Environmental and Geologic Services



Fax: 510-547-5043 Phone: 510-450-6000

93 AUG 11 PM 3: 39

July 30, 1993

Britt Johnson Alameda Department of Environmental Health 80 Swan Way, Room 200 Oakland, CA 94621

> Re: Shell Service Station WIC #204-0079-0109 999 San Pablo Avenue Albany, California WA Job #81-699-203

> > .

Dear Mr. Johnson:

This letter describes recently completed and anticipated activities at the Shell service station referenced above (Figure 1). This status report satisfies the quarterly reporting requirements prescribed by California Administrative Code Title 23 Waters, Chapter 3, Subchapter 16, Article 5, Section 265.d. Included below are descriptions and results of activities performed in the second quarter 1993 and proposed work for the third quarter 1993.

Second Ouarter 1993 Activities:

- Blaine Tech Services, Inc. (BTS) of San Jose, California measured ground water depths in seven of the wells and collected ground water samples from six of the seven site wells. Well S-5 contained 0.9 ft of floating hydrocarbons and was not sampled. BTS' report describing these activities and the analytic report for the ground water samples are included as Attachment A.
- Weiss Associates (WA) calculated ground water elevations and compiled the analytic data (Tables 1 and 2) and prepared a ground water elevation contour map (Figure 2).

Anticipated Third Ouarter 1993 Activities:

WA will submit a report presenting the results of the third quarter 1993 ground water sampling and ground water depth measurements. The report will include tabulated chemical analytic results, ground water elevations and a ground water elevation contour map.

Conclusions and Recommendations:

- Since the floating hydrocarbons detected in monitoring well S-5 appear to originate from the Arco Station across Marin Avenue south of the Shell site, WA will not install a hydrocarbon skimmer or bail floating hydrocarbons from monitoring well S-5.
- WA recommends continued monitoring of hydrocarbon concentrations in ground water during the third quarter of 1993.

Please call if you have any questions.



Sincerely, Weiss Associates

ZVZ.

J. Michael Asport Technical Assistant

N. Scott MacLeod, R.G. Project Geologist

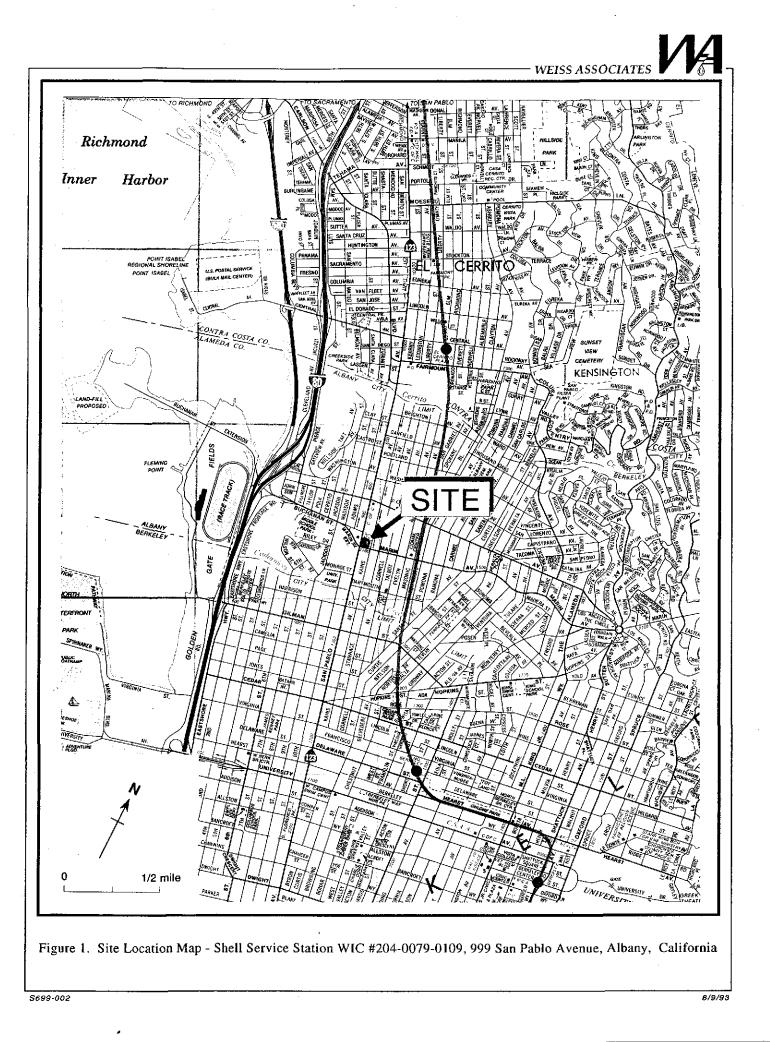
JMA/NSM:jma

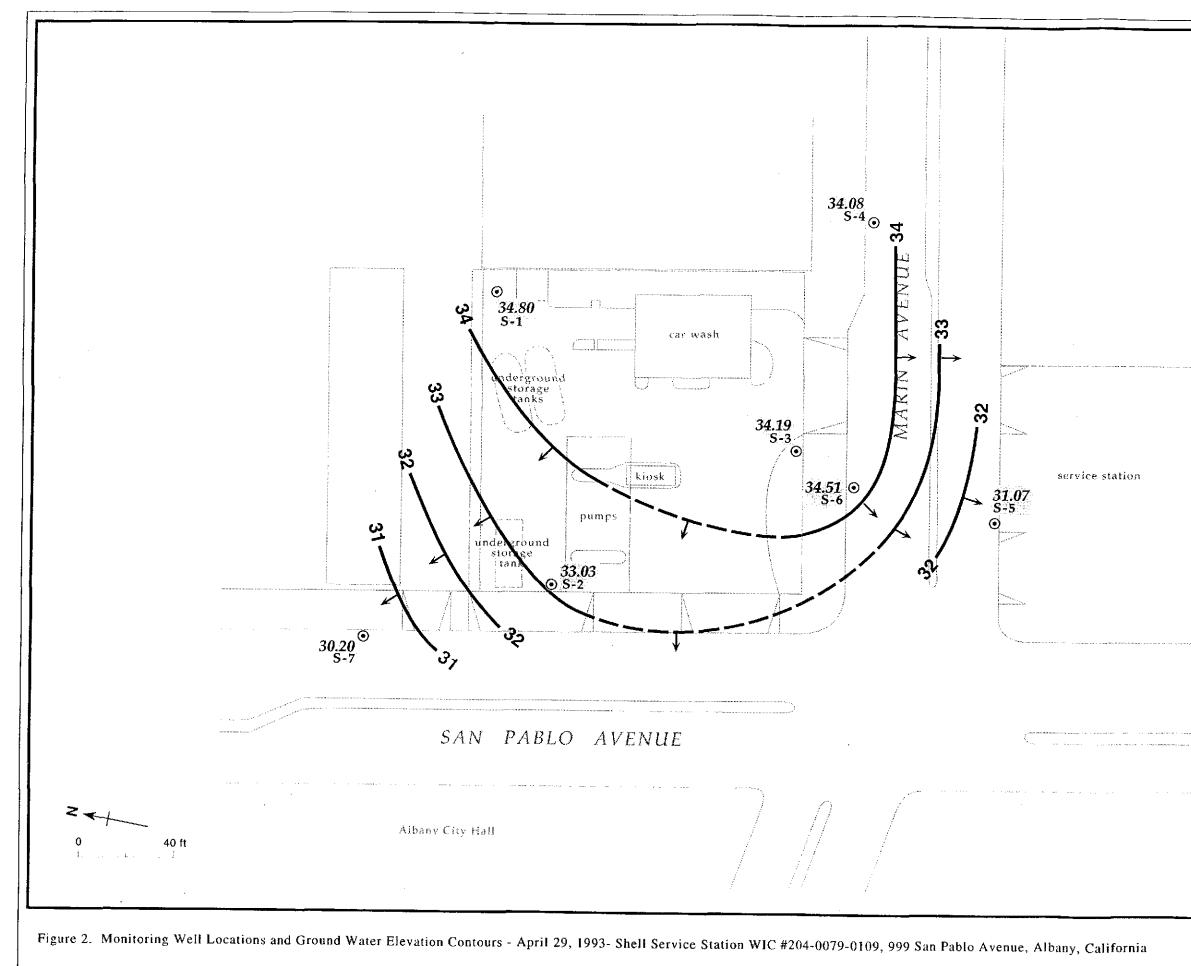
J:\SHELL\650\699QMJY3.WP

Attachments: Figures Tables

A - Blaine Tech's Ground Water Monitoring Report

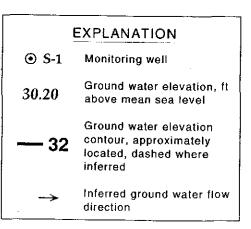
cc: Dan Kirk, Shell Oil Company, P.O. Box 5278, Concord, California 94520-9998 Richard Heitt, Regional Water Quality Control Board - San Francisco Bay Region, 2101 Webster Street, Suite 500, Oakland, California 94612





.





Base map from GeoStrategies Inc.

Well ID	Date	Top-of-Vault Elevation	Depth to Water (ft)	Floating Hydrocarbon Thickness (ft) ^a	Ground Water Elevation (ft above msl)
S-1	05/06/92 08/26/92 10/28/92 01/19/93 04/29/93	42.73	7.95 8.24 8.52 6.54 7.93		34.78 34.49 34.21 36.19 34.80
S-2	05/06/92 08/26/92 10/28/92 01/19/93 04/29/93	40.73	8.10 8.37 8.64 5.82 7.70		32.63 32.36 32.09 34.91 33.03
S-3	05/06/92 08/26/92 10/28/92 01/19/93 04/29/93	41.46	7.55 7.53 7.95 6.12 7.27		33.91 33.93 33.51 35.34 34.19
S-4	05/06/92 08/26/92 10/28/92 01/19/93 04/29/93	41.10	7.21 8.13 8.73 5.86 7.02		33.89 32.97 32.37 35.24 34.08
°S-5	05/06/92 08/26/92 10/28/92 01/19/93 04/29/93	39.99	14.31 14.26 14.22 12.36 9.64	5.66 3.80 3.81 3.96 0.9	30.21 28.77 28.82 30.80 31.07
S-6	05/06/92 08/26/92 10/28/92 01/19/93 04/29/93	40.12	8.27 9.57 8.90 4.84 5.61		32.85 31.55 32.22 35.28 34.51
S-7	05/06/92 08/26/92 10/28/92	40.10	10.34 11.13 11.52		29.76 28.97 28.58

Table 1.Ground Water Elevations - Shell Service Station WIC #204-0079-0109, 999 San PabloAvenue, Albany, California

-- Table 1 continues on next page --

Well ID	Date	Top-of-Vault Elevation	Depth to Water (ft)	Floating Hydrocarbon Thickness (ft) ^a	Ground Water Elevation (ft above msl)
	01/19/93		8.68		31.42

Notes:

a = When floating hydrocarbons are present, ground water elevation corrected by the relation: corrected ground water elevation = (top-of-box elevation) - (depth to water) + (0.8 x floating)hydrocarbon thickness)

ample D	Date	Depth to Water (ft)	TPN-G <	B par	E tspermillion (mg/	T /L)	X
ELLS							
-1	05/06/92	7.95	1.2	0.0055	0.080	<0.0025	0.036
	07/29/93	8.24	2.0	0.0094	0.130	<0.0025	<0.0025
	10/28/92	8.52	1.3	0.027	0.072	0.0032	0.013
	01/19/93	6.54	1.5	0.013	0.029	0.003	0.031
	04/29/93	7.93	2.0	0.015	0.082	<0.0025	<0.065
2	05/06/92	8.10	20	2.6	0.860	0.11	1.9
	07/29/92	8.37	42	5.0	1.1	0.16	3.5
	10/28/92	8.64	34	4.8	1.6	0.33	2.9
	01/19/93	5.82	20	2.3	0.66	0.37	1.3
	04/29/93	7.70	40	2.0	0.90	0.067	1.9
-3	05/06/92	7.55	6.6	0.038	0.045	0.051	0.065
	07/29/92	7.53	5.8	0.018	0.029	0.012	0,060
	10/28/92	7.95	3.0	0.055	0.016	0.011	0.032
	01/19/93	6.12	3.1	<0.005	0.011	0.0051	0.016
	04/29/93	7.27	3.0	0.031	<0.005	0.022	D.014
-4	05/06/92	7.21	0.054	<0.0005	<0.0005	<0.0005	<0.0005
	07/29/92	8.13	0.067	<0.0005	<0.0005	<0.0005	<0.0005
	10/28/92	8.73	<0.050	<0.0005	<0.0005	<0.0005	<0.0005
	01/19/93	5.86	0.086	0.0012	0.0027	0.0007	0.015
	04/29/93 04/29/93 ^{dup}	7.02	<0.05	<0.0005	<0.0005	<0.0005	<0.0005
			<0.05	<0.0005	<0.0005	<0_0005	<0.0005
-5	05/06/92 ^{FHC}	14.31					
	07/29/92 ^{FHC}	14.26		•••	•••		
	10/28/92 ^{FHC}	14.22					
	01/19/93FHC	12.36				•••	
	04/29/93 ^{FHC}	9.64				e-e-e	***
-6	05/06/92	8.27	7.1	0.33	0.110	0.029	0.21
	07/29/92	9.57	13.0	0.24	0.056	<0.029	0.078
	10/28/92	8.90	10.0	0.47	0.067	0.210	0.17
	01/19/93	4.84	4.8	0.10	0.027	0.026	0.045
	04/29/93	5.61	7.0	0,43	<0.0125	0,02	0.042
-7	05/06/92	10.34	<0.050	<0.0005	<0.0005	<0.0005	<0.0005
	07/29/92	11.13	0.160	<0.0005	<0.0005	<0.0005	<0.0005
	10/28/92	11.52	<0.050	<0.0005	<0.0005	<0.0005	<0.0005
	01/19/93	8.68	0.050	0.0011	0.0019	0.0006	0.0092
	04/29/93	9.90	<0.05	<0.0005	<0.0005	<0.0005	<0.0005

Table 2. Analytic Results for Ground Water Former Shell Service Station ULC #206-0079-0100 000 Sep Poble Au Californi

-- Table 2 continues on next page --

.

Well ID	Date	Top-of-Vault Elevation	Depth to Water (ft)	Floating Hydrocarbon Thickness (ft) ^a	Ground Water Elevation (ft above msl)
S-1	05/06/92	42.73	7.95		34.78
	08/26/92		8.24		34.49
	10/28/92		8.52		34.21
	01/19/93		6.54		36.19
	04/29/93		7.93		34.80
S-2	05/06/92	40.73	8.10		32.63
-	08/26/92		8.37		32.36
	10/28/92		8.64		32.09
	01/19/93		5.82		34.91
	04/29/93		7.70		33.03
S-3	05/06/92	41.46	7.55		33.91
	08/26/92		7.53		33.93
	10/28/92		7.95		33.51
	01/19/93		6.12		35.34
	04/29/93		7.27		34.19
S-4	05/06/92	41.10	7.21		33.89
	08/26/92		8.13		32.97
	10/28/92		8.73		32.37
	01/19/93		5.86		35.24
	04/29/93		7.02		34.08
S-5	05/06/92	39.99	14.31	5.66	30.21
	08/26/92		14.26	3.80	28.77
	10/28/92		14.22	3.81	28.82
	01/19/93		12.36	3.96	30.80
	04/29/93		9.64	0.9	31.07
S-6	05/06/92	40.12	8.27		32.85
	08/26/92		9.57		31.55
	10/28/92		8.90		32.22
	01/19/93		4.84		35.28
	04/29/93		5.61		34.51
S-7	05/06/92	40.10	10.34		29.76
	08/26/92		11.13		28.97
	10/28/92		11.52		28.58

Table 1.Ground Water Elevations - Shell Service Station WIC #204-0079-0109, 999 San Pablo
Avenue, Albany, California

-- Table 1 continues on next page --

.

Well ID	Date	Top-of-Vault Elevation	Depth to Water (ft)	Floating Hydrocarbon Thickness (ft) ^a	Ground Water Elevation (ft above msl)
	01/19/93		8.68		31.42

Ground Water Elevations - Shell Service Station WIC #204-0079-0109, 999 San Pablo Table 1

Notes:

a = When floating hydrocarbons are present, ground water elevation corrected by the relation: corrected ground water elevation = (top-of-box elevation) - (depth to water) + (0.8 x floating)hydrocarbon thickness)

Well ID	Date	Top-of-Vault Elevation	Depth to Water (ft)	Floating Hydrocarbon Thickness (ft) ^a	Ground Water Elevation (ft above msl)
S-1	05/06/92	42.73	7.95		34.78
	08/26/92		8.24		34.49
	10/28/92		8.52		34.21
	01/19/93		6.54		36.19
	04/29/93		7.93		34.80
S-2	05/06/92	40.73	8.10		32.63
	08/26/92		8.37		32.36
	10/28/92		8.64		32.09
	01/19/93		5.82		34.91
	04/29/93		7.70		33.03
S-3	05/06/92	41.46	7.55		33.91
	08/26/92		7.53		33.93
	10/28/92		7.95		33.51
	01/19/93		6.12		35.34
	04/29/93		7.27		34.19
S-4	05/06/92	41.10	7.21		33.89
	08/26/92		8.13		32.97
	10/28/92		8.73		32.37
	01/19/93		5.86		35.24
	04/29/93		7.02		34.08
S-5	05/06/92	39.99	14.31	5.66	30.21
	08/26/92		14.26	3.80	28.77
	10/28/92		14.22	3.81	28.82
	01/19/93		12.36	3.96	30.80
	04/29/93		9.64	0.9	31.07
S-6	05/06/92	40.12	8.27		32.85
	08/26/92		9.57		31.55
	10/28/92		8.90		32.22
	01/19/93		4.84		35.28
	04/29/93		5.61		34.51
S-7	05/06/92	40.10	10.34		29.76
	08/26/92		11.13		28.97
	10/28/92		11.52		28.58

Table 1.Ground Water Elevations - Shell Service Station WIC #204-0079-0109, 999 San Pablo
Avenue, Albany, California

-- Table 1 continues on next page --

Well ID	Date	Top-of-Vault Elevation	Depth to Water (ft)	Floating Hydrocarbon Thickness (ft) ^a	Ground Water Elevation (ft above msl)
	01/19/93		8.68		31.42

Ground Water Elevations - Shell Service Station WIC #204-0079-0109, 999 San Pablo Table 1.

Notes:

a = When floating hydrocarbons are present, ground water elevation corrected by the relation: corrected ground water elevation = (top-of-box elevation) - (depth to water) + (0.8 x floating)hydrocarbon thickness)

Sample ID	Date	Depth to Water (ft)	TPH-G ≺	8 par	E ts per million (mg/	T /L)	×>
WELLS S-1	05/06/92	7.95	1.2	0.0055	0.080	<0.0025	0.036
2-1	07/29/93	8.24	2.0	0.0094	0.130	<0.0025	
	10/28/92	8.52	1.3	0.0074	0.072	0.0032	<0.0025 0.013
	01/19/93	6.54	1.5	0.013	0.029	0.003	0.013
	04/29/93	7.93	2.0	0,015	0.082	<0.003	<0.065
5-2	05/06/92	8.10	20	2.6	0.860	0.11	1_9
	07/29/92	8.37	42	5.0	1.1	0_16	3.5
	10/28/92	8.64	34	4.8	1.6	0.33	2.9
	01/19/93	5,82	20	2.3	0.66	0.37	1.3
	04/29/93	7.70	40	2.0	0,90	0.067	1.9
s-3	05/06/92	7.55	6.6	0.038	0.045	0.051	0.065
	07/29/92	7.53	5.8	0.018	0.029	0.012	0.060
	10/28/92	7.95	3.0	0.055	0.016	0.011	0,032
	01/19/93	6.12	3.1	<0.005	0.011	0.0051	0.016
	04/29/93	7.27	3.0	0.031	<0.005	0.022	0.014
S-4	05/06/92	7.21	0.054	<0.0005	<0.0005	<0.0005	<0.0005
	07/29/92	8.13	0.067	<0.0005	<0.0005	<0.0005	<0.0005
	10/28/92	8.73	<0.050	<0.0005	<0.0005	<0.0005	<0.0005
	01/19/93	5.86	0.086	0.0012	0.0027	0.0007	0.015
	04/29/93 04/29/93 ^{chup}	7.02	<0.05	<0.0005	<0.0005	<0.0005	<0.0005
			<0.05	<0.0005	<0.0005	<0.0005	<0.0005
s-5	05/06/92FHC	14.31				•••	•
	07/29/92 ^{FHC}	14.26	•••			•••	
	10/28/92 ^{FHC}	14.22					
	01/19/93 ^{FHC}	12.36			•••		
	05/06/92 ^{FHC} 07/29/92 ^{FHC} 10/28/92 ^{FHC} 01/19/93 ^{FHC} 04/29/93 ^{FHC}	9.64	***		***		***
S-6	05/06/92	8.27	7.1	0.33	0.110	0.029	0.21
	07/29/92	9.57	13.0	0.24	0.056	<0.050	0.078
	10/28/92	8.90	10.0	0.47	0.067	0.210	0.17
	01/19/93	4.84	4.8	0.10	0.027	0.026	0.045
	04/29/93	5.61	7.0	0.43	<0.0125	0.02	0.042
s-7	05/06/92	10.34	<0.050	<0.0005	<0.0005	<0.0005	<0.0005
	07/29/92	11.13	0.160	<0.0005	<0.0005	<0.0005	<0.0005
	10/28/92	11.52	<0.050	<0.0005	<0.0005	<0.0005	<0.0005
	01/19/93	8.68	0.050	0.0011	0.0019	0.0006	0.0092
	04/29/93	9.90	<0.05	<0.0005	<0.0005	<0.0005	<0.0005

G

Table 2. Analytic Results for Ground Water, Former Shell Service Station, WIC #204-0079-0109, 999 San Pablo Avenue, Albany, California

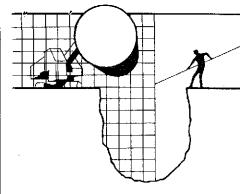
-- Table 2 continues on next page --

Sample 10	Date	Depth to Water (ft)	TPH-G <	6 par	E ts per million (mg/	T L)	X
Trip Blank	04/29/93		<0.05	<0.0005	<0.0005	<0.0005	<0.0005
DTSC MCLS			NE	0.001	0.680	0.10 ⁸	1.750
bbreviations:				<u>Notes</u> :			
N-C = Total r	sension hudaaaabaaa	as gasoline by Modif	God CDA Mathad	a = DTSC recommen			



ATTACHMENT A

GROUND WATER MONITORING REPORT AND ANALYTIC REPORT



BLAINE TECH SERVICES INC.

985 TIMOTHY DRIVE SAN JOSE, CA 95133 (408) 995-5535 FAX (408) 293-8773

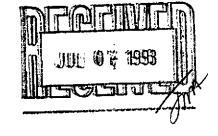
May 21, 1993

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

Attn: Daniel T. Kirk

srte: Shell WIC # 204-0079-0109 999 San Pablo Ave. Albany, California

QUARTER: 2nd quarter of 1993



QUARTERLY GROUNDWATER SAMPLING REPORT 930429-A-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.

Blaine Tech Services, Inc. 9

930429-A-1

Shell 999 San Pablo, Albany

DATA
GAUGING
OF WELL
TABLE

WELL I.D.	WELL Diameter (inchee)	DATA COLLECTION DATE	measurements referenced to	QUALITATIVE Observations (sbeen)	DEPTH TO FIRST Inwiscible Liguid (FPZ) (feet)	THICKNESS OF IMMISCIBLE LIQUID ZONE (feet)	VOLUME OF IMMISCIELES REMOVED (ml)	DEPTH To Water (feet)	DEFTH TO WELL BOTTOM (feet)
s-1	m	04-29-93	GRADE	1	NONE	1	1	7.93	11.96
S-2	m)	04-29-93	GRADE	ODOR	NONE	:	ł	7.70	12.14
S S	m	04-29-93	GRADE	1	NONE	1	ł	7.27	12.20
* **	m	04~29-93	GRADE		NONE	ł	;	7.02	14.08
s-5 5	m	04-29-93	GRADE	FREE PRODUCT	8.74	6°0	ł	9.64	;
5 - 6	m	04-29-93	GRADE	SHEEN/ODOR	NONE	ł,	ł	5.61	15.24
S-7	m	04-29-93	GRADE	ł	NONE		ł	6 ° 6	15.06
* Samp]	le DUP was a c	duplicate sample	* Sample DUP was a duplicate sample taken from well	S-4.	·	. *			

Blaine Tech Services, Inc. 930429-A-1

Shell 999 San Pablo, Albany

page 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.

930429-A-1

page 3

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.

Shell 999 San Pablo, Albany

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.

d C. Blaine

RCB/kkl

attachments: chain of custody certified analytical report

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

930429-A-1

page 5

			••	•	:										•				·			· ·
•							• • • •) 														
					•	•							-		1 . T							
						× •••													\bigcirc			
r						<u>1</u>					·		30					1	(18)		~ · ·	· .
	SHELI RETAIL I					EERING -	WES	э т			CH/	AIN Sor	l O Ial N	: Cl	UST		YR	EC		Dala Pagé	0 0,51	
	Sile Address: 099 WIC#:	an	<u>l'áble</u>		<u>U ()</u>	hay_				Anc	ilysi:	s Re	∋qui	red	T-	<u> </u>					TRIX	
r	204 CO Shell Engineer: Danuel	<u> 29 0</u> Kurj	ŀ			No.: 570								•				l		сиот Х.н.1) нит	24 hours	
	Consultant Name & <u>13 an</u> Consultant Contact	ih.	- V	m	e.	No.: 405		et).		8240)		Combination TPH 8015 & BTEX 8020							Woter Closety/Disposol	сина (4444 [4444 [16 days 🔯 (Herma) Other	
	Comments:	Sla A	nel to	<u> F</u> (<u>ax #::</u>		Mod. Gas)	TPH (EPA 8015 Mod. Diesel)	0/602)	ilos (EPA 8	7	108 HJ			1		ęq		I	ан [KOTLI Nolly Lob ai raan ai faulbie ei 24/44 hn, TAT,)
	Sampled by:	le l	laci	7/5			TPH (EPA 8015 Mod.	(EPA 8015	BTEX (EPA 6020/602)	Volatile Organics (EPA	Test for Disposol	bination 1			Asbestos	Container Size	Preparation Used	Composite Y/N	MATERIAL DESCRIPTION		SAMPLE CONDITION/	
\sim	Sample ID	Dale	Sludge	Soft	Walet	Alt No. of conis,	Hd	HAL	1019	Volc	Test	Con			Å	U S S	Prep	Lo Lo Lo	\square		COMMENTS	
\mathcal{O}	5-1	1/29			U'	3					·		/						Stoundar	il c	2	
. Z	5.2			<u> </u>		3	<u> </u>					Ĺ,	<u></u>						Ý			
8 8 4	5-3			· ·		3			<u> </u>			4										
~	5.4	_				3	 	ļ	<u> </u>											_	l	1
B	5-6					3						·										
(6)	5-7					3																
	Dup					3							_									
<u> </u>		-77	.		\forall	2			<u>6</u> 4			1 (90	nalui					ilnig	ed Name:		Dale: 0/3/4 3	:
Ð	Rellacuisted By (signaliu Rellacuisted By (signaliu Rellacuisted By (signaliu Rellacuisted By (signaliu	(9):	Prink	ed Nome		715	IDm	1 0: KO	uju.		1	IAL	M	۰ h	<u>-</u>	41	64		ed Name: Moin Har Varia Parat	jut	Dale: 4/3/17	

ANAMETRIX INC

Énvironmental & Analytical Chemistry

Part of Inchcape Environmental



MR. GLEN BENNETT BLAINE TECH 985 TIMOTHY STREET SAN JOSE, CA 95133 Workorder # : 9304366 Date Received : 04/30/93 Project ID : 204-0079-0109 Purchase Order: MOH-B813

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

ANAMETRIX ID	CLIENT SAMPLE ID
9304366- 1	S-1
9304366- 2	S-2
9304366- 3	S-3
9304366- 4	S-4
9304366- 5	S-6
9304366- 6	S-7
9304366- 7	DUP
9304366- 8	TRIP

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

5-10-93

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

MR. GLEN BENNETT BLAINE TECH 985 TIMOTHY STREET SAN JOSE, CA 95133 Workorder # : 9304366 Date Received : 04/30/93 Project ID : 204-0079-0109 Purchase Order: MOH-B813 Department : GC Sub-Department: TPH

SAMPLE INFORMATION:

ANAMETRIX SAMPLE ID	CLIENT SAMPLE ID	MATRIX	DATE SAMPLED	METHOD
9304366- 1	S-1	WATER	04/29/93	TPHg/BTEX
9304366- 2	S-2	WATER	04/29/93	TPHg/BTEX
9304366- 3	S-3	WATER	04/29/93	TPHg/BTEX
9304366- 4	S-4	WATER	04/29/93	TPHg/BTEX
9304366- 5	S-6	WATER	04/29/93	TPHg/BTEX
9304366- 6	S-7	WATER	04/29/93	TPH9/BTEX
9304366- 7	DUP	WATER	04/29/93	TPHg/BTEX
9304366- 8	TRIP	WATER	04/29/93	TPHg/BTEX

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

MR. GLEN BENNETT BLAINE TECH 985 TIMOTHY STREET SAN JOSE, CA 95133 Workorder # : 9304366 Date Received : 04/30/93 Project ID : 204-0079-0109 Purchase Order: MOH-B813 Department : GC Sub-Department: TPH

QA/QC SUMMARY :

- No QA/QC problems encountered for these samples.

5/10/5 Department Supervisor Date

12507 Date Chem/s

GC/TPH - PAGE 2

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

Anametrix W.O.: Matrix : Date Sampled :	WATER	Project Number Date Released	: 204-0079-0109 : 05/10/93
			•

COMPOUNDS (ug/L) -01 -02 -03 -04	Sample I.D.# S-6
	-05
Benzene 0.5 15 2000 31 ND Toluene 0.5 ND 67 22 ND Ethylbenzene 0.5 82 900 ND ND Total Xylenes 0.5 65 1900 14 ND TPH as Gasoline 50 2000 40000 3000 ND % Surrogate Recovery 129% 135% 119% 119% Instrument I.D. HP4 HP4 HP4 HP4 Date Analyzed 05/05/93 05/05/93 05/05/93 05/05/93 KLMF 5 100 10 1	430 20 ND 42 7000 128% HP4 3 05/05/93 25

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.

Jichs Date Burner Supervisor

RESULTS - TPH - PAGE 3

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

Anametrix W.O.	:	9304366	Proj	ect	Number	:	204-0079-0109
Matrix Date Sampled			Date	Re]	eased	:	05/10/93

	Reporting Limit	Sample I.D.# S-7	Sample I.D.# DUP	Sample I.D.# TRIP	Sample I.D.# BY0401E2	Sample I.D.# BY0501E2
COMPOUNDS	(ug/L)	-06	-07	-08	BLANK	BLANK
Benzene Toluene Ethylbenzene Total Xylenes TPH as Gasoline % Surrogate Rec	0.5 0.5 0.5 0.5 50	ND ND ND ND ND 118%	ND ND ND ND ND ND 119%	ND ND ND ND ND 117%	ND ND ND ND ND ND 109%	ND ND ND ND ND 125%
Instrument I. Date Analyzed RLMF		HP4 05/05/93 1	HP4	HP4 05/05/93 1	HP4 05/04/93 1	HP4

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.

rate Devison 5/11

Chenge	Bulmer	>/10/53
Supervisor		- Date

RESULTS - TPH - PAGE 4

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

Sample I.D. Matrix Date Sampled Date Analyzed	: LAB CONTROL : WATER : N/A : 05/05/93	SAMPLE	Anametrix I.D. Analyst Supervisor Date Released Instrument ID	: RP : ⁽⁷³ : 05/10/93
COMPOUND	SPIKE AMT. (ug/L)	LCS (ug/L)	REC LCS	%REC LIMITS
Benzene Toluene Ethylbenzene TOTAL Xylenes	20.0 20.0 20.0 20.0	18.7 22.3 23.4 24.1	948 1128 1178 1218	52-133 57-136 56-139 56-141
P-BFB			133%	61-139
* Limits estab	lished by Aname	etrix, Inc.		

1