



BLAINE TECH SERVICES INC.

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

July 12, 1993

Clint Rogers
Chevron U.S.A. Products Company
2410 Camino Ramon
San Ramon, CA 94583-0804

2nd Quarter 1993 monitoring at 9-2582

Second Quarter 1993 Groundwater Monitoring at
Chevron Service Station number 9-2582
7240 Dublin Boulevard
Dublin, California

Monitoring performed June 25, 1993

Groundwater Sampling Report 930625-F-1

This report covers the routine quarterly monitoring of groundwater wells at this former Chevron facility. Blaine Tech Services, Inc. work at the site includes inspection, gauging, evacuation, purgewater containment, sample collection and sample handling in accordance with standard procedures that conform to Regional Water Quality Control Board requirements.

Routine field data collection includes depth to water, total well depth, thickness of any separate immiscible layer, water column volume, calculated volume of a three case volume purge, elapsed evacuation time, total volume of water removed, and standard water parameter instrument readings. Sample material is collected, contained, stored, and transported to the laboratory in conformance with EPA standards. Purgewater is, likewise, collected and transported to Chevron's Richmond Refinery for disposal.

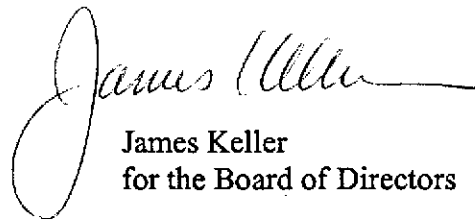
Basic field information is presented alongside analytical values excerpted from the laboratory report in the cumulative table of **WELL DATA AND ANALYTICAL RESULTS**. The full analytical report for the most recent samples is located in the **Analytical Appendix**. The table also contains new groundwater elevation calculations taken from the computer plotted gradient map which is located in the **Professional Engineering Appendix**.

At a minimum, Blaine Tech Services, Inc. field personnel are certified on completion of a forty hour Hazardous Materials and Emergency Response training course per 29 CFR 1910.120. Field personnel are also enrolled in annual eight hour refresher courses.

Blaine Tech Services, Inc. conducts sampling and documentation assignments of this type 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. concentrates on objective data collection and does not participate in the interpretation of analytical results, the definition of geological or hydrological conditions, the formulation of recommendations, or the marketing of remedial systems.

Blaine Tech Services, Inc. employs the services of outside professional firms to conduct independent reviews of our methodologies. Independent Professional Reviews by a certified engineering geologist are directed to the evaluating the efficacy of procedures and equipment employed by Blaine Tech Services, Inc. personnel in the conduct of our technical assignments. Independent Professional Reviews are intentionally limited in scope and do not extend to characterizing environmental conditions at the site or making recommendations.

Yours truly,



James Keller
for the Board of Directors

Independent Professional Review

John K. Hofer
engineering geologist 1065

JPK/kkl

attachments: Cumulative Table of Field Data and Analytical Results
Analytical Appendix
Professional Engineering Appendix

Cumulative Table of Well Data and Analytical Results

Vertical measurements are in feet.

Analytical values are in µg/l (ppb) unless otherwise annotated.

EA-1 Date	Depth	Water	Field	TPH-G	benzene	toluene	ethyl- benzene	xylenes	1,2-DCA
	To Water	Elevation	Observations						
10-17-1988	--	--	--	<50.	<0.5	<0.5	<0.5	<0.5	--
10-24-1988	10.64	322.77	(gauging)	--	--	--	--	--	--
11-02-1988	10.69	322.72	(gauging)	--	--	--	--	--	--
12-20-1988	10.51	322.90	--	<50.	<0.5	<0.5	<0.5	<0.5	--
03-28-1989	9.87	323.54	--	<250.	<0.5	<0.5	<0.5	<0.5	--
08-02-1989	10.34	323.07	--	<50.	<0.1	<0.1	<0.1	<0.1	<0.1
11-06-1989	10.65	322.76	--	<500.	<3.	<5.	<5.	<5.	<5.
01-25-1990	10.60	322.81	--	<50.	<0.5	<0.5	<0.5	<0.5	<0.5
04-23-1990	10.58	322.83	--	71.	2.	5.	3.	8.	<0.5
08-01-1990	10.88	322.53	--	300.	86.	21.	10.	33.	--
10-24-1991	11.12	322.29	--	280.	69.	13.	11.	16.	--
01-31-1991	11.16	322.25	--	460.	160.	11.	17.	17.	--
08-21-1991	10.80	322.61	--	2,400.	400.	220.	44.	120.	--
08-21-1991	--	--	EA-1D duplicate	2,300.	390.	210.	42.	120.	--
10-07-1991	10.79	322.62	not sampled	--	--	--	--	--	--
01-28-1992	10.79	322.62	--	3,600.	320.	360.	110.	310.	--
01-28-1992	--	--	EA-1D duplicate	3,000.	290.	320.	99.	270.	--
06-05-1992	10.84	322.57	--	1,700.	290.	89.	61.	130.	--
09-30-1992	11.06	322.35	--	2,100.	160.	260.	80.	350.	--
12-30-1992	10.15	323.26	Sheen, odor	3200.	240.	180.	110.	310.	--
03-29-1993	9.42	323.99	Odor	23,000.	700.	3,000.	610.	3,000.	--
06-25-1993	10.42	322.99	--	2700.	130.	590.	130.	590.	--

EA-2	DTW	Elevation	Observ.	TPH-G	benzene	toluene	ethyl-benz	xylenes	1,2-DCA
10-17-1988	--	--	--	<50.	<0.5	<0.5	<0.5	1.2	--
10-24-1988	9.70	322.89	(gauging)	--	--	--	--	--	--
11-02-1988	10.03	322.56	(gauging)	--	--	--	--	--	--
12-20-1988	9.98	322.61	--	<50.	<0.5	<0.5	<0.5	<0.5	--
03-28-1989	8.80	323.79	--	<250.	<2.	<0.5	<0.5	<0.5	<0.5
08-02-1989	9.44	323.15	--	<50.	<0.1	<0.1	<0.1	<0.1	<0.1
11-06-1989	9.53	323.06	--	<500.	<3.	<5.	<5.	<5.	<5.
01-25-1990	9.27	323.32	--	<50.	<0.5	<0.5	<0.5	<0.5	<0.5

Continues

Cumulative Table of Well Data and Analytical Results

Continued

EA-2	<u>DTW</u>	<u>Elevation</u>	<u>Observ.</u>	<u>TPH-G</u>	<u>benzene</u>	<u>toluene</u>	<u>ethyl-benz</u>	<u>xylenes</u>	<u>1,2-DCA</u>
04-23-1990	9.35	323.24	--	50.	0.6	0.8	<0.5	2.	<0.5
08-01-1990	9.71	322.88	--	<50	<0.5	<0.5	<0.5	<0.5	--
10-24-1990	10.08	322.51	--	<50.	<0.5	<0.5	<0.5	<0.5	--
01-31-1991	10.21	322.38	--	<50.	<0.5	<0.5	<0.5	<0.5	--
01-31-1991	--	--	EA-2D duplicate	<50.	<0.5	<0.5	<0.5	<0.5	--
08-21-1991	9.80	322.79	--	<50.	<0.5	<0.5	<0.5	<0.5	--
10-07-1991	9.98	322.61	not sampled	--	--	--	--	--	--
01-28-1992	9.81	322.78	--	<50.	0.8	<0.5	<0.5	<0.5	--
06-05-1992	9.86	322.73	--	<50.	<0.5	<0.5	<0.5	<0.5	--
09-30-1992	10.60	321.99	--	66.	1.	3.2	1.3	7.4	--
12-30-1992	9.11	323.48	--	<50.	<0.5	<0.5	<0.5	<0.5	--
03-29-1993	7.73	324.86	--	<50.	<0.5	<0.5	<0.5	<1.5	--
06-25-1993	9.22	323.37	--	<50.	<0.5	<0.5	<0.5	<1.5	--

EA-3	<u>DTW</u>	<u>Elevation</u>	<u>Observ.</u>	<u>TPH-G</u>	<u>benzene</u>	<u>toluene</u>	<u>ethyl-benz</u>	<u>xylenes</u>	<u>1,2-DCA</u>
10-17-1988	--	--	--	<50.	1.8	<0.5	<0.5	3.	--
10-24-1988	11.03	322.61	(gauging)	--	--	--	--	--	--
11-02-1988	11.03	322.61	(gauging)	--	--	--	--	--	--
12-20-1988	10.96	322.68	--	240.	90.	1.2	13.	3.3	--
03-28-1989	9.77	322.87	--	2,300.	380.	130.	240.	910.	--
08-02-1989	10.65	322.99	--	<50.	<0.1	<0.1	<0.1	<0.1	<0.1
11-06-1989	10.78	322.86	--	<500.	<3.	<5.	<5.	<5.	<5.
01-25-1990	10.66	322.98	--	<50.	<0.5	<0.5	<0.5	<0.5	<0.5
04-23-1990	10.68	322.96	--	<50.	0.8	<0.5	0.9	<0.5	<0.5
08-01-1990	11.03	322.61	--	<50.	<0.5	<0.5	<0.5	<0.5	--
10-24-1990	11.35	322.29	--	<50.	<0.5	<0.5	<0.5	<0.5	--
01-31-1991	11.52	322.12	--	<50.	<0.5	<0.5	<0.5	<0.5	--
08-21-1991	--	--	not sampled	--	--	--	--	--	--
10-07-1991	11.15	322.49	--	180.	40.	20.	4.7	8.4	--
10-07-1991	--	--	EA-3D duplicate	200.	43.	17.	4.1	6.7	--
01-28-1992	11.08	322.12	--	640.	69.	85.	13.	46.	--
06-05-1992	10.98	322.66	--	250.	63.	8.3	3.	9.5	--
09-30-1992	11.38	322.26	--	330.	120.	33.	6.3	22.	--
12-30-1992	10.48	323.16	--	58.	7.6	1.3	2.5	5.4	--
03-29-1993	9.30	324.34	--	120.	11.	4.5	6.2	13.	--
06-25-1993	10.46	323.18	--	<50.	<0.5	<0.5	<0.5	<1.5	--

Cumulative Table of Well Data and Analytical Results

PVC	<u>DTW</u>	<u>Elevation</u>	<u>Observ.</u>	<u>TPH-G</u>	<u>benzene</u>	<u>toluene</u>	<u>ethyl-benz</u>	<u>xylenes</u>	<u>1,2-DCA</u>
08-02-1989	11.52	--	--	100,000.	8,700.	14,000.	1,700.	17,000.	50.
08-02-1989	--	--	duplicate	110,000.	9,200.	14,000.	1,800.	13,000.	50.
11-06-1989	--	--	--	--	--	--	--	--	--

QC samples

<u>Date</u>	<u>QC Blank Type</u>	<u>TPH-G</u>	<u>benzene</u>	<u>toluene</u>	<u>ethyl-benz</u>	<u>xylenes</u>	<u>1,2-DCA</u>
03-28-1989	equipment blank	<250.	<0.5	<0.5	<0.5	<0.5	--
07-28-1989	trip blank	<50.	<0.1	<0.1	<0.1	<0.1	<0.1
11-06-1989	trip blank	<500.	<3.0	<0.5	<0.5	<0.5	<0.5
01-25-1990	trip blank	<50.	<0.5	<0.5	<0.5	<0.5	na
08-01-1990	trip blank	<50.	<0.5	<0.5	<0.5	<0.5	<0.5
10-24-1990	trip blank	<50.	<0.5	<0.5	<0.5	<0.5	--
01-31-1991	trip blank	<50.	<0.5	<0.5	<0.5	<0.5	--
08-21-1991	trip blank	<50.	<0.5	<0.5	<0.5	<0.5	--
10-07-1991	trip blank	<50.	<0.5	<0.5	<0.5	<0.5	--
01-28-1992	trip blank	<50.	<0.5	<0.5	<0.5	<0.5	--
06-05-1992	trip blank	<50.	<0.5	<0.5	<0.5	<0.5	--
09-30-1992	trip blank TB-LB	<50.	<0.5	<0.5	<0.5	<0.5	--
12-30-1992	trip blank TB-LB	<50.	<0.5	<0.5	<0.5	<0.5	--
03-29-1993	trip blank TB-LB	<50.	<0.5	<0.5	<0.5	<1.5	--
06-25-1993	trip blank	<50.	<0.5	<0.5	<0.5	<1.5	--

Note: Blaine Tech Services, Inc. began routine monitoring of the groundwater wells at this site on September 30, 1992. Earlier field data and analytical results are drawn from the tables contained in the Western Geologic Resources/RESNA report (WGR Project #1-124.08) of February 13, 1992 to Chevron U.S.A. Products Company. Wellhead elevation data contained in that source document are reproduced as follows:

<u>Well I.D.</u>	<u>Wellhead Elevation</u>
EA-1	333.41
EA-2	332.59
EA-3	333.64
PVC	not given

Analytical Appendix



Superior Precision Analytical, Inc.

1555 Burke, Unit I • San Francisco, California 94124 • (415) 647-2081 / fax (415) 821-7123

Blaine Tech Services
Attn: Jim Keller

Project 930625F1
Reported 07/02/93

TOTAL PETROLEUM HYDROCARBONS

Lab #	Sample Identification	Sampled	Analyzed Matrix
14541- 1	EA-1	06/25/93	07/01/93 Water
14541- 2	EA-2	06/25/93	07/02/93 Water
14541- 3	EA-3	06/25/93	07/02/93 Water
14541- 4	TB-LB	06/25/93	07/01/93 Water

RESULTS OF ANALYSIS

Laboratory Number: 14541- 1 14541- 2 14541- 3 14541- 4

Gasoline:	2700	ND<50	ND<50	ND<50
Benzene:	130	ND<0.5	ND<0.5	ND<0.5
Toluene:	590	ND<0.5	ND<0.5	ND<0.5
Ethyl Benzene:	130	ND<0.5	ND<0.5	ND<0.5
Xylenes:	590	ND<1.5	ND<1.5	ND<1.5
Concentration:	ug/L	ug/L	ug/L	ug/L



C E R T I F I C A T E O F A N A L Y S I S

ANALYSIS FOR TOTAL PETROLEUM HYDROCARBONS

Page 2 of 2
QA/QC INFORMATION
SET: 14541

NA = ANALYSIS NOT REQUESTED
ND = ANALYSIS NOT DETECTED ABOVE QUANTITATION LIMIT
ug/L = parts per billion (ppb)

OIL AND GREASE ANALYSIS By Standard Methods Method 5520F:
Minimum Detection Limit in Water: 5000ug/L

Modified EPA SW-846 Method 8015 for Extractable Hydrocarbons:
Minimum Quantitation Limit for Diesel in Water: 50ug/L

EPA SW-846 Method 8015/5030 Total Purgable Petroleum Hydrocarbons:
Minimum Quantitation Limit for Gasoline in Water: 50ug/L

EPA SW-846 Method 8020/BTXE
Minimum Quantitation Limit in Water: 0.5ug/L

ANALYTE -----	MS/MSD RECOVERY -----	RPD ---	CONTROL LIMIT -----
Gasoline:	89/85	5%	76-111
Benzene:	89/87	2%	78-110
Toluene:	90/87	3%	78-111
Ethyl Benzene:	91/90	1%	78-118
Xylenes:	85/84	1%	73-113

Richard Srna, Ph.D.

Cecilia G. Jorgensen (for)
Laboratory Director

Chevron U.S.A. Inc.
P.O. BOX 5004
San Ramon, CA 94583
FAX (415)842-9591

Chevron Facility Number 4-2582
Facility Address 7240 Dublin BLVD.
Consultant Project Number 930625 F1
Consultant Name BTS
Address 985 Timothy Drive San Jose
Project Contact (Name) Jim Keller
(Phone) 408 995 5532 (Fax Number)

Chevron Contact (Name) Clint Rogers
(Phone) 510 842 8658
Laboratory Name Superior
Laboratory Release Number 2612800
Samples Collected by (Name) Tom Flory
Collection Date 6-25-93
Signature [Signature]

Sample Number	Lab Sample Number	Number of Containers	Matrix S = Soil W = Water C = Charcoal	Type C = Grab C = Composite D = Discrete	Time	Sample Preservation	Iced (Yes or No)	Analyses To Be Performed										Remarks			
								BTEX + TPH GAS (8020 + 8015)	TPH Diesel (8015)	Oil and Grease (5520)	Purgeable Halocarbons (8010)	Purgeable Aromatics (8020)	Purgeable Organics (8240)	Extractable Organics (8270)	Metals Cd, Cr, Pb, Zn, Ni (ICAP or AA)						
EA-1		3	W	G	1145	HCl	yes	X													
EA-2		↓	↓	↓		↓	↓	↓													
EA-3		↓	↓	↓	1128	↓	↓	↓													
TB		2	↓	↓	LAB	↓	↓	↓													

Place Initial: MP
 Samples stored in ice.
 Appropriate containers.
 Samples preserved.
 VOA's without headspace.
 Comments: _____

Relinquished By (Signature) <u>[Signature]</u>	Organization <u>BTS</u>	Date/Time <u>6/25/93 1650</u>	Received By (Signature) <u>[Signature]</u>	Organization <u>AERIO</u>	Date/Time <u>6/25/93 1650</u>	Turn Around Time (Circle Choice) 24 Hrs. 48 Hrs. 5 Days 10 Days <u>As Contracted</u>
Relinquished By (Signature) <u>[Signature]</u>	Organization <u>Aerio</u>	Date/Time <u>6/25/93 1750</u>	Received By (Signature) _____	Organization _____	Date/Time _____	
Relinquished By (Signature) _____	Organization _____	Date/Time _____	Received For Laboratory By (Signature) <u>nichu Heath</u>	Date/Time <u>6/25/93 17:50</u>		

COC-3.DWG/03 91/HCH

Professional Engineering Appendix



GEOCONSULTANTS, INC.

*Geotechnical Consultants
Geology • Ground Water*

1450 Koll Circle, Suite 114
San Jose, California 95112
Telephone: (408) 453-2541
Fax: (408) 453-2543

August 5, 1993
Project No. G758-09

Mr. Richard Blaine
Blaine Tech Services, Inc.
985 Timothy Drive
San Jose, CA 95133

**RE: GROUND-WATER ELEVATION CONTOUR MAP
FORMER CHEVRON SERVICE STATION NO. 9-2582
7240 DUBLIN BOULEVARD, DUBLIN, CALIFORNIA**

Dear Mr. Blaine:

In accordance with your request, please find attached the June 25, 1993, ground-water elevation contour map for the subject site. The depth to the water table was measured in three wells by your staff. An elevation datum of mean sea-level was utilized. The ground-water elevation contours were extrapolated from the three wells, and are to be considered only approximate in nature. The general direction of the ground-water gradient is indicated on the contour map.

If you have any questions regarding the map, please call.

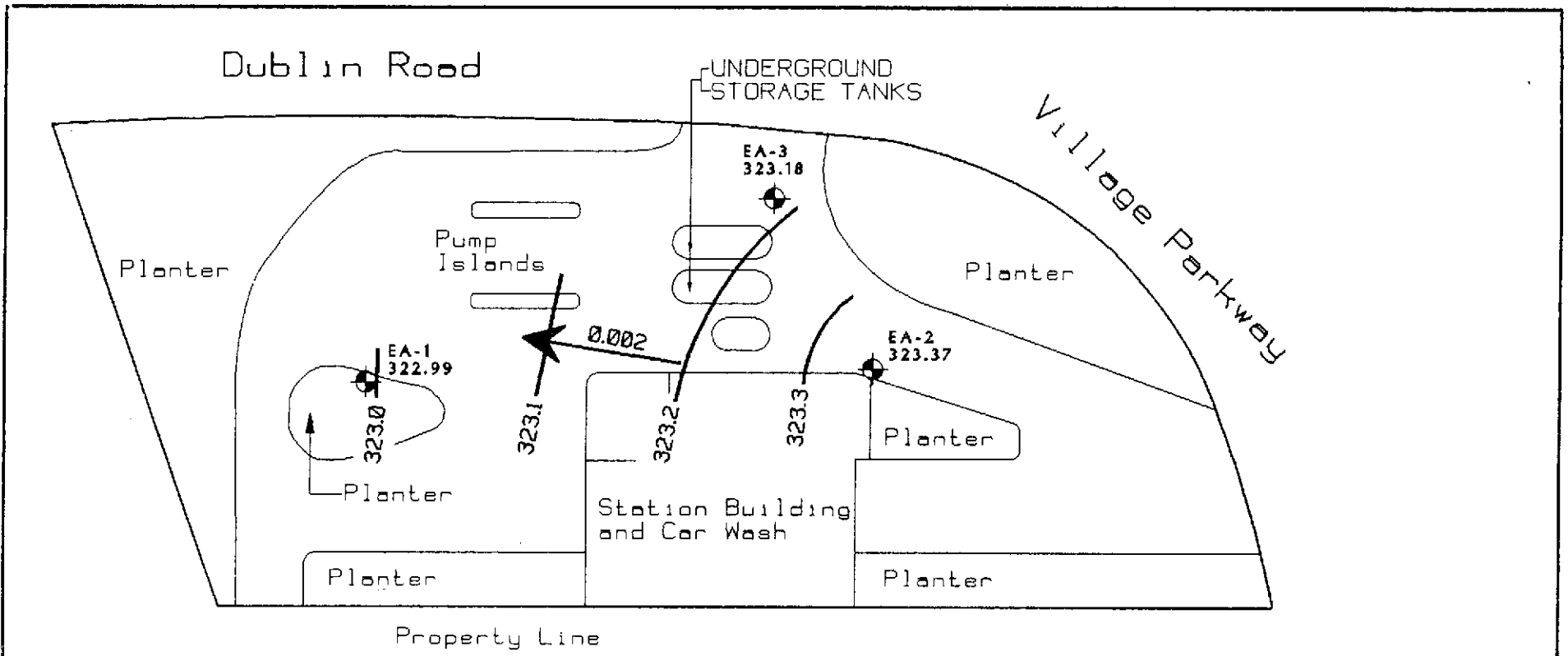
Very truly yours,

GEOCONSULTANTS, INC.


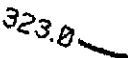
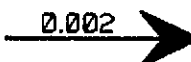
David J. Welch
Project Geologist

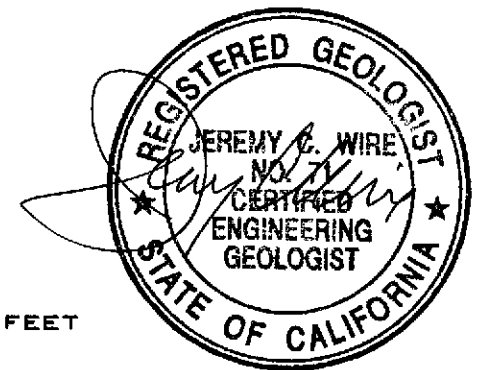
Jeremy C. Wire
Engineering Geologist, EG-71

JCW:dw
(CH92582.692)



LEGEND

- EA-1  GROUND-WATER MONITORING WELL
- 322.99 GROUND-WATER ELEVATION, FEET ABOVE MEAN SEA LEVEL (MSL)
-  323.0 GROUND-WATER ELEVATION CONTOUR, FEET ABOVE MSL, APPROXIMATELY LOCATED
-  0.002 APPROXIMATE GROUND-WATER FLOW DIRECTION GRADIENT INDICATED IN FEET/FEET



NOTES:

TITLE : GROUND-WATER ELEVATION CONTOUR MAP - JUNE 25, 1993

LOCATION : FORMER CHEVRON SERVICE STATION #9-25B2 7240 DUBLIN BOULEVARD, DUBLIN, CALIFORNIA

SOURCE : RESNA



GEOCONSULTANTS, INC

Project No. Q758-09

DRWG NO: W062593 REV: