EXCELTECH

FEBRUARY 1991 QUARTERLY GROUNDWATER MONITORING REPORT

FOR

FORMER SHELL STATION
7194 AMADOR VALLEY BOULEVARD
DUBLIN, CALIFORNIA

Project No. 1826G
April 1991

Northern California Regional Office 41674 Christy Street, Fremont, CA 94538-3114 (415) 659-0404 Fax: (415) 651-4677 Lic. # 596545

EXCELTECH

April 3, 1991

Shell Oil Company
1390 Willow Pass Road
Suite 900
Concord, CA 94520

Attention: Mr. Jack Brastad

Subject: February 1991 Quarterly Monitoring Report
Former Shell Station
7194 Amador Valley Boulevard, Dublin, California
Project No. 1826G

Dear Mr. Brastad:

This quarterly monitoring report summarizes the groundwater sampling and analyses performed on February 11, 1991 for the subject site in the City of Dublin, Alameda County, California (Figure 1). Included are all current and past analytical data acquired during this ongoing investigation.

Groundwater Sampling

Exceltech collected groundwater samples from 11 monitoring wells on and adjacent to the site (Figure 2) in accordance with Exceltech's groundwater sampling protocol.[1] Because monitoring well RW-1 is within 5 feet of MW-1, RW-1 was not sampled this quarter. Monitoring well MW-10, located on the adjacent Dutch Pride Dairy property was destroyed on June 13, 1990 by Aqua Terra Technologies (ATT). The Monitoring well was destroyed during the removal of an underground fuel tank. ATT installed a new monitoring well (MW-13), in accordance with specifications provided by Exceltech, on December 5, 1990 within approximately 3 feet of the location of MW-10. Monitoring well MW-13 was not sampled this quarter, however, it will be sampled during the next quarter. The groundwater purged from the wells and equipment rinse water was placed in drums approved by the Department of Transportation. The drums were left on-site pending removal by a licensed hauler to the Shell refinery for recycling.

Laboratory Analyses

The groundwater samples were transported to NET Pacific, Inc. (NET) located in Santa Rosa, California for analysis. NET, which is a state-certified laboratory, analyzed the samples for the presence of total petroleum hydrocarbons as gasoline (TPHG) and benzene, toluene, ethyl benzene, and total xylenes (BTEX) using methods GC FID/5030 and 602, respectively.

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[1] For Exceltech's groundwater sampling protocol refer to Appendix A in "November Quarterly Groundwater Sampling and Analysis for Former Shell Station, 7194 Amador Valley Boulevard, Dublin, California, December 20, 1991"

Summary of Laboratory Results

The results of the groundwater sampling and analyses are summarized in Table 1. The analytical report from NET and chain-of-custody document are attached in Appendix A. Hydrocarbon constituents were detected in five of the 11 monitoring wells (MW-1, MW-2, MW-3, MW-4, and MW-6).

Discussion

A groundwater elevation contour map (Figure 2) has been generated from measurements obtained during the February sampling. The groundwater gradient was calculated at 0.003 feet per foot in a southeasterly direction. A benzene concentration contour map is presented as Figure 3. Figures 4 through 9 are graphs representing groundwater analyses data for selected monitoring wells. The graphs display data beginning from the first quarter sampling up to the current quarter. Monitoring wells MW-4 through MW-9 were selected because the data was significant enough to display graphically (a particular monitoring well was not chosen if the majority of the analytical results were just above or below the laboratory detection limits). In general, hydrocarbon levels in groundwater samples remained relatively consistent when compared to last quarter's analytical results.

Reporting Requirements

A copy of this report will be forwarded to the following agencies:

Zone 7-Alameda County Flood Control and
Water Conservation District
5997 Parkside Drive
Pleasanton, California 94566
Attention: Mr. Craig Mayfield
Water Resources Engineer

California Regional Water Quality Control
Control Board
San Francisco Bay Region
1800 Harrison Street, Suite 700
Oakland, California 94612-3429
Attention: Mr. Donald Dalke

Alameda County Health Care Services
Department of Environmental Health
Hazardous Materials Division
80 Swan Way, Suite 200
Oakland, California 94621
Attention: Mr. Gil Wistar
Hazardous Materials Specialist

Disclaimer

This report has been prepared solely for the use of Shell and any reliance on this report by third parties shall be as such party's sole risk.

Limitations

The discussion and recommendations presented in this report are based on the following:

1. Observations by field personnel.
2. Results of laboratory analyses performed by a state-certified laboratory.
3. Our understanding of the regulations of the State of California, Alameda County, and the City of Dublin.

It is possible that variations in the soil or groundwater conditions could exist beyond the points explored in this investigation. Also, changes in the groundwater conditions could occur at some time in the future because of variations in rainfall, temperature, regional water usage, or other factors.

The service performed by Exceltech has been conducted in a manner consistent with the level of care and skill ordinarily exercised by members of our profession currently practicing under similar conditions in the Dublin area. Please note that contamination of soil and groundwater must be reported to the appropriate agencies in a timely manner. No other warranty, expressed or implied, is made.

Exceltech includes in this report chemical analytical data from a state-certified laboratory. The analytical tests are performed according to procedures suggested by the U.S. EPA and State of California. Exceltech is not responsible for laboratory errors in procedure or result reporting.

Sincerely,
Exceltech, Inc.

Cynthia R. Virostko
Project Geologist

Lawrence D. Pavlak, C.E.G. 1187
Corporate C.E.G.

MD/LDP/sw
Enclosures

Exceltech, Inc.
Project No. 1826G
April 4,1991

Shell Oil Company
7194 Amador Valley Boulevard
Dublin, California

TABLE 1

GROUNDWATER ANALYSES DATA

Well	Date	TPHG (ppm)	Benzene (ppm)	Toluene (ppm)	Ethyl Benzene (ppm)	Xylenes (ppm)	Depth To Water (ft.)	Well Elevation (ft.)
MW-1	05/09/88	0.44	0.12	0.05	N R	0.12	8.72	334.83
	08/26/88	200	4.4	0.26	0.30	0.45	9.15	
	10/05/88	17	6.7	0.36	0.21	0.73	8.54	
	11/22/88	8	3.9	0.83	0.25	0.34	9.31	
	12/09/88	11	0.79	0.036	0.0073	0.068	9.33	
	01/13/89	8.8	3.8	0.11	0.33	0.09	N A	
	02/10/89	18	4.7	0.4	0.66	0.19	8.51	
	03/02/89	14	6.1	0.77	0.32	0.44	8.71	
	04/04/89	11	4.8	0.77	0.27	0.78	7.93	
	05/01/89	11	2.8	0.88	0.41	0.78	8.43	
	06/01/89	N D	N D	N D	N D	N D	8.56	
	06/29/89	4.7	0.31	0.16	0.075	0.26	8.60	
	08/09/89	12	1.3	0.62	0.83	0.68	8.43	
	09/11/89	N D	N D	N D	N D	0.0022	8.65	
	10/10/89	8.7	1.1	0.31	0.18	0.59	8.52	
	10/25/89	7.5	0.66	0.25	0.46	0.48	8.56	
	12/20/89	6.2	0.27	0.11	0.26	0.22	8.80	
	01/17/90	7.4	0.20	0.17	0.16	0.26	8.47	
	02/23/90	1.5	0.130	0.013	0.030	0.024	8.25	
	06/04/90	0.83	0.088	0.010	0.0026	0.028	8.62	
	11/20/90	NA	NA	NA	NA	NA	9.50	
	02/12/91	1.5	0.180	0.039	0.0820	0.110	9.51	

TABLE 1

GROUNDWATER ANALYSES DATA

Well	Date	TPHG (ppm)	Benzene (ppm)	Toluene (ppm)	Ethyl Benzene (ppm)	Xylenes (ppm)	Depth To Water (ft.)	Well Elevation (ft.)
MW-2	05/09/88	N D	N D	N D	N R	N D	10.85	336.96
	08/26/88	1.7	0.23	0.016	0.087	0.12	11.29	
	10/05/88	0.2	0.02	0.0023	0.0083	0.012	10.83	
	11/22/88	0.8	0.093	0.0016	0.0043	0.06	11.42	
	12/09/88	0.27	0.045	0.0036	0.0072	0.014	11.45	
	01/13/89	0.18	0.026	0.0023	0.017	0.007	N A	
	02/10/89	0.32	0.043	0.0017	0.034	0.015	10.74	
	03/02/89	0.23	0.024	0.0009	0.0092	0.018	10.91	
	04/04/89	0.23	0.053	0.0023	0.0071	0.02	10.06	
	05/01/89	N D	0.0027	N D	N D	N D	10.58	
	05/31/89	0.12	0.014	N D	0.0039	0.0076	10.73	
	06/28/89	N D	0.0041	N D	N D	N D	10.90	
	08/08/89	0.088	0.0039	N D	N D	N D	10.78	
	09/08/89	N D	0.0032	N D	N D	N D	10.97	
	10/09/89	0.11	0.0067	N D	N D	N D	10.88	
	10/24/89	N D	0.0025	N D	N D	0.0019	11.00	
	12/21/89	<0.05	0.0071	<0.0005	0.005	0.0098	11.06	
	01/17/90	<0.05	0.0044	<0.0005	0.0016	0.0014	10.78	
	02/23/90	0.07	0.0063	<0.0005	0.0027	0.0025	10.35	
	06/04/90	0.06	0.0024	<0.0005	0.0008	<0.0005	10.72	
	11/20/90	0.06	0.0056	<0.0005	<0.0005	<0.0005	11.35	
	02/12/91	0.13	0.014	<0.0005	0.0009	0.0005	11.64	

TABLE 1

GROUNDWATER ANALYSES DATA

Well	Date	TPHG (ppm)	Benzene (ppm)	Toluene (ppm)	Ethyl Benzene (ppm)	Xylenes (ppm)	Depth To Water (ft.)	Well Elevation (ft.)
MW-3	05/09/88	0.076	0.01	0.0044	N R	0.015	10.59	336.96
	08/26/88	5.2	0.17	0.006	0.032	0.054	11.10	
	10/05/88	0.26	0.1	0.0027	0.0058	0.007	10.43	
	11/22/88	0.18	0.075	0.0014	0.0081	0.004	11.16	
	12/09/88	0.16	0.005	0.0059	N D	N D	11.24	
	01/13/89	0.16	0.036	0.0012	0.003	0.002	N A	
	02/10/89	0.3	0.083	N D	0.0086	0.008	10.43	
	03/02/89	0.57	0.16	0.001	0.017	0.009	10.59	
	04/04/89	0.15	0.064	0.0008	0.0027	0.006	9.45	
	05/01/89	0.13	0.048	0.0012	0.0034	0.002	10.20	
	06/01/89	N D	N D	N D	N D	N D	10.40	
	06/28/89	0.09	0.068	0.0007	N D	0.0051	10.60	
	08/09/89	0.15	0.023	0.0053	0.0026	N D	10.64	
	09/11/89	N D	N D	N D	N D	N D	10.83	
	10/10/89	0.08	0.0064	0.00072	N D	N D	10.95	
	10/26/89	0.15	0.011	N D	0.0016	N D	10.86	
	12/21/89	<0.05	0.0068	<0.0005	<0.0005	<0.0005	11.09	
	01/17/90	<0.05	0.004	<0.0005	0.0068	<0.0005	10.90	
	02/23/90	0.05	0.010	<0.0005	0.0012	0.0009	10.52	
	06/04/90	0.08	0.010	<0.0005	0.0014	<0.0005	10.52	
	11/20/90	0.10	0.026	0.0007	0.0012	0.0019	12.65	
	02/12/91	0.13	0.027	<0.0005	<0.0005	<0.0005	11.16	

TABLE 1

GROUNDWATER ANALYSES DATA

Well	Date	TPHG (ppm)	Benzene (ppm)	Toluene (ppm)	Ethyl Benzene (ppm)	Xylenes (ppm)	Depth To Water (ft.)	Well Elevation (ft.)
MW-4	05/09/88	0.29	0.076	0.033	N R	0.15	10.88	337.14
	08/26/88	0.21	0.64	0.041	0.11	0.16	11.34	
	10/05/88	0.45	0.11	0.0063	0.016	0.02	10.87	
	11/22/88	0.5	0.11	0.004	0.02	0.027	11.41	
	12/09/88	0.26	0.92	0.0075	0.0059	0.011	11.46	
	01/13/89	0.99	0.2	0.0065	0.046	0.014	N A	
	02/10/89	0.29	0.09	0.0036	0.0088	0.009	10.78	
	03/02/89	0.63	0.21	0.0062	0.034	0.007	10.92	
	04/04/89	0.64	0.34	0.013	0.025	0.04	10.04	
	05/01/89	0.1	0.065	0.002	0.003	0.004	10.52	
	05/31/89	0.06	N D	N D	N D	N D	10.62	
	06/28/89	0.11	0.062	0.0013	N D	0.0048	11.00	
	08/09/89	0.16	0.11	0.002	0.0064	N D	10.92	
	09/08/89	0.094	0.045	0.0005	0.0038	N D	11.05	
	10/10/89	0.09	0.03	0.001	0.0019	N D	10.97	
	10/26/89	N D	0.0034	N D	N D	N D	11.35	
	12/21/89	<0.05	0.035	0.0011	0.0036	0.0016	11.07	
	01/17/90	<0.05	0.004	<0.0005	0.0068	<0.0005	11.08	
	02/23/90	<0.05	0.008	<0.0005	0.0011	0.0007	10.90	
	06/04/90	0.16	0.085	0.0011	0.0019	<0.0005	10.74	
	11/20/90	0.14	0.052	0.001	0.0008	0.0009	11.45	
	02/12/91	0.13	0.048	<0.0005	0.0015	<0.0005	11.50	

TABLE 1

GROUNDWATER ANALYSES DATA

Well	Date	TPHG (ppm)	Benzene (ppm)	Toluene (ppm)	Ethyl Benzene (ppm)	Xylenes (ppm)	Depth To Water (ft.)	Well Elevation (ft.)
MW-5	08/26/88	0.21	0.006	0.044	0.009	0.019	9.10	334.96
	10/05/88	7.5	2.7	N D	0.11	0.59	9.95	
	11/22/88	0.15	0.021	0.026	0.003	0.002	8.93	
	12/09/88	0.24	0.037	0.0022	0.0067	0.0077	10.48	
	01/13/89	0.08	0.0016	N D	0.0077	0.002	N A	
	02/10/89	0.06	N D	N D	N D	N D	10.35	
	03/02/89	N D	N D	N D	N D	N D	8.50	
	04/05/89	N D	N D	N D	N D	N D	7.72	
	05/01/89	N D	0.0013	N D	N D	N D	8.21	
	06/01/89	N D	N D	N D	N D	N D	8.40	
	06/29/89	N D	N D	N D	N D	N D	8.65	
	08/09/89	0.089	0.0085	0.0018	0.0015	0.0022	8.76	
	09/11/89	1.1	0.0078	0.0014	N D	0.0063	8.80	
	10/10/89	N D	N D	N D	N D	N D	11.92	
	10/25/89	N D	0.0014	N D	N D	0.0016	9.03	
	12/20/89	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	11.26	
	01/18/90	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	9.95	
	02/23/90	<0.05	<0.0005	<0.0005	0.0006	<0.0005	8.30	
	06/04/90	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	8.57	
	11/20/90	<0.05	<0.0005	<0.0005	<0.0005	0.001	9.45	
	02/11/91	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	9.27	

TABLE 1

GROUNDWATER ANALYSES DATA

Well	Date	TPHG (ppm)	Benzene (ppm)	Toluene (ppm)	Ethyl Benzene (ppm)	Xylenes (ppm)	Depth To Water (ft.)	Well Elevation (ft.)
MW-6	08/26/88	15	0.39	0.39	0.67	1.7	9.69	335.42
	10/05/88	2.7	0.13	0.038	0.96	0.22	9.27	
	11/22/88	N A	N A	N A	N A	N A	9.77	
	12/09/88	0.54	0.062	0.003	0.026	0.005	9.85	
	01/13/89	0.98	0.16	0.022	0.12	0.029	N A	
	02/10/89	1.9	0.29	0.024	0.093	0.048	9.10	
	03/02/89	1.4	0.16	0.02	0.13	0.033	9.29	
	04/04/89	1.2	0.22	0.027	0.074	0.069	8.48	
	05/01/89	0.79	0.12	0.011	0.025	0.017	8.90	
	06/01/89	1.2	0.049	0.049	0.069	0.03	9.16	
	06/29/89	0.94	0.13	0.015	0.069	0.035	9.30	
	08/09/89	1.4	0.28	0.039	0.17	0.064	9.30	
	09/11/89	N D	N D	N D	N D	N D	9.31	
	10/10/89	1.0	0.085	0.011	0.012	0.016	9.32	
	10/24/89	1.5	0.067	0.02	0.05	0.039	9.30	
	12/20/89	<0.05	0.0049	0.0051	<0.0005	<0.0005	9.58	
	01/18/90	<0.05	0.067	0.012	0.048	0.018	9.46	
	02/23/90	0.0010	0.150	0.016	0.047	0.030	8.94	
	06/04/90	0.19	<0.0005	<0.0005	<0.0005	0.0006	9.22	
	11/20/90	0.73	0.120	0.012	0.039	0.0210	9.65	
	02/12/91	0.55	0.065	0.010	0.033	0.0160	9.85	

TABLE 1

GROUNDWATER ANALYSES DATA

Well	Date	TPHG (ppm)	Benzene (ppm)	Toluene (ppm)	Ethyl Benzene (ppm)	Xylenes (ppm)	Depth To Water (ft.)	Well Elevation (ft.)
MW-7	08/26/88	N D	0.0008	N D	N D	N D	7.94	333.23
	10/05/88	N D	N D	N D	N D	N D	7.54	
	11/22/88	0.7	0.041	0.009	0.001	0.02	N A	
	12/09/88	N D	N D	N D	N D	0.0006	7.53	
	01/13/89	N D	N D	N D	N D	N D	N A	
	02/10/89	N D	N D	N D	N D	N D	6.62	
	03/02/89	N D	N D	N D	N D	N D	7.03	
	04/05/89	N D	N D	N D	N D	N D	6.80	
	05/01/89	N D	N D	N D	N D	N D	6.53	
	05/31/89	N D	N D	N D	N D	N D	6.93	
	06/28/89	N D	N D	N D	N D	N D	6.85	
	08/09/89	N D	N D	N D	N D	N D	6.67	
	09/07/89	N D	N D	N D	N D	N D	6.90	
	10/10/89	N D	N D	N D	N D	N D	6.90	
	10/24/89	N D	N D	N D	N D	N D	7.29	
	12/20/89	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	7.47	
	01/18/90	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	7.49	
	02/23/90	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	6.92	
	06/04/90	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	6.95	
	11/20/90	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	8.10	
	02/11/91	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	8.04	

TABLE 1

GROUNDWATER ANALYSES DATA

Well	Date	TPHG (ppm)	Benzene (ppm)	Toluene (ppm)	Ethyl Benzene (ppm)	Xylenes (ppm)	Depth To Water (ft.)	Well Elevation (ft.)
MW-8	03/01/89	N D	N D	N D	N D	N D	8.28	335.80
	04/04/89	N D	N D	N D	N D	N D	7.31	
	05/01/89	N D	N D	N D	N D	N D	8.97	
	05/31/89	N D	N D	N D	N D	N D	9.17	
	06/28/89	N D	N D	N D	N D	N D	9.40	
	08/08/89	N D	N D	N D	N D	N D	9.42	
	09/07/89	N D	N D	N D	N D	N D	8.50	
	10/10/89	N D	N D	N D	N D	N D	9.46	
	10/26/89	N D	N D	N D	N D	N D	9.56	
	12/21/89	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	9.57	
	01/18/90	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	9.29	
	02/26/90	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	8.50	
	06/04/90	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	9.04	
	11/20/90	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	10.70	
	2/11/91	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	9.40	
MW-9	03/01/89	N D	N D	N D	N D	N D	8.48	334.57
	04/04/89	N D	N D	N D	N D	N D	7.69	
	05/01/89	N D	N D	N D	N D	N D	8.20	
	05/31/89	N D	N D	N D	N D	N D	8.72	
	06/28/89	N D	N D	N D	N D	N D	9.00	
	08/08/89	N D	N D	N D	N D	N D	8.53	
	09/07/89	N D	N D	N D	N D	N D	8.99	

TABLE 1

GROUNDWATER ANALYSES DATA

Well	Date	TPHG (ppm)	Benzene (ppm)	Toluene (ppm)	Ethyl Benzene (ppm)	Xylenes (ppm)	Depth To Water (ft.)	Well Elevation (ft.)
MW-9	10/09/89	N D	N D	N D	N D	N D	8.89	
(Con't)	10/23/89	N D	N D	N D	N D	N D	9.02	
	12/21/89	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	9.48	
	01/18/90	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	8.73	
	02/26/90	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	9.06	
	06/04/90	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	8.64	
	11/20/90	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	9.95	
	02/11/91	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	9.85	
MW-10	03/02/89	1	0.14	0.036	N D	0.077	8.95	335.37
	04/04/89	3.3	0.76	0.24	0.046	0.63	7.89	
	05/01/89	0.68	0.099	0.024	0.0081	0.032	9.07	
	06/01/89	1.4	0.12	0.039	N D	0.045	8.86	
	06/29/89	1.3	0.051	0.0014	0.0061	0.091	9.05	
	08/09/89	0.86	0.31	0.026	0.045	0.082	9.70	
	09/07/89	0.39	0.055	0.0029	0.0040	0.018	8.14	
	10/10/89	0.46	0.085	0.0076	0.010	0.045	9.21	
	10/26/89	0.27	0.02	0.0014	0.0035	0.0093	9.60	
	12/20/89	<0.05	0.0057	<0.0005	<0.0005	<0.0005	9.42	
	01/18/90	N A	NA	NA	NA	NA	NA	
	06/04/90	N A	N A	N A	N A	N A	N A	
	11/20/1990 (a)	NA	NA	NA	NA	NA	NA	

TABLE 1

GROUNDWATER ANALYSES DATA

Well	Date	TPHG (ppm)	Benzene (ppm)	Toluene (ppm)	Ethyl Benzene (ppm)	Xylenes (ppm)	Depth To Water (ft.)	Well Elevation (ft.)
MW-11	03/02/89	N D	N D	N D	N D	N D	8.30	334.20
	04/04/89	N D	N D	N D	N D	N D	7.52	
	05/01/89	N D	N D	N D	N D	N D	7.97	
	11/20/90	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	
	05/31/89	N D	N D	N D	N D	N D	8.13	
	06/28/89	N D	N D	N D	N D	N D	8.30	
	08/08/89	N D	N D	N D	N D	N D	8.22	
	09/07/89	N D	N D	N D	N D	N D	8.32	
	10/09/89	N D	N D	N D	N D	N D	8.28	
	10/24/89	N D	N D	N D	N D	N D	8.38	
	12/20/89	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	8.48	
	01/18/90	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	8.20	
	02/26/90	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	7.86	
	06/04/90	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	8.13	
	11/20/90	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	8.83	
	02/11/91	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	8.95	
MW-12	03/02/89	N D	N D	N D	N D	N D	6.94	332.53
	04/04/89	N D	N D	N D	N D	N D	6.33	
	05/01/89	N D	N D	N D	N D	N D	6.62	
	06/01/89	N D	N D	N D	N D	N D	6.82	
	06/29/89	N D	N D	N D	N D	N D	7.00	

TABLE 1

GROUNDWATER ANALYSES DATA

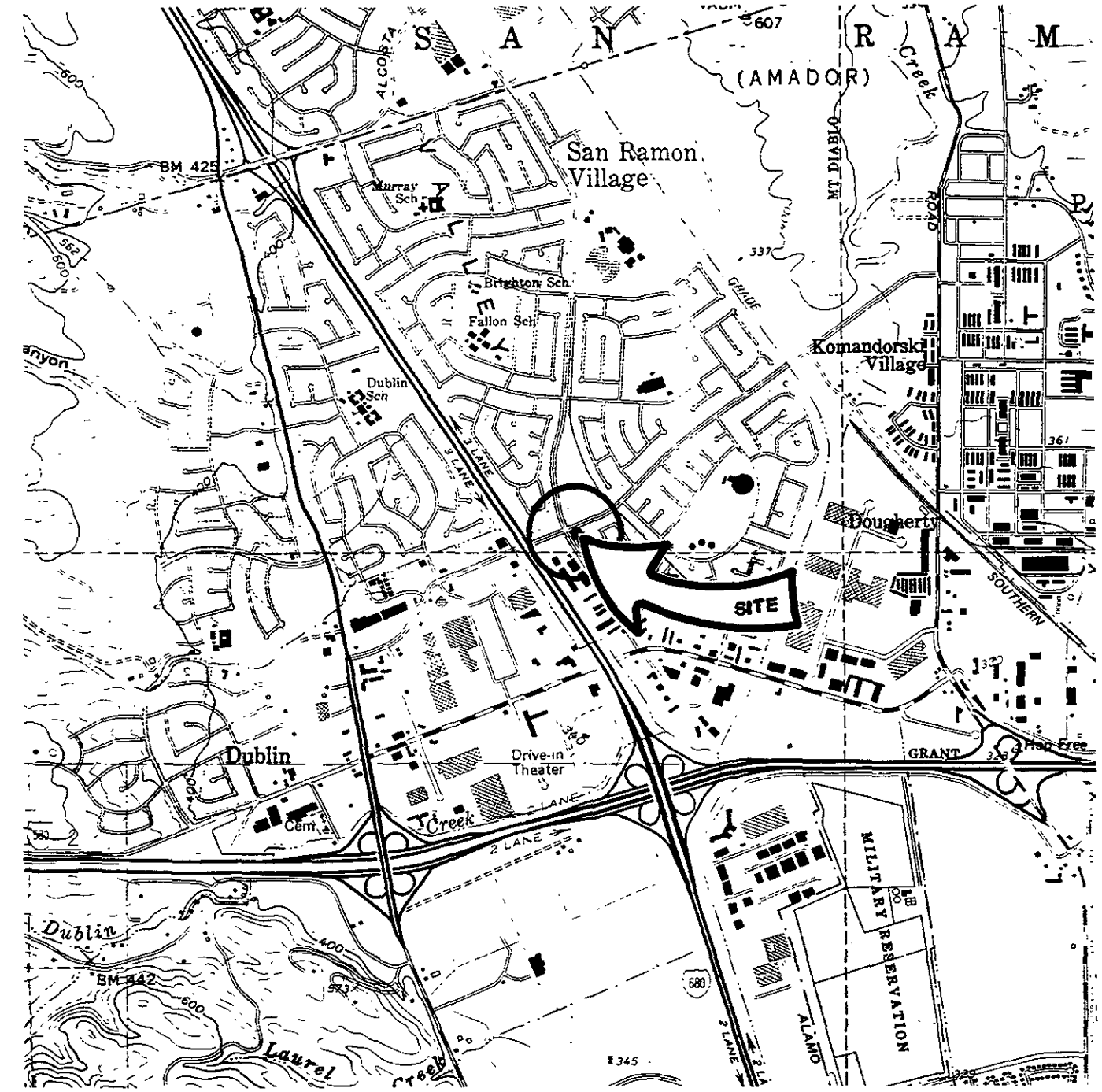
Well	Date	TPHG (ppm)	Benzene (ppm)	Toluene (ppm)	Ethyl Benzene (ppm)	Xylenes (ppm)	Depth To Water (ft.)	Well Elevation (ft.)
MW-12 (Con't)	08/09/89	N D	N D	N D	N D	N D	6.76	
	09/07/89	N D	N D	N D	N D	N D	6.81	
	10/09/89	N D	N D	N D	N D	N D	7.11	
	10/24/89	N D	N D	N D	N D	N D	7.60	
	12/20/89	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	8.25	
	01/18/90	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	8.23	
	02/26/90	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	7.54	
	06/04/90	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	7.96	
	11/20/90	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	8.80	
	02/12/91	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	7.85	
RW-1	12/09/89	6.8	0.74	0.005	0.011	0.037	10.73	336.19
	01/13/89	10	3.2	0.027	0.06	N D	N A	
	02/10/89	6	2.8	N D	N D	N D	10.91	
	03/02/89	3.9	2.4	N D	N D	N D	10.15	
	04/05/89	1.7	1	N D	0.009	N D	9.34	
	05/01/89	0.9	0.39	0.005	0.01	N D	9.85	
	06/01/89	1.1	0.0014	0.0033	N D	0.013	9.96	
	06/30/89	1.4	N D	N D	N D	N D	9.90	
	08/09/89	7.5	1.7	0.21	0.28	0.30	9.80	
	09/11/89	0.097	0.0017	0.0021	0.0023	0.014	10.02	
	10/10/89	1.4	0.048	0.0045	N D	0.003	9.88	

TABLE 1

GROUNDWATER ANALYSES DATA

Well	Date	TPHG (ppm)	Benzene (ppm)	Toluene (ppm)	Ethyl Benzene (ppm)	Xylenes (ppm)	Depth To Water (ft.)	Well Elevation (ft.)
RW-1	10/25/89	0.82	0.051	0.0012	0.025	0.003	9.80	
(Con't)	12/21/89	0.49	0.016	0.001	0.0085	0.019	10.25	
	01/17/90	N D	0.027	0.0017	0.014	0.0016	9.80	
	02/23/90	0.42	0.042	0.0018	0.013	0.0027	9.60	
	06/04/90	0.18	0.023	0.0007	0.0053	0.0012	9.97	
	11/20/90	1.9	0.17	0.052	0.029	0.038	10.50	
	02/11/91	NA	NA	NA	NA	NA	10.87	

(a) Groundwater monitoring well MW-10 destroyed on June 13, 1990
ppm Parts per million (mg/kg)
TPHG Total petroleum hydrocarbons as gasoline
N A Data not available
N R Analysis not requested
N D Not detected at or above laboratory listed detection limit
<0.05 Not detected at or above the indicated detection limit
Note: For unlisted detection limits, refer to laboratory reports



SOURCE: USGS 7.5' MAP, DUBLIN QUADRANGLE

LEGEND

SITE LOCATION

0 1

SCALE IN MILES

N

EXCELTECH

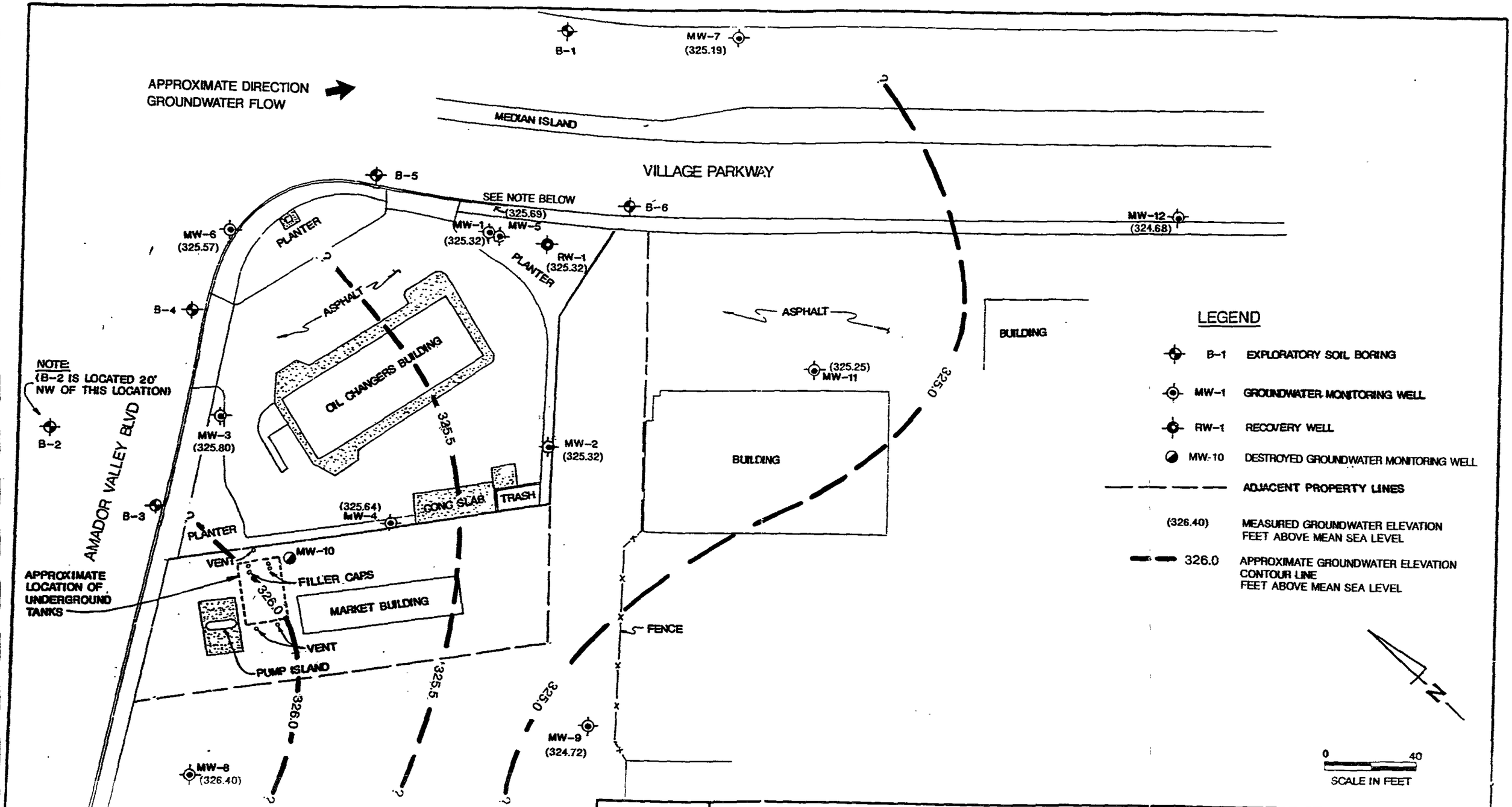
SITE LOCATION MAP

FORMER SHELL STATION

7194 AMADOR VALLEY BLVD

DUBLIN, CALIFORNIA

REVIEWED BY	APPROVED BY
CRD	
JOB # 1826G	DRAWN BY J.C.
DATE 4/3/91	DRAWING # FIG. 1



NOTE: MW-5 SCREENED AT DIFFERENT INTERVAL, GROUNDWATER LEVEL NOT USED IN CALCULATING CONTOURS

EXCELTECH

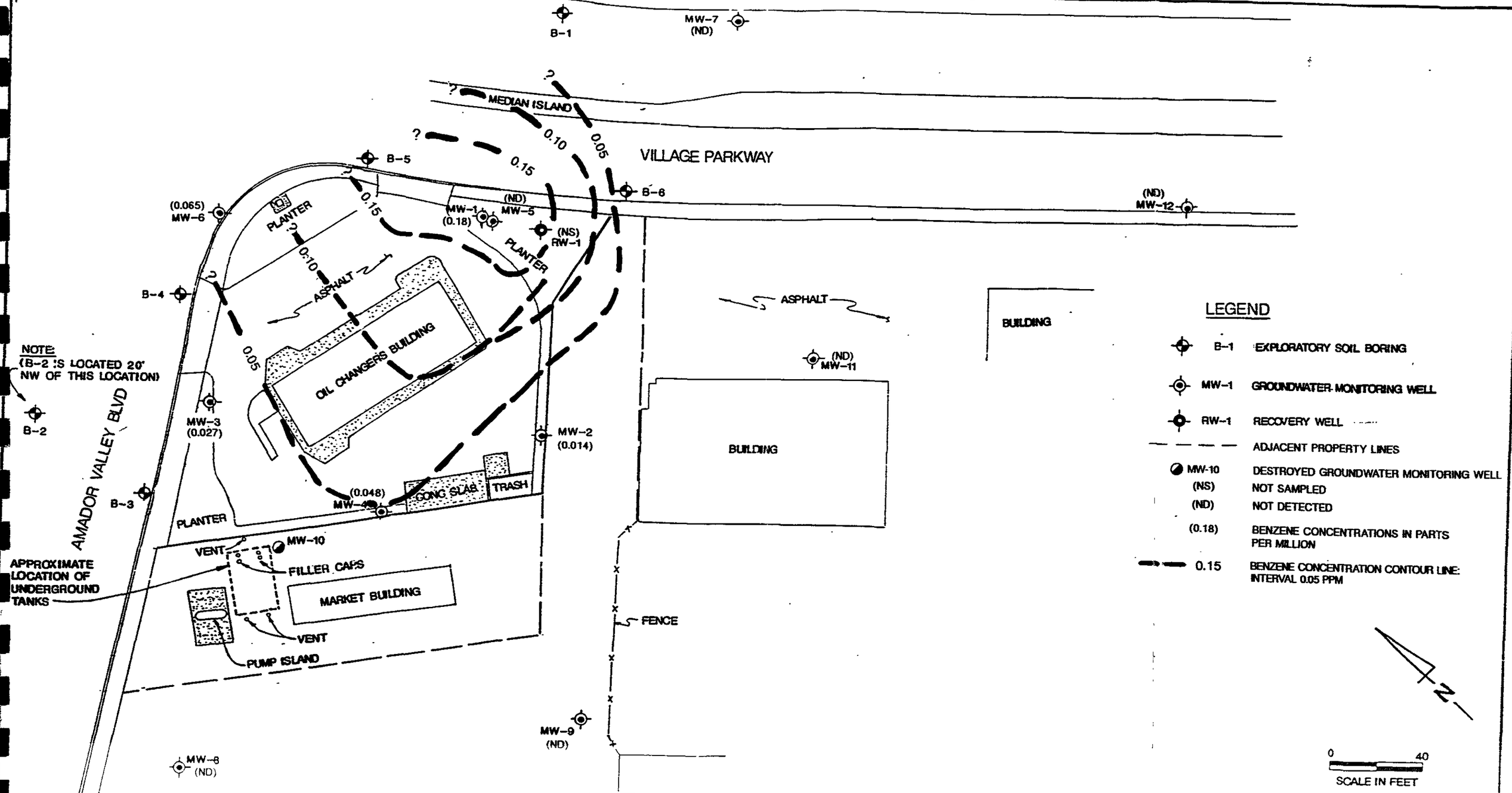
GROUNDWATER ELEVATION CONTOUR MAP (2/11/91)

FORMER SHELL STATION

7194 AMADOR VALLEY BLVD

DUBLIN, CALIFORNIA

REVIEWED BY:	APPROVED BY:
CRT	RP
JOB #: 1826G	DRAWN BY: J.D.S.
DATE: 4/3/91	DRAWING #: FIG. 2



EXCELTECH

BENZENE CONCENTRATION CONTOUR MAP (2/11/91)

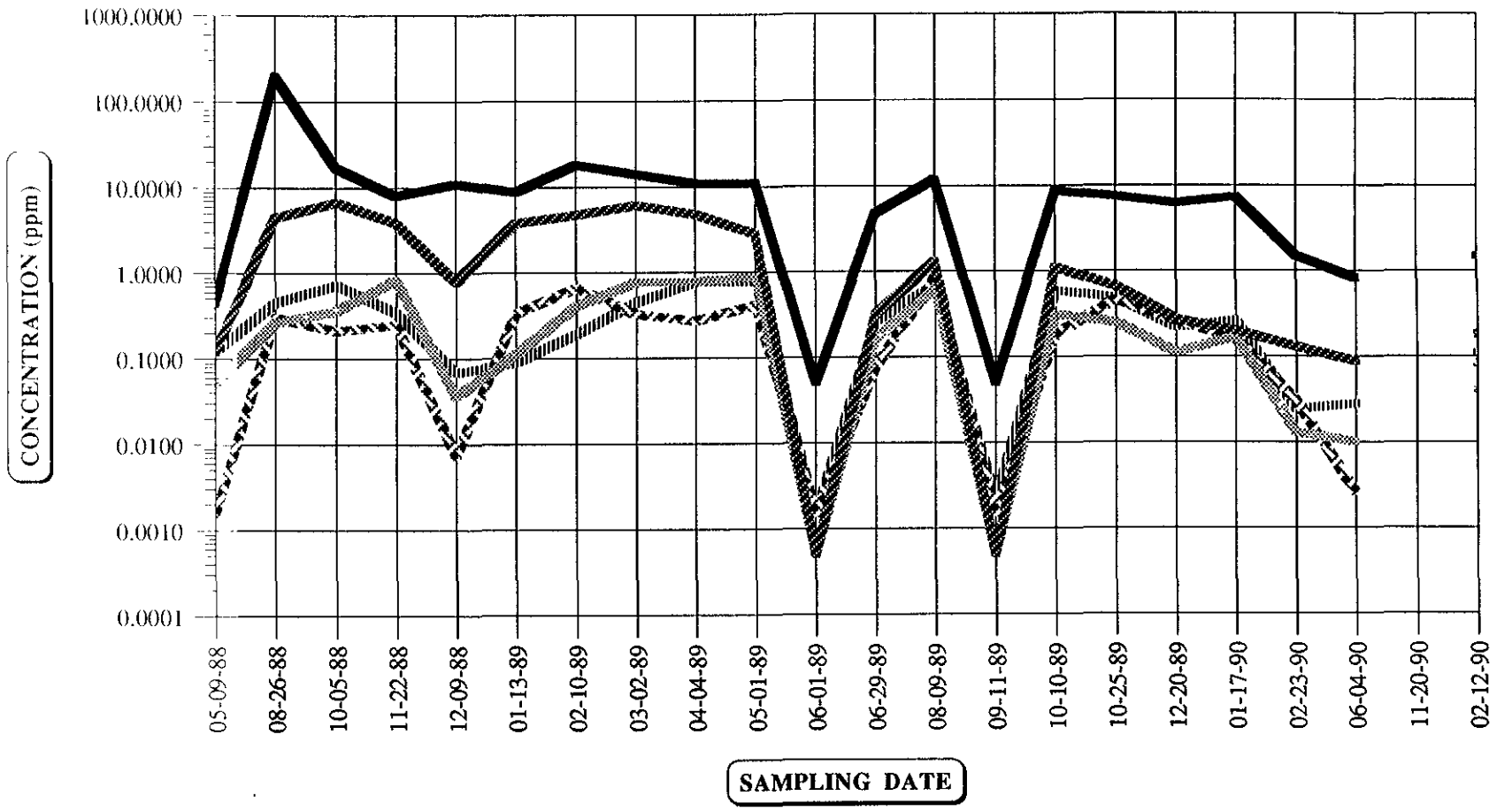
FORMER SHELL STATION

7194 AMADOR VALLEY BLVD

DUBLIN, CALIFORNIA

REVIEWED BY:	APPROVED BY:
CRS	RP
JOB #: 1826G	DRAWN BY: J.D.S.
DATE: 4/3/91	DRAWING #: FIG. 3

MW-1 GROUNDWATER ANALYSES DATA



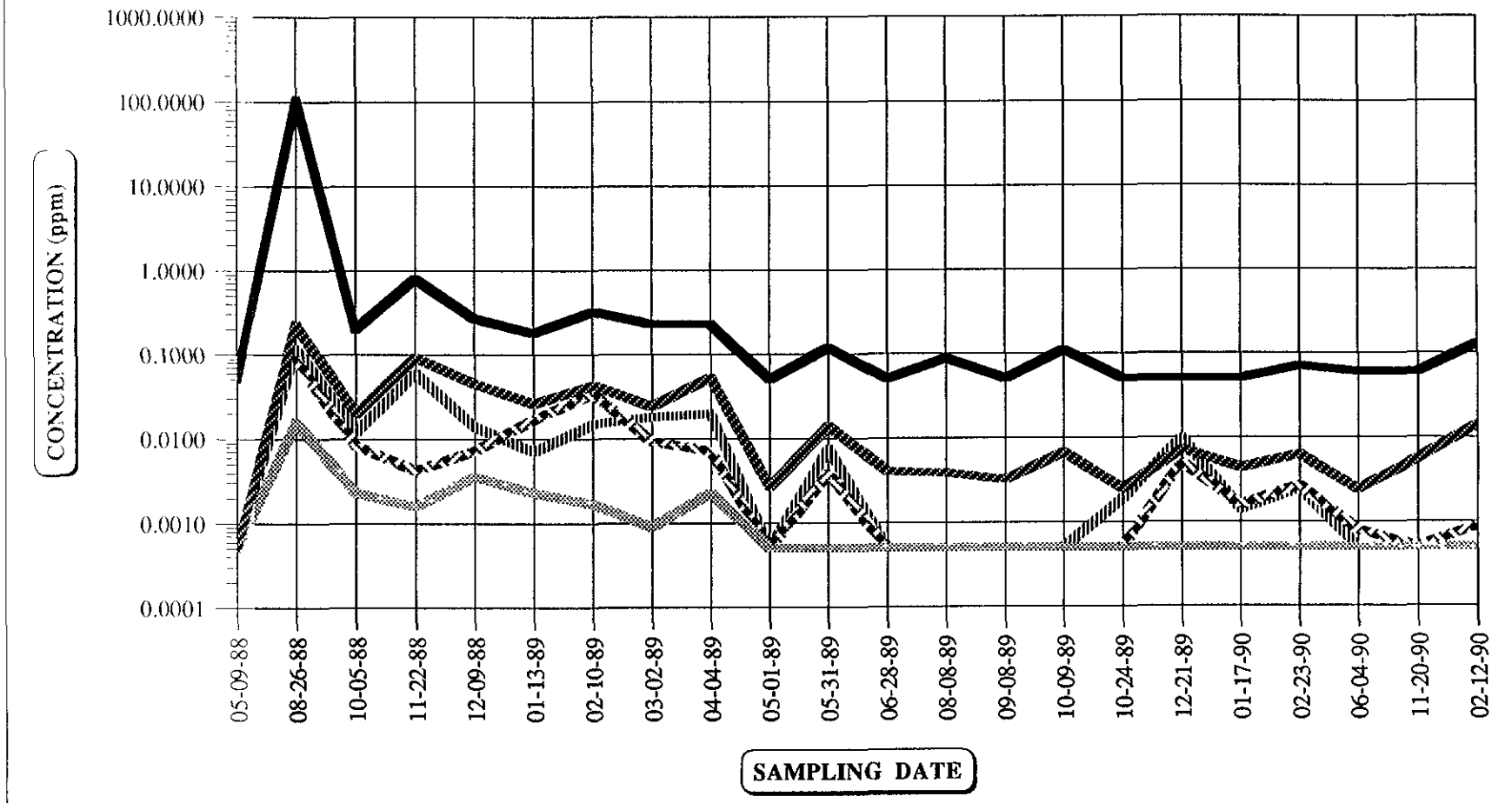
NOTE: For analytical results, refer to appended laboratory reports. Gaps on graph represent dates where no sample was collected.

Exceltech, Inc.
Project No. 1826 G

FIGURE NO. 4

Shell Oil Company
Dublin, California

MW-2 GROUNDWATER ANALYSES DATA



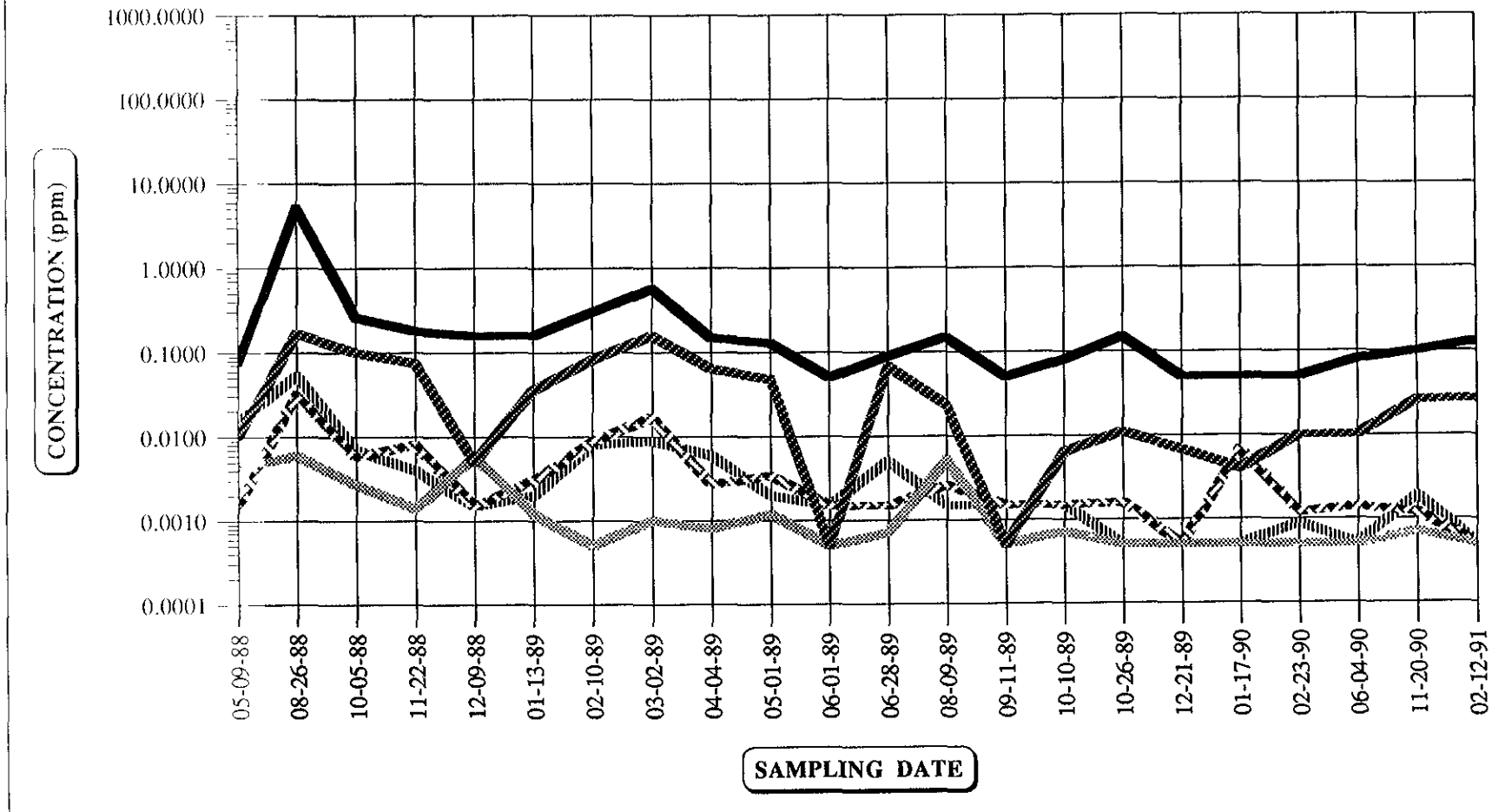
NOTE: Minimum value plotted is laboratory detection limit. For analytical results, refer to appended laboratory reports.

Exceltech, Inc.
Project No. 1826 G

FIGURE NO. 5

Shell Oil Company
Dublin, California

MW-3 GROUNDWATER ANALYSES DATA



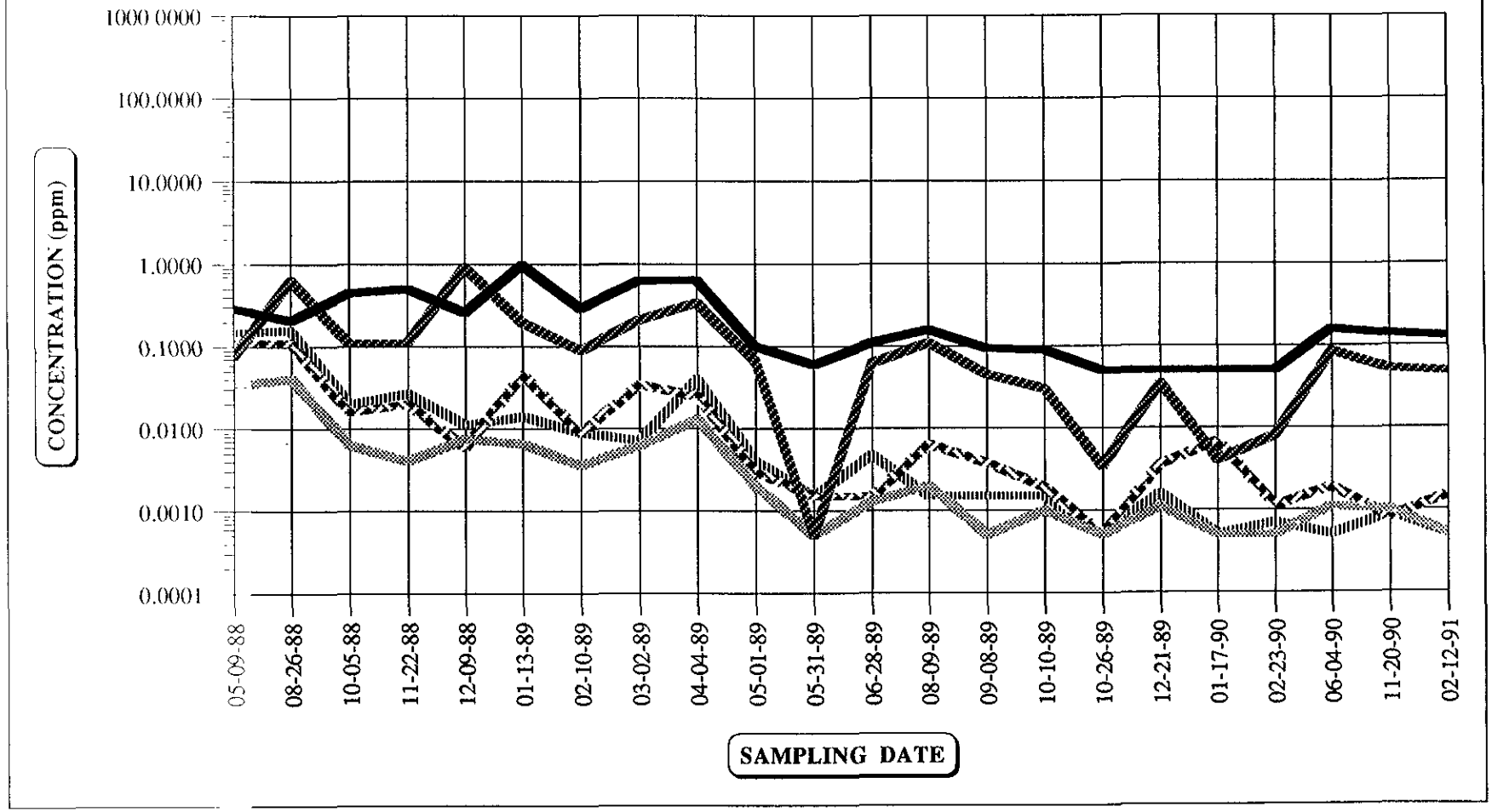
NOTE: Minimum value plotted is the laboratory detection limit. For analytical results, refer to appended laboratory reports.

Exceltech, Inc.
Project No. 1826 G

FIGURE NO. 6

Shell Oil Company
Dublin, California

MW-4 GROUNDWATER ANALYSES DATA



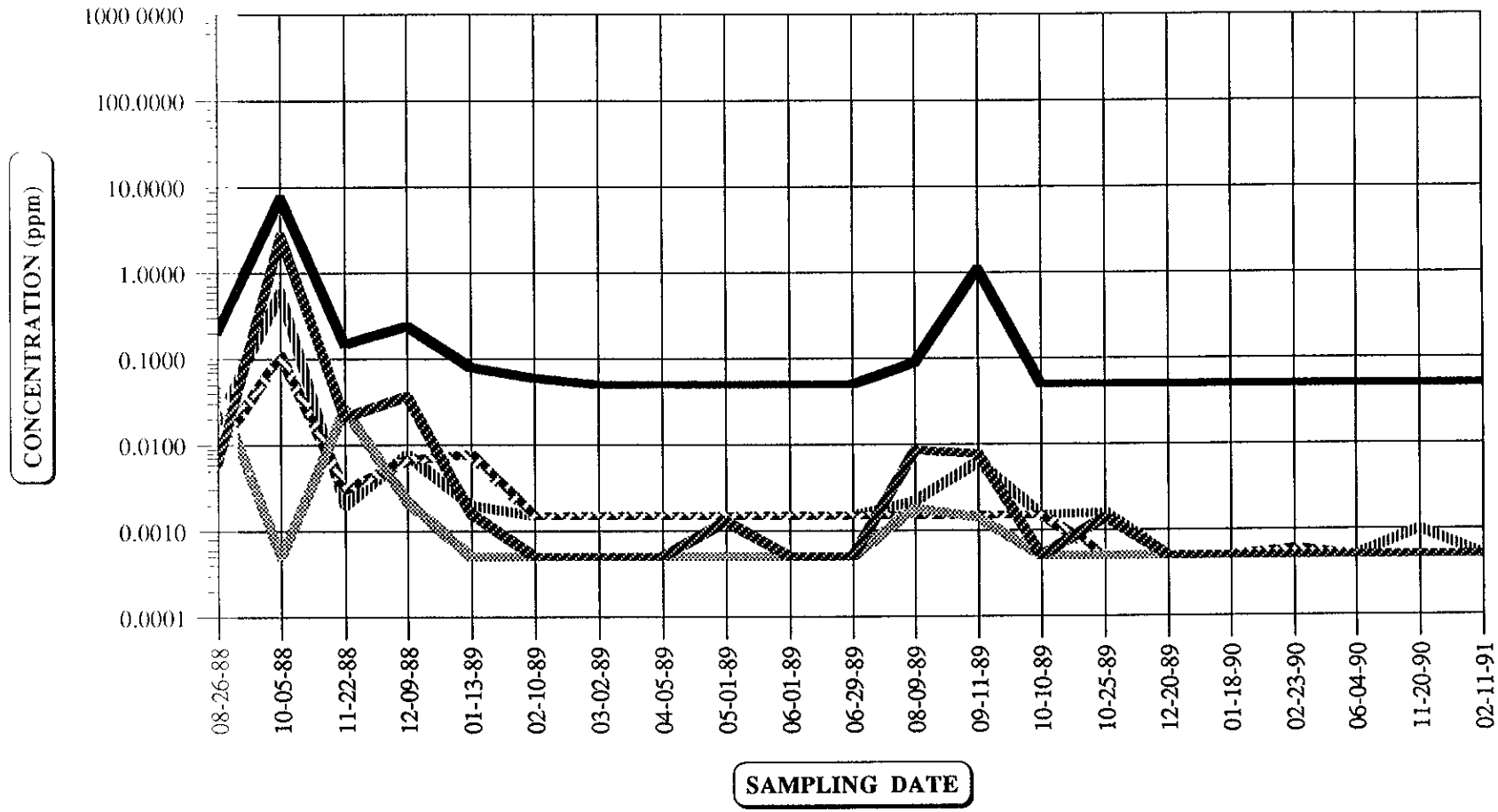
NOTE: Minimum value plotted is the laboratory detection limit. For analytical results, refer to appended laboratory reports.

Exceltech, Inc.
Project No. 1826 G

FIGURE NO. 7

Shell Oil Company
Dublin, California

MW-5 GROUNDWATER ANALYSES DATA



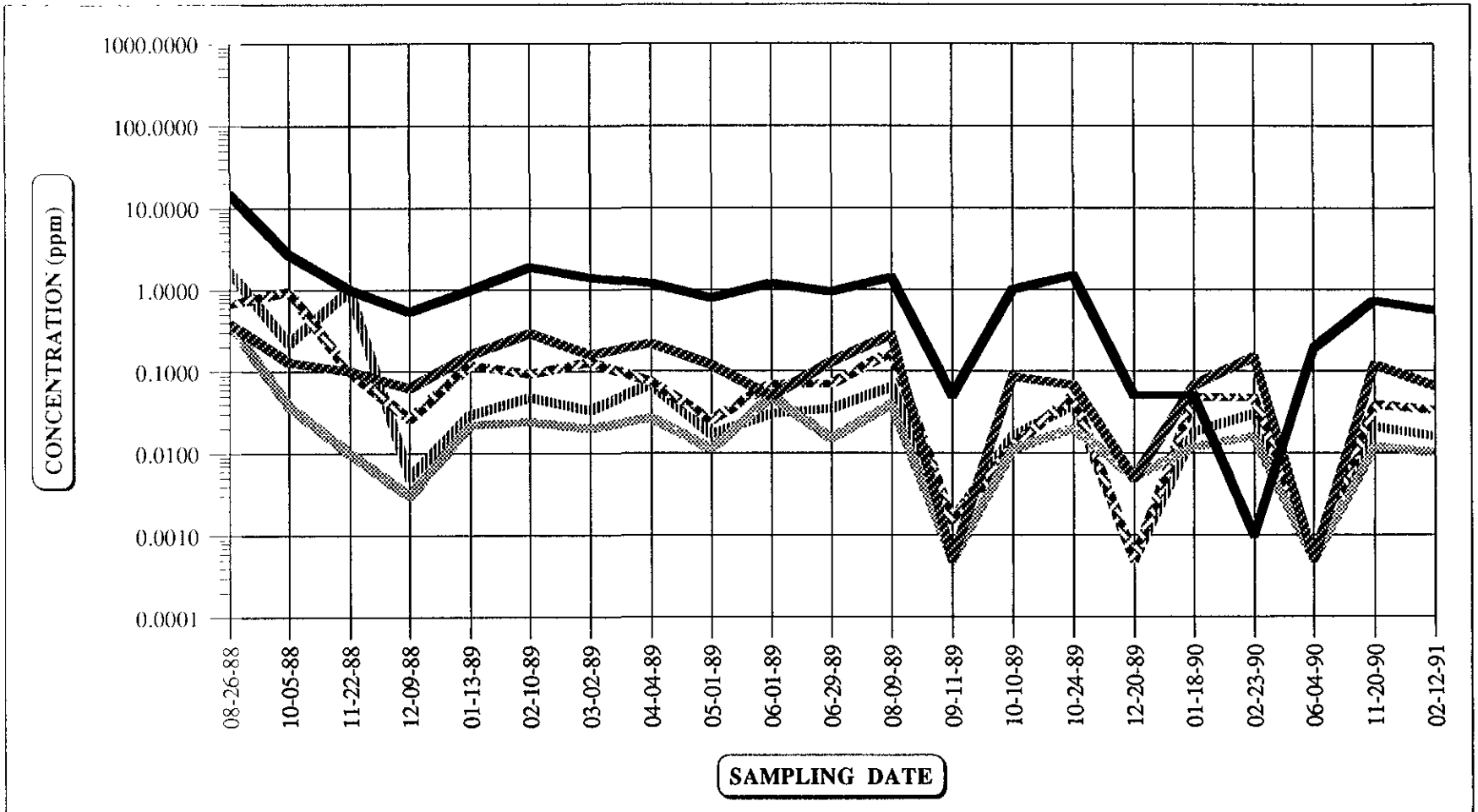
NOTE: Minimum value plotted is the laboratory detection limit. For analytical results, refer to appended laboratory reports.

Exceltech, Inc.
Project No. 1826 G

FIGURE NO. 8

Shell Oil Company
Dublin, California

MW-6 GROUNDWATER ANALYSES DATA



NOTE: Minimum value plotted is the laboratory detection limit. For analytical results, refer to appended laboratory reports.

Exceltech, Inc.
Project No. 1826 G

FIGURE NO. 9

Shell Oil Company
Dublin, California

APPENDIX A

LABORATORY ANALYTICAL REPORTS

AND

CHAIN-OF-CUSTODY DOCUMENTS

NET NATIONAL ENVIRONMENTAL TESTING, INC.®

NET Pacific, Inc.
435 Tesconi Circle
Santa Rosa, CA 95401
Tel: (707) 526-7200
Fax: (707) 526-9623

Kay Pannell
Exceltech
41674 Christy St.
Fremont, CA 94538

Date: 02-25-91
NET Client Acct No: 18.06
NET Pacific Log No: 6096
Received: 02-14-91 0800

Client Reference Information

SHELL, Dublin; Project: 1826G WATER

Sample analysis in support of the project referenced above has been completed and results are presented on following pages. Please refer to the enclosed "Key to Abbreviations" for definition of terms. Should you have questions regarding procedures or results, please feel welcome to contact Client Services.

Approved by:

Jules Skamarack
Laboratory Manager

JS:rct
Enclosure(s)

NET Pacific, Inc.

Client No: 18.06 Date: 02-25-91
Client Name: Exceltech
NET Log No: 6096 Page: 2

Ref: SHELL, Dublin; Project: 1826G WATER

Parameter	Method	Reporting Limit	Descriptor, Lab No. and Results BB-1 02-11-91 1100 76545	 MW-5 02-11-91 1305 76546	Units
PETROLEUM HYDROCARBONS			--	--	
VOLATILE (WATER)			--	--	
DILUTION FACTOR *			1	1	
DATE ANALYZED			02-20-91	02-21-91	
METHOD GC FID/5030			--	--	
as Gasoline		0.05	ND	ND	ppm
METHOD 602			--	--	
DILUTION FACTOR *			1	1	
DATE ANALYZED			02-20-91	02-21-91	
Benzene		0.0005	ND	ND	ppm
Ethylbenzene		0.0005	ND	ND	ppm
Toluene		0.0005	ND	ND	ppm
Xylenes, total		0.0005	ND	ND	ppm

NET Pacific, Inc.

Client No: 18.06 Date: 02-25-91
Client Name: Exceltech
NET Log No: 6096 Page: 3

Ref: SHELL, Dublin; Project: 1826G WATER

			Descriptor, Lab No. and Results		
			MW-7 02-11-91 1358	MW-8 02-11-91 1500	
Parameter	Method	Reporting Limit	76547	76548	Units
PETROLEUM HYDROCARBONS			--	--	
VOLATILE (WATER)			--	--	
DILUTION FACTOR *			1	1	
DATE ANALYZED			02-20-91	02-20-91	
METHOD GC FID/5030			--	--	
as Gasoline		0.05	ND	ND	ppm
METHOD 602			--	--	
DILUTION FACTOR *			1	1	
DATE ANALYZED			02-20-91	02-20-91	
Benzene		0.0005	ND	ND	ppm
Ethylbenzene		0.0005	ND	ND	ppm
Toluene		0.0005	ND	ND	ppm
Xylenes, total		0.0005	ND	ND	ppm

NET Pacific, Inc.

Client No: 18.06 Date: 02-25-91
Client Name: Exceltech
NET Log No: 6096 Page: 4

Ref: SHELL, Dublin; Project: 1826G WATER

			Descriptor, Lab No. and Results		
			MW-9 02-11-91 1555	MW-11 02-11-91 1645	
Parameter	Method	Reporting Limit	76549	76550	Units
PETROLEUM HYDROCARBONS			--	--	
VOLATILE (WATER)			--	--	
DILUTION FACTOR *			1	1	
DATE ANALYZED			02-20-91	02-20-91	
METHOD GC FID/5030			--	--	
as Gasoline		0.05	ND	ND	ppm
METHOD 602			--	--	
DILUTION FACTOR *			1	1	
DATE ANALYZED			02-20-91	02-20-91	
Benzene		0.0005	ND	ND	ppm
Ethylbenzene		0.0005	ND	ND	ppm
Toluene		0.0005	ND	ND	ppm
Xylenes, total		0.0005	ND	ND	ppm

NET Pacific, Inc.

Client No: 18.06 Date: 02-25-91
Client Name: Exceltech
NET Log No: 6096 Page: 5

Ref: SHELL, Dublin; Project: 1826G WATER

Parameter	Method	Reporting Limit	Descriptor, Lab No. and Results MW-12 02-12-91 0830 76551	MW-2 02-12-91 1015 76552	Units
PETROLEUM HYDROCARBONS			--	--	
VOLATILE (WATER)			--	--	
DILUTION FACTOR *			1	1	
DATE ANALYZED			02-20-91	02-20-91	
METHOD GC FID/5030			--	--	
as Gasoline		0.05	ND	0.13	ppm
METHOD 602			--	--	
DILUTION FACTOR *			1	1	
DATE ANALYZED			02-20-91	02-20-91	
Benzene		0.0005	ND	0.014	ppm
Ethylbenzene		0.0005	ND	0.0009	ppm
Toluene		0.0005	ND	ND	ppm
Xylenes, total		0.0005	ND	ND	ppm

NET Pacific, Inc.

Client No: 18.06 Date: 02-25-91
Client Name: Exceltech
NET Log No: 6096 Page: 6

Ref: SHELL, Dublin; Project: 1826G WATER

			Descriptor, Lab No. and Results		
			MW-3 02-12-91 1110	MW-4 02-12-91 1220	
Parameter	Method	Reporting Limit	76553	76554	Units
PETROLEUM HYDROCARBONS			--	--	
VOLATILE (WATER)			--	--	
DILUTION FACTOR *			1	1	
DATE ANALYZED			02-20-91	02-20-91	
METHOD GC FID/5030			--	--	
as Gasoline		0.05	0.13	0.13	ppm
METHOD 602			--	--	
DILUTION FACTOR *			1	1	
DATE ANALYZED			02-20-91	02-20-91	
Benzene		0.0005	0.027	0.048	ppm
Ethylbenzene		0.0005	ND	0.0015	ppm
Toluene		0.0005	ND	ND	ppm
Xylenes, total		0.0005	ND	ND	ppm

NET Pacific, Inc.

Client No: 18.06 Date: 02-25-91
Client Name: Exceltech
NET Log No: 6096 Page: 7

Ref: SHELL, Dublin; Project: 1826G WATER

			Descriptor, Lab No. and Results		
			MW-6 02-12-91 1350	MW-1 02-12-91 1540	
Parameter	Method	Reporting Limit	76555	76556	Units
PETROLEUM HYDROCARBONS			--	--	
VOLATILE (WATER)			--	--	
DILUTION FACTOR *			1	1	
DATE ANALYZED			02-20-91	02-20-91	
METHOD GC FID/5030			--	--	
as Gasoline		0.05	0.55	1.5	ppm
METHOD 602			--	--	
DILUTION FACTOR *			1	1	
DATE ANALYZED			02-20-91	02-21-91	
Benzene		0.0005	0.065	0.18	ppm
Ethylbenzene		0.0005	0.033	0.082	ppm
Toluene		0.0005	0.010	0.039	ppm
Xylenes, total		0.0005	0.016	0.11	ppm

NET®

NET Pacific, Inc.

KEY TO ABBREVIATIONS and METHOD REFERENCES

<	:	Less than; When appearing in results column indicates analyte not detected at the value following. This datum supercedes the listed Reporting Limit.
*	:	Reporting Limits are a function of the dilution factor for any given sample. To obtain the actual reporting limits for this sample, multiply the stated Reporting Limits by the dilution factor (but do not multiply reported values).
ICVS	:	Initial Calibration Verification Standard (External Standard).
mean	:	Average; sum of measurements divided by number of measurements.
mg/Kg (ppm)	:	Concentration in units of milligrams of analyte per kilogram of sample, wet-weight basis (parts per million).
mg/L	:	Concentration in units of milligrams of analyte per liter of sample.
mL/L/hr	:	Milliliters per liter per hour.
MPN/100 mL	:	Most probable number of bacteria per one hundred milliliters of sample.
N/A	:	Not applicable.
NA	:	Not analyzed.
ND	:	Not detected; the analyte concentration is less than applicable listed reporting limit.
NTU	:	Nephelometric turbidity units.
RPD	:	Relative percent difference, 100 [Value 1 - Value 2]/mean value.
SNA	:	Standard not available.
ug/Kg (ppb)	:	Concentration in units of micrograms of analyte per kilogram of sample, wet-weight basis (parts per billion).
ug/L	:	Concentration in units of micrograms of analyte per liter of sample.
umhos/cm	:	Micromhos per centimeter.

Method References

Methods 100 through 493: see "Methods for Chemical Analysis of Water & Wastes", U.S. EPA, 600/4-79-020, rev. 1983.

Methods 601 through 625: see "Guidelines Establishing Test Procedures for the Analysis of Pollutants" U.S. EPA, 40 CFR, Part 136, rev. 1988.

Methods 1000 through 9999: see "Test Methods for Evaluating Solid Waste", U.S. EPA SW-846, 3rd edition, 1986.

SM: see "Standard Methods for the Examination of Water & Wastewater, 16th Edition, APHA, 1985.

CHAIN OF CUSTODY RECORD

6096

PROJECT NO.	PROJECT NAME	P.O. #
1826 G	SHELL Dublin	204-2277-0105

SAMPLERS (Signature) Dennis Hunter

LAB: NET

TURN AROUND TIME: 5 DAYS

NO.	DATE	TIME	STATION AND LOCATION	Total	TPH G BTEX							REMARKS
BB1	2/11/91	11:00	Pres VOAS	(3)	X							
MW5	"	1:05	Pres VOAS	(3)	X							
MW7	"	1:58	Pres VOAS	(3)	X							
MW8	"	3:00	Pres VOAS	(3)	X							
MW9	"	3:55	Pres VOAS	(3)	X							
MW11	"	4:45	Pres VOAS	(3)	X							
MW12	2/12/91	8:30	Pres VOAS	(5)	X							
MW2	"	10:15	Pres VOAS	(3)	X							
MW3	"	11:10	Pres VOAS	(3)	X							
MW4	"	12:20	Pres VOAS	(3)	X							
MW6	"	1:50	Pres VOAS	(3)	X							
MW1	"	3:40	Pres VOAS	(3)	X							

CUSTODY SEALED 2/13/91 @ 1400 [signature] Intact

RELINQUISHED BY:	DATE:	TIME:	RECEIVED BY:	RELINQUISHED BY:	DATE:	TIME:	RECEIVED BY:
Dennis D Hunter	2/12/91	1638	[signature]	[signature]	2/13/91	3:40pm	Mike Tavarni

RELINQUISHED BY:	DATE:	TIME:	RECEIVED BY:	DATE:	TIME:	RECEIVED BY:
Mike Tavarni	2/13/91		(WANG) K. Kemple 2/14/91 0830			

REMARKS:

REPORT TO: KAY PANNELL

EXCELTECH
41674 Christy Street
Fremont, C.A. 94538-3114
(415) 659-0404
Fax (415) 651-4677
Contr. Lic. No. 550205

FORM DATED 5-30-89

KELLY — NET