ensco
environmental
services, inc.

DECEMBER QUARTERLY REPORT
GROUNDWATER SAMPLING
AND ANALYSIS

FOR

FORMER SHELL STATION
7194 AMADOR VALLEY BOULEVARD
DUBLIN, CALIFORNIA

Project No. 1826G
WIC No. 204-2277-0105
AFE No. 986639
December 1989

Corporate Offices 41674 Christy Street, Fremont, CA 94538-3114 (415) 659-0404 Fax (415) 651-4677 Contr Lic. No 550205

ensco environmental services, inc.
a subsidiary of environmental system company

January 17, 1990

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

Attention: Ms. Diane Lundquist

Subject: December Quarterly Report
Groundwater Sampling and Analysis
Former Shell Station, 7194 Amador Valley Boulevard, Dublin, California
EES Project No. 1826G

Dear Ms. Lundquist:

This report presents the result of groundwater sampling and analyses performed at the subject site since the September 1989 quarterly report. It includes all current and past analytical data acquired during this ongoing investigation.

If you have any questions, please call.

Sincerely,
Ensco Environmental Services, Inc.

Richard A. Garlow, R.E.A. 1365
Project Geologist

Lawrence D. Pavlak, C.E.G. 1187
Senior Program Geologist

CRV/LDP/sw
Enclosure

CONTENTS

CONTENTS

Table

Figures

Appendices

DECEMBER QUARTERLY REPORT
GROUNDWATER SAMPLING AND ANALYSIS

FOR

FORMER SHELL STATION
7194 AMADOR VALLEY BOULEVARD
DUBLIN, CALIFORNIA

INTRODUCTION

This report presents the results of groundwater monitoring by Ensco Environmental Services, Inc. (EES) at the former Shell Station located at 7194 Amador Valley Boulevard, in the City of Dublin, Alameda County, California (see Figure 1). EES has been collecting groundwater samples for laboratory analysis at this site since May 1988. This EES quarterly report includes all groundwater sampling data acquired at the site since the issuance of the September 1989 quarterly report. The program objectives are listed below.

- Plot the groundwater contour surface and inferred flow direction.
- Investigate for the presence of a petroleum hydrocarbon plume and its concentrations.
- Compare current and past data.

The existence and degree of hydrocarbon contamination is determined by (1) checking for the presence of free-floating petroleum product in the groundwater monitoring wells and measuring its thickness and (2) performing laboratory analyses on groundwater samples to determine concentrations of total petroleum hydrocarbons as gasoline (TPHG), and specific concentrations of benzene, toluene, ethyl benzene, and total xylenes (BTEX).

BACKGROUND

EES, at the request of Shell Oil Company (Shell), is continuing the investigation of hydrocarbon contamination in the soil and groundwater beneath the former Shell Station located at 7194 Amador Valley Boulevard, Dublin, California. EES completed a preliminary investigation at this site in April 1988 which confirmed the presence of hydrocarbon contamination in the soil and groundwater beneath the site. This was followed by an EES supplemental investigation completed in November 1988, which found soil and groundwater contamination beyond the site boundaries. In June 1988, a final assessment report was completed which determined limits of the contamination downgradient from the site.

This report details the results of the continuing groundwater monitoring and sampling phase of this investigation. EES installed groundwater monitoring wells MW-1 through MW-4 within the site boundaries between May 4 and May 9, 1988. Groundwater monitoring wells MW-5, MW-6, MW-7, and recovery well RW-1 were installed as part of the supplemental off-site field investigation conducted between July 19 and August 12, 1988. MW-5 is screened at a deeper interval than the other wells to monitor the lower depths of the affected aquifer. EES installed five additional off-site monitoring wells (MW-8 through MW-12) between February 21 and 23, 1989, and sampled the groundwater from these wells beginning in March 1989. The locations of these wells are shown on the Site Plan (Figure 2).

FIELD INVESTIGATION

The field data obtained for this report was collected on September 7, 8, and 11, 1989; October 9 and 10, 1989; and October 23 thru 26, 1989.

Groundwater Sampling

EES measured the depth to groundwater in each well with an electronic sounder and checked for the presence of floating product with a clear acrylic bailer. No floating product was observed; however, a petroleum product odor was detected in monitoring

wells MW-1, MW-3, MW-6, MW-10, and recovery well RW-1. A minimum of four well-casing volumes of water were removed from each well before sampling. Groundwater samples were then collected following the procedures outlined in our groundwater sampling protocol (Appendix A). All groundwater purged from each well was placed in properly labeled drums at the site, then transported by a licensed hauler to a recycling facility.

HYDROGEOLOGY

An average apparent groundwater gradient and general flow direction was calculated for each month, resulting in the following: 0.004 feet per foot trending to the south on September 7, 1989, 0.004 feet per foot trending to the south on October 9, 1989 and 0.005 feet per foot trending to the south on October 24, 1989.

The groundwater elevations measured at the site ranged from 325.58 to 326.33, 325.42 to 326.34, and 324.93 to 326.39 feet above mean sea level for September 7, 1989, October 9, 1989, and October 24, 1989, respectively. Groundwater elevations recorded during all current and past monitoring is included in Table 1. EES has prepared groundwater elevation contour maps based upon water depth data collected from the monitoring wells (Figures 11 through 13).

LABORATORY ANALYSIS

The groundwater samples were analyzed by NET Pacific, Inc., a Shell-approved, state-certified laboratory in San Ramon, California. The laboratory analyzed the groundwater samples for TPHG and BTEX using Environmental Protection Agency Methods 8015/5030 and 602.

SUMMARY OF ANALYTICAL RESULTS

Laboratory analyses revealed variable TPHG and/or BTEX concentrations in groundwater samples from monitoring wells MW-1, MW-2, MW-3, MW-4, MW-5, MW-6, MW-10, and recovery well RW-1. Analyses of samples collected from monitoring wells

MW-7, MW-8, MW-9, MW-11 and MW-12 did not detect any TPHG or BTEX. A summary of all current and past sampling results are presented in Table 1. Appendix B contains the laboratory reports and chain-of-custody records for sampling done during this quarter.

EES has developed logarithmic graphical representations of all current and past data to show the variations in concentrations of TPHG and BTEX with respect to time. These graphs are presented as Figures 3 through 10. (Note: There are no graphical representations for MW-8, MW-9, MW-11, and MW-12 because samples collected from these wells have never had detectable concentrations of TPHG or BTEX.)

LONG-TERM MONITORING

EES will continue monthly monitoring of monitoring wells MW-1 through MW-12 and recovery well RW-1. This monitoring will include: (1) depth-to-water measurements; (2) field checks for odor, sheen, or floating petroleum product; and (3) collection of groundwater samples for analysis by a Shell-approved, state-certified laboratory. The samples will be tested for the presence of TPHG and BTEX. EES will issue the next quarterly groundwater sampling report in March 1990.

CONCLUSIONS

1. Average apparent groundwater gradients and flow directions were 0.004 feet per foot to the south on September 7, 1989, and October 9, 1989 and 0.005 feet per foot to the south on October 24, 1989. Groundwater elevations at the site ranged from 324.93 to 326.39 feet above mean sea level during this quarter.

2. Laboratory analyses revealed variable concentrations of TPHG and/or BTEX in the groundwater samples from wells MW-1, MW-2, MW-3, MW-4, MW-5, MW-6, MW-10, and recovery well RW-1. No TPHG or BTEX were detected in groundwater samples collected from MW-7, MW-8, MW-9, MW-11, or MW-12.

3. EES will continue with the current monitoring schedule. The next quarterly groundwater monitoring report, to be issued in March 1990, will include monthly groundwater depth measurements, analytical data, and groundwater elevation contours derived from monitoring wells MW-1 through MW-12, and recovery well RW-1.

REPORTING REQUIREMENTS

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

Alameda County Flood Control and
Water Conservation District, (Zone 7)
5997 Parkside Drive
Pleasanton, California 94566-5127
Attention: Mr. Craig Mayfield

California Regional Water Quality Control Board
San Francisco Bay Region
1800 Harrison, 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. Storm Goranson

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. The exploratory test borings drilled at the site.
2. The observations of field personnel.
3. The results of laboratory analyses performed by a state-certified laboratory.
4. Our understanding of the regulations of the State of California and Alameda County and/or 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 due to variations in rainfall, temperature, regional water usage, or other factors.

The service performed by EES 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.

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

Ensco Environmental Services, Inc.
Project No. 1826G
January 9, 1990

Shell Oil Company
7194 Amador Valley Blvd. Dublin
Dublin, CA

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	
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	

Ensco Environmental Services, Inc.
Project No. 1826G
January 9, 1990

Shell Oil Company
7194 Amador Valley Blvd. Dublin
Dublin, CA

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	04/04/89	0.23	0.053	0.0023	0.0071	0.02	10.06	
(CONT)	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	
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	

Ensco Environmental Services, Inc.
Project No. 1826G
January 9, 1990

Shell Oil Company
7194 Amador Valley Blvd. Dublin
Dublin, CA

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	
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	

Ensco Environmental Services, Inc.
Project No. 1826G
January 9, 1990

Shell Oil Company
7194 Amador Valley Blvd. Dublin
Dublin, CA

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	04/05/89	N D	N D	N D	N D	N D	7.72	
(CONT)	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	
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	

Ensco Environmental Services, Inc.
Project No 1826G
January 9, 1990

Shell Oil Company
7194 Amador Valley Blvd. Dublin
Dublin, CA

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	
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	

Ensco Environmental Services, Inc.
Project No. 1826G
January 9, 1990

Shell Oil Company
7194 Amador Valley Blvd. Dublin
Dublin, CA

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	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	
	10/09/89	N D	N D	N D	N D	N D	8.89	
	10/23/89	N D	N D	N D	N D	N D	9.02	
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	
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	
	05/31/89	N D	N D	N D	N D	N D	8.13	

Ensco Environmental Services, Inc.
Project No. 1826G
January 9, 1990

Shell Oil Company
7194 Amador Valley Blvd. Dublin
Dublin, CA

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	06/28/89	N D	N D	N D	N D	N D	8.30	
(CONT.)	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	
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	
	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	
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	

Ensco Environmental Services, Inc.
Project No. 1826G
January 9, 1990

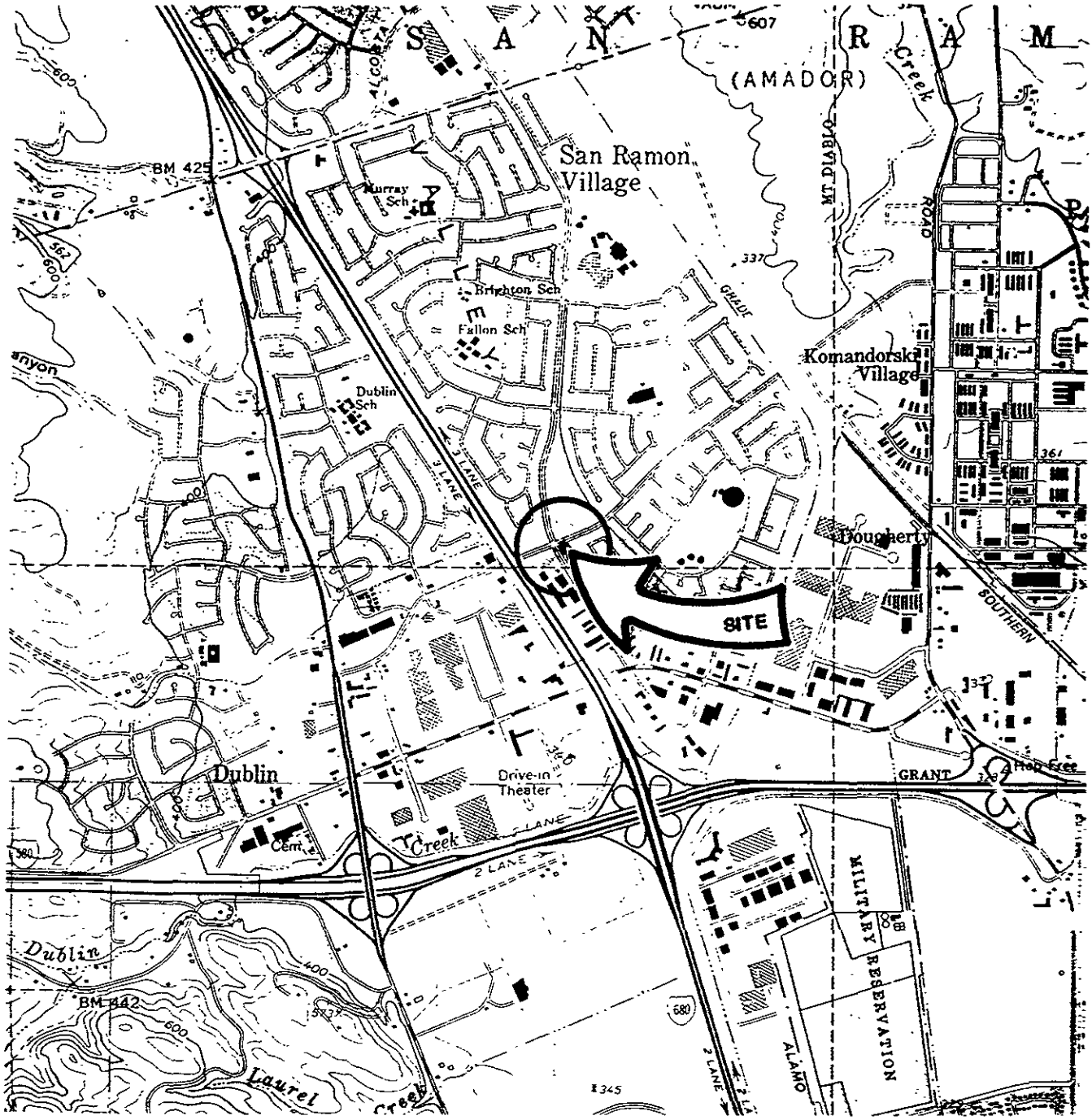
Shell Oil Company
7194 Amador Valley Blvd. Dublin
Dublin, CA

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	09/11/89	0.097	0.0017	0.0021	0.0023	0.014	10.02	
(CONT.)	10/10/89	1.4	0.048	0.0045	N D	0.003	9.88	
	10/25/89	0.82	0.051	0.0012	0.025	0.003	9.80	

ppm parts per million (mg/kg)
TPHG Total petroleum hydrocarbons as gasoline
N A Not analyzed
N R Analysis not requested
N D Not detected at or above laboratory listed reporting limit

Note: For detection limits, refer to laboratory reports



SOURCE: USGS 7.5' MAP, DUBLIN QUADRANGLE

LEGEND

SITE LOCATION

0 1

SCALE IN MILES

N

ensco environmental services, Inc.

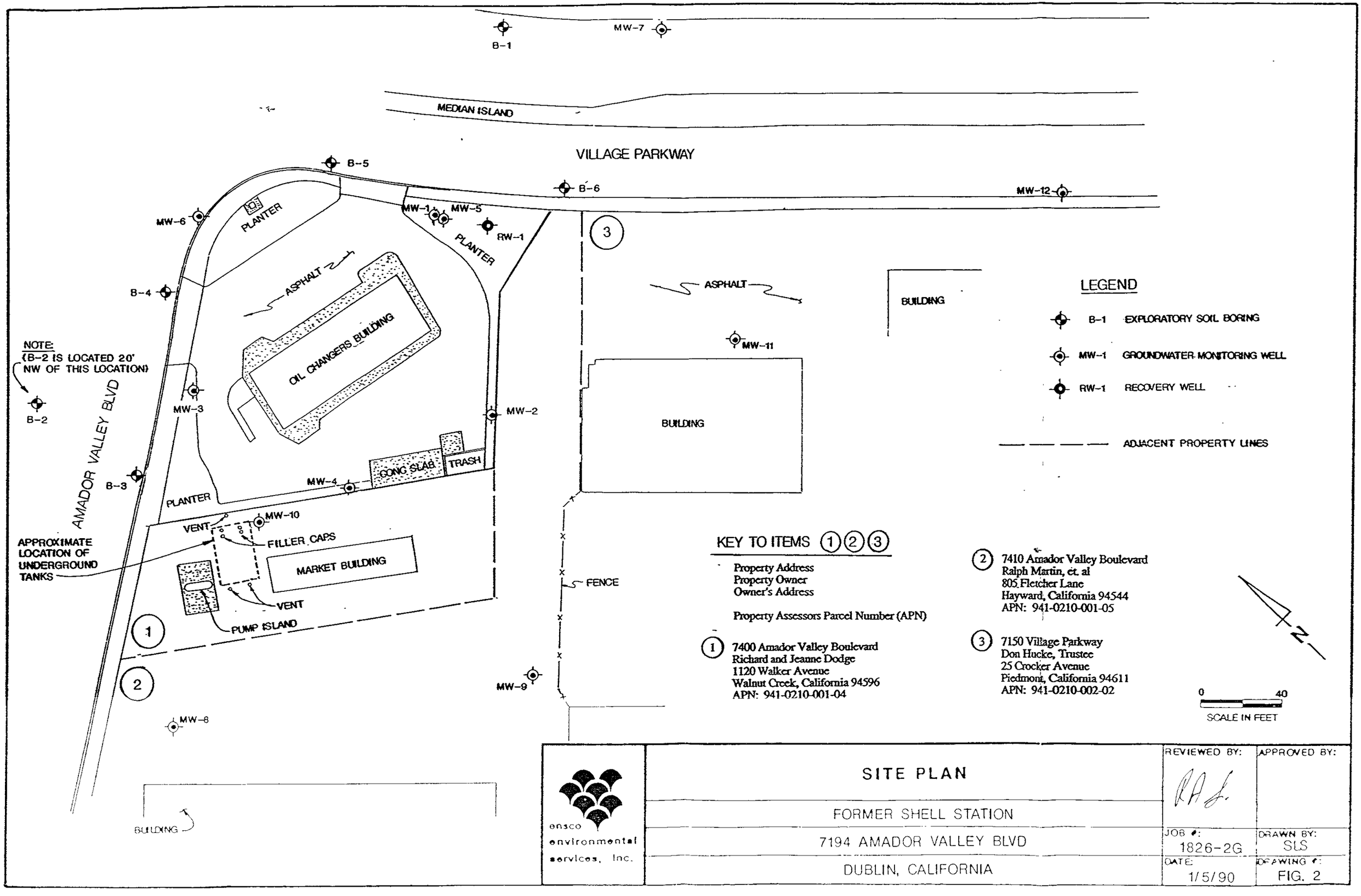
SITE LOCATION MAP

FORMER SHELL STATION

7194 AMADOR VALLEY BLVD

DUBLIN, CALIFORNIA

REVIEWED BY	APPROVED BY
JOB # 1826G	DRAWN BY J.C.
DATE 4-5-89	DRAWING # FIG. 1



ensco environmental services, Inc.

SITE PLAN

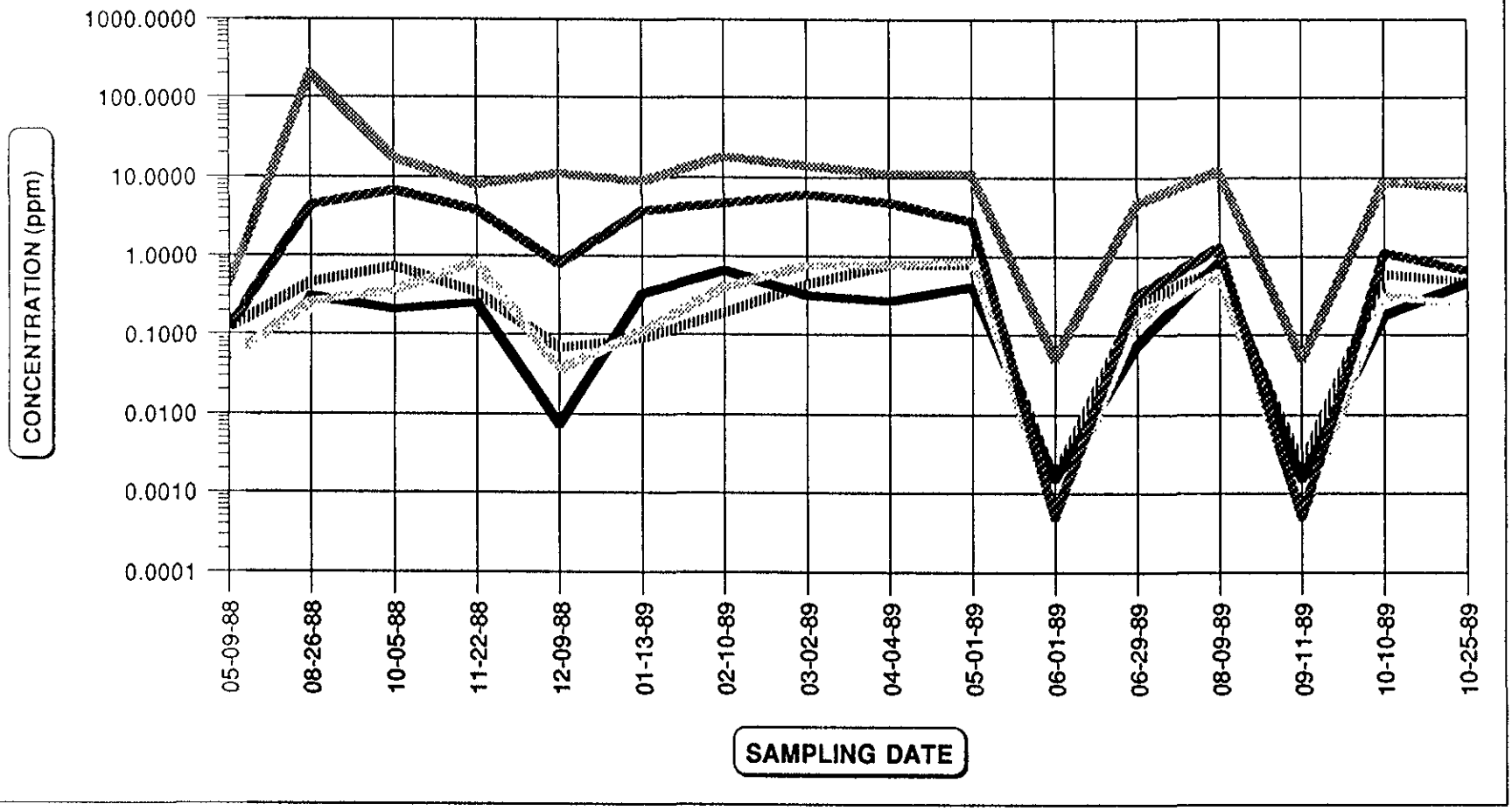
FORMER SHELL STATION

7194 AMADOR VALLEY BLVD

DUBLIN, CALIFORNIA

REVIEWED BY:	APPROVED BY:
JOB #: 1826-2G	DRAWN BY: SLS
DATE: 1/5/90	DRAWING #: FIG. 2

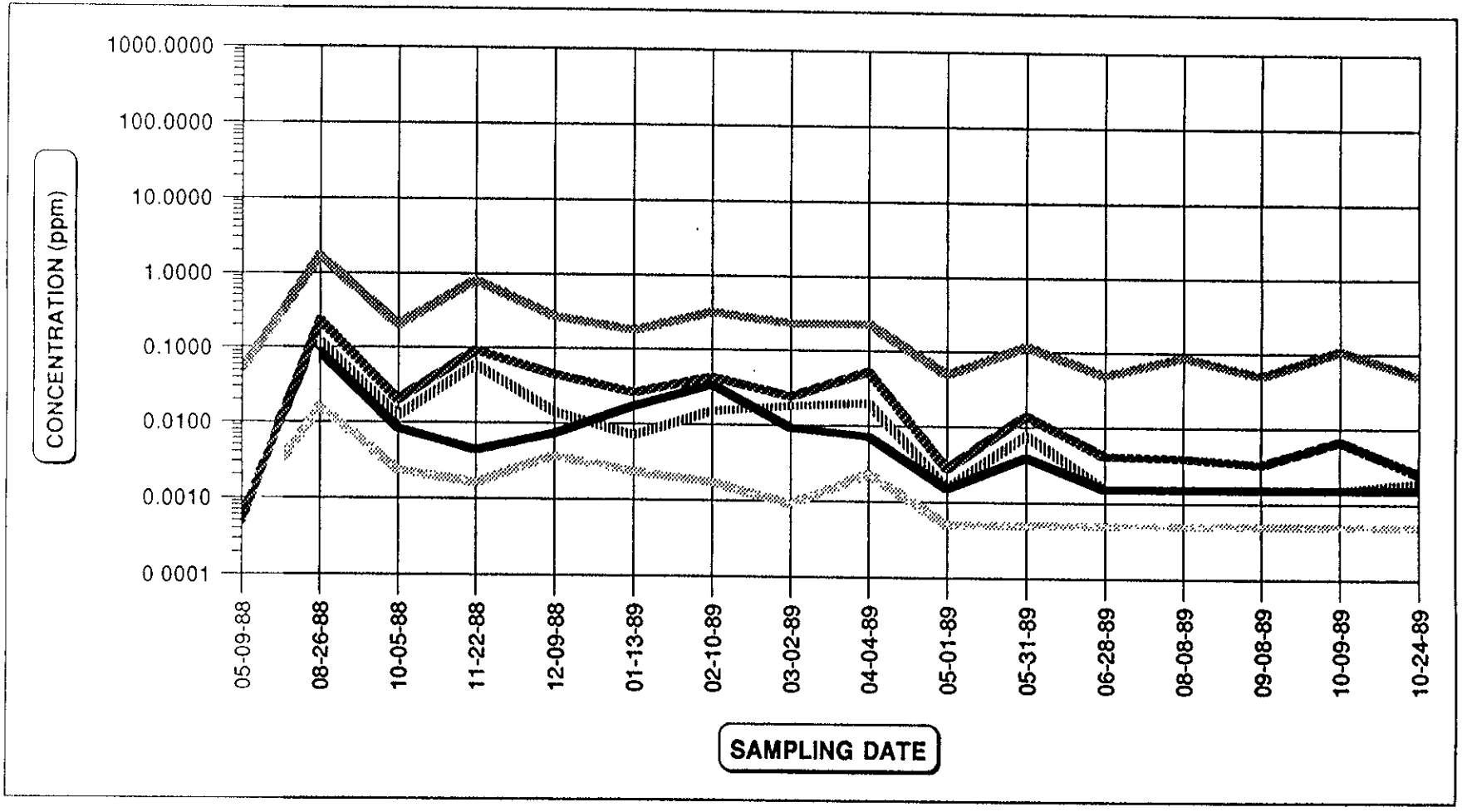
MW-1 GROUNDWATER ANALYSES DATA



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

Ensco Environmental Services, Inc. Project No. 1826G
Figure # 3

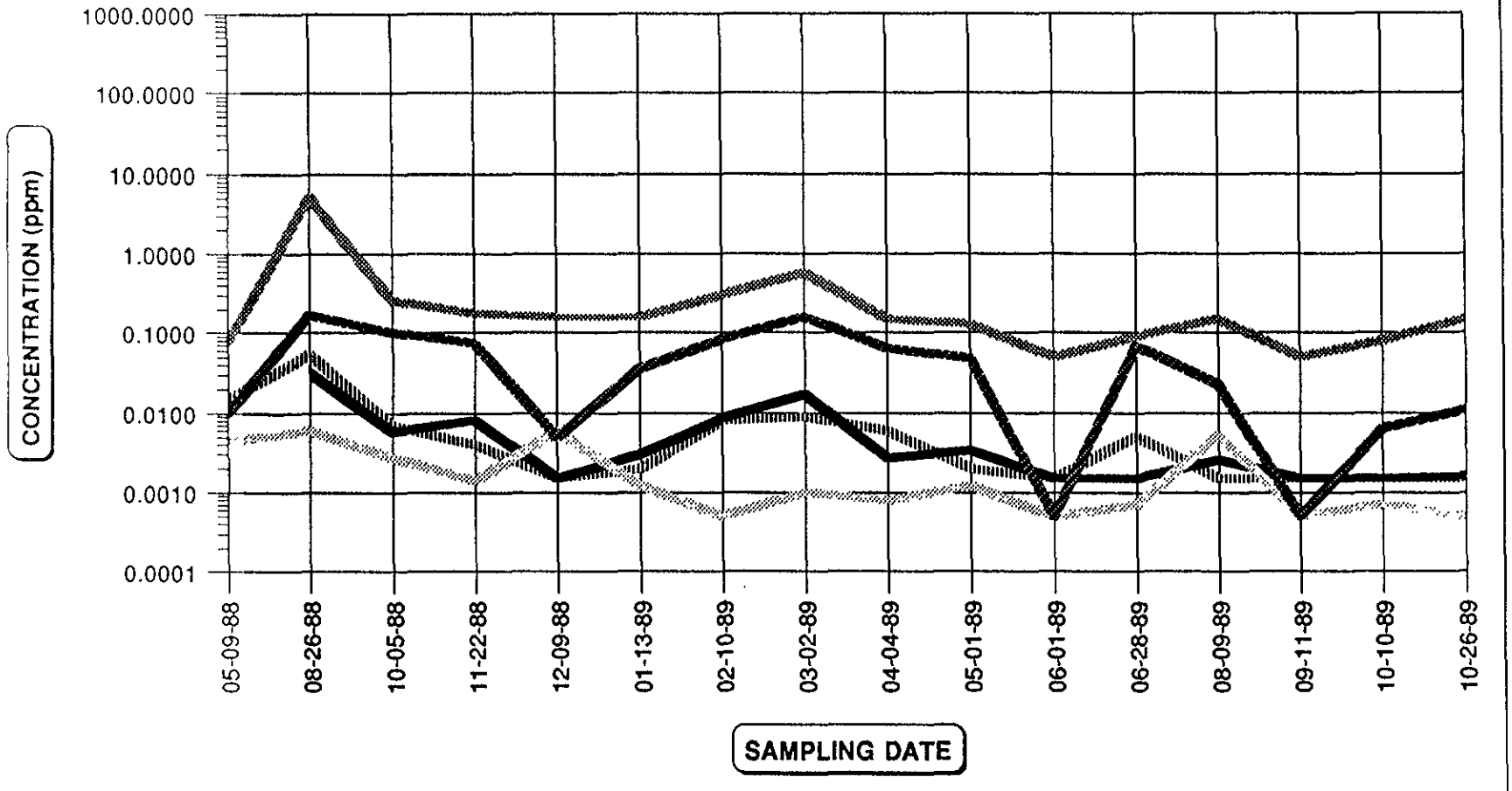
MW-2 GROUNDWATER ANALYSES DATA



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

Ensco Environmental Services, Inc. Project No. 1826G
Figure # 4

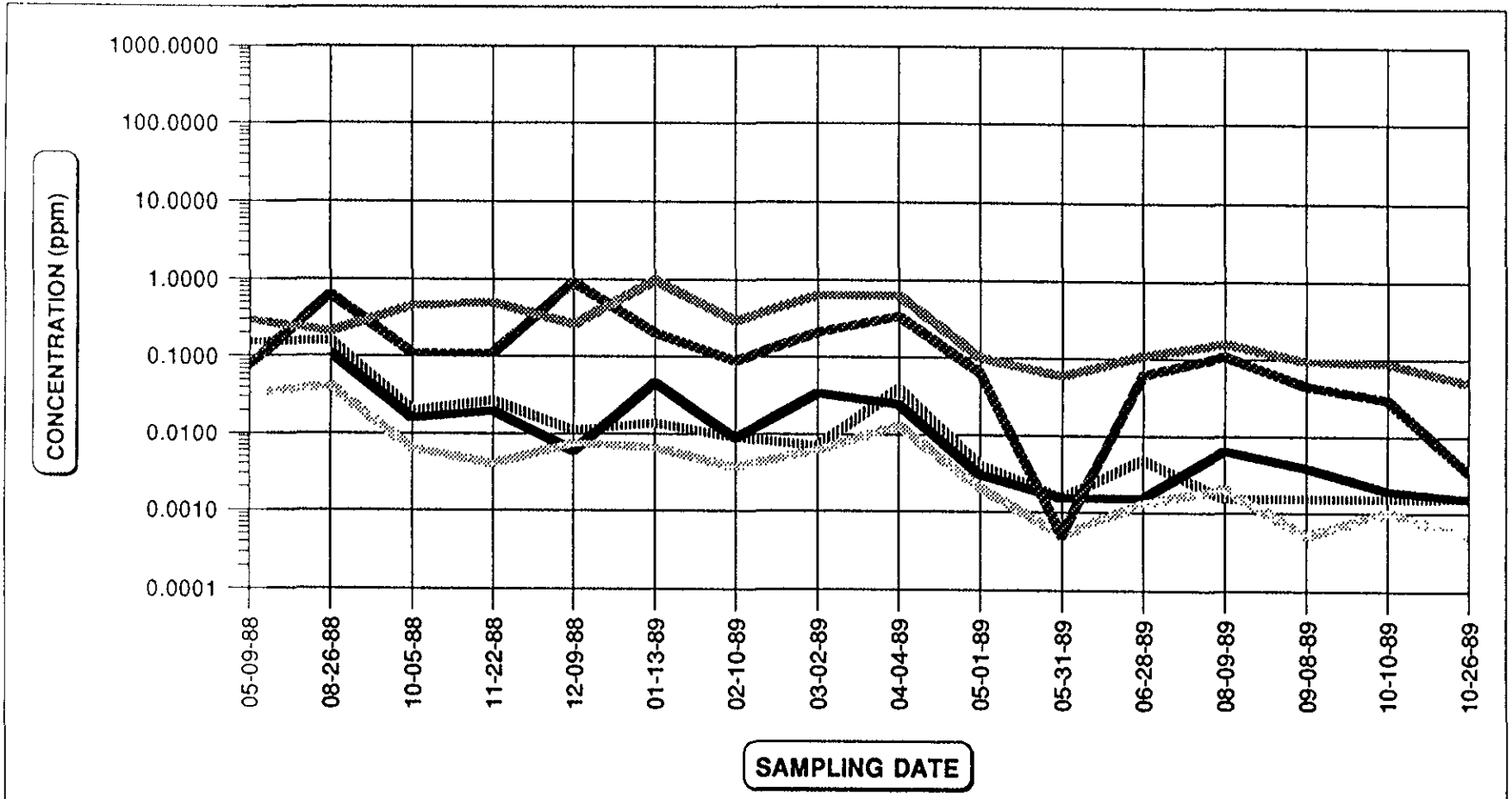
MW-3 GROUNDWATER ANALYSES DATA



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

Ensco Environmental Services, Inc. Project No. 1826G
Figure # 5

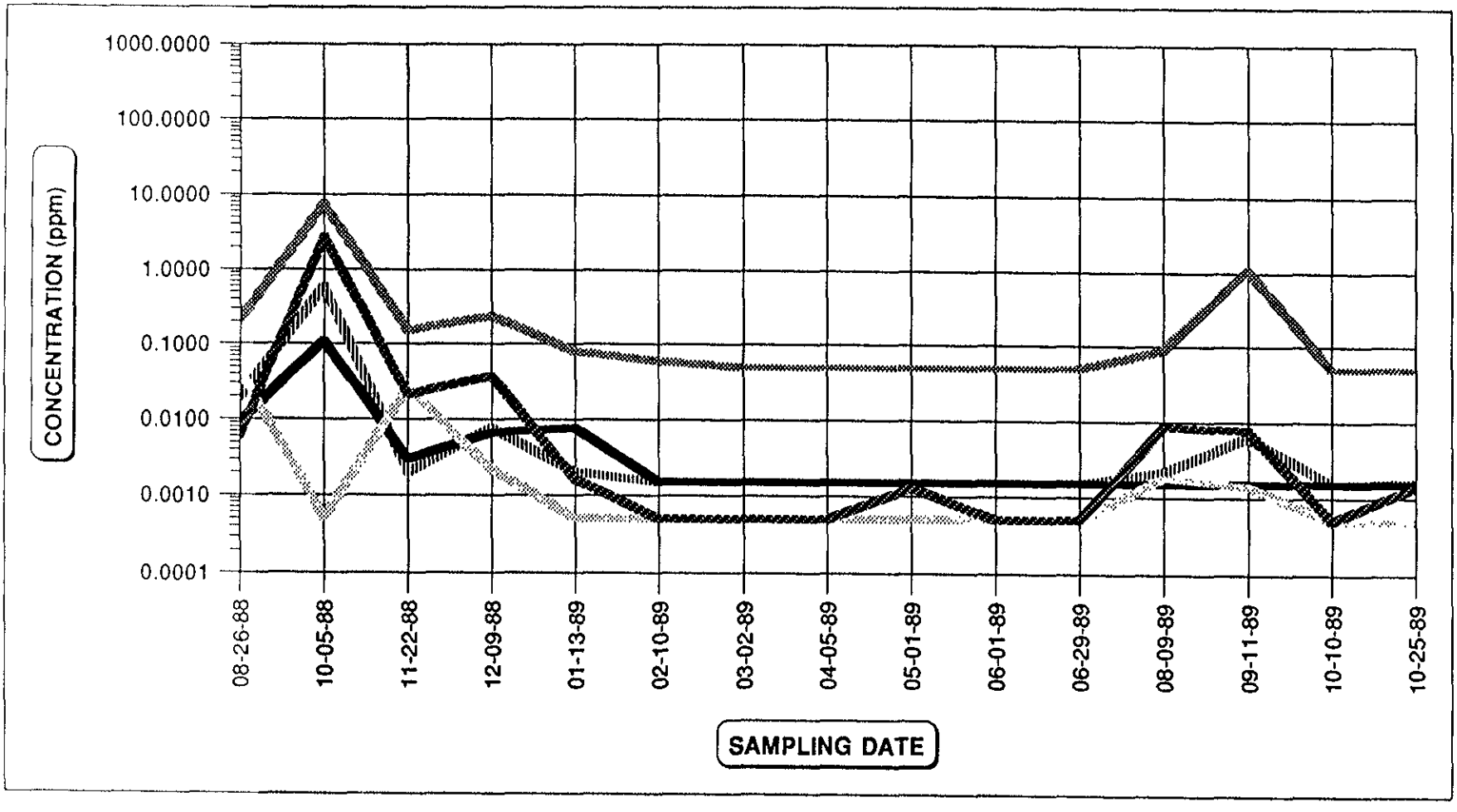
MW-4 GROUNDWATER ANALYSES DATA



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

Ensco Environmental Services, Inc. Project No. 1826G
Figure # 6

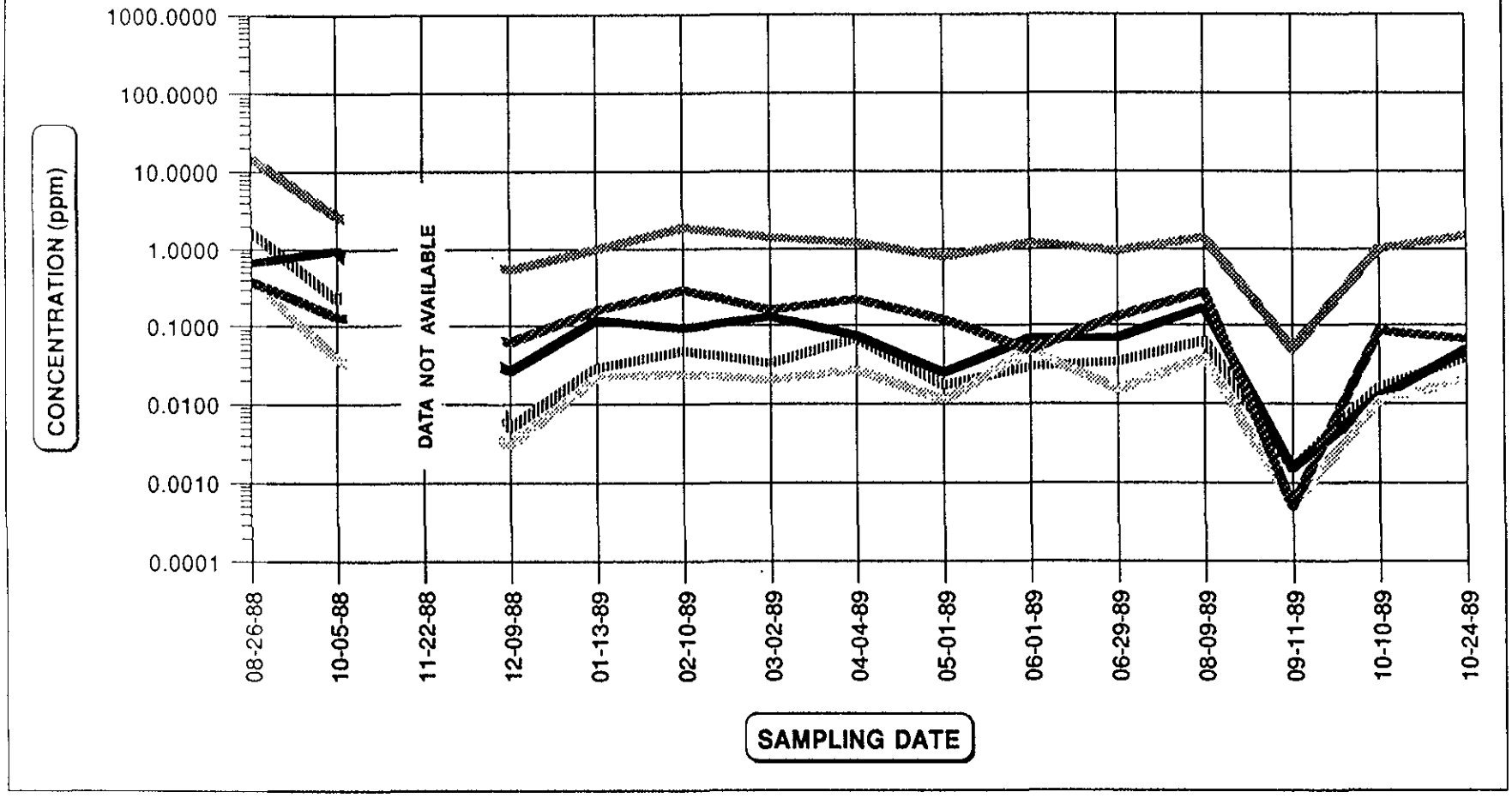
MW-5 GROUNDWATER ANALYSES DATA



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

Ensco Environmental Services, Inc. Project No. 1826G
Figure # 7

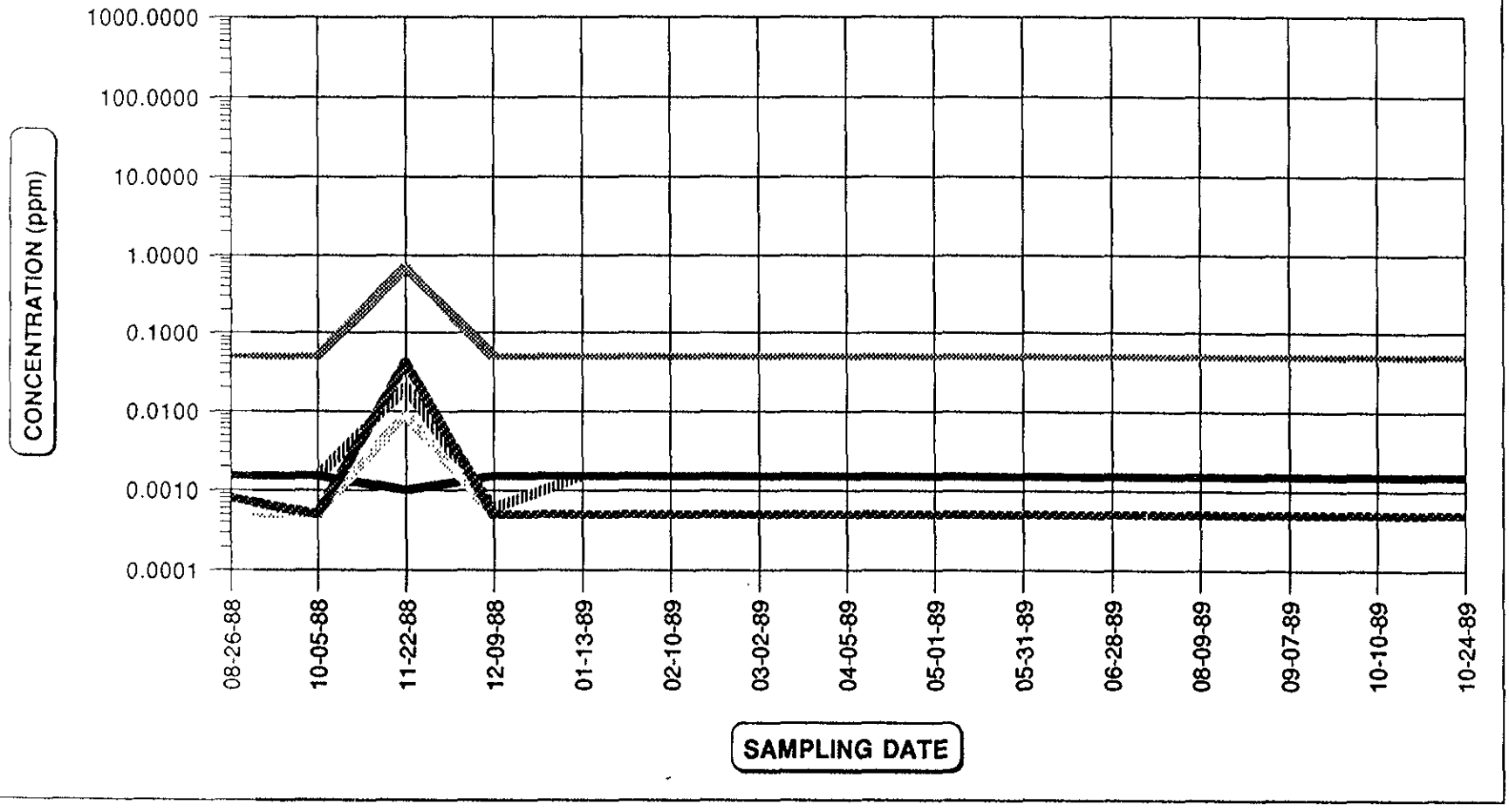
MW-6 GROUNDWATER ANALYSES DATA



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

Ensco Environmental Services, Inc. Project No. 1826G
Figure # 8

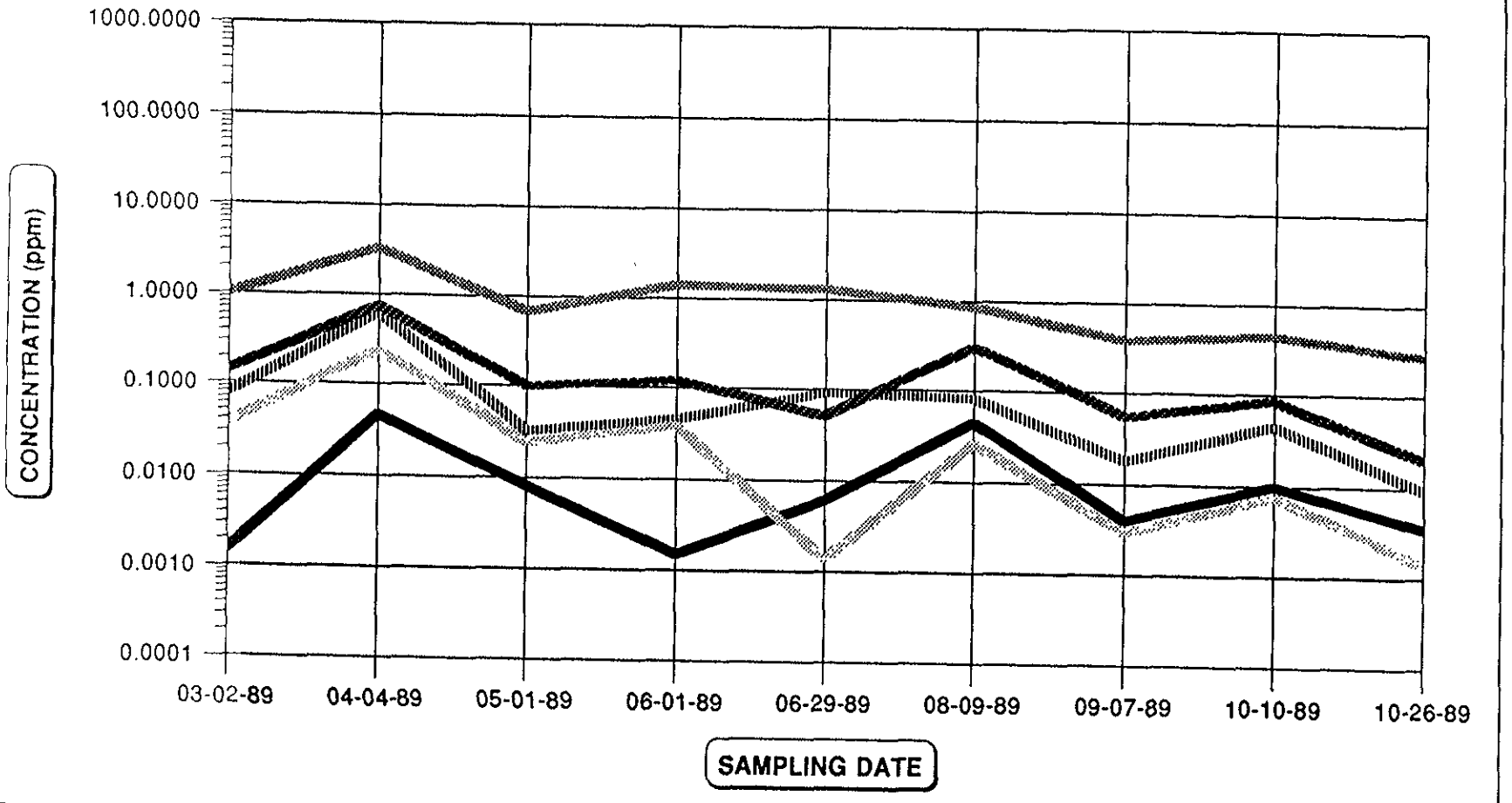
MW-7 GROUNDWATER ANALYSES DATA



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

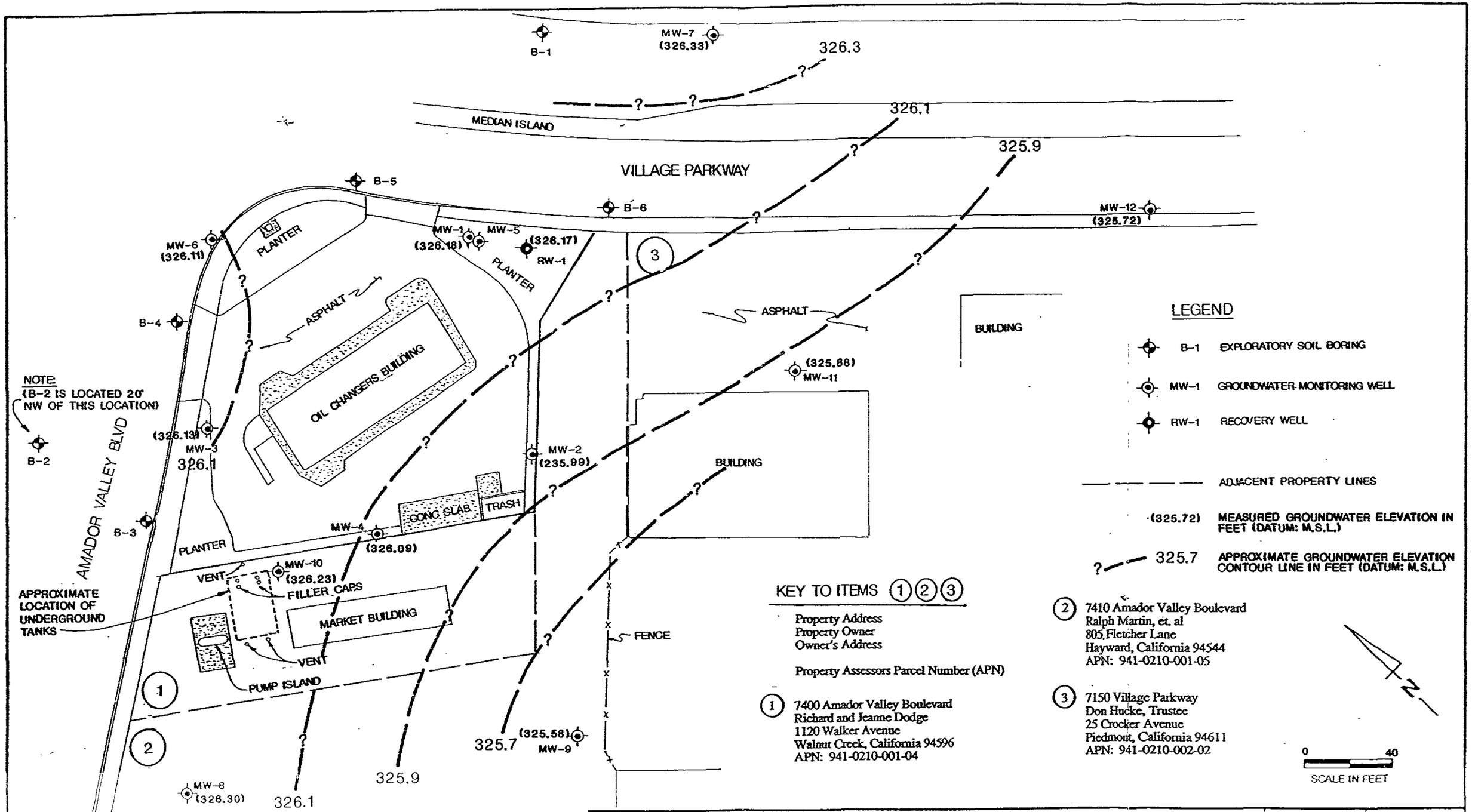
Ensco Environmental Services, Inc. Project No. 1826G
Figure # 9

MW-10 GROUNDWATER ANALYSES DATA



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

Ensco Environmental Services, Inc. Project No. 1826G
Figure # 10



ensco environmental services, inc.

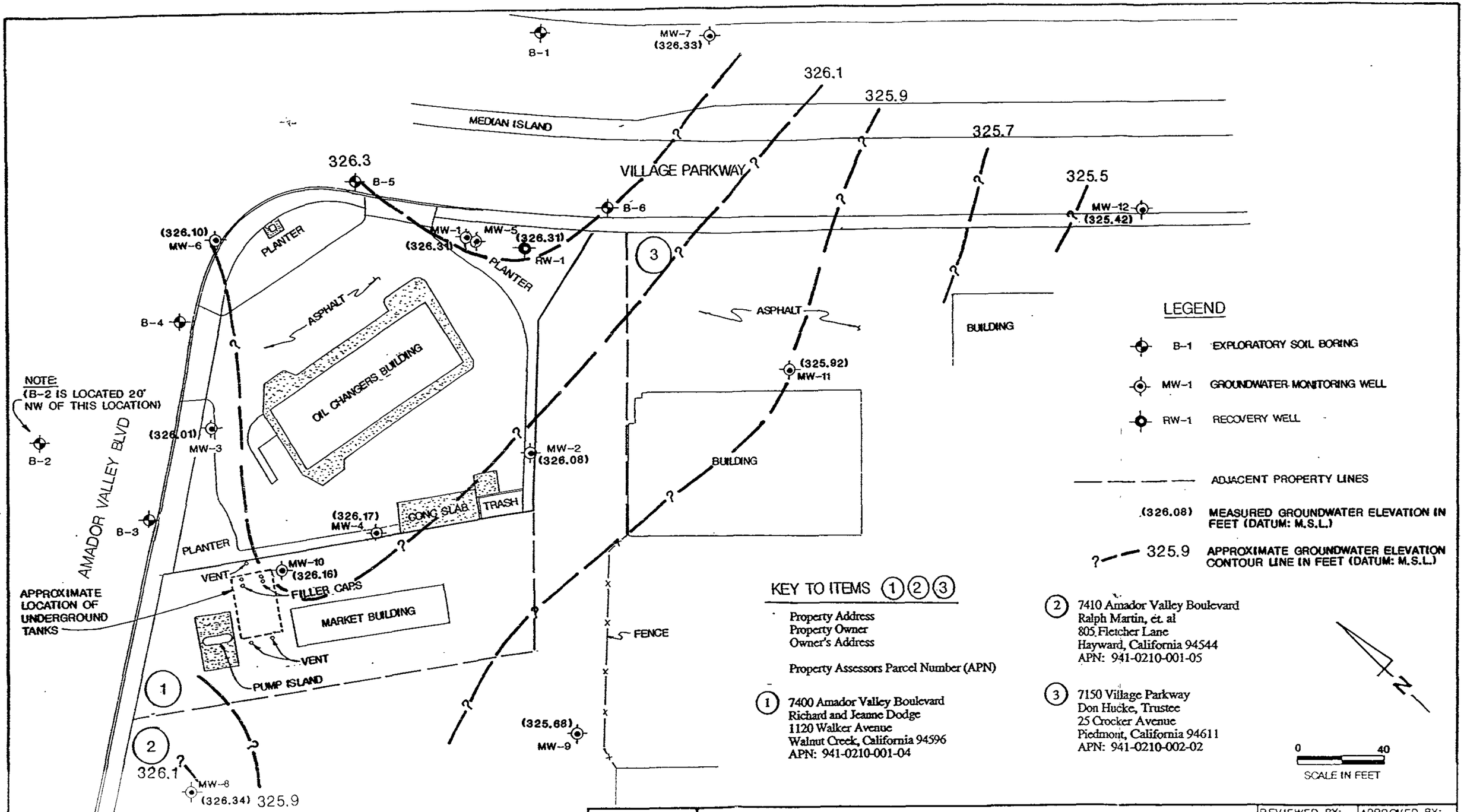
GROUNDWATER ELEVATION CONTOUR MAP (9/7/89)

FORMER SHELL STATION

7194 AMADOR VALLEY BLVD

DUBLIN, CALIFORNIA

REVIEWED BY:	APPROVED BY:
JOB #: 1826-2G	DRAWN BY: SLS
DATE: 1/5/90	DRAWING #: FIG. 11



LEGEND

- B-1 EXPLORATORY SOIL BORING
- MW-1 GROUNDWATER MONITORING WELL
- RW-1 RECOVERY WELL
- ADJACENT PROPERTY LINES
- (326.08) MEASURED GROUNDWATER ELEVATION IN FEET (DATUM: M.S.L.)
- 325.9 APPROXIMATE GROUNDWATER ELEVATION CONTOUR LINE IN FEET (DATUM: M.S.L.)

KEY TO ITEMS (1)(2)(3)

Property Address
Property Owner
Owner's Address

Property Assessors Parcel Number (APN)

(1) 7400 Amador Valley Boulevard
Richard and Jeanne Dodge
1120 Walker Avenue
Walnut Creek, California 94596
APN: 941-0210-001-04

(2) 7410 Amador Valley Boulevard
Ralph Martin, et. al
805 Fletcher Lane
Hayward, California 94544
APN: 941-0210-001-05

(3) 7150 Village Parkway
Don Hucke, Trustee
25 Crocker Avenue
Piedmont, California 94611
APN: 941-0210-002-02

N

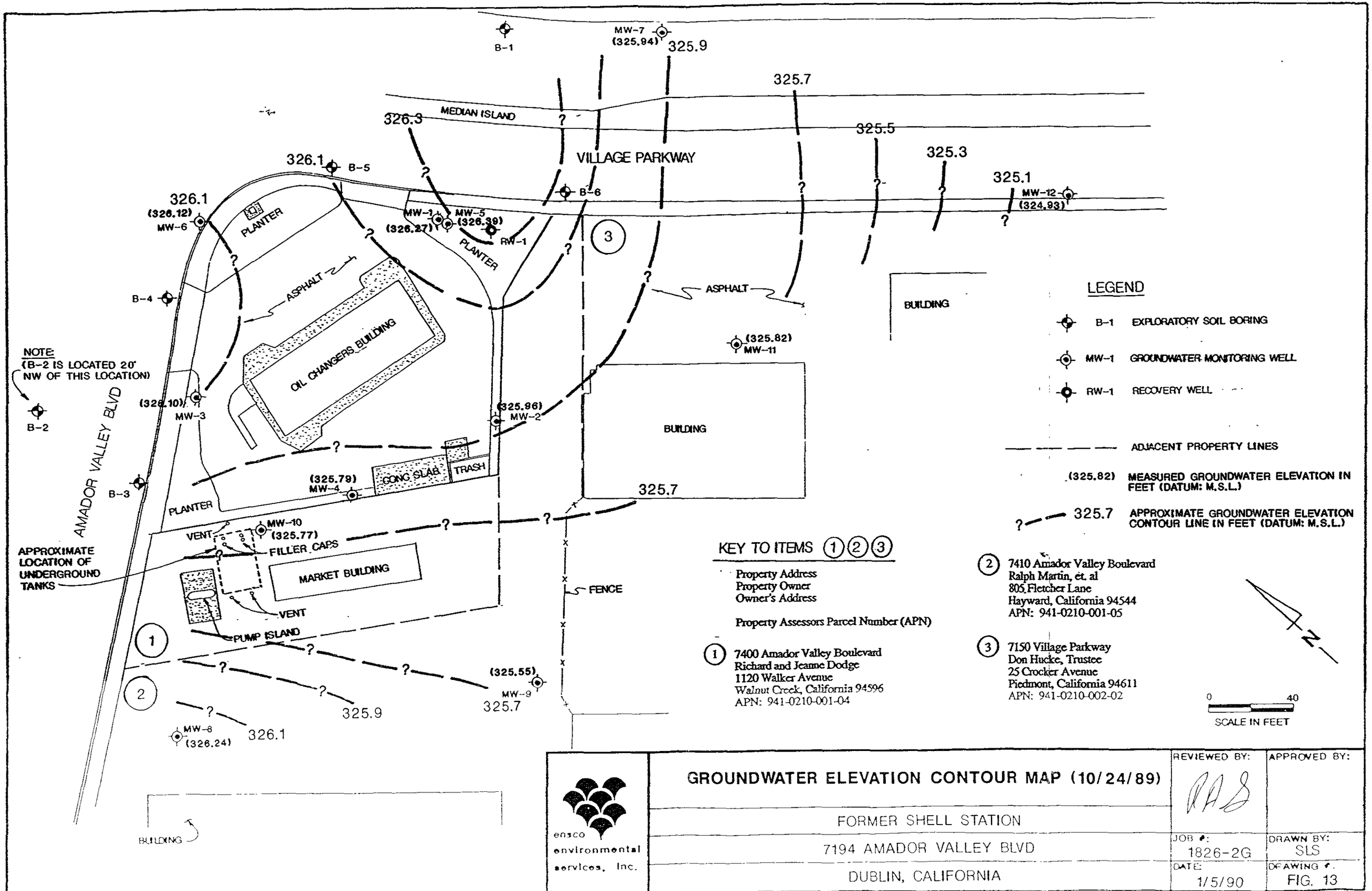
0 40
SCALE IN FEET

ensco environmental services, inc.

GROUNDWATER ELEVATION CONTOUR MAP (10/9/89)

FORMER SHELL STATION
7194 AMADOR VALLEY BLVD
DUBLIN, CALIFORNIA

REVIEWED BY:	APPROVED BY:
RAS	
JOB #: 1826-2G	DRAWN BY: SLS
DATE: 1/5/90	DRAWING #: FIG. 12



ensco environmental services, Inc.

GROUNDWATER ELEVATION CONTOUR MAP (10/24/89)

FORMER SHELL STATION

7194 AMADOR VALLEY BLVD

DUBLIN, CALIFORNIA

REVIEWED BY:	APPROVED BY:
JOB #: 1826-2G	DRAWN BY: SLS
DATE: 1/5/90	DRAWING #: FIG. 13

APPENDIX A

GROUNDWATER SAMPLING PROTOCOL AND LABORATORY PROCEDURES

ENSCO ENVIRONMENTAL SERVICES, INC.

GROUNDWATER SAMPLING PROTOCOL

GROUNDWATER SAMPLING PROTOCOL

Sampling of groundwater is performed by Ensco Environmental Services, Inc. (EES) sampling technicians. Summarized field sampling procedures are as follows:

1. Measurements of liquid surface in the well and depth of monitoring well.

2. Field check for presence of floating product.

3. Purge well prior to collecting samples.

4. Monitor groundwater for temperature, pH, and specific conductance during purging.

5. Collect samples using Environmental Protection Agency (EPA) approved sample collection devices, i.e., teflon or stainless steel bailers or pumps.

6. Transfer samples into laboratory-supplied EPA-approved containers.

7. Label samples and log onto chain-of-custody form.

8. Store samples in a chilled ice chest for shipment to a state-certified analytical laboratory.

GROUNDWATER SAMPLING PROCEDURES

Equipment Cleaning

All water samples are placed in precleaned laboratory-supplied bottles. Sample bottles and caps remain sealed until actual usage at the site. All equipment which comes in contact with the well or groundwater is thoroughly cleaned with a tri sodium phosphate (TSP) solution and rinsed with deionized or distilled water before use at the site. This cleaning procedure is followed between each well sampled. Wells are sampled in approximate order of increasing contamination. If a teflon cord is used, the cord is cleaned. If a nylon or cotton cord is used, a new cord is used in each well All equipment blanks are collected prior to sampling. The blanks are analyzed periodically to ensure proper cleaning.

Water Level Measurements

Depth to groundwater is measured in each well using a sealed sampling tape or scaled electric sounder prior to purging or sampling. If the well is known or suspected of containing free-phase petroleum hydrocarbons, an optical interface probe is used to measure the hydrocarbon thickness and groundwater level. Measurements are collected and recorded to the nearest 0.01 foot.

Bailer Sheen Check

If no measurable free-phase petroleum hydrocarbons are detected, a clear acrylic bailer is used to determine the presence of a sheen. Any observed film as well as odor and color of the water is recorded.

Groundwater Sampling

Prior to groundwater sampling, each well is purged of "standing" groundwater. Either a bailer, hand pump, or submersible pump is used to purge the well. The amount of purging is dependent on the well yield. In a high yield formation, samples will be collected when normal field measurement, including temperature, pH, and specific conductance stabilize, provided a minimum of three well-casing volumes of water have been removed. Field measurements will be taken after purging each well volume. In low yield formations, the well is purged such that the "standing" water is removed and the well is allowed to recharge. (Normal field measurements will be periodically recorded during the purging process.) In situations where recovery to 80% of static water level is estimated, or observed to exceed a two hour duration, a sample will be collected when sufficient volume is available for a sample for each parameter. At no time will the well be purged dry so that the recharge rate causes the formation water to cascade into the well.

In wells where free-phase hydrocarbons are detected, the free-phase portion will be bailed from the well and the volume removed recorded. A groundwater sample will be collected if bailing reduces the amount of free-phase hydrocarbons to the point where they are not present in the well. Well sampling will be conducted using one of the aforementioned methods depending on the formation yield. However, if free-phase hydrocarbons persist throughout bailing, then groundwater samples will not be collected.

Groundwater sample containers are labeled with a unique sample number, location, product name and number, and date of collection. All samples are logged onto a chain-of-custody form and placed in a chilled ice chest for shipment to a laboratory certified by the State of California Department of Health Services.

ENSCO ENVIRONMENTAL SERVICES, INC.

LABORATORY PROCEDURES

LABORATORY PROCEDURES

Selection of the Laboratory

The laboratories selected to perform the analytical work are certified by the California State Department of Health Services as being qualified to perform the selected analyses. The selected laboratories are reviewed by Ensco Environmental Services, Inc. to ensure that they are certified by the State of California and maintain an adequate quality control program

Chain-of-Custody Control

The following procedures are used during sampling and analytical activities to provide chain-of-custody control during transfer of samples from collection through delivery to the laboratories. Record keeping activities used to achieve chain-of-custody control are:

- Contact made by sampling organization with facility supervisor and laboratory prior to sampling to alert them of dates of sampling and sample delivery.
- Well location map with well identification number(s) prominently displayed.
- Field log book for documenting sampling activities in the field.
- Labels for identifying individual samples.
- Chain-of-custody record for documenting transfer and possession of samples.
- Laboratory analysis request sheet for documenting analyses to be performed.

Field Filtration of Samples

Samplers will refrain from filtering TOC, TOX or other organic compound samples as the increased handling required may result in the loss of chemical constituents of interest. Allowing the samples to settle prior to analysis followed by decanting the sample is preferable to filtration of these substances. If filtration is necessary for the determination of extractable organic compounds, the filtration should be performed in the laboratory. It may be necessary to run parallel sets of filtered and unfiltered samples with standards to establish the recovery of hydrophobic compounds when sample must be filtered. All the materials' precautions used in the construction of the sampling train should be observed for filtration apparatus. Vacuum filtration of groundwater samples is not recommended.

Water samples for dissolved inorganic chemical constituents (e.g., metals, alkalinity and anionic species) will be filtered in the field.

Sample Containers

Sample containers vary with each type of analytical parameter. Selected container types and materials are non-reactive with the sample and the particular analytical parameter being tested. Appropriate containers for volatile organics are glass bottles of at least 40 milliliters in size fitted with teflon-faced silicon septa. Sample containers are properly cleaned and sterilized by the certified laboratory according to the EPA protocol for the individual analysis.

Sample Preservation and Shipment

Various preservatives are used by the certified laboratory to retard changes in samples. Sample shipment from Ensco Environmental Services to laboratories performing the selected analyses routinely occurs within 24 hours of sample collection.

Analytical Procedures

The analysis of groundwater samples is conducted in accordance with accepted quantitative analytical procedures. The following four publications are considered the primary references for groundwater sample analysis, and the contracts with the laboratories analyzing the samples stipulate that the methods set out in these publications be used. Please note that procedures used are periodically updated by federal and state agencies, and the certified laboratories amend analysis as required by the update.

- Standard Methods for the Examination of Water and Wastewater, 16th Ed., American Public Health Association, et al., 1985.
- Methods for Chemical Analysis of Water and Wastes, U.S. EPA, 600/4-79-020, March 1979.
- Test Methods for Evaluation of Solid Waste: Physical/Chemical Methods, U.S. EPA SW-846, 1982.
- Methods for Organic Chemical Analysis of Municipal and Industrial Wastewater, EPA, 600/4-82-057, 1982.
- Practical Guide for Groundwater Sampling, EPA, 600/2-85/104, September 1985.
- RCRA Ground-Water Monitoring Technical Enforcement Guidance Document, EPA, September 1986.

Analytical Methods

The analytical methods used by the selected laboratories are those required by the type of analysis (fuels, metals, etc.). These methods are those currently approved by the State Regional Water Quality Control Board.

APPENDIX B

CERTIFIED LABORATORY REPORTS AND CHAIN-OF-CUSTODY RECORDS

NATIONAL ENVIRONMENTAL TESTING, INC.

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

Formerly: ANATEC Labs, Inc.

Richard A. Garlow
ENSCO
41674 Christy St
Fremont, CA 94538

09-22-89
NET Pacific Log No: 7676
Series No: 509
Client Ref: PO# 15200;Proj# 1826G

Subject: Analytical Results for "Shell-7194 Amador Valley Blvd" Received 09-08-89.

Dear Mr. Garlow:

Sample analysis in support of the project referenced above has been completed and results are presented on following pages. Should you have questions regarding procedures or results, please feel welcome to contact Client Services.

Submitted by:

Susan Joy Griffin
Group Leader
Gas Chromatography

Approved by:

Brian Fies
Group Leader
Atomic Spectroscopy

/ma
Enc: Sample Custody Document

KEY TO ABBREVIATIONS and METHOD REFERENCES

Abbreviations

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.

NR : Not requested.

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 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.

* 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.

Parameter	Reporting Limit (ppm)	Descriptor, Lab No. and Results BB1 09-07-89 0945 (-34559)	MW9 09-07-89 0954 (-34560)	MW11 09-07-89 1100 (-34561)
PETROLEUM HYDROCARBONS VOLATILE (WATER)				
DILUTION FACTOR *		1	1	1
DATE ANALYZED		09-18-89	09-18-89	09-18-89
METHOD GC FID/5030				
as Gasoline	0.05	ND	ND	ND
METHOD 602				
Benzene	0.0005	ND	ND	ND
Ethylbenzene	0.0015	ND	ND	ND
Toluene	0.0005	ND	ND	ND
Xylenes, total	0.0015	ND	ND	ND

Parameter	Reporting Limit (ppm)	Descriptor, Lab No. and Results MW 7 09-07-89 1200 (-34562)	 MW 8 09-07-89 1324 (-34563)	 MW 10 09-07-89 1431 (-34564)
PETROLEUM HYDROCARBONS VOLATILE (WATER)				
DILUTION FACTOR *		1	1	1
DATE ANALYZED		09-18-89	09-18-89	09-18-89
METHOD GC FID/5030				
as Gasoline	0.05	ND	ND	0.39
METHOD 602				
Benzene	0.0005	ND	ND	0.055
Ethylbenzene	0.0015	ND	ND	0.0040
Toluene	0.0005	ND	ND	0.0029
Xylenes, total	0.0015	ND	ND	0.018

CHAIN OF CUSTODY RECORD

7676

PROJECT NO	PROJECT NAME	7194 Amador Valley Blvd
1826G	Shell Dublin	

SAMPLERS (Signature) John Monroe

NO	DATE	TIME	STATION AND LOCATION	TEST REQUESTED: TPH G/BTEX
BB-1	9/7/89	1145	3 gres VOA	X
MW-9		9:54	"	X
MW-11		11:00	"	X
MW-7		12:00	"	X
MW-6		1:24	"	X
MW-10		2:31	"	X

P.O. # 15200

LAB NET Pacific

TURN AROUND TIME Normal

REMARKS

RELINQUISHED BY	DATE:	TIME:	RECEIVED BY:
[signature]	9/7	15:00	[signature]
RELINQUISHED BY:	DATE:	TIME:	RECEIVED BY:

RELINQUISHED BY:	DATE:	TIME:	RECEIVED BY:
[signature]	9/8	0300	[signature]
RELINQUISHED BY: (VIA NCS)	DATE: 9/8/89	TIME: 0716	RECEIVED BY: [signature]

REMARKS report in ppm

REPORT TO Rich Garlow

ensco environmental services, inc.
41674 Christy Street
Fremont, CA 94538-3114
(415) 659-0404
Fax (415) 651-4677
Contr. Lic. No. 550205

FORM DATED 5-30-89

NATIONAL ENVIRONMENTAL TESTING, INC.

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

Formerly: ANATEC Labs, Inc.

Richard A. Garlow
ENSCO
41674 Christy St
Fremont, CA 94538

09-22-89
NET Pacific Log No: 7709
Series No: 509
Client Ref: PO# 15200; Proj# 1826G

Subject: Analytical Results for "Shell-7194 Amador Valley Blvd" Received 09-12-89.
REVISED 10-13-89.

Dear Mr. Garlow:

Sample analysis in support of the project referenced above has been completed and results are presented on following pages. Should you have questions regarding procedures or results, please feel welcome to contact Client Services.

Submitted by:

Susan Joy Griffin
Group Leader
Gas Chromatography

Approved by:

Brian Fies
Group Leader
Atomic Spectroscopy

/ma
Enc: Sample Custody Document

KEY TO ABBREVIATIONS and METHOD REFERENCES

Abbreviations

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.

NR : Not requested.

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 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.

* 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.

Parameter	Reporting Limit (ppm)	Descriptor, Lab No. and Results BB-1 09-08-89 1310 (-34740)	 MW-2 09-08-89 1430 (-34741)	 MW-4 09-08-89 1520 (-34742)
PETROLEUM HYDROCARBONS VOLATILE (WATER)				
DILUTION FACTOR *		1	1	1
DATE ANALYZED		09-18-89	09-18-89	09-18-89
METHOD GC FID/5030				
as Gasoline	0.05	ND	ND	0.094
METHOD 602				
Benzene	0.0005	ND	0.0032	0.045
Ethylbenzene	0.0015	ND	ND	0.0038
Toluene	0.0005	ND	ND	0.0005
Xylenes, total	0.0015	ND	ND	ND

CHAIN OF CUSTODY RECORD

7709

PROJECT NO	PROJECT NAME	
1826G	Shell Dublin	2795 Amador Valley Blvd

SAMPLERS (Signature) John Monroe

NO	DATE	TIME	STATION AND LOCATION
BB-1	9/4/89	1:10	2 preserved VOA
MW-7	MW-12	1:23	"
MW-2		2:30	"
MW-4	↓	3:20	"
MW 12			2 VOAs

TEST REQUESTED: TPH G/BTEX

P.O. # 15200

LAB NET Pacific

TURN AROUND TIME Normal

REMARKS

* NOT RELINQUED.

HOLD

Change MW-7 to MW-12 per John Monroe to JR to LY 9/11/09

RELINQUISHED BY:	DATE:	TIME:	RECEIVED BY:
RELINQUISHED BY:	9/12/89	0245	RECEIVED BY:

RELINQUISHED BY:	DATE:	TIME:	RECEIVED BY:
	9/11	11:25	
RELINQUISHED BY: CUIA NCS	9/14/09	0700	RECEIVED BY:

REMARKS

REPORT TO Rich Gorlow

FORM DATED 5-30-89

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

NET NATIONAL ENVIRONMENTAL TESTING, INC.

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

Formerly: ANATEC Labs, Inc.

Richard A. Garlow
ENSCO
41674 Christy St
Fremont, CA 94538

09-29-89
NET Pacific Log No: 7725
Series No: 509
Client Ref: PO# 15200;Proj# 1826G

Subject: Analytical Results for "Shell-7194 Amador Valley Blvd" Received 09-13-89.
REVISED 10-13-89.

Dear Mr. Garlow:

Sample analysis in support of the project referenced above has been completed and results are presented on following pages. Should you have questions regarding procedures or results, please feel welcome to contact Client Services.

Submitted by:

Brian Fies
Group Leader
Atomic Spectroscopy

Approved by:

Susan Joy Griffin
Group Leader
Gas Chromatography

/ma
Enc: Sample Custody Document

KEY TO ABBREVIATIONS and METHOD REFERENCES

Abbreviations

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.

NR : Not requested.

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 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.

* 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.

Parameter	Reporting Limit (ppm)	Descriptor, Lab No. and Results BB-1 9-11-89 1007 (-34770)	 RW-1 09-11-89 1101 (-34771)	 MW-5 09-11-89 1228 (-34772)
PETROLEUM HYDROCARBONS VOLATILE (WATER)				
DILUTION FACTOR *		1	1	1
DATE ANALYZED		09-22-89	09-22-89	09-22-89
METHOD GC FID/5030				
as Gasoline	0.05	ND	0.097	1.1
METHOD 602				
Benzene	0.0005	ND	0.0017	0.0078
Ethylbenzene	0.0015	ND	0.0023	ND
Toluene	0.0005	ND	0.0021	0.0014
Xylenes, total	0.0015	ND	0.014	0.0063

Parameter	Reporting Limit (ppm)	Descriptor, Lab No. and Results MW-1 09-11-89 1256 (-34773)	 MW-3 09-11-89 1359 (-34774)	 MW-6 09-11-89 1447 (-34775)
PETROLEUM HYDROCARBONS VOLATILE (WATER)				
DILUTION FACTOR *		1	1	1
DATE ANALYZED		09-22-89	09-22-89	09-22-89
METHOD GC FID/5030				
as Gasoline	0.05	ND	ND	ND
METHOD 602				
Benzene	0.0005	ND	ND	ND
Ethylbenzene	0.0015	ND	ND	ND
Toluene	0.0005	ND	ND	ND
Xylenes, total	0.0015	0.0022	ND	ND

CHAIN OF CUSTODY RECORD

PROJECT NO	PROJECT NAME	2795 Amador Valley Blvd
1826G	Shell Dublin	

SAMPLERS (Signature): John Monroe

NO.	DATE	TIME	STATION AND LOCATION	TEST REQUESTED: BTEX / TPHG
BB-1	9/11/89	10:07	2 pres VOA	X
RW-1		11:01	"	X
MW-5		12:38	"	X
MW-1		12:56	"	X
MW-3		1:59	"	X
MW-6		2:47	"	X

P.O # 15200

LAB NET Pacific

TURN AROUND TIME Normal

REMARKS

RELINQUISHED BY:	DATE: TIME:	RECEIVED BY:
[signature]	9/12/89 14:20	[signature]
RELINQUISHED BY:	DATE: TIME:	RECEIVED BY:

RELINQUISHED BY:	DATE: TIME:	RECEIVED BY
RELINQUISHED BY:	DATE: TIME:	RECEIVED BY

REMARKS:

REPORT TO: Rich Garlow

FORM DATED 5-30-89

ensco environmental services, inc.
41674 Christy Street
Fremont, C.A. 94538-3114
(415) 659-0101
Fax (415) 651-4077
Cont Lic No 550205

NET NATIONAL ENVIRONMENTAL TESTING, INC.

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

Formerly: ANATEC Labs, Inc.

Rich Garlow
ENSCO Env. Services, Inc.
41674 Christy St.
Fremont, CA 94538A

10-23-89
NET Pacific Log No: 8114
Series No: 103.1
Client Ref: ENSCO Proj#1826G

Subject: Analytical Results for "Shell - 7194 Amador Valley Blvd., Dublin" Received 10-10-89.

Dear Mr. Garlow:

Sample analysis in support of the project referenced above has been completed and results are presented on following pages. Should you have questions regarding procedures or results, please feel welcome to contact Client Services.

Submitted by:

Gregg P. Oakes
Group Leader
Mass Spectroscopy

Approved by:

Jules Skamarack
Laboratory Manager

/sm
Enc: Sample Custody Document

KEY TO ABBREVIATIONS and METHOD REFERENCES

Abbreviations

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.

NR : Not requested.

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 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.

* 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.

SAMPLE DESCRIPTION: BB1 10-09-89 1415
LAB NO.: (-36940)

Parameter	Reporting Limit	Results	Units
PETROLEUM HYDROCARBONS			
VOLATILE (WATER)		--	
DILUTION FACTOR *		1	
DATE ANALYZED		10-14-89	
METHOD GC FID/5030		--	
as Gasoline	0.05	ND	ppm
METHOD 602		--	
Benzene	0.0005	ND	ppm
Ethylbenzene	0.0015	ND	ppm
Toluene	0.0005	ND	ppm
Xylenes, total	0.0015	ND	ppm

SAMPLE DESCRIPTION: MW9 10-09-89 1430
LAB NO.: (-36941)

Parameter	Reporting Limit	Results	Units
PETROLEUM HYDROCARBONS			
VOLATILE (WATER)		--	
DILUTION FACTOR *		1	
DATE ANALYZED		10-14-89	
METHOD GC FID/5030		--	
as Gasoline	0.05	ND	ppm
METHOD 602		--	
Benzene	0.0005	ND	ppm
Ethylbenzene	0.0015	ND	ppm
Toluene	0.0005	ND	ppm
Xylenes, total	0.0015	ND	ppm

SAMPLE DESCRIPTION: MW11 10-09-89 1445
LAB NO.: (-36942)

Parameter	Reporting Limit	Results	Units
PETROLEUM HYDROCARBONS VOLATILE (WATER)		--	
DILUTION FACTOR *		1	
DATE ANALYZED		10-14-89	
METHOD GC FID/5030		--	
as Gasoline	0.05	ND	ppm
METHOD 602		--	
Benzene	0.0005	ND	ppm
Ethylbenzene	0.0015	ND	ppm
Toluene	0.0005	ND	ppm
Xylenes, total	0.0015	ND	ppm

SAMPLE DESCRIPTION: MW12 10-09-89 1530
LAB NO.: (-36943)

Parameter	Reporting Limit	Results	Units
PETROLEUM HYDROCARBONS VOLATILE (WATER)		--	
DILUTION FACTOR *		1	
DATE ANALYZED		10-14-89	
METHOD GC FID/5030		--	
as Gasoline	0.05	ND	ppm
METHOD 602		--	
Benzene	0.0005	ND	ppm
Ethylbenzene	0.0015	ND	ppm
Toluene	0.0005	ND	ppm
Xylenes, total	0.0015	ND	ppm

SAMPLE DESCRIPTION: MW2 10-09-89 1600
LAB NO.: (-36944)

Parameter	Reporting Limit	Results	Units
PETROLEUM HYDROCARBONS			
VOLATILE (WATER)		--	
DILUTION FACTOR *		1	
DATE ANALYZED		10-14-89	
METHOD GC FID/5030		--	
as Gasoline	0.05	0.11	ppm
METHOD 602		---	
Benzene	0.0005	0.0067	ppm
Ethylbenzene	0.0015	ND	ppm
Toluene	0.0005	ND	ppm
Xylenes, total	0.0015	ND	ppm

CHAIN OF CUSTODY RECORD

WIC # (8114)

PROJECT NO	PROJECT NAME
1826 G	Shell Dublin 7194 Amador Valley Blvd

SAMPLERS (Signature) Jan Smith, John Monroe

NO	DATE	TIME	STATION AND LOCATION	TPH G-BTEX
B01	10-9-89	14:15	2 pres. VOA	X
MW9	"	14:30	" "	X
MW11	"	14:45	" "	X
MW12	"	15:30	" "	X
MW2	"	16:00	" "	X

TEST REQUESTED

P.O.# 204-3277-0105

LAB NET

TURN AROUND TIME Normal

REMARKS

RELINQUISHED BY:	DATE: TIME:	RECEIVED BY:	RELINQUISHED BY:	DATE: TIME:	RECEIVED BY:
	10/10/89 11:15				
RELINQUISHED BY:	DATE: TIME:	RECEIVED BY:	RELINQUISHED BY:	DATE: TIME:	RECEIVED BY:
				10/10/89 1515	

REMARKS AFE # 986639

REPORT TO Rich Garlow

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

FORM DATED 5-30-89

NET NATIONAL ENVIRONMENTAL TESTING, INC.

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

Formerly: ANATEC Labs, Inc.

Rich Garlow
ENSCO Env. Services, Inc.
41674 Christy St.
Fremont, CA 94538

10-19-89
NET Pacific Log No: 8148
Series No: 103.1
Client Ref: ENSCO's Proj#1826G

Subject: Analytical Results for "Shell - 1194 Amador Valley Blvd., Dublin" Received 10-12-89.

Dear Mr. Garlow:

Sample analysis in support of the project referenced above has been completed and results are presented on following pages. Should you have questions regarding procedures or results, please feel welcome to contact Client Services.

Submitted by:

Gregg P. Oakes
Group Leader
Mass Spectroscopy

Approved by:

Sue J. Long
Group Leader
Classical Chemistry

/sm
Enc: Sample Custody Document

KEY TO ABBREVIATIONS and METHOD REFERENCES

Abbreviations

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.

NR : Not requested.

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 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.

* 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.

Parameter	Reporting Limit (ppm)	Descriptor, Lab No. and Results				
		BB-2 10-10-89 1000 (-37075)	MW-7 10-10-89 1026 (-37076)	RW-1 10-10-89 1044 (-37077)	MW-6 10-10-89 1112 (-37078)	MW-5 10-10-89 1135 (-37079)
PETROLEUM HYDROCARBONS VOLATILE (WATER)		—	—	—	—	—
DILUTION FACTOR *		1	1	1	1	1
DATE ANALYZED		10-16-89	10-16-89	10-16-89	10-16-89	10-16-89
METHOD GC FID/5030		—	—	—	—	—
as Gasoline	0.05	ND	ND	1.4	1.0	ND
METHOD 602		—	—	—	—	—
Benzene	0.0005	ND	ND	0.048	0.085	ND
Ethylbenzene	0.0015	ND	ND	ND	0.012	ND
Toluene	0.0005	ND	ND	0.0045	0.011	ND
Xylenes, total	0.0015	ND	ND	0.0030	0.016	ND

Parameter	Reporting Limit (ppm)	Descriptor, Lab No. and Results				
		MW-1 10-10-89 1215 (-37080)	MW-3 10-10-89 1238 (-37081)	MW-8 10-10-89 1317 (-37082)	MW-10 10-10-89 1402 (-37083)	MW-4 10-10-89 1547 (-37084)
PETROLEUM HYDROCARBONS VOLATILE (WATER)		—	—	—	—	—
DILUTION FACTOR *		10	1	1	1	1
DATE ANALYZED		10-17-89	10-16-89	10-16-89	10-16-89	10-16-89
METHOD GC FID/5030		—	—	—	—	—
as Gasoline	0.05	8.7	0.08	ND	0.46	0.09
METHOD 602		—	—	—	—	—
Benzene	0.0005	1.1	0.0064	ND	0.085	0.030
Ethylbenzene	0.0015	0.18	ND	ND	0.010	0.0019
Toluene	0.0005	0.31	0.00072	ND	0.0076	0.0010
Xylenes, total	0.0015	0.59	ND	ND	0.045	ND

CHAIN OF CUSTODY RECORD

WIC # 8148

PROJECT NO	PROJECT NAME	7194 Amador Valley Blvd
18266	Shell Dublin	

SAMPLERS (Signature) John Monroe, James Smyth

NO	DATE	TIME	STATION AND LOCATION	TEST REQUESTED: TPH-Gas/BTEX
BB-2	10/10/89	10:00	2 pres VOA	X
MW-7		10:26	"	X
RW-1		1044	"	X
MW-6		11:12	"	X
MW-5		11:35	"	X
MW-1		12:15	"	X
MW-3		12:38	"	X
MW-8		1:17	"	X
MW-10		2:02	"	X
MW-4	↓	3:47	"	X

P.O.# 204-2277-0105

LAB NET Pacific

TURN AROUND TIME Normal

REMARKS

RELINQUISHED BY:	DATE:	TIME:	RECEIVED BY:
[signature]	10/11	14:30	[signature]
RELINQUISHED BY:	DATE:	TIME:	RECEIVED BY:

RELINQUISHED BY:	DATE:	TIME:	RECEIVED BY:
[signature]			
RELINQUISHED BY: (VIA NCS)	DATE: 10/12/89	TIME: 0700	RECEIVED BY: [signature]

REMARKS AFE# 986639

REPORT TO: Rich Garlow

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

FORM DATED 5-30-89

NATIONAL ENVIRONMENTAL TESTING, INC.

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

Formerly: ANATEC Labs, Inc.

Rich Garlow
Ensco Environmental Svs.
41674 Christy Street
Fremont, CA 94538-3114

10-31-89
NET Pacific Log No: 8341
Series No: 103.1
Client Ref: Proj# 1826G;AFE#986639

Subject: Analytical Results for "Shell-Dublin" Received 10-26-89.

Dear Mr. Garlow:

Sample analysis in support of the project referenced above has been completed and results are presented on following pages. Should you have questions regarding procedures or results, please feel welcome to contact Client Services.

Submitted by:

Jules Skamarack
Laboratory Manager

Approved by:

Sue J. Long
Group Leader
Classical Chemistry

/ma
Enc: Sample Custody Document

KEY TO ABBREVIATIONS and METHOD REFERENCES

Abbreviations

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.

NR : Not requested.

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 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.

* 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.

Parameter	Reporting Limit (ppm)	BB-1 10-23-89 1522 (-38327)	MW9 10-23-89 1537 (-38328)	MW11 10-24-89 1040 (-38329)	MW12 10-24-89 1210 (-38330)	MW2 10-24-89 1335 (-38331)
		Descriptor, Lab No. and Results				
PETROLEUM HYDROCARBONS		—	—	—	—	—
VOLATILE (WATER)		—	—	—	—	—
DILUTION FACTOR *		1	1	1	1	1
DATE ANALYZED		10-27-89	10-27-89	10-27-89	10-27-89	10-27-89
METHOD GC FID/5030		—	—	—	—	—
as Gasoline	0.05	ND	ND	ND	ND	ND
METHOD 602		—	—	—	—	—
Benzene	0.0005	ND	ND	ND	ND	0.0025
Ethylbenzene	0.0015	ND	ND	ND	ND	ND
Toluene	0.0005	ND	ND	ND	ND	ND
Xylenes, total	0.0015	ND	ND	ND	ND	0.0019

Parameter	Reporting Limit (ppm)	Descriptor, Lab No. and Results				
		MW7 10-24-89 1500 (-38332)	MW6 10-24-89 1637 (-38333)	MW1 10-25-89 1440 (-38334)	RW1 10-25-89 1100 (-38335)	MW5 10-25-89 1530 (-38336)
PETROLEUM HYDROCARBONS		—	—	—	—	—
VOLATILE (WATER)		—	—	—	—	—
DILUTION FACTOR *		1	1	20	1	1
DATE ANALYZED		10-27-89	10-27-89	10-27-89	10-27-89	10-27-89
METHOD GC FID/5030		—	—	—	—	—
as Gasoline	0.05	ND	1.5	7.5	0.82	ND
METHOD 602		—	—	—	—	—
Benzene	0.0005	ND	0.067	0.66	0.051	0.0014
Ethylbenzene	0.0015	ND	0.050	0.46	0.025	ND
Toluene	0.0005	ND	0.020	0.25	0.0012	ND
Xylenes, total	0.0015	ND	0.039	0.48	0.003	0.0016

8341

CHAIN OF CUSTODY RECORD

WIC

PROJECT NO	PROJECT NAME
1826 G	Shell Dublin

SAMPLERS (Signature) James Gonzales

NO.	DATE	TIME	STATION AND LOCATION	TPH-G-BTEX
BB1	10-23-89	3:22	2 pres. VOA	X
MW9	"	3:37	" "	
MW11	10-24-89	10:40	" "	
MW12	"	12:10	" "	
MW2	"	1:25	" "	
MW7	"	3:00	" "	
MW6	"	4:37	" "	
MW1	10-25-89	2:40	" "	
RW1	"	11:00	" "	
MW5	"	3:30	" "	

TEST REQUESTED

P.O. # 204-2277-0105

LAB NET PACIFIC

TURN AROUND TIME 2 Days

REMARKS

RELINQUISHED BY:	DATE:	TIME:	RECEIVED BY:
[signature]	10-25-89	17:10	[signature] 10/26 13:00
RELINQUISHED BY:	DATE:	TIME:	RECEIVED BY:

RELINQUISHED BY:	DATE:	TIME:	RECEIVED BY:
[signature]	10-26	145	[signature]
RELINQUISHED BY: (via NGS)	DATE: 10/26/89	TIME: 1530	RECEIVED BY: JSchwartz

REMARKS: AFE # 986439
FAX results to ENSCO ENVIRONMENTAL SERVICES INC (415) 651-9677

REPORT TO: Rich Garlow

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

FORM DATED 5-30-89

NET NATIONAL ENVIRONMENTAL TESTING, INC.

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

Formerly: ANATEC Labs, Inc.

Rich Garlow
Ensco Environmental Svs.
41674 Christy Street
Fremont, CA 94538-3114

11-07-89
NET Pacific Log No: 8370
Series No: 103.1
Client Ref: Proj#1826G;AFE#986639

Subject: Analytical Results for "Shell - 7194 Amador Valley Blvd., Dublin" Received 10-27-89.

Dear Mr. Garlow:

Sample analysis in support of the project referenced above has been completed and results are presented on following pages. Should you have questions regarding procedures or results, please feel welcome to contact Client Services.

Submitted by:

Jules Skamarack
Laboratory Manager

Approved by:

Brian Fies
Group Leader
Atomic Spectroscopy

/sm
Enc: Sample Custody Document

KEY TO ABBREVIATIONS and METHOD REFERENCES

Abbreviations

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.

NR : Not requested.

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 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.

* 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.

SAMPLE DESCRIPTION: BB2 10-26-89 1028
LAB NO.: (-38492)

Parameter	Reporting Limit	Results	Units
PETROLEUM HYDROCARBONS		--	
VOLATILE (WATER)		--	
DILUTION FACTOR *		1	
DATE ANALYZED		10-31-89	
METHOD GC FID/5030		--	
as Gasoline	0.05	0.23	ppm
METHOD 602		--	
Benzene	0.0005	0.022	ppm
Ethylbenzene	0.0015	0.0038	ppm
Toluene	0.0005	0.0015	ppm
Xylenes, total	0.0015	0.010	ppm

SAMPLE DESCRIPTION: MW3 10-26-89 1036
LAB NO.: (-38493)

Parameter	Reporting Limit	Results	Units
PETROLEUM HYDROCARBONS		--	
VOLATILE (WATER)		--	
DILUTION FACTOR *		1	
DATE ANALYZED		10-31-89	
METHOD GC FID/5030		--	
as Gasoline	0.05	0.15	ppm
METHOD 602		--	
Benzene	0.0005	0.011	ppm
Ethylbenzene	0.0015	0.0016	ppm
Toluene	0.0005	ND	ppm
Xylenes, total	0.0015	ND	ppm

SAMPLE DESCRIPTION: MW8 10-26-89 1140
LAB NO.: (-38494)

Parameter	Reporting Limit	Results	Units
PETROLEUM HYDROCARBONS		--	
VOLATILE (WATER)		--	
DILUTION FACTOR *		1	
DATE ANALYZED		10-31-89	
METHOD GC FID/5030		--	
as Gasoline	0.05	ND	ppm
METHOD 602		--	
Benzene	0.0005	ND	ppm
Ethylbenzene	0.0015	ND	ppm
Toluene	0.0005	ND	ppm
Xylenes, total	0.0015	ND	ppm

SAMPLE DESCRIPTION: MW10 10-26-89 1250
LAB NO.: (-38495)

Parameter	Reporting Limit	Results	Units
PETROLEUM HYDROCARBONS		--	
VOLATILE (WATER)		--	
DILUTION FACTOR *		1	
DATE ANALYZED		10-31-89	
METHOD GC FID/5030		--	
as Gasoline	0.05	0.27	ppm
METHOD 602		--	
Benzene	0.0005	0.020	ppm
Ethylbenzene	0.0015	0.0035	ppm
Toluene	0.0005	0.0014	ppm
Xylenes, total	0.0015	0.0093	ppm

SAMPLE DESCRIPTION: MW 4 10-26-89 1355
LAB NO.: (-38496)

Parameter	Reporting Limit	Results	Units
PETROLEUM HYDROCARBONS		--	
VOLATILE (WATER)		--	
DILUTION FACTOR *		1	
DATE ANALYZED		10-31-89	
METHOD GC FID/5030		--	
as Gasoline	0.05	ND	ppm
METHOD 602		--	
Benzene	0.0005	0.0034	ppm
Ethylbenzene	0.0015	ND	ppm
Toluene	0.0005	ND	ppm
Xylenes, total	0.0015	ND	ppm

QUALITY CONTROL RESULTS - TOTAL PETROLEUM HYDROCARBONS (water)

Parameter	Reporting Limits	Units	Blank Results	Lab No. Spike and Spike Replicate Results (% Recovery) (-38492S)	(-38492SR)	RPD
as gasoline	0.05	ppm	ND	107	111	4
Benzene	0.5	ppm	ND	87	87	0
Toluene	0.5	ppm	ND	103	103	0
Ethylbenzene	1.5	ppm	ND	110	110	0
Xylenes	1.5	ppm	ND	109	110	1

CHAIN OF CUSTODY RECORD

CT/QL # 5440

8370

AFE # 986639

WIC # 204-2277-0105

PROJECT NO	PROJECT NAME
1826 G	SHELL DUBLIN 7194 Amador Valley Blvd. Dublin, CA

SAMPLERS (Signature) JAMES GONZALES

NO.	DATE	TIME	STATION AND LOCATION	TPHd-BTEX
BB2	10-26-89	10:28	2 pres. VOA	X
MW3	"	10:36		X
MW8	"	11:40		X
MW10	"	12:50		X
MW4	"	1:55		X

TEST REQUESTED

LAB NET PACIFIC

TURN AROUND TIME 2 days

REMARKS

VOA's not marked (HOLD)

Called client 10/30/89 regarding unlabeled VOAs and message to "Hold." Rich Garlow will have Jim Gonzales call. KF

Run BB-2 per John Monroe 10/31/89 1020

RELINQUISHED BY:	DATE:	TIME:	RECEIVED BY:
[signature]	10-26-89	5:46 PM	
Gary L. Mulkey	10/27/89	11:43	[signature]

RELINQUISHED BY:	DATE:	TIME:	RECEIVED BY:
[signature]	10/27/89	2230	[signature]

REMARKS AFE#986639
FAX RESULTS TO EES (415) 651-4677

REPORT TO RICH GARLOW (EES)

FORM DATED 5-30-89

Shell contact - Diane Lumquest.

ensco environmental services, inc.
41674 Christy Street
Fremont, C.A. 94538-3114
(415) 659-0404
Fax (415) 651-4677
Conv. Lic. No. 550205