAP
Shell Service Station
999 San Pablo Avenue
Albany, California

PLATE **3**

JOB NUMBER	REVIEWED BY RG/CEG	DATE	REVISED DATE	REVISED DATE
766601-11		6/92		

EMCON
ASSOCIATES
Consultants in Wastes
Management and
Environmental Control

RECEIVED
JUN 8 1992
GeoStrategies Inc.

June 5, 1992
Project: G67-19.01
WIC#: 204-0079-0109

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

Re: Second quarter 1992 ground-water monitoring report, Shell Oil Company, 999 San Pablo Avenue, Albany, California

Dear Ms. Fostersmith:

This letter presents the results of the second quarter 1992 ground-water monitoring event for the Shell Oil Company (Shell) site located at 999 San Pablo Avenue, Albany, California. Second quarter monitoring was conducted on May 6, 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 through S-7 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. Floating product, 5.66 feet thick, was observed in well S-5. Total depth was measured to the nearest 0.1 foot. Results of the second quarter water-level survey, and available data from four previous surveys, are summarized in table 1.

SAMPLING AND ANALYSIS

Ground-water samples were collected from wells S-1 through S-4, S-6, and S-7 on May 6, 1992. Prior to sample collection, the wells were purged with polyvinyl chloride or Teflon® bailers. 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. Wells S-1, S-2, S-4, S-6, and S-7 were evacuated to dryness before the removal of three casing volumes. These wells were allowed to recharge for up to 24 hours. Samples were collected after the wells had recharged to a level sufficient for sample collection. Field measurements from second quarter monitoring, and available measurements from four previous monitoring

1938 Junction Avenue, San Jose, California 95131-2102, (408) 453-0719, Fax (408) 453-0452

events, are summarized in table 1. Purge water from the monitoring wells was contained in a 55-gallon drum. The drum was identified with a Shell-approved label 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 with deionized water prior to use at each well.

Quality control samples for second quarter monitoring included a trip blank (TB), and a duplicate well sample (SD-S6) collected from well S-6. All water samples collected during second quarter monitoring were analyzed for total petroleum hydrocarbons as gasoline (TPH-g), and benzene, toluene, ethylbenzene, and total xylenes (BTEX).

ANALYTICAL RESULTS

Analytical results for the second quarter 1992 monitoring event, and available results from four previous monitoring events, are summarized in table 2. The original certified analytical report and chain-of-custody documents are attached.

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

Attachments: Table 1 - Monitoring well field measurement data
Table 2 - Summary of analytical results
Figure 1 - Monitoring well locations
Certified analytical report
Chain-of-custody documents

Table 1
Monitoring Well Field Measurement Data
Second Quarter 1992

Shell Station: 999 San Pablo Avenue
Albany, California
WIC #: 204-0079-0109

Date: 06/03/92
Project Number: G87-19.01

Well Designation	Water Level Field Date	TOB Elevation (ft-MSL)	Depth to Water (feet)	Groundwater Elevation (ft-MSL)	Total Well Depth (feet)	Floating Product Thickness (feet)	Water Sample Field Date	pH (std. units)	Electrical Conductivity (micromhos/cm)	Temperature (degrees F)	Turbidity (NTU)
S-1	05/13/91	42.73	8.24	34.49	11.8	ND	05/13/91	NR	680	59.8	NR
S-1	08/23/91	42.73	8.37	34.36	11.8	ND	08/23/91	6.63	614	68.1	NR
S-1	11/07/91	42.73	8.30	34.43	11.8	ND	11/07/91	7.04	544	68.3	NR
S-1	01/28/92	42.73	7.84	34.89	11.4	ND	01/28/92	6.87	707	63.9	>200
S-1	05/06/92	42.73	7.95	34.78	11.8	ND	05/06/92	6.56	692	67.3	833
S-2	05/13/91	40.73	8.50	32.23	12.1	ND	05/13/91	NR	1098	61.7	NR
S-2	08/23/91	40.73	8.80	31.93	12.2	ND	08/23/91	6.56	940	69.4	NR
S-2	11/07/91	40.73	8.61	32.12	12.2	ND	11/07/91	6.66	855	69.8	NR
S-2	01/28/92	40.73	7.80	32.93	11.8	ND	01/28/92	6.94	1177	62.4	>200
S-2	05/06/92	40.73	8.10	32.63	12.1	ND	05/06/92	7.02	1154	63.5	21.8
S-3	05/13/91	41.46	7.90	33.56	12.2	ND	05/13/91	NR	815	64.1	NR
S-3	08/23/91	41.46	8.14	33.32	12.2	ND	08/23/91	6.46	698	70.3	NR
S-3	11/07/91	41.46	7.91	33.55	12.2	ND	11/07/91	6.93	814	70.8	NR
S-3	01/28/92	41.46	7.53	33.93	11.9	ND	01/28/92	6.76	777	61.2	>200
S-3	05/06/92	41.46	7.55	33.91	12.1	ND	05/06/92	6.54	704	65.2	>1000
S-4	05/13/91	41.10	7.44	33.66	14.1	ND	05/13/91	NR	655	64.3	NR
S-4	08/23/91	41.10	8.32	32.78	14.1	ND	08/23/91	6.55	356	67.8	NR
S-4	11/07/91	41.10	8.32	32.78	14.1	ND	11/07/91	6.60	356	69.5	NR
S-4	01/28/92	41.10	7.40	33.70	13.8	ND	01/28/92	6.80	409	63.6	>200
S-4	05/06/92	41.10	7.21	33.89	14.1	ND	05/06/92	6.16	419	67.9	>1000

TOB = top of well box
ft-MSL = elevation in feet, relative to mean sea level
std. units = standard pH units
micromhos/cm = micromhos per centimeter
degrees F = degrees Fahrenheit
NTU = nephelometric turbidity units
ND = None detected
NR = Not reported; data not available

Table 1
Monitoring Well Field Measurement Data
Second Quarter 1992

Shell Station: 999 San Pablo Avenue
Albany, California
WIC #: 204-0079-0109

Date: 06/03/92
Project Number: G67-19.01

Well Designation	Water Level Field Date	TOB Elevation (ft-MSL)	Depth to Water (feet)	Groundwater Elevation (ft-MSL)	Total Well Depth (feet)	Floating Product Thickness (feet)	Water Sample Field Date	pH (std. units)	Electrical Conductivity (micromhos/cm)	Temperature (degrees F)	Turbidity (NTU)
S-5	05/13/91	39.99	14.60	30.57**	NR	6.48	05/13/91	FP	FP	FP	FP
S-5	08/23/91	39.99	15.14	29.25**	NR	5.50	08/23/91	FP	FP	FP	FP
S-5	11/07/91	39.99	15.10	29.17**	NR	5.35	11/07/91	FP	FP	FP	FP
S-5	01/28/92	39.99	14.05	29.86**	15.7	4.90	01/28/92	FP	FP	FP	FP
S-5	05/06/92	39.99	14.31	30.21**	16.1	5.66	05/06/92	FP	FP	FP	FP
S-6	05/13/91	40.12	7.82	32.30	15.2	ND	05/13/91	NR	845	64.2	NR
S-6	08/23/91	40.12	9.58	30.54	15.3	ND	08/23/91	6.61	598	68.8	NR
S-6	11/07/91	40.12	10.86	29.26	15.3	ND	11/07/91	7.34	538	70.2	NR
S-6	01/28/92	40.12	8.97	31.15	14.8	ND	01/28/92	7.09	728	65.8	>200
S-6	05/06/92	40.12	8.27	31.85	15.2	ND	05/06/92	7.27	594	64.5	>1000
S-7	05/13/91	40.10	10.56	29.54	15.2	ND	05/13/91	NR	729	63.9	NR
S-7	08/23/91	40.10	11.16	28.94	15.1	ND	08/23/91	6.61	600	68.4	NR
S-7	11/07/91	40.10	11.48	28.62	15.2	ND	11/07/91	6.39	606	69.8	NR
S-7	01/28/92	40.10	10.72	29.38	14.7	ND	01/28/92	6.79	800	62.7	>200
S-7	05/06/92	40.10	10.34	29.76	15.1	ND	05/06/92	6.84	826	67.2	>1000

TOB = top of well box
ft-MSL = elevation in feet, relative to mean sea level
std. units = standard pH units
micromhos/cm = micromhos per centimeter
degrees F = degrees Fahrenheit
NTU = nephelometric turbidity units
** = groundwater elevation corrected to include 80 percent of the floating product thickness measured in the well
NR = Not reported; data not available
FP = Floating product; well contained floating product and was not sampled
ND = None detected

Table 2
Summary of Analytical Results
Second Quarter 1992
milligrams per liter (mg/l) or parts per million (ppm)

Shell Station: 999 San Pablo Avenue
Albany, California
WIC #: 204-0079-0109

Date: 08/05/92
Project Number: 087-19.01

Sample Designation	Water Sample Field Date	TPH-g (mg/l)	Benzene (mg/l)	Toluene (mg/l)	Ethyl-benzene (mg/l)	Total Xylenes (mg/l)
S-1	05/13/91	1.5	0.020	0.0026	0.086	0.074
S-1	08/23/91	2.9	0.027	<0.0025	0.075	0.018
S-1	11/07/91	2.9	0.0080	0.0025	0.046	0.026
S-1	01/28/92	2.0	0.011	<0.0025	0.060	0.020
S-1	05/06/92	1.2	0.0055	<0.0025	0.080	0.036
S-2	05/13/91	23.	3.9	0.23	1.1	3.2
S-2	08/23/91	23.	4.4	0.26	1.9	2.4
S-2	11/07/91	40.	4.0	0.16	1.02	3.4
S-2	01/28/92	22.	1.6	0.07	0.42	1.7
S-2	05/06/92	20.	2.6	0.11	0.86	1.9
S-3	05/13/91	3.3	0.030	0.0036	0.026	0.013
S-3	08/23/91	2.0	0.025	0.0040	0.0093	0.0045
S-3	11/07/91	4.0	0.020	0.0039	0.0050	0.0049
S-3	01/28/92	2.1	0.021	0.0076	0.0067	0.015
S-3	05/06/92	6.6	0.038	0.051	0.045	0.085
SD-3	01/28/92	2.1	0.018	0.0061	0.0071	0.014
S-4	05/13/91	<0.05	<0.0005	<0.0005	<0.0005	<0.0005
S-4	08/23/91	<0.05	<0.0005	<0.0005	<0.0005	<0.0005
S-4	11/07/91	0.26	<0.0005	<0.0005	<0.0005	<0.0005
S-4	01/28/92	0.11*	<0.0005	<0.0005	<0.0005	<0.0005
S-4	05/06/92	0.054+	<0.0005	<0.0005	<0.0005	<0.0005

TPH-g = total petroleum hydrocarbons as gasoline
* = Compounds detected and calculated as gasoline are not characteristic of the standard gasoline chromatographic pattern
+ = The concentration reported as gasoline is primarily due to the presence of a discrete hydrocarbon peak not indicative of gasoline

Table 2
Summary of Analytical Results
Second Quarter 1992
milligrams per liter (mg/l) or parts per million (ppm)

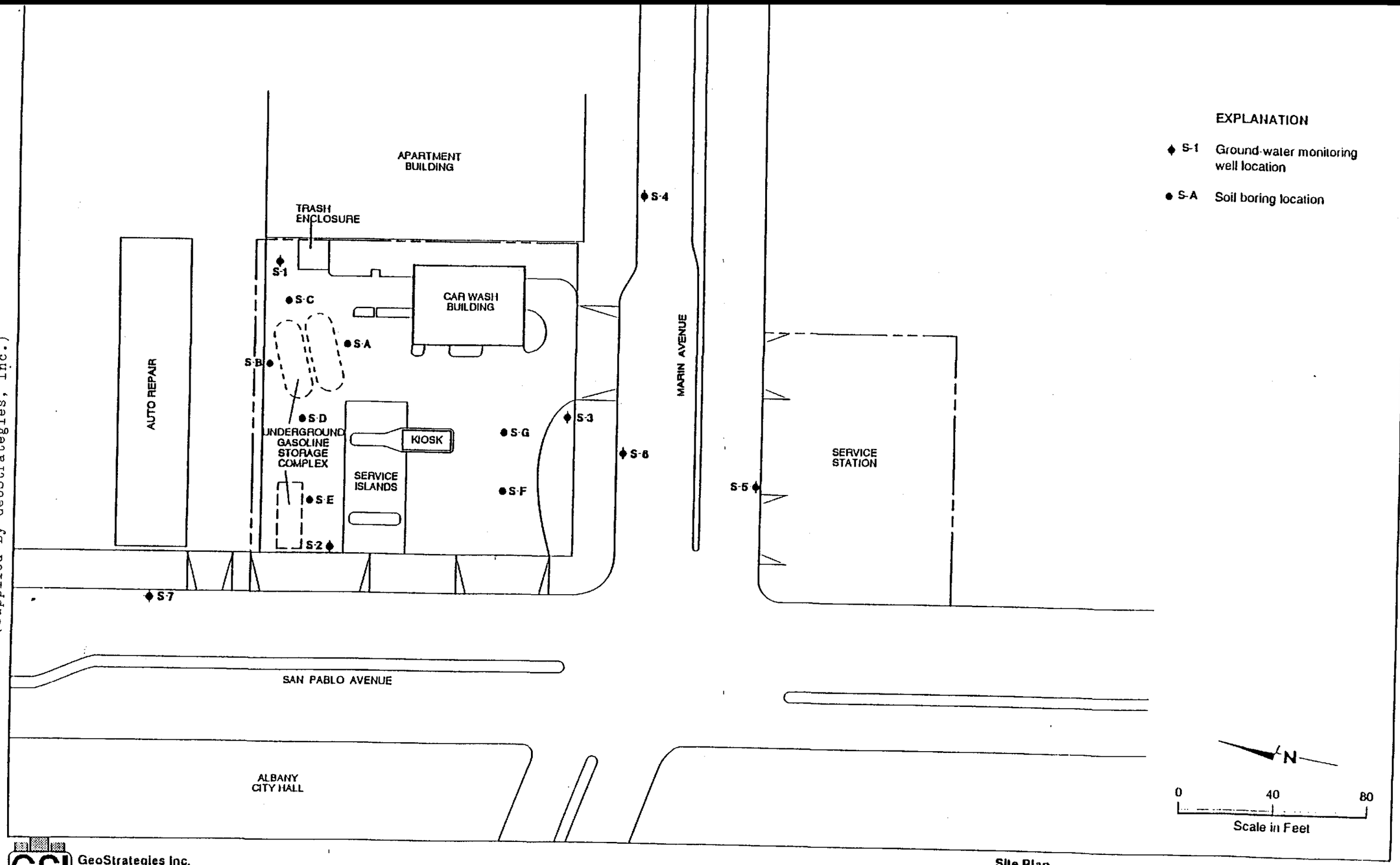
Shell Station: 999 San Pablo Avenue
Albany, California
WIC #: 204-0079-0109

Date: 06/05/92
Project Number: G67-19.01

Sample Designation	Water Sample Field Date	TPH-g (mg/l)	Benzene (mg/l)	Toluene (mg/l)	Ethyl-benzene (mg/l)	Total Xylenes (mg/l)
S-5	05/13/91	FP	FP	FP	FP	FP
S-5	08/23/91	FP	FP	FP	FP	FP
S-5	11/07/91	FP	FP	FP	FP	FP
S-5	01/28/92	FP	FP	FP	FP	FP
S-5	05/06/92	FP	FP	FP	FP	FP
S-6	05/13/91	13.	0.60	0.14	0.21	0.31
S-6	08/23/91	9.8	0.48	0.08	0.12	0.15
S-6	11/07/91	6.2	0.24	0.023	0.025	0.027
S-6	01/28/92	5.6	0.25	0.015	0.041	0.036
S-6	05/06/92	7.1	0.33	0.029	0.11	0.21
SD-S6	05/06/92	6.3	0.28	<0.025	0.041	0.035
S-7	05/13/91	<0.05	<0.0005	<0.0005	<0.0005	<0.0005
S-7	08/23/91	<0.05	<0.0005	<0.0005	<0.0005	<0.0005
S-7	11/07/91	<0.05	<0.0005	<0.0005	<0.0005	<0.0005
S-7	01/28/92	<0.05	<0.0005	<0.0005	<0.0005	<0.0005
S-7	05/06/92	<0.05	<0.0005	<0.0005	<0.0005	<0.0005
TB	01/28/92	<0.05	<0.0005	<0.0005	<0.0005	<0.0005
TB	05/06/92	<0.05	<0.0005	<0.0005	<0.0005	<0.0005

TPH-g = total petroleum hydrocarbons as gasoline
FP = Floating product; well contained floating product and was not sampled

Figure 1
GeoStrategies, Inc.)
(Supplied By



GSI GeoStrategies Inc.

Site Plan
Shell Service Station
999 San Pablo Avenue
Albany, California

JOB NUMBER	REVIEWED BY	DATE	REVISED DATE	REVISED DATE
766601-8	DHP	9/91		

ANAMETRIX INC
Environmental & Analytical Chemistry
1961 Concourse Drive. Suite E. San Jose. CA 95131
(408) 432-8192 · Fax (408) 432-8198

REPORT

MR. DAVID LARSEN
EMCON ASSOCIATES
1938 JUNCTION AVE.
SAN JOSE, CA 95131

Workorder # : 9205089
Date Received : 05/06/92
Project ID : G67-19.01
Purchase Order: MOH-B813

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

ANAMETRIX ID	CLIENT SAMPLE ID
9205089- 1	S-4
9205089- 2	S-7
9205089- 3	S-3
9205089- 4	S-1
9205089- 5	S-6
9205089- 6	S-2
9205089- 7	SD-S6
9205089- 8	T.BLANK

This report consists of 5 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.

Sarah Schoen, Ph.D.
Laboratory Director

5-20-92
Date

EMCON ASSOCIATES
MAY 2 2 1992
RECEIVED

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

MR. DAVID LARSEN
EMCON ASSOCIATES
1938 JUNCTION AVE.
SAN JOSE, CA 95131

Workorder # : 9205089
Date Received : 05/06/92
Project ID : G67-19.01
Purchase Order: MOH-B813
Department : GC
Sub-Department: TPH

SAMPLE INFORMATION:

ANAMETRIX SAMPLE ID	CLIENT SAMPLE ID	MATRIX	DATE SAMPLED	METHOD
9205089- 1	S-4	WATER	05/06/92	TPHg/BTEX
9205089- 2	S-7	WATER	05/06/92	TPHg/BTEX
9205089- 3	S-3	WATER	05/06/92	TPHg/BTEX
9205089- 4	S-1	WATER	05/06/92	TPHg/BTEX
9205089- 5	S-6	WATER	05/06/92	TPHg/BTEX
9205089- 6	S-2	WATER	05/06/92	TPHg/BTEX
9205089- 7	SD-S6	WATER	05/06/92	TPHg/BTEX
9205089- 8	T.BLANK	WATER	05/06/92	TPHg/BTEX

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

MR. DAVID LARSEN
EMCON ASSOCIATES
1938 JUNCTION AVE.
SAN JOSE, CA 95131

Workorder # : 9205089
Date Received : 05/06/92
Project ID : G67-19.01
Purchase Order: MOH-B813
Department : GC
Sub-Department: TPH

QA/QC SUMMARY :

- The concentration reported as gasoline for sample S-4 is primarily due to the presence of a discrete hydrocarbon peak not indicative of gasoline.

Department Supervisor 5/20/92 Date

Chemist 5/20/92 Date

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

Anametrix W.O.: 9205089
Matrix : WATER
Date Sampled : 05/06/92

Project Number : G67-19.01
Date Released : 05/20/92

COMPOUNDS	Reporting Limit (mg/L)	Sample I.D.# S-4 -01	Sample I.D.# S-7 -02	Sample I.D.# S-3 -03	Sample I.D.# S-1 -04	Sample I.D.# S-6 -05
Benzene	0.0005	ND	ND	0.038	0.0055	0.33
Toluene	0.0005	ND	ND	0.051	ND	0.029
Ethylbenzene	0.0005	ND	ND	0.045	0.080	0.11
Total Xylenes	0.0005	ND	ND	0.065	0.036	0.21
TPH as Gasoline	0.050	0.054	ND	6.6	1.2	7.1
% Surrogate Recovery		111%	125%	99%	108%	103%
Instrument I.D.		HP4	HP4	HP4	HP4	HP4
Date Analyzed		05/17/92	05/17/92	05/17/92	05/19/92	05/19/92
RLMF		1	1	50	5	50

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 53-147%.

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

Steve Sona 5/20/92
Analyst Date

Cheryl Barlman 5/20/92
Supervisor Date

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

Anametrix W.O.: 9205089
Matrix : WATER
Date Sampled : 05/06/92

Project Number : G67-19.01
Date Released : 05/20/92

COMPOUNDS	Reporting Limit (mg/L)	Sample I.D.# S-2 -06	Sample I.D.# SD-S6 -07	Sample I.D.# T.BLANK -08	Sample I.D.# 04B0517A BLANK	Sample I.D.# 04B0518A BLANK
Benzene	0.0005	2.6	0.28	ND	ND	ND
Toluene	0.0005	0.11	ND	ND	ND	ND
Ethylbenzene	0.0005	0.86	0.041	ND	ND	ND
Total Xylenes	0.0005	1.9	0.035	ND	ND	ND
TPH as Gasoline	0.050	20	6.3	ND	ND	ND
% Surrogate Recovery		107%	110%	109%	100%	107%
Instrument I.D.		HP4	HP4	HP4	HP4	HP4
Date Analyzed		05/18/92	05/18/92	05/17/92	05/17/92	05/17/92
RLMF		100	50	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 53-147%.

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

Analyst 5/20/92 Date

Supervisor 5/20/92 Date

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

Anametrix W.O.: 9205089
Matrix : WATER
Date Sampled : N/A

Project Number : G67-19.01
Date Released : 05/20/92

COMPOUNDS	Reporting Limit (mg/L)	Sample I.D.# 04B0519A BLANK
Benzene	0.0005	ND
Toluene	0.0005	ND
Ethylbenzene	0.0005	ND
Total Xylenes	0.0005	ND
TPH as Gasoline	0.050	ND
% Surrogate Recovery		102%
Instrument I.D.		HP4
Date Analyzed		05/19/92
RLMF		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 53-147%.

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

Steve Sona 5/20/92
Analyst Date

Cheryl Balmer 5/20/92
Supervisor Date

SHELL OIL COMPANY
RETAIL ENVIRONMENTAL ENGINEERING - WEST

CHAIN OF CUSTODY RECORD

9205089 Serial No.: 175

Date: 5-6-92
Page 1 of 2

Site Address: 999 San Pablo Avenue Albany CA

WIC#: 204-0079-0109

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: 3-40ml VOAs (HCl) for g/BTEX
2-40ml VOAs (HCl) for TB

Sampled By: Mark Knuttel Steve Horton
Printed Name: Mark Knuttel steve Horton

LAB: ~~IT Analytical - Cerritos~~ Anametrix Inc

CHECK ONE (1) BOX ONLY		CT/DT
Quarterly Monitoring	X[X]	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 X[X] (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-4	5-6-92		X		3	X		X			40 ml	HCl	No	Preserved / no bubbles	
S-7	5-6-92		↓		3	X		X			↓	↓	↓	↓	
S-3	5-6-92		↓		3	X		X			↓	↓	↓	↓	
S-1	5-6-92		↓		3	X		X			↓	↓	↓	↓	
S-6	5-6-92		↓		3	X		X			↓	↓	↓	↓	
S-2	5-6-92		↓		3	X		X			↓	↓	↓	↓	
~~S-5~~	NO SAMPLE		↓		~~3~~	X		X			↓	↓	↓		
SD-~~5~~6	5-6-92		↓		3	X		X			↓	↓	↓		

Relinquished By (signature):	Printed name:	Date/Time	Received (signature):	Printed name:	Date/Time
Mark Knuttel	Mark Knuttel	Date: 5-6-92 Time: 1515	Carl C Bratt	Carl C Bratt	Date: 5/6/92 Time: 5:15
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

920589 Serial No.:

Date: 5-6-92
Page 2 of 2

Site Address: 999 San Pablo Avenue
Albany CA

WIC#: 204-0079-0109

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: 3-40ml HCl VOAs for G, BTEX
3-40ml HCl VOAs for TB

Sampled By: Mark Knuttel

Printed Name: Mark Knuttel

Analysis Required

LAB: ~~TT - Cerritos CA~~ Anametrix

CHECK ONE (1) BOX ONLY | CT/DT

- Quarterly Monitoring XXX 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 XXX (Norma
- 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
TB	5-6-92		X		3	X		X			40 ml	HCl	No		

Relinquished By (signature): Mark Knuttel
Printed name: Mark Knuttel
Date: 5-6-92
Time: 1515
Received (signature): Carl C Bates
Printed name: CARL C. BATES
Date: 5/6/92
Time: 15:15

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