PROBLEM ASSESSMENT REPORT

E. C. Buehrer & Associates, Inc.
1061 Eastshore Highway
Albany, California

Aegis Project No. 90-007

August 1, 1991

Prepared By:
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1.0 INTRODUCTION

This report presents the results of subsurface investigative activities performed by Aegis Environmental, Inc. (Aegis), at 1061 Eastshore Highway in Albany (Alameda County), California (Figure 1). This work comprises the problem assessment phase of investigation at the site.

1.1 Purpose

The purpose of the investigation was to:

- Define the lateral and vertical extent of petroleum hydrocarbons in soil beneath the site.
- Install additional monitoring wells to delineate the plume of dissolved hydrocarbons in groundwater beneath the site.

1.2 Scope

The investigative scope of work is summarized below. The work was performed upon approval by the Alameda County Environmental Health Department (ACEHD) of Aegis' Phase II Hydrogeologic Assessment Work Plan (amended March 11, 1991). All work was performed in accordance with Aegis' standard operating procedures (SOPs) included in Appendix A.

- On April 2 and 3, 1991, nine soil borings were drilled to depths between 3 and 14 feet below the site surface, using hollow-stem augers.
- Soil samples were recovered from the borings, logged and classified according to the Unified Soil Classification System.
- Four of the soil borings were converted to 4-inch-diameter groundwater monitoring wells (Figure 2).
- Five of the soil borings were abandoned to the surface with a grout mixture.
- Drill cuttings were placed on plastic sheeting and covered.
- Based on soil classification, gas detector screening, and depth, representative soil samples from each boring were submitted to a state-certified laboratory for analysis of petroleum hydrocarbons.
- The groundwater monitoring wells (wells) were developed on April 5, 1991.

- Water level measurements and groundwater samples were collected from the four new wells, MW-5 through MW-8, on April 8, 1991.
- Water level measurements and groundwater samples were collected from wells MW-1 through MW-4, on May 8, 1991.
- Groundwater samples were submitted to a state-certified laboratory for analysis.
- Wellhead elevations were surveyed on May 3, 1991, by a California-registered land surveyor and referenced to a temporary bench mark.

2.0 BACKGROUND INFORMATION

The following subsections present information regarding site location and description, adjacent land uses, site utilities and site history.

2.1 Site Location

The site is located at 1061 Eastshore Highway in Albany, (Alameda County) California (Figure 1). The site has been occupied by E. C. Buehrer, Inc., for several years.

2.2 Site Description

The site facilities consist of two buildings (Figure 2). The large building along the western boundary of the site contains office space (about 25 percent) and work bays for equipment repair (about 75 percent). The small building along the southern boundary of the site is utilized as a welding and machine shop, and a spray painting booth. The site is constructed on fill material consisting of bay muds.

2.3 Adjacent Land Uses

The site is located in an industrial area of Albany, California, near the Berkeley City limits. Adjacent to the site's eastern boundary, is an open area that formerly accommodated an Alcan Aluminum Metals Plant. To the north exists an irrigation and plumbing supply business, to the south is a diesel-engine service and repair shop. Eastshore Highway is located to the west of the site, parallel to Interstate Highway 80.

2.4 Utilities

Underground utilities at the site were located prior to conducting a previous phase of work. Three underground utility structures are located on the site. A storm sewer system runs north-south the length of the site in the driveway area east of the main building. A natural gas line runs north-south along the east edge of the property boundary within 2 feet of a chain-link fence. A City sanitary sewer main runs north-south the length of the site immediately east of the storm sewer system (Figure 2).

2.5 Site History

In December 1987, a 300-gallon underground storage tank (UST) containing waste oil reportedly failed a precision tank test. The failed test, in part, prompted a decision to remove the waste-oil tank. On February 18, 1988, the single-wall, steel waste-oil tank and a 1000-gallon, single-wall, steel UST containing gasoline were excavated and removed from the site. The tanks were removed by Willis Brothers Excavating, of Pacheco, California. According to file documents, the 1,000-gallon gasoline storage tank had not been in use for the previous 2 to 3 years. A 1,000-gallon single-wall, steel UST containing gasoline is still in use at the site (Figure 2).

Subsequent to the removal of the two UST, the ACEHD requested submittal of a workplan to address a groundwater assessment. The site operators contacted Hageman-Shank, Inc., of San Ramon, California, to provide a workplan (Proposal For Subsurface Investigation, Hageman-Shank, Inc., November 16, 1989). Their workplan included the results of laboratory analysis performed on aqueous samples collected from the tank pits. One liquid sample from each tank pit was collected by Ivan Vegvary, P.E., L.S., and submitted to Trace Analysis Laboratory, Inc., of Hayward, California, for analysis. As a consequence of the high groundwater table beneath the site, liquid samples were collected in lieu of soil samples.

Liquid sample analysis revealed nonpolar oil & grease by Standard Method 503 E was present in the waste-oil tank excavation sample (B) at 17.0 parts-per-million (ppm). Analysis of Sample B by EPA Method 8020 detected benzene at 0.10 ppm. Analysis of Sample B by EPA Method 8010 revealed the following concentrations of halogenated volatile organics: trans-1,2-dichloroethylene (0.0065 ppm), dichloromethane (0.010 ppm), 1,1,2,2-tetrachloroethane, 1,1,1-trichloroethane (0.028 ppm), and 1,1-dichloroethane (0.018 ppm). Total petroleum hydrocarbons (TPH), as gasoline, and benzene were present in the gasoline tank pit sample at 2.0 and 0.18 ppm, respectively.

The scope of work detailed in the Hageman-Shank, Inc., workplan was modified to include an additional well when the project was assigned to Aegis. In April of 1990, Aegis drilled and installed four wells at the site. The locations of the existing wells are shown on Figure 2. The results of that work are presented in the Hydrogeological Investigation Results Report (Aegis, June 12, 1990).

3.0 PROJECT RESULTS

The following sections present the results of the additional subsurface assessment to further define the lateral and vertical extent of petroleum hydrocarbons in soil and groundwater. The work consisted of drilling nine soil borings, four of which were converted to groundwater monitoring wells (MW-5 through MW-8).

The analytical sampling plan for the range of compounds tested in soil and groundwater was determined in advance and verbally approved by the ACEHD on March 26, 1991.

3.1 Soil Borings

The nine soil borings were drilled, sampled and logged, and the wells installed on April 2 and 3, 1991, according to the SOPs included in Appendix A. The four well borings were advanced to depths of about 11 to 14 feet below grade. The five soil borings were advanced to depths of three to 4 feet below grade. All soil samples were collected from the vadose zone within the first 4 feet of boring depth.

3.2 Soil Conditions

Soil types encountered across the site consist mainly of silty clays with course angular gravel. A black, expansive clay (bay mud) also exists across the site at approximately 5 feet below grade. Boring logs are included in Appendix B. Soil types encountered in soil borings SB-1 and SB-2, and well borings MW-6 and MW-7, near the eastern boundary of the site, include a thin sandy horizon at a depth of approximately 3 feet. Material such as glass, leaves, and metal were occasionally encountered at various depths across the site, indicating fill. The depth of fill material varied across the site, from about 5 to 10 feet below grade.

3.3 Soil Boring Sample Analytical Results

Ten soil samples from the nine soil borings were submitted to a state-certified laboratory for analysis. Sample shipment and handling were documented with completed chain-of-custody forms. Analytical methods included EPA Method 9071 for total oil & grease, Standard Method 5520E&F for nonpolar oil & grease, Standard Method GC FID/3550 for TPH as diesel and motor oil, Method 8020 for benzene, toluene, ethylbenzene, and xylenes (BTEX), Standard Method GC FID/5030 for TPH as gasoline and mineral spirits, Method 8010 for halogenated volatile organics, and Method 8080 for polychlorinated biphenyls (PCBs). Soil boring sample analytical results are presented in Table 1, except for halogenated volatile organics, which were not detected at the quantitative reporting limits and PCBs. The PCB Aroclor 1260 was detected in soil sample SB2-B at 66 ppb. As indicated in the soil sample analytical laboratory reports (Appendix C), concentrations of halogenated volatile organics were not present at or above the detection limits.

Laboratory analysis for PCBs was performed on three soil samples from soil borings SB-1 and SB-2. Soil sample SB2-B, collected from a depth of about 2 feet below surface grade, contained the PCB Aroclor 1260 at 66 ppb. These samples were analyzed for PCBs to evaluate the presence of PCB compounds in the vicinity of the former location of an electrical transformer. The transformer was located on Southern Pacific Transportation Company property adjoining the eastern site boundary (Figure 2).

Soil boring samples SB1-C, SB2-B, and SB2-C were analyzed for TPH as mineral spirits. None was detected at the quantitative reporting limit of 10.0 parts-per-million (ppm). These samples were analyzed for TPH as mineral spirits to evaluate the presence of this hydrocarbon in soil in the area of the site bordering the former Alcan Aluminum Company Plant. According to file documents, the Alcan site has been involved with remediation of mineral spirits released from underground tanks formerly located on the Alcan site.

The results of laboratory analysis of soil samples revealed a concentration of 3.0 ppm of TPH as gasoline in soil boring sample SB4-C. Sample SB4-C was the only soil sample to contain concentrations of BTEX above the detection limit of 0.005 ppm (Table 1). Total petroleum hydrocarbons as diesel were not detected in any of the soil samples. Concentrations of TPH as motor oil ranged from 27 ppm in soil sample MW6-B to 280 ppm in sample SB2-B. Concentrations of total oil & grease ranged from 2,400 ppm in soil sample SB4-C to 73 ppm in sample MW6-B. Figure 3 presents the concentrations of oil & grease in soil samples from across the site. Figures 4 and 5 present the concentrations of TPH as motor oil and TPH as gasoline and diesel in soil samples across the site, respectively.

3.4 Monitoring Well Installation, Development, and Sampling

The four well borings were drilled with 10-inch-diameter hollow-stem augers to depths ranging from 11-½ to 14 feet below the site surface. The well locations are shown on Figure 2. The wells were installed, developed and sampled according to the SOPs included in Appendix A. The wells were set with 4-inch-diameter, Schedule 40 PVC pipe with flush-threaded joints. Monitoring well construction details are included in Appendix D. The wells were developed on April 5, 1991.

Groundwater samples were collected from the four new wells MW-5 through MW-8 on April 8, 1991, using Voss SingleSample^{tm} disposable bailers. Groundwater samples were collected from wells MW-1 through MW-4 on May 8, 1991.

3.5 Groundwater Conditions

Groundwater elevations were determined using water level data collected on May 8, 1991 (Table 4). The groundwater elevations were used to prepare the groundwater elevation contour map included as Figure 8. Water level data indicate that the groundwater flow is in a general westerly direction, from the Berkeley Hills toward San Francisco Bay. However, some localized mounds and depressions appear to exist around wells MW-5

and MW-2. Groundwater flow direction may be affected by tidal influences and subsurface obstructions such as building foundations. Depth to groundwater varies from 1 to 3 feet below grade, across the site. The groundwater gradient beneath the site is approximately 0.01 ft/ft.

3.6 Groundwater Sample Analyses

Groundwater samples were submitted for analysis to National Environmental Testing (NET) Pacific, Inc. Sample shipment and handling were documented with completed chain-of-custody forms. Groundwater samples were collected from wells MW-5 through MW-8 on April 8, 1991. Groundwater samples were collected from wells MW-1 through MW-4 on May 8, 1991, to maintain the quarterly monitoring schedule. The laboratory analytical results of these two sampling events are summarized in Table 2. The results of laboratory analysis performed on groundwater samples collected on February 8, 1991, from wells MW-1 through MW-4 are summarized in Table 3 for comparison.

Laboratory analytical methods used in the analysis of groundwater samples included Standard Method GC FID/5030 for TPH as gasoline and mineral spirits, Method 602 for BTEX, Standard Method GC FID/3510 for TPH as diesel and motor oil, EPA Method 9070 for total oil & grease, Standard Method 5520BF for nonpolar oil & grease, and Method 8010 for halogenated volatile organics. Groundwater analytical laboratory reports are included in Appendix E.

4.0 SUMMARY OF FINDINGS

The following subsections summarize the results of the investigation relevant to the extent of petroleum hydrocarbons in soil and groundwater beneath the site.

4.1 Petroleum Hydrocarbons In Soil

Petroleum hydrocarbons were detected in soil samples from each of the nine soil borings. The hydrocarbons detected in the soil samples were predominantly those consisting of heavy, straight-chain hydrocarbon molecules - identified as oil & grease and TPH as motor oil. TPH as mineral spirits and diesel were not detected in any of the soil samples collected during this second phase of investigation (Table 1). TPH as gasoline was detected in only one soil sample during this phase of investigation, SB4-C at 3.0 ppm. Figure 5 illustrates the concentrations of TPH as gasoline and diesel in soil samples from across the site, including analytical results from the initial investigation when wells MW-1 through MW-4 were installed. TPH as diesel and gasoline, and three chlorinated hydrocarbon compounds, on the Method 8010 list of halogenated volatile organics, were detected in soil samples collected during the initial site investigation. No chlorinated hydrocarbons were found in soil samples collected during this second phase of the investigation.

As shown on Figure 3, oil & grease concentrations are highest in the locations of wells MW-2, MW-3, and MW-4, and soil boring SB-4. Well MW-4 is near the oil clarifier system and wells MW-2 and MW-3 and soil boring SB-4 are near the former UST location (Figure 2). Figure 4 presents concentrations TPH as motor oil. Concentrations of TPH as motor oil were highest in soil samples from well MW-4, which is near the oil clarifier system (Figure 2). Concentrations of oil & grease and TPH as motor oil detected in soil samples from other locations, such as soil boring SB-2, may be due to an unknown source. The limits of TPH as diesel and gasoline are defined in three directions. Their extent in soil is not defined off site, to the south.

During the first phase of investigation, the PCB Aroclor 1254 was detected at 300 ppb in soil sample SB-3, collected about 2 feet below the surface. Aroclor 1260 was detected in soil boring sample SB2-B at 66.0 ppb at approximately the same depth during this second phase of investigation (Appendix C). Sample SB-3 was collected directly west of the former location of an electrical transformer, near the fence along the eastern site boundary. Sample SB2-B was collected approximately 80 feet to the north of this location (Figure 2).

4.2 Petroleum Hydrocarbons In Groundwater

Laboratory analysis of groundwater samples collected from wells MW-5 through MW-8 on April 8, 1991, and from wells MW-1 through MW-4 on May 8, 1991, indicate that TPH as gasoline is not present in groundwater at or above the practical quantitative reporting limit of 50 ppb (Table 2). Concentrations of TPH as diesel ranged from 150 to 220 ppb in monitoring wells MW-1 through MW-6. TPH as mineral spirits were detected in groundwater samples from four wells at concentrations up to 150 ppb.

Benzene concentrations in groundwater samples collected on April 8 and May 8, 1991, were detected above the reporting limit in only one monitoring well, MW-3, at 1.0 ppb. The benzene iso-concentration contour map illustrating the results of these two sampling events is presented on Figure 7. Concentrations of benzene in monitoring wells MW-1 through MW-4 sampled on February 8, 1991, were detected in wells MW-1, MW-3, and MW-4 at up to 7.5 ppb (Table 3). A benzene iso-concentration contour map, included as Figure 6, presents the results of the February sampling event.

The presence of TPH as mineral spirits was detected in groundwater samples from wells MW-1, MW-3, MW-4, and MW-6. The presence of TPH as diesel was detected in groundwater samples from all wells except MW-7 and MW-8. The presence of TPH as mineral spirits and diesel fuel may be due to off site sources.

TPH as motor oil were not detected at or above the practical quantitation reporting limit in any of the groundwater samples. Oil & grease (total and nonpolar) were not detected at or above the practical quantitation reporting limit in the aqueous samples analyzed for those hydrocarbons. None of the halogenated volatile organics were detected at or above the practical quantitation reporting limits in groundwater samples analyzed for those compounds listed in the Method 8010 analysis.

4.3 Hydrogeologic Conditions

Groundwater beneath the site is shallow. The depth to groundwater is approximately 3 feet, however during the second phase of investigation in March 1991, groundwater in monitoring well MW-7 was about 6 inches below the site surface when the well was installed. Water was ponded in numerous areas east of the site. The direction of groundwater flow beneath the site is to the west, although some local variations occur (Figure 8).

5.0 REMARKS/SIGNATURES

The interpretations and conclusions contained in this report represent our professional opinions. These opinions are based on currently accepted geological and engineering practices in use at this time and for this specific site. Other than this, no warranty is implied or intended.

AEGIS ENVIRONMENTAL, INC.

This report was prepared by: Larry Braybrooks

Larry Braybrooks
Project Geologist

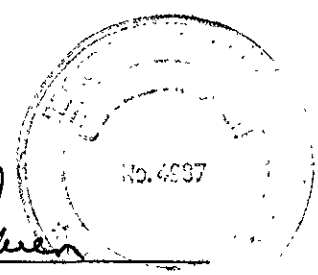
Date: 8/1/91

This report was reviewed by: Mark A. Richards

Mark A. Richards
Senior Geologist

Date: August 1, 1991

The work described herein was performed under the direct Supervision of a State of California Registered Professional Geologist:



Clarke H. Owen

Clarke H. Owen
Registered Geologist #4987

Date: 8-1-91

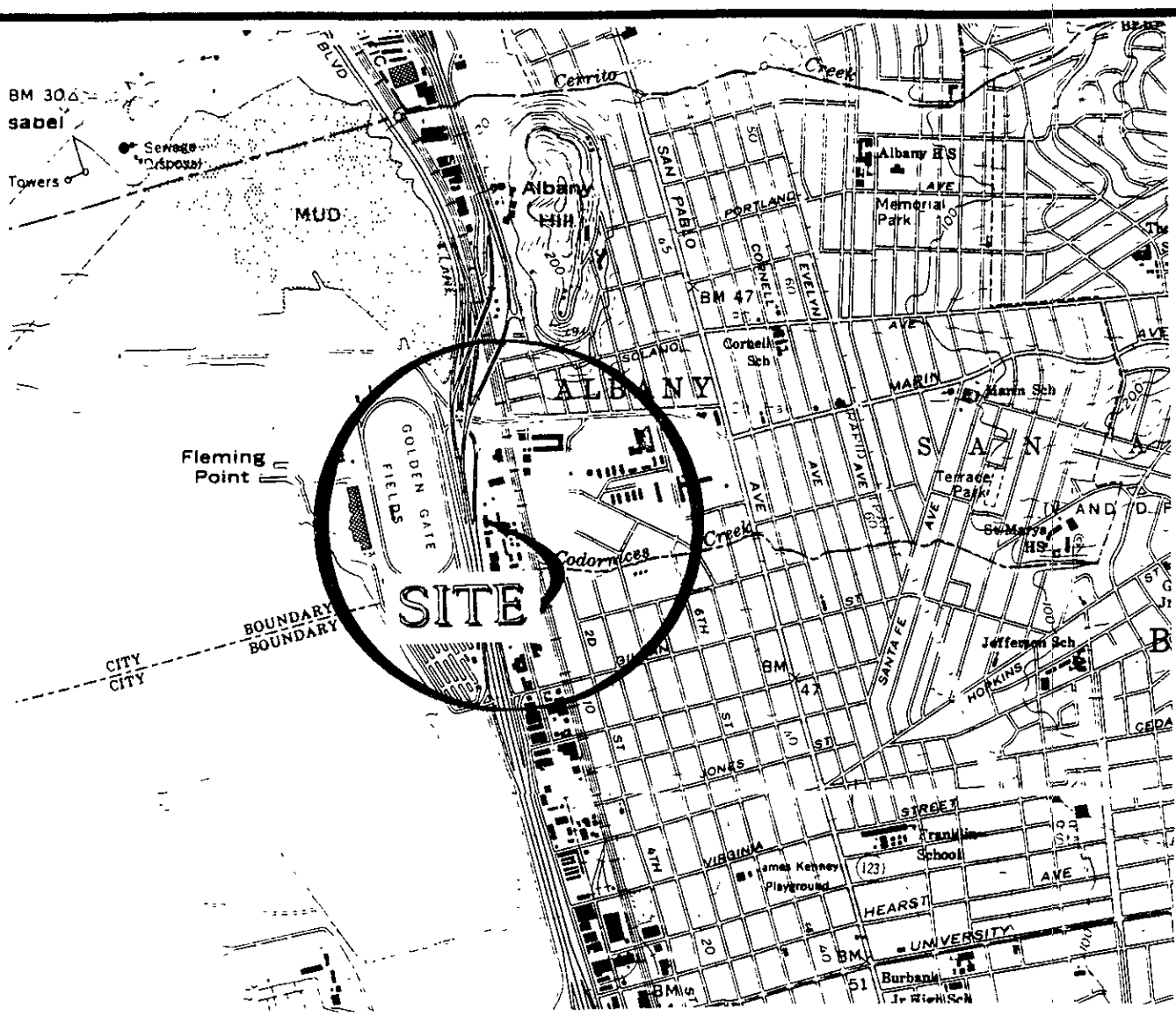
6.0 REFERENCES

"Proposal For Subsurface Investigation," Hageman-Shank, Inc., November 16, 1989.

"Hydrogeological Investigation Results Report," Aegis Environmental, Inc., June 12, 1990.

Regional Board Staff Recommendations - Preliminary Site Investigation, Explanation For Table #2 "Recommended Minimum Verification Analyses For Underground Tank Leaks," October 18, 1989, Revised August 10, 1990.

FIGURES



SCALE: 1"= 2,000'

0 2,000

GENERAL NOTES:

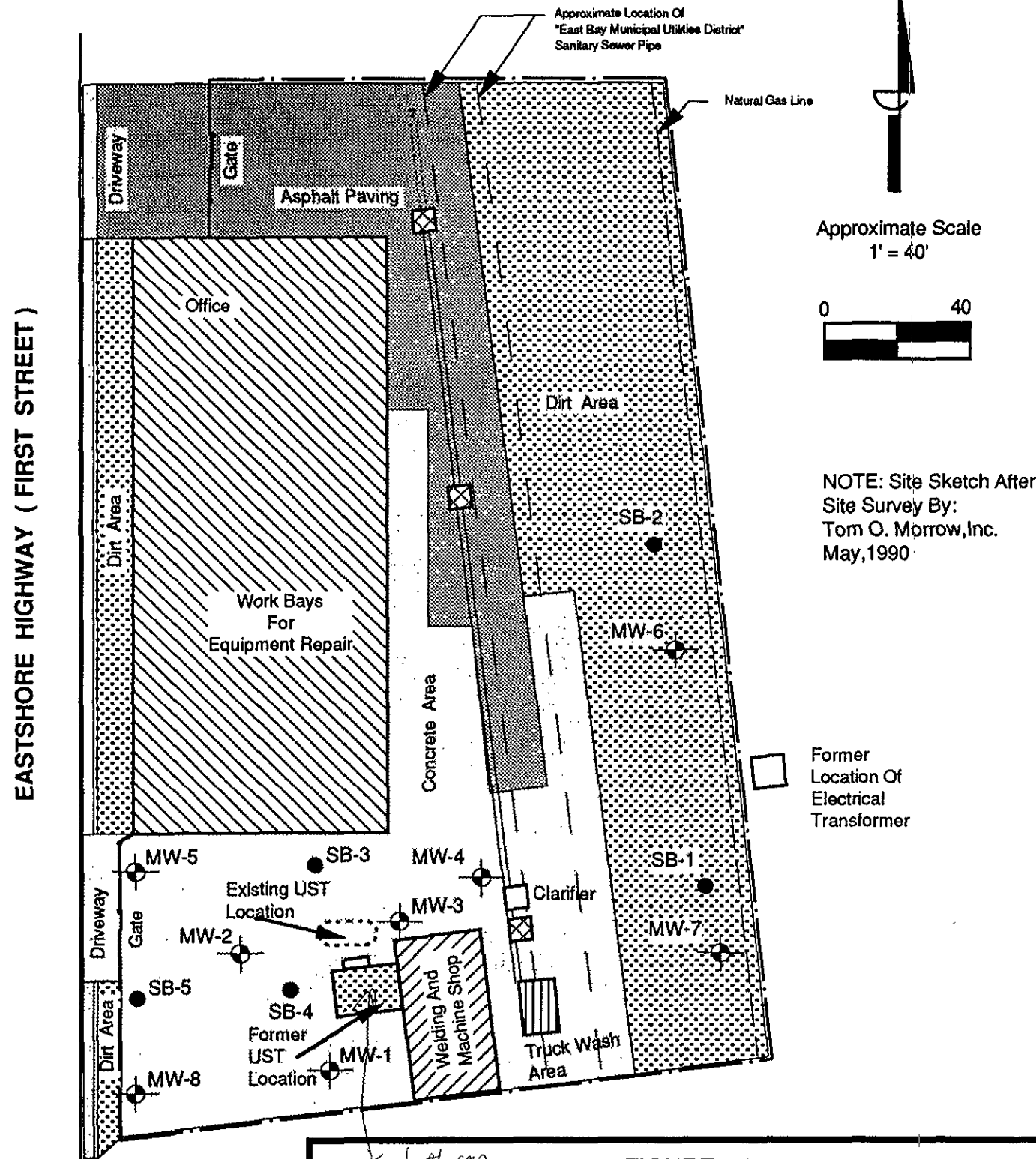
BASE MAP FROM USGS 7.5 MINUTE TOPOGRAPHIC RICHMOND & OAKLAND WEST, CA.

CALIF

FIGURE 1
SITE LOCATION MAP
E. C. Buehrer Associates, Inc.
1061 Eastshore Highway
Albany, Ca.

AEGIS Job Number 90 -007

DRAWN BY: Ed Bernard DATE: April 8,1991
REVIEWED BY: L Braybrooks DATE: April 14,1991

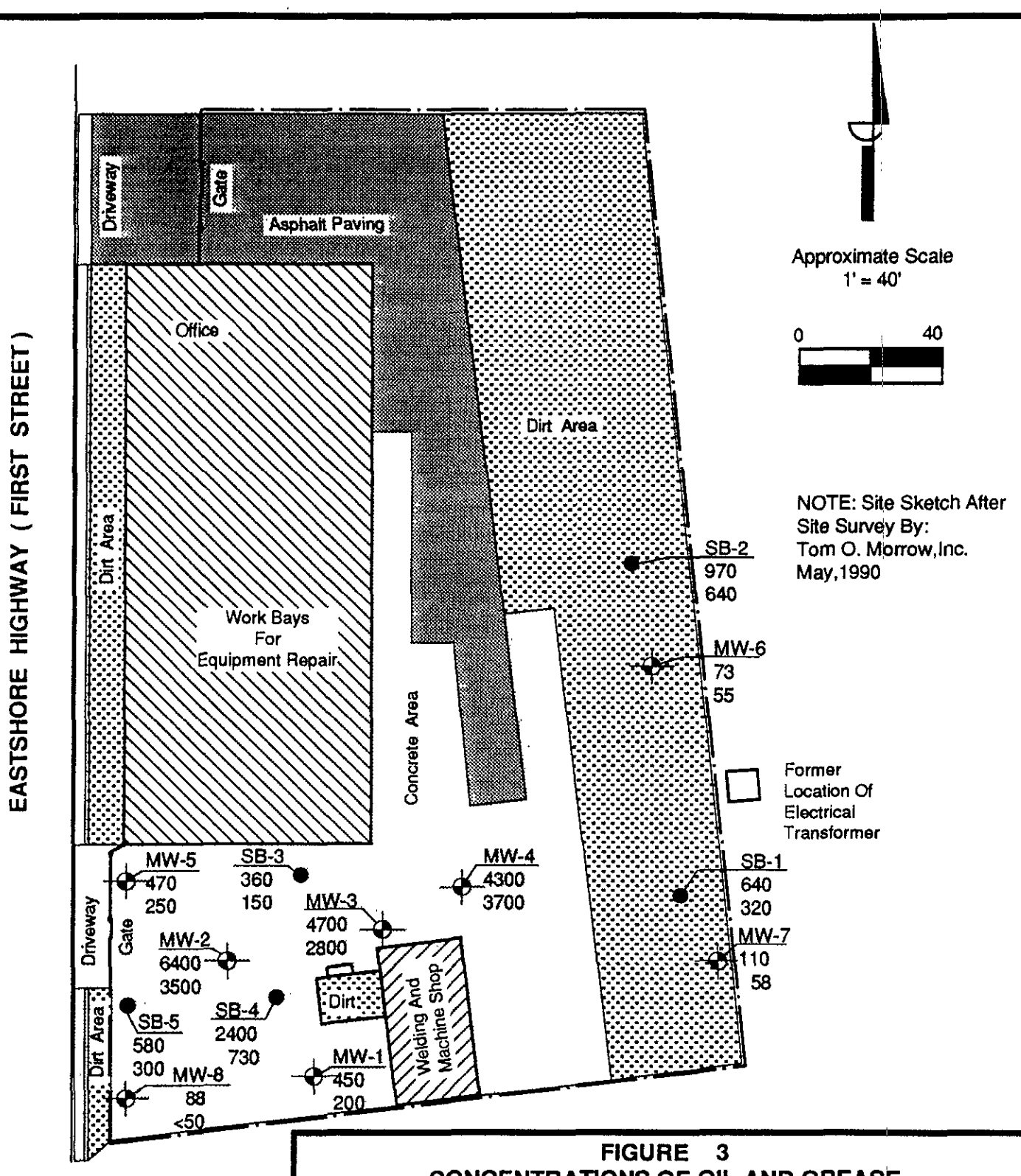


For both gas & waste oil UST.

FIGURE 2
SITE MAP
E. C. Buehrer Associates, Inc.
1061 Eastshore Highway
Albany, Ca.

AEGIS Job Number 90 -007

DRAWN BY: Ed Bernard DATE: April 8,1991
REVIEWED BY: L Braybrooks DATE: April 14,1991



LEGEND

Monitoring Well

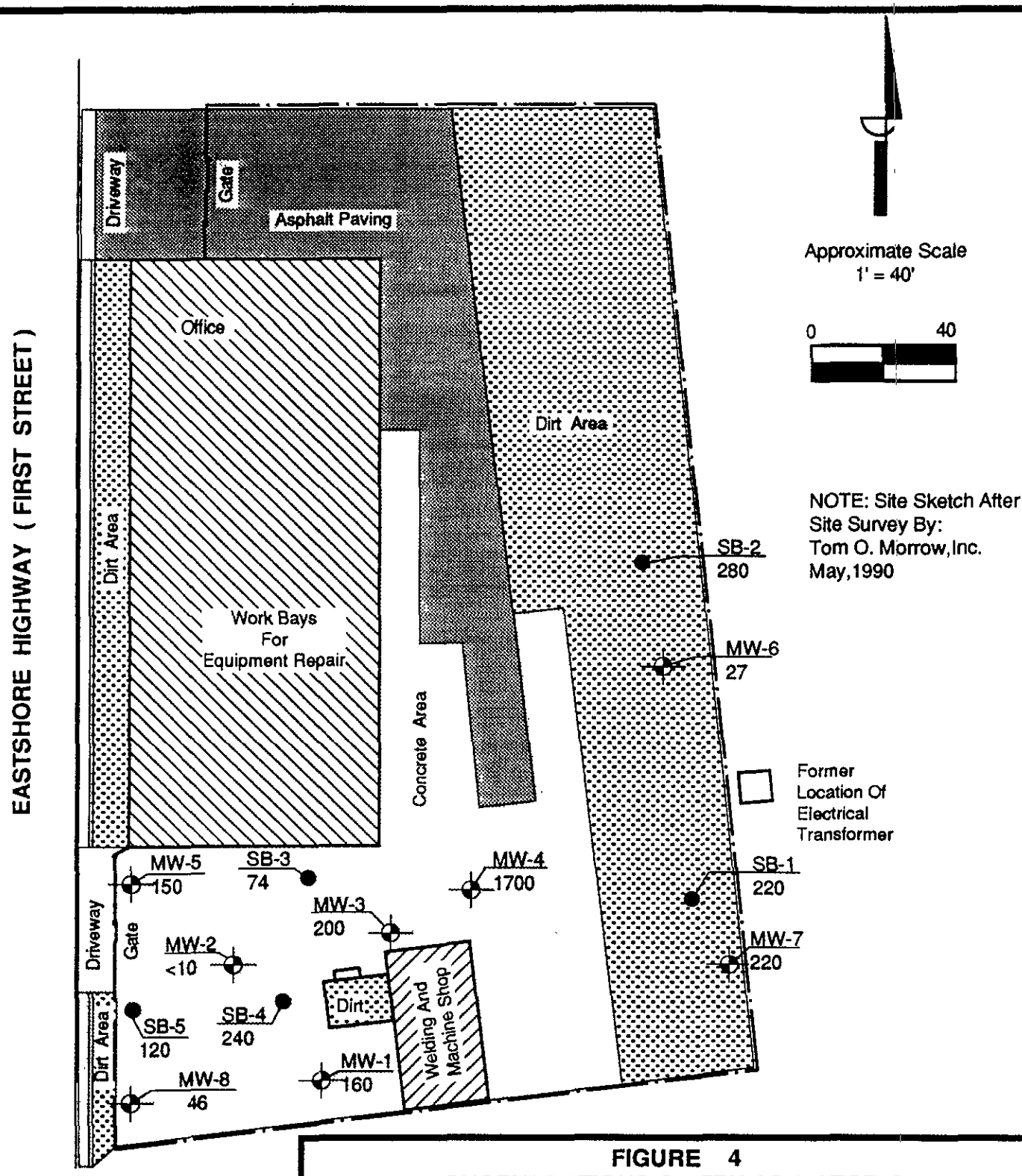
SB-5 Soil Boring
580 Total Oil & Grease
300 Non-Polar Oil & Grease

NOTE: Analytical Results reported In ppm.
(Parts Per Million)

FIGURE 3
CONCENTRATIONS OF OIL AND GREASE IN SOIL (ppm)
E. C. Buehrer Associates, Inc.
1061 Eastshore Highway
Albany, Ca.

AEGIS Job Number 90 -007

DRAWN BY: Ed Bernard DATE:May 29,1991
REVIEWED BY: L Braybrooks DATE:May 29,1991



LEGEND

Monitoring Well

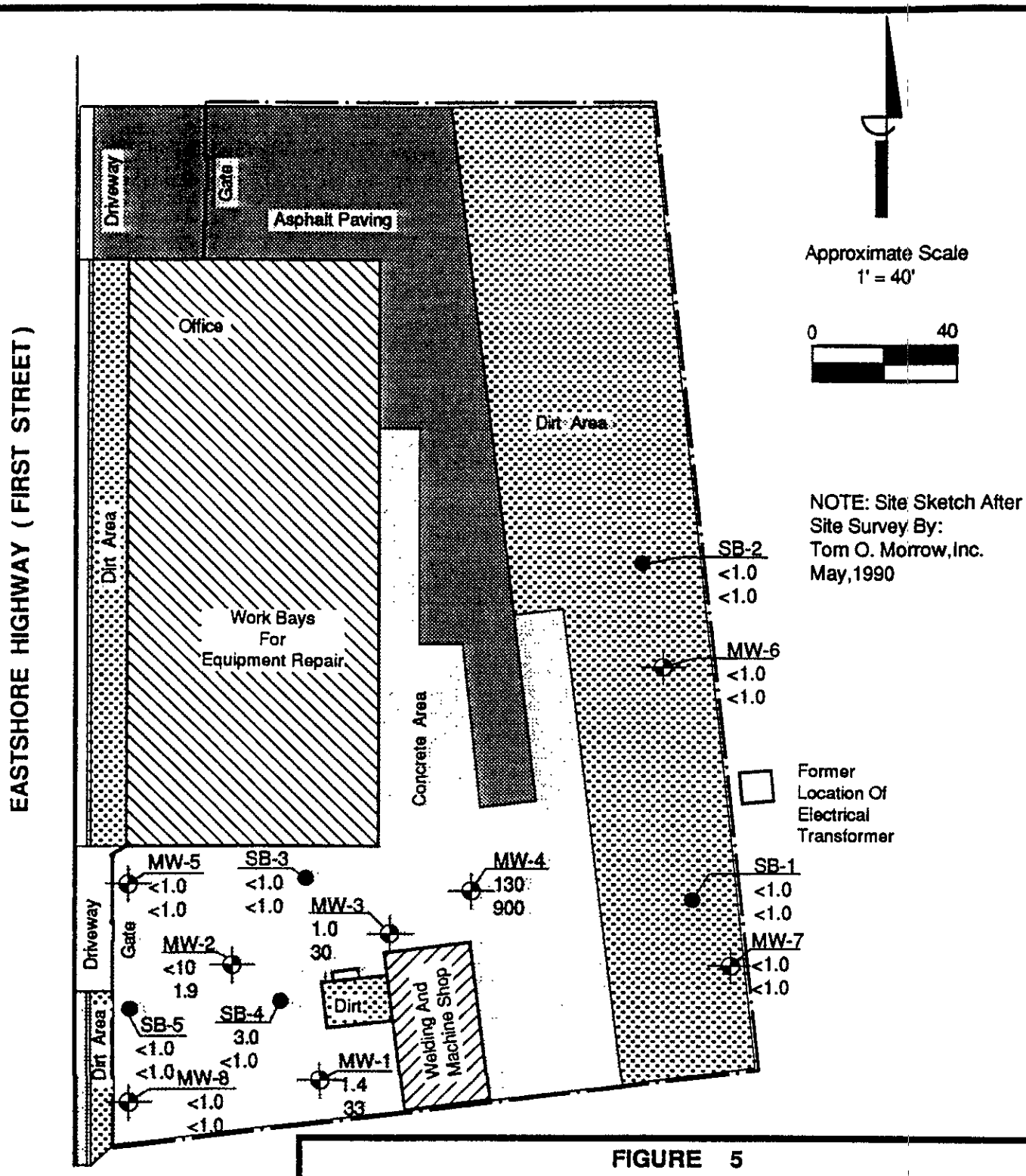
SB-5 / 120 — Soil Boring
Motor Oil Concentration
In ppm In Soil

NOTE: Analytical Results
reported In ppm.
(Parts Per Million)

FIGURE 4
CONCENTRATIONS OF TPH AS MOTOR OIL
IN SOIL (ppm)
E. C. Buehrer Associates, Inc.
1061 Eastshore Highway
Albany, Ca.

AEGIS Job Number 90 -007

DRAWN BY: Ed Bernard DATE:May 29,1991
REVIEWED BY: L Braybrooks DATE:May 29,1991



LEGEND

Monitoring Well

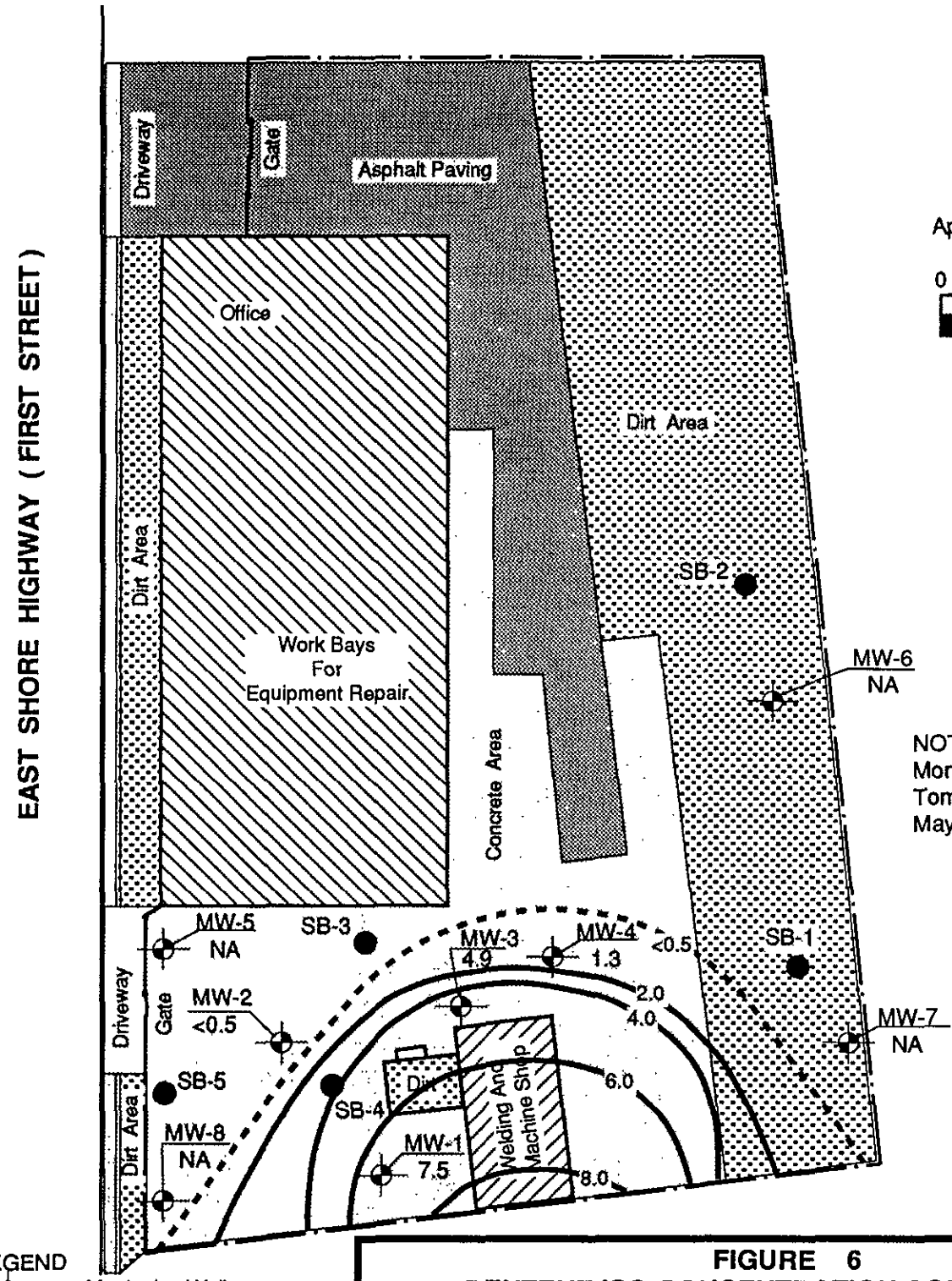
SB-5 Soil Boring
<1.0 TPH As Gasoline
<1.0 TPH As Diesel

NOTE: Analytical Results reported In ppm.
(Parts Per Million)

FIGURE 5
CONCENTRATIONS OF TPH AS GASOLINE & DIESEL IN SOIL (ppm)
E. C. Buehrer Associates, Inc.
1061 Eastshore Highway
Albany, Ca.

AEGIS Job Number 90 -007

DRAWN BY: Ed Bernard DATE:May 29,1991
REVIEWED BY: L Braybrooks DATE:May 29,1991



LEGEND

Monitoring Well

MW-1 / 7.5 — Benzene Concentration In Groundwater Sample (ppb)

Soil Boring

NA — Not Available For This Date

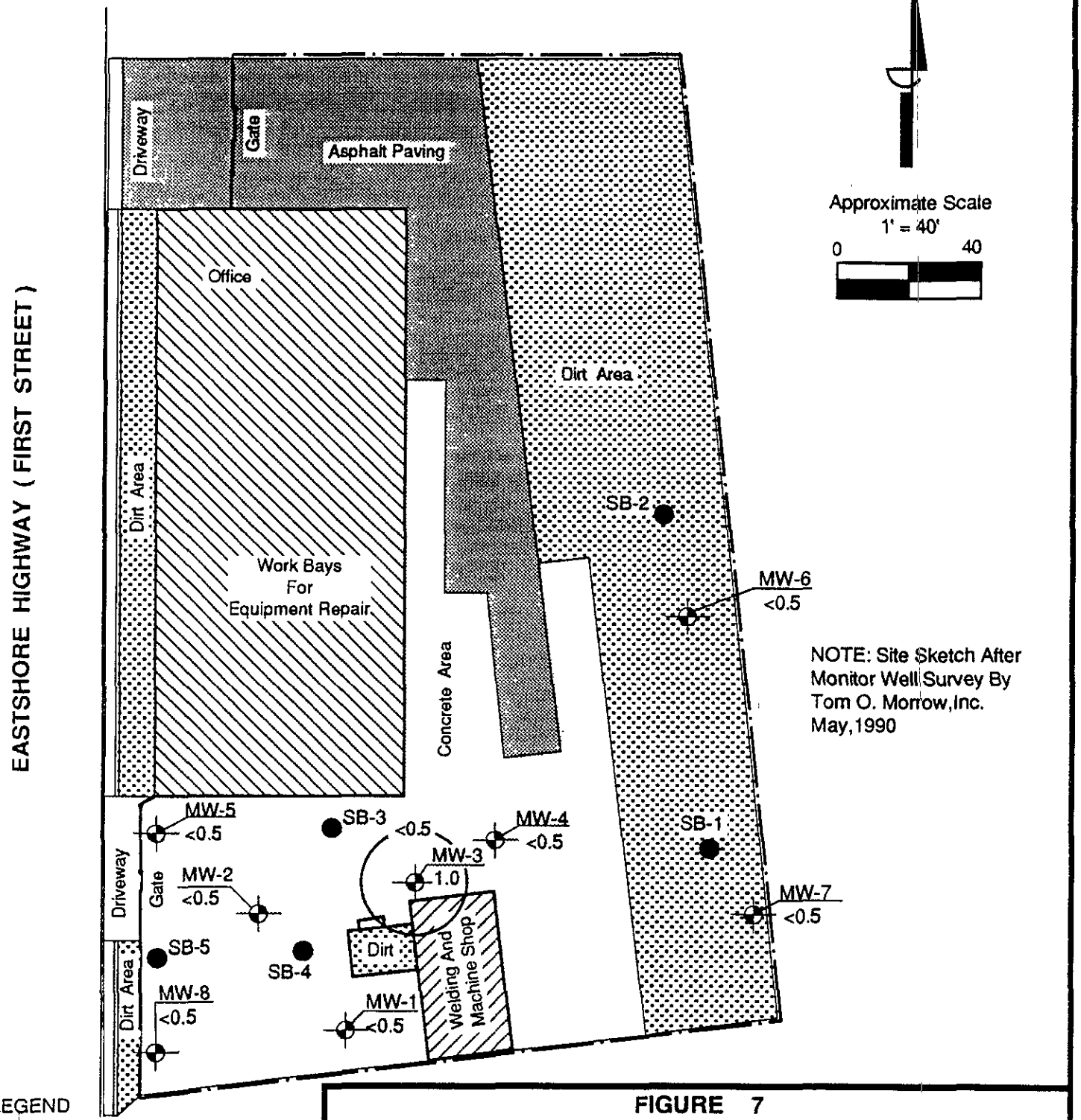
6.0 — Benzene Iso-Concentration Contour Line

FIGURE 6
BENZENE ISO-CONCENTRATION CONTOUR MAP
FEBRUARY 26, 1991
E. C. Buehrer Associates, Inc.
1061 Eastshore Highway
Albany, Ca.

AEGIS Job Number 90 -007

DRAWN BY: Dennis Hada **DATE:** June 20,1991

REVIEWED BY: **DATE:**



LEGEND

Monitoring Well

MW-3 / 1.0 — Benzene Concentration In Groundwater Sample (ppb)

Soil Boring

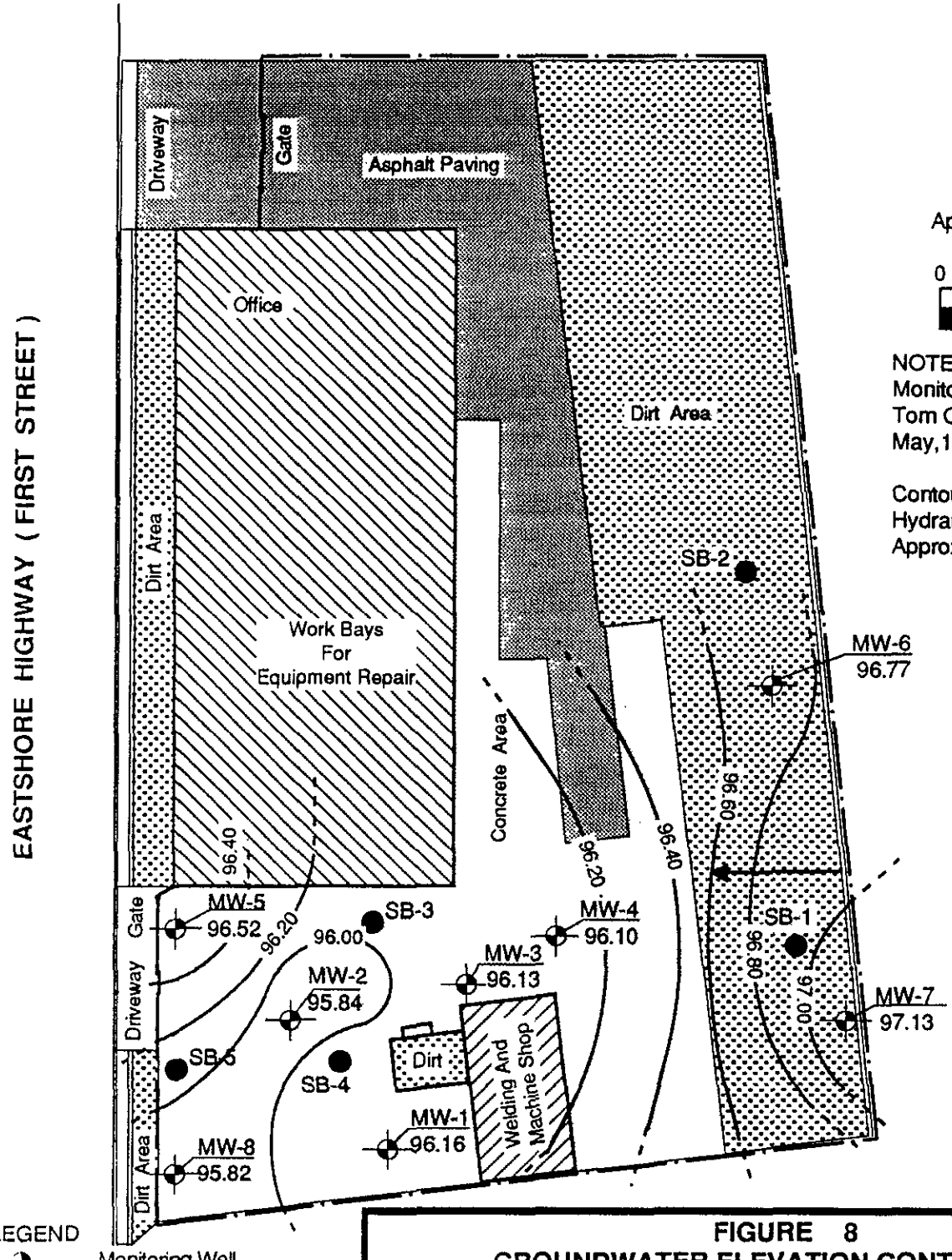
NA — Not Available For This Date

<0.5 — Benzene Iso-Concentration Contour Line

FIGURE 7
BENZENE ISO-CONCENTRATION CONTOUR MAP
APRIL 8, MAY 8,1991
E. C. Buehrer Associates, Inc.
1061 Eastshore Highway
Albany, Ca.

AEGIS Job Number 90 -007

DRAWN BY: Ed Bernard **DATE: May 30,1991**
REVIEWED BY: L Braybrooks **DATE: May 31,1991**



LEGEND

- Monitoring Well
- MW-3 / 95.84 — Groundwater Elevation
- Groundwater Elevation Contour Line (Dashed Where Inferred) — 96.20
- Soil Boring
- Estimated Direction Of Groundwater Flow

FIGURE 8
GROUNDWATER ELEVATION CONTOUR MAP
MAY 8,1991
E. C. Buehrer Associates, Inc.
1061 Eastshore Highway
Albany, Ca.

AEGIS Job Number 90 -007

DRAWN BY: Ed Bernard DATE: May 30,1991
REVIEWED BY: L Braybrooks DATE: May 31,1991

TABLES

TABLE 1

SOIL SAMPLE ANALYTICAL RESULTS
E. C. BUEHRER, INC., 1061 EASTSHORE HIGHWAY, ALBANY, CALIFORNIA

Sample ID	TPH-G	TPH-MS	TPH-D	Benzene	Toluene	Ethyl-Benzene	Xylenes	O&G	O&G	TPH-MO
SB1-C	<1.0	<10.0	<1.0	<0.005	<0.005	<0.005	<0.005	640	320	220
SB2-B	<1.0	<10.0	<1.0	<0.005	<0.005	<0.005	<0.005	970	640	280
SB2-C	<1.0	<10.0	<1.0	<0.005	<0.005	<0.005	<0.005	680	370	260
SB3-B	<1.0	NA	<1.0	<0.005	<0.005	<0.005	<0.005	360	150	74
SB4-C	3.0	NA	<1.0	0.012	0.120	0.0052	0.018	2,400	730	240
SB5-B	<1.0	NA	<1.0	<0.005	<0.005	<0.005	<0.005	580	300	120
MW5-B	<1.0	NA	<1.0	<0.005	<0.005	<0.005	<0.005	470	250	150
MW6-B	<1.0	NA	<1.0	<0.005	<0.005	<0.005	<0.005	73	55	27
MW7-A	<1.0	NA	<1.0	<0.005	<0.005	<0.005	<0.005	110	58	220
MW8-A	<1.0	NA	<1.0	<0.005	<0.005	<0.005	<0.005	88	<50	46

NOTES: NA = Not analyzed.
Sample results are presented in parts-per-million.
TPH-G = Total petroleum hydrocarbons (TPH) as gasoline.
TPH-MS = TPH as mineral spirits.
TPH-D = TPH as diesel.
O&G = Oil and grease.
TPH-MO = TPH as motor oil.

Detection limits used in tabulating analytical results follow practical quantitation reporting limits as presented in the Regional Board Staff Recommendations for Investigation of Underground Tanks, except where detection limits are higher due to necessary sample dilution.

TABLE 2

GROUNDWATER SAMPLE ANALYTICAL RESULTS
E. C. BUEHRER, INC., 1061 EASTSHORE HIGHWAY, ALBANY, CALIFORNIA
(FEBRUARY 8, 1991)

Sample ID	TPH-G	TPH-MS	TPH-D	Benzene	Toluene	Ethyl-Benzene	Xylenes	O&G	TPH-MO
MW-1	140	NA	430	7.5	<0.5	0.66	0.70	NA	600
MW-2	<50	NA	480	<0.5	<0.5	<0.5	<0.5	NA	700
MW-3	150	NA	470	4.9	<0.5	<0.5	<0.5	NA	700
MW-4	90	NA	350	1.3	<0.5	<0.5	<0.5	NA	600

NOTES: Sample results are presented in parts-per-billion.
TPH-G = Total petroleum hydrocarbons (TPH) as gasoline.
TPH-MS = TPH as mineral spirits.
TPH-D = TPH as diesel.
O&G = Oil & grease.
TPH-MO = TPH as motor oil.
NA = Not analyzed for that compound.

Detection limits used in tabulating analytical results follow practical quantitation reporting limits as presented in the Regional Board Staff Recommendations for Investigation of Underground Tanks, except where detection limits are higher due to necessary sample dilution.

Analytical results presented in Table 3 represent groundwater samples collected on February 8, 1991.

TABLE 3

GROUNDWATER SAMPLE ANALYTICAL RESULTS
E. C. BUEHRER, INC., 1061 EASTSHORE HIGHWAY, ALBANY, CALIFORNIA
(MAY 8, 1991 AND APRIL 8, 1991)

Sample ID	TPH-G	TPH-MS	TPH-D	Benzene	Toluene	Ethyl-Benzene	Xylenes	O&G	TPH-MO
MW-1	<50	120	180	<0.5	<0.5	<0.5	<0.5	NA	<500
MW-2	<50	<50	220	<0.5	0.6	<0.5	<0.5	NA	<500
MW-3	<50	100	230	1.0	1.0	<0.5	<0.5	NA	<500
MW-4	<50	50	150	<0.5	<0.5	<0.5	<0.5	NA	<500
MW-5	<50	<50	220	<0.5	1.8	0.6	1.0	<5,000	<500
MW-6	<50	150.0	210	<0.5	1.8	0.6	1.0	<5,000	<500
MW-7	<50	<50	<50	<0.5	1.4	<0.5	0.8	<5,000	<500
MW-8	<50	<50	<50	<0.5	1.6	<0.5	1.0	<5,000	<500

NOTES: Sample results are presented in parts-per-billion (ppb).
TPH-G = Total petroleum hydrocarbons as gasoline.
TPH-MS = TPH as mineral spirits.
TPH-D = TPH as diesel.
O&G = Oil & grease (total and nonpolar).
TPH-MO as motor oil.
NA = Not analyzed for that compound.

Detection limits used in tabulating analytical results follow practical quantitation reporting limits as presented in the Regional Board Staff Recommendations for Investigation of Underground Tanks, except where detection limits are higher due to necessary sample dilution.

Analytical results for monitoring wells MW-1 through MW-4 represent groundwater samples collected on May 8, 1991. Analytical results for monitoring wells MW-5 through MW-8 represent groundwater samples collected on April 8, 1991.

TABLE 4

GROUNDWATER ELEVATION DATA
E. C. BUEHRER, INC., 1061 EASTSHORE HIGHWAY, ALBANY, CALIFORNIA

Well ID	Time	Reference Elevation (Feet)	Depth to Groundwater (Feet)	Groundwater Elevation (Feet)	Total Well Depth (Feet)
MW-1	11:15	99.51	3.35	96.16	13.91
MW-2	11:00	99.52	3.68	95.84	14.44
MW-3	11:10	99.60	3.47	96.13	13.41
MW-4	11:05	99.20	3.10	96.10	13.97
MW-5	10:45	99.14	2.62	96.52	11.57
MW-6	10:35	100.76	3.99	96.77	12.15
MW-7	10:30	101.52	4.39	97.13	12.20
MW-8	10:40	99.64	3.82	95.82	11.81

NOTE: Groundwater level measurements were collected on May 8, 1991, using a Slope[tm] water level indicator.

APPENDIX A

STANDARD OPERATING PROCEDURES

AEGIS ENVIRONMENTAL, INC.
STANDARD OPERATING PROCEDURES
RE: SOIL BORING SAMPLING
SOP-1

Soil samples for chemical analysis are collected in thin-walled brass tubes, 4- or 6-inches long by 2-inches outside diameter. Three or four of the tubes, plus a spacer tube, are set in a 2-inch inside diameter 18-inch split-barrel sampler.

Where possible, the split-barrel sampler is driven its entire length either hydraulically or using a 140-pound drop hammer. The sampler is extracted from the borehole and the brass tubes, containing the soil samples, are removed. Upon removal from the sampler, the selected brass tubes are immediately trimmed and capped with either aluminum foil or Teflon sheets and plastic caps. They are then hermetically sealed with duct tape, labeled and refrigerated for delivery, under strict chain-of-custody, to the analytical laboratory. These procedures minimize the potential for cross-contamination and volatilization of volatile organic compounds (VOC) prior to chemical analysis.

One soil sample collected at each sampling interval is analyzed in the field using either a portable photoionization detector (PID), flame ionization detector, organic vapor analyzer, catalytic gas detector or an explosimeter. The purpose of this field analysis is to qualitatively determine the presence or absence of hydrocarbons, and the samples to be analyzed at the laboratory. The soil sample is sealed in either a brass tube, glass jar or plastic bag to allow for some volatilization of VOC. The PID is then used to measure the concentrations of hydrocarbons within the containers's head space. The data is recorded on both field notes and the boring logs at the depth corresponding to the sampling point.

Other soil samples are collected to document the soil and/or stratigraphic profile beneath the project site, and estimate the relative permeability of the subsurface materials. All drilling and sampling equipment are either steam-cleaned or washed in trisodium phosphate solution and double-rinsed in deionized water prior to use at each site and between boreholes to minimize the potential for cross-contamination.

AEGIS ENVIRONMENTAL, INC.
STANDARD OPERATING PROCEDURES
RE: SOIL CLASSIFICATION
SOP-3

Soil samples are classified according to the Unified Soil Classification System (USCS). Representative portions of the samples may be shipped under strict chain-of-custody to an analytical laboratory for further examination and verification of the in-field classification, and analysis of soil mechanical and/or petrophysical properties. The soil types are indicated on logs of either excavations or borings together with depths corresponding to the sampling points, and other pertinent information.

AEGIS ENVIRONMENTAL, INC.
STANDARD OPERATING PROCEDURES
RE: SAMPLE IDENTIFICATION AND CHAIN-OF-CUSTODY PROCEDURES
SOP-4

Sample identification and chain-of-custody procedures ensure sample integrity, and document sample possession from the time of collection to its ultimate disposal. Each sample container submitted for analysis is labeled to identify the job number, date, time of sample collection, a sample number unique to the sample, any in-field measurements made, sampling methodology, name(s) of on site personnel and any other pertinent field observations also recorded on the field excavation or boring log.

Chain-of-custody forms are used to record possession of the sample from time of collection to its arrival at the laboratory. During shipment, the person with custody of the samples will relinquish them to the next person by signing the chain-of-custody form(s) and noting the date and time. The sample-control officer at the laboratory will verify sample integrity, correct preservation, confirm collection in the proper container(s) and ensure adequate volume for analysis.

If these conditions are met, the samples will be assigned unique laboratory log numbers for identification throughout analysis and reporting. The log numbers will be recorded on the chain-of-custody forms and in the legally-required log book maintained in the laboratory. The sample description, date received, client's name and any other relevant information will also be recorded.

AEGIS ENVIRONMENTAL, INC.
STANDARD OPERATING PROCEDURES
RE: LABORATORY ANALYTICAL QUALITY ASSURANCE AND CONTROL
SOP-5

In addition to routine calibration of the analytical instruments with standards and blanks, the laboratory analyst is required to run duplicates and spikes on 10 percent of the analyses to insure an added measure of precision and accuracy. Accuracy is also verified through the following:

1. U.S. Environmental Protection Agency (EPA) and State certification programs;

2. Participation in an inter-laboratory or "round-robin" quality assurance program;

3. Verification of results with an alternative method. For example, calcium may be determined by atomic absorption, ion chromatography, or titrimetric methods. Volatile organic compounds may be determined through either purge and trap or liquid-liquid extraction methods; and,

4. Miscellaneous checks of equipment accuracy. Where trace analysis is involved, purity of the solvents, reagents and gases employed is of great concern. The laboratory maintains a service contract on all major instrumentation, including gas chromatograph, atomic absorption, ion chromatography and total organic carbon analyzers. Each of these instruments are serviced and maintained regularly.

AEGIS ENVIRONMENTAL, INC.
STANDARD OPERATING PROCEDURE
RE: HOLLOW-STEM AUGER MONITORING WELL INSTALLATION AND DEVELOPMENT
SOP-6

Boreholes for monitoring wells are drilled using a truck-mounted hollow-stem auger drill rig. The borehole diameter will be a minimum of four inches larger than the outside diameter of the casing when installing well screen. The hollow-stem auger provides minimal interruption of drilling while permitting soil sampling at desired intervals. Soil samples are collected by either hammering or hydraulically pushing a conventional split-barrel sampler containing pre-cleaned 2-inch diameter brass tubes. A geologist or engineer from Aegis Environmental, Inc. continuously logs each borehole during drilling and constantly checks drill cuttings for indications of both the first occurrence of groundwater and volatile hydrocarbons using either a portable photoionization detector (PID), flame ionization detector or an explosimeter. The sampler is rinsed between samples and either steam cleaned or washed with all other drilling equipment between borings to minimize the potential for cross-contamination.

Monitoring wells are cased with threaded, factory-perforated and blank Schedule 40 PVC. The perforated interval consists of slotted casing, generally with 0.020-inch wide by 1.5-inch long slots, with 42 slots per foot. A PVC cap may be secured to the bottom of the casing with stainless steel screws; no solvents or cements are used. Centering devices may be fastened to the casing to assure even distribution of filter material and grout within the borehole annulus. The well casing is thoroughly washed and/or steam cleaned, or may be purchased as pre-cleaned, prior to installation.

After setting the casing inside the hollow-stem auger, sand or gravel filter material is poured into the annular space to fill from boring bottom to generally 1 foot above the perforated interval. A 1- to 2-foot thick bentonite plug is set above this filter material to prevent grout from infiltrating into the filter pack. Either neat cement, containing about 5% bentonite, or sand-cement grout is then tremmied into the annular space from the top of the bentonite plug to near surface. A traffic-rated vault is installed around each wellhead for wells located in parking lots or driveways, while steel "stovepipes" are usually set over wellheads in landscaped areas.

After installation, the wells are thoroughly developed to remove residual drilling materials from the wellbore, and to improve well performance by removing fine material from the filter pack that may pass into the well. Well development techniques used may include pumping, surging, bailing, swabbing, jetting, flushing and air-lifting. All development water is collected either in drums or tanks for temporary storage, and properly disposed of depending on laboratory analytical results. To minimize the potential for cross-contamination between wells, all development equipment are either steam cleaned or properly washed prior to use.

AEGIS ENVIRONMENTAL, INC.
STANDARD OPERATING PROCEDURE
RE: GROUNDWATER PURGING AND SAMPLING
SOP-7

Prior to water sampling, each well is purged by evacuating a minimum of three well-bore volumes of groundwater. When required, purging will continue until either the discharge water temperature, conductivity or pH stabilize, a maximum of ten well-bore volumes of groundwater have been recovered or the well is bailed dry. When practical, the groundwater sample should be taken when the water level in the well recovers to at least 80% of its static level.

The sampling equipment consists of either a Teflon bailer, PVC bailer or stainless steel bladder pump with a Teflon bladder. If the sampling system is dedicated to the well, then the bailer is usually Teflon, but the bladder pump is PVC with a polypropylene bladder. In general and depending on the intended laboratory analysis, forty-milliliter (ml) glass, volatile-organic-analysis (VOA) vials, with Teflon septa, are used as sample containers.

The groundwater sample is decanted into each VOA vial in such a manner that there is no meniscus at the top of the vial. A cap is quickly secured to the top of the vial. The vial is then inverted and gently tapped to see if air bubbles are present. If none are present, the vial is labeled and refrigerated for delivery, under strict chain-of-custody, to the analytical laboratory. Label information should include a unique sample identification number, job identification number, date, time, type of analysis requested and the sampler's name.

For quality control purposes, a duplicate water sample is collected from each well. This sample is put on hold at the laboratory. When required, a trip blank is prepared at the laboratory and placed in the transport cooler. It is labeled similar to the well samples, remains in the cooler during transport and is analyzed by the laboratory along with the groundwater samples. In addition, a field blank may be prepared in the field when sampling equipment is not dedicated. The field blank is prepared after a pump or bailer has been either steam cleaned or properly washed, prior to use in the next well, and is analyzed along with the other samples. The field blank analysis demonstrates the effectiveness of the in-field cleaning procedures to prevent cross-contamination.

To minimize the potential for cross-contamination between wells, all well development and water sampling equipment not dedicated to a well is either steam cleaned or properly washed between use. As a second precautionary measure, wells are sampled in order of least to highest concentrations as established by available previous analyses.

AEGIS ENVIRONMENTAL, INC.
STANDARD OPERATING PROCEDURE
RE: MEASURING LIQUID LEVELS USING WATER LEVEL OR INTERFACE PROBE
SOP-12

Field equipment used for liquid-level gauging typically includes the measuring probe (water level or interface), light filter(s), and product bailer(s). The field kit also includes cleaning supplies (buckets, TSP, spray bottles, and deionized water) to be used in cleaning the equipment between wells.

Prior to measurement, the probe tip is lowered into the well until it touches bottom. Using the previously established top-of-casting (TOC) point, the probe cord (or halyard) is marked and an measuring tape (graduated in hundredths of a foot) is used to determine the distance between the probe end and the marking on the cord. This measurement is then recorded on the liquid-level data sheet as the depth to water (DTW).

When using the interface probe to measure liquid levels, the probe is first electrically grounded to either the metal stove pipe or another metal object nearby. When no ground is available, reproducible measurements can be obtained by clipping the ground lead to the handle of the interface probe case. After grounding the probe, the top of the well casing is fitted with a light filter to insure that sunlight does not interfere with the operation of the probe's optical mechanisms. The probe tip is then lowered into the well and submerged in the groundwater. An oscillating (beeping) tone indicates that the probe is in water. The probe is slowly raised until either the oscillating tone ceases or becomes a steady tone. In either case, this is the depth-to-water indicator and the DTW measurement is made accordingly. The steady tone indicates floating hydrocarbons. In this case, the probe is slowly raised until the steady tone ceases. This is the depth-to-product (DTP) indicator and the DTP measurement is made accordingly.

The process of lowering and raising the probe must be repeated several times to ensure accurate measurements. The DTW and DTP measurements are recorded on the liquid level data sheet. When floating product is indicated by the probe's response, a product bailer is lowered partially through the product-water interface to confirm the product on the water surface, and as further indication of product thickness, particularly in cases where the product layer is quite thin. This measurement is recorded on the data sheet as product thickness (PT).

In order to avoid cross contamination of wells during the liquid-level measurement process, wells are measured in the order of "clean" to "dirty" (where such information is available). In addition, all measurement equipment is cleaned with TSP solution and thoroughly rinsed with deionized water before use, between measurements in respective wells and at the completion of the day's use.

APPENDIX B

BORING LOGS

PROJECT NAME/LOCATION:	PROJECT NUMBER: 90-007	BORING NUMBER: SB-1	SHEET 1 OF 1
E.C. Buehrer, Inc. 1061 Eastshore Hwy. Albany, CA.	CONTRACTOR: B&F Drilling	DRILLING METHOD: 7.5" HSA	
	DRILLER: Breece Franks	DRILLING RIG: Mobile B 61	
LAND OWNER: Bayport Investors	START DATE: 4/02/91	COMPLETED: 4/02/91	

STAMPLE	SAMPLER	BLOWNTS	SAMPLE INTERV	SAMPLER	DEPTH ft	DESCRIPTION OF MATERIALS AND CONDITIONS	Hnu PID (ppm)	GENERAL OBSERVATION NOTES
					0	Surface: vegetated soil		
* SS	SB1 /C	5 6 8	2.5 to 3.0	16"		Silty Clay: dark brown/black, slight plasticity, some fine sand, 15% angular gravel particles, wet. (CL)	4	No Odor
					5	Total Depth = 4 ft		
					10			
					15			
					20			
					25			
					30			

Field Notes:
First water encountered at 2.5 ft.
SS = California Modified Split Spoon Sampler
* = Sample Analyzed by Laboratory
ctg = Cuttings sample
2.0 in. ID sample Spoon
Soil Description after USCS

Aegis Environmental Inc.

Logged By: L.Braybrooks

PROJECT NAME/LOCATION:	PROJECT NUMBER: 90-007	BORING NUMBER: SB-2	SHEET 1 OF 1
E.C. Buehrer, Inc. 1061 Eastshore Hwy. Albany, CA.	CONTRACTOR: B&F Drilling	DRILLING METHOD: 7.5" HSA	
	DRILLER: Breece Franks	DRILLING RIG: Mobile B 61	
LAND OWNER: Bayport Investors	START DATE: 4/02/91	COMPLETED: 4/02/91	

STAMPLE	SNAMPLER	BCLOWNTS	SIANTPLER	SRAMCPLER	DEPTH ft	DESCRIPTION OF MATERIALS AND CONDITIONS	Hnu PID (ppm)	GENERAL OBSERVATION NOTES
					0	Surface: vegetated soil		
* SS	SB2 /B	5 8 16	1.5 to 2.0	18"		Silty Clay: dark brown/black, 20% course gravel, sticky, medium plasticity, moist. (CL)	3	No Odor
* SS	SB2 /C	6 6 9	to 2.5	18"	5	Silty Sand: (SM) black, medium grained, subang. poorly graded, saturated.	NA	No Odor
						total Depth = 4 ft		
					10			
					15			
					20			
					25			
					30			

Field Notes:
First water encountered at 3.0 ft.
SS = California Modified Split Spoon Sampler
* = Sample Analyzed by Laboratory
ctg = Cuttings sample
2.0 in. ID sample Spoon
Soil Description after USCS

Aegis Environmental Inc.

Logged By: L.Braybrooks

PROJECT NAME/LOCATION:	PROJECT NUMBER: 90-007	BORING NUMBER: SB-3	SHEET 1 OF 1
E.C. Buehrer, Inc. 1061 Eastshore Hwy. Albany, CA.	CONTRACTOR: B&F Drilling	DRILLING METHOD: 7.5" HSA	
	DRILLER: Breece Franks	DRILLING RIG: Mobile B 61	
LAND OWNER: Bayport Investors	START DATE: 4/02/91	COMPLETED: 4/02/91	

STAMPLE	SNAMPLER	BCOUNTS	SIAMPLEV	SRAMPLER	DEPTH ft	DESCRIPTION OF MATERIALS AND CONDITIONS	Hnu PID (ppm)	GENERAL OBSERVATION NOTES
					0	Surface: concrete		
* SS	SB3 /B	2 4 4	2.0 to 2.5	12"		Gravelly Silt: black, about 20% course angular gravel, medium plasticity, moist. (CL)	10	Slight Petroleum Odor
					5	Total Depth = 3 ft		
					10			
					15			
					20			
					25			
					30			

Field Notes:
First water encountered at 3.0 ft.
SS = California Modified Split Spoon Sampler
* = Sample Analyzed by Laboratory
ctg = Cuttings sample
2.0 in. ID sample Spoon
Soil Description after USCS

Aegis Environmental Inc.

Logged By: L.Braybrooks

PROJECT NAME/LOCATION:	PROJECT NUMBER: 90-007	BORING NUMBER: SB-4	SHEET 1 OF 1
E.C. Buehrer, Inc. 1061 Eastshore Hwy. Albany, CA.	CONTRACTOR: B&F Drilling	DRILLING METHOD: 7.5" HSA	
	DRILLER: Breece Franks	DRILLING RIG: Mobile B 61	
LAND OWNER: Bayport Investors	START DATE: 4/02/91	COMPLETED: 4/02/91	

STAMPLE	SNAMPLER	BCLOW	BCOUNTS	SIAMPLER	SRAMPLER	DEPTH ft	DESCRIPTION OF MATERIALS AND CONDITIONS	Hnu PID (ppm)	GENERAL OBSERVATION NOTES
		6				0	Surface: concrete		
* SS	SB4 /C	4 2	2.5 to 3.0	12"			Silty Clay: dark brown, medium plasticity, about 20% course angular gravel, sticky, wet. (CL)	5	Moderate Petroleum Odor
						5	Total Depth = 3 ft		
						10			
						15			
						20			
						25			
						30			

Field Notes:
First water encountered at 3.0 ft.
SS = California Modified Split Spoon Sampler
* = Sample Analyzed by Laboratory
ctg = Cuttings sample
2.0 in. ID sample Spoon
Soil Description after USCS

Aegis Environmental Inc.

Logged By: L.Braybrooks

PROJECT NAME/LOCATION:	PROJECT NUMBER: 90-007	BORING NUMBER: SB-5	SHEET 1 OF 1
E.C. Buehrer, Inc. 1061 Eastshore Hwy. Albany, CA.	CONTRACTOR: B&F Drilling	DRILLING METHOD: 7.5" HSA	
	DRILLER: Breece Franks	DRILLING RIG: Mobile B 61	
LAND OWNER: Bayport Investors	START DATE: 4/03/91	COMPLETED: 4/03/91	

STAMPLE	SNAMPLER	BCOUNTS	SIANTPLER	SRAMCPLER	DEPTH ft	DESCRIPTION OF MATERIALS AND CONDITIONS	Hnu PID (ppm)	GENERAL OBSERVATION NOTES
					0	Surface: concrete		
* SS	SB5 /B	2 2 4	2.0 to 2.5	16"		Silty Clay: medium to dark brown/gray, slight plasticity, about 20% course angular (CL)	3	No Odor
						gravel particles maximium size 25mm, moist.		
					5	Total Depth = 3 ft		
					10			
					15			
					20			
					25			
					30			

Field Notes:
First water encountered at 3.0 ft.
SS = California Modified Split Spoon Sampler
* = Sample Analyzed by Laboratory
ctg = Cuttings sample
2.0 in. ID sample Spoon
Soil Description after USCS

Aegis Environmental Inc.

Logged By: L.Braybrooks

PROJECT NAME/LOCATION:	PROJECT NUMBER: 90-007	BORING NUMBER: MW-5	SHEET 1 OF 1
E.C. Buehrer, Inc. 1061 Eastshore Hwy. Albany, CA.	CONTRACTOR: B&F Drilling	DRILLING METHOD: 10.0" HSA	
	DRILLER: Breece Franks	DRILLING RIG: Mobile B 61	
LAND OWNER: Bayport Investors	START DATE: 4/02/91	COMPLETED: 4/03/91	

STAMPLE	SNAMMB	BCLOWNTS	SIAMPLEV	SRAMCPLVER	DEPTH ft	DESCRIPTION OF MATERIALS AND CONDITIONS	Hnu PID (ppm)	GENERAL OBSERVATION NOTES
					0	Surface: concrete		
* SS	MW5 /B	4 5 5	2.0 to 2.5	10"		Gravelly Clay: dark brown-gray low plasticity, 40% subangular gravel particles 15 mm maximum size, slightly compacted and moist in place. (CL)	5	No Odor
					5			
ctg	NA	NA	NA	NA		Clay: black, medium to high plasticity, smooth, very sticky, wet. (OH)	NA	No Odor
					10	Total Depth = 14 ft		
					15			
					20			
					25			
					30			

Field Notes:
First water encountered at 3.0 ft.
SS = California Modified Split Spoon Sampler
* = Sample Analyzed by Laboratory
ctg = Cuttings sample
2.0 in. ID sample Spoon
Soil Description after USCS

Aegis Environmental Inc.

Logged By: L.Braybrooks

PROJECT NAME/LOCATION:	PROJECT NUMBER: 90-007	BORING NUMBER: MW-6	SHEET 1 OF 1
E.C. Buehrer, Inc. 1061 Eastshore Hwy. Albany, CA.	CONTRACTOR: B&F Drilling	DRILLING METHOD: 10.0" HSA	
	DRILLER: Breece Franks	DRILLING RIG: Mobile B 61	
LAND OWNER: Bayport Investors	START DATE: 4/02/91	COMPLETED: 4/03/91	

SAMPLE TYPE	SAMPLE NUMBER	BLOW COUNTS	SAMPLE INTERVAL	SAMPLE RECOVER	DEPTH ft	DESCRIPTION OF MATERIALS AND CONDITIONS Surface: concrete	Hnu PID (ppm)	GENERAL OBSERVATION NOTES
ctg	NA	NA	NA	NA	0	Clayey Silt: brown, slightly plastic, root material, moist. (ML)	NA	No Odor
* SS	MW6 /B	10 8 7	1.5 to 2.0	14"		Silty Sand: dark brown, medium grained, angular, poorly graded, 20% fines, saturated. (SM)	NA	No Odor
					5			
ctg	NA	NA	NA	NA		Clay: black, medium to high plasticity, smooth, very sticky, wet. (OH)	NA	No Odor
					10			
						Total Depth = 12.5 ft		
					15			
					20			
					25			
					30			

Field Notes:
First water encountered at 2.0 ft.
SS = California Modified Split Spoon Sampler
* = Sample Analyzed by Laboratory
ctg = Cuttings sample
2.0 in. ID sample Spoon
Soil Description after USCS

Aegis Environmental Inc.

Logged By: L.Braybrooks

PROJECT NAME/LOCATION:	PROJECT NUMBER: 90-007	BORING NUMBER: MW-7	SHEET 1 OF 1
E.C. Buehrer, Inc. 1061 Eastshore Hwy. Albany, CA.	CONTRACTOR: B&F Drilling	DRILLING METHOD: 10.0" HSA	
	DRILLER: Breece Franks	DRILLING RIG: Mobile B 61	
LAND OWNER: Bayport Investors	START DATE: 4/02/91	COMPLETED: 4/03/91	

STAMPLE	SAMPLER	BLOWS	SAMPLE INTERVAL	SAMPLE RECOVER	DEPTH ft	DESCRIPTION OF MATERIALS AND CONDITIONS Surface: vegetated soil	Hnu PID (ppm)	GENERAL OBSERVATION NOTES
* SS	MW7 /A	8 6 7	1.0 to 1.5	8"	0	Sandy Silt: dark brown/black, fine sand, 20% course angular gravel, wet. (ML)	5	No Odor
ctg	NA	NA	NA	NA	5	Clay: black, medium to high plasticity, smooth, very sticky, wet. (OH)	NA	No Odor
					10			
						Total Depth = 11.5 ft		
					15			
					20			
					25			
					30			

Field Notes:
First water encountered at 1.0 ft.
SS = California Modified Split Spoon Sampler
* = Sample Analyzed by Laboratory
ctg = Cuttings sample
2.0 in. ID sample Spoon
Soil Description after USCS

Aegis Environmental Inc.

Logged By: L.Braybrooks

PROJECT NAME/LOCATION:	PROJECT NUMBER: 90-007	BORING NUMBER: MW-8	SHEET 1 OF 1
E.C. Buehrer, Inc. 1061 Eastshore Hwy. Albany, CA.	CONTRACTOR: B&F Drilling	DRILLING METHOD: 10.0" HSA	
	DRILLER: Breece Franks	DRILLING RIG: Mobile B 61	
LAND OWNER: Bayport Investors	START DATE: 4/02/91	COMPLETED: 4/03/91	

STAMPLE	SNAMPLER	BCOUNTS	SIAMTPLEV	SRAMCPLER	DEPTH ft	DESCRIPTION OF MATERIALS AND CONDITIONS	Hnu PID (ppm)	GENERAL OBSERVATION NOTES
					0	Surface: concrete		
* SS	MW8 /A	6 4 7	1.5 to 2.0	6"		Clayey Silt: brown, some fine angular sand grains, about 15% course angular rock fragments, slight plasticity, moist. (ML)	NA	No Odor
					5			
ctg	NA	NA	NA	NA		Silty Clay: brown, medium plasticity, sticky, wet. (CL)	NA	No Odor
ctg	NA	NA	NA	NA		Clay: black, medium plasticity silty, some fine sand, wet. (OH)	NA	No Odor
					10			
						Total Depth = 13 ft		
					15			
					20			
					25			
					30			

Field Notes:
First water encountered at 3.0 ft.
SS = California Modified Split Spoon Sampler
* = Sample Analyzed by Laboratory
ctg = Cuttings sample
2.0 in. ID sample Spoon
Soil Description after USCS

Aegis Environmental Inc.

Logged By: L.Braybrooks

APPENDIX C

SOIL BORING SAMPLE LABORATORY REPORTS

NATIONAL
ENVIRONMENTAL
TESTING, INC.

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

RECEIVED
APR 2 9 1991
Ans'd.

Larry Braybrooks
Aegis Environmental Inc.
801 Riverside Ave., Ste C
Roseville, CA 95678

Date: 04-25-91
NET Client Acct No: 654
NET Pacific Log No: 6839
Received: 04-05-91 0800

Client Reference Information

1061 Eastshore Highway, Albany; Project: 90-007

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)

Ref: 1061 Eastshore Highway, Albany; Project: 90-007

Parameter	Method	Reporting Limit	Descriptor, Lab No. and Results SB-1-C 04-02-91 81698	SB-2-B 04-02-91 81699	Units
Oil & Grease(Total)	EPA9071	50	640	970	mg/Kg
Oil & Grease(Non-Polar)	SM5520EF	50	320	640	mg/Kg
METHOD 8010					
DATE ANALYZED			04-11-91	04-11-91	
DILUTION FACTOR*			1	1	
Bromodichloromethane		2.0	ND	ND	ug/Kg
Bromoform		2.0	ND	ND	ug/Kg
Bromomethane		2.0	ND	ND	ug/Kg
Carbon tetracnloride		2.0	ND	ND	ug/Kg
Chlorobenzene		2.0	ND	ND	ug/Kg
Chloroethane		2.0	ND	ND	ug/Kg
2-Chloroethylvinyl ether		5.0	ND	ND	ug/Kg
Chloroform		2.0	ND	ND	ug/Kg
Chloromethane		2.0	ND	ND	ug/Kg
Dibromochloromethane		2.0	ND	ND	ug/Kg
1,2-Dichlorobenzene		2.0	ND	ND	ug/Kg
1,3-Dichlorobenzene		2.0	ND	ND	ug/Kg
1,4-Dichlorobenzene		2.0	ND	ND	ug/Kg
Dichlorodifluoromethane		2.0	ND	ND	ug/Kg
1,1-Dichloroethane		2.0	ND	ND	ug/Kg
1,2-Dichloroethane		2.0	ND	ND	ug/Kg
1,1-Dichloroethene		2.0	ND	ND	ug/Kg
trans-1,2-Dichloroethene		2.0	ND	ND	ug/Kg
1,2-Dichloropropane		2.0	ND	ND	ug/Kg
cis-1,3-Dichloropropene		2.0	ND	ND	ug/Kg
trans-1,3-Dichloropropene		2.0	ND	ND	ug/Kg
Methylene Chloride		50	ND	ND	ug/Kg
1,1,2,2-Tetrachloroethane		2.0	ND	ND	ug/Kg
Tetrachloroethene		2.0	ND	ND	ug/Kg
1,1,1-Trichloroethane		2.0	ND	ND	ug/Kg
1,1,2-Trichloroethane		2.0	ND	ND	ug/Kg
Trichloroethene		2.0	ND	ND	ug/Kg
Trichlorofluoromethane		2.0	ND	ND	ug/Kg
Vinyl chloride		2.0	ND	ND	ug/Kg

NET Pacific, Inc.

Client No: 654 Date: 04-25-91
Client Name: Aegis Environmental Inc.
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Ref: 1061 Eastshore Highway, Albany; Project: 90-007

Parameter	Method	Reporting Limit	Descriptor, Lab No. and Results SB-1-C 04-02-91 81698	SB-2-B 04-02-91 81699	Units
PETROLEUM HYDROCARBONS			--	--	
VOLATILE (SOIL)			--	--	
DILUTION FACTOR *			1	1	
DATE ANALYZED			04-08-91	04-07-91	
METHOD GC FID/5030			--	--	
as Gasoline		1	ND	ND	mg/Kg
as Mineral Spirits		10	ND	ND	mg/kg
METHOD 8020			--	--	
DILUTION FACTOR *			1	1	
DATE ANALYZED			04-08-91	04-07-91	
Benzene		2.5	ND	ND	ug/Kg
Ethylbenzene		2.5	ND	ND	ug/Kg
Toluene		2.5	ND	ND	ug/Kg
Xylenes, total		2.5	ND	ND	ug/Kg
PETROLEUM HYDROCARBONS			--	--	
EXTRACTABLE (SOIL)			--	--	
DILUTION FACTOR *			20	20	
DATE EXTRACTED			04-07-91	04-07-91	
DATE ANALYZED			04-10-91	04-10-91	
METHOD GC FID/3550			--	--	
as Diesel		1	ND	ND	mg/Kg
as Motor Oil		10	220	280	mg/Kg

Ref: 1061 Eastshore Highway, Albany; Project: 90-007

Parameter	Method	Reporting Limit	Descriptor, Lab No. and Results SB-1-C 04-02-91 81698	SB-2-B 04-02-91 81699	Units
METHOD 8080					
DATE EXTRACTED			04-11-91	04-11-91	
DATE ANALYZED			04-15-91	04-15-91	
DILUTION FACTOR *			1	1	
POLYCHLORINATED BIPHENYLS			--	--	
Aroclor 1016		100	ND	ND	ug/Kg
Aroclor 1221		500	ND	ND	ug/Kg
Aroclor 1232		200	ND	ND	ug/Kg
Aroclor 1242		100	ND	ND	ug/Kg
Aroclor 1248		100	ND	ND	ug/Kg
Aroclor 1254		50	ND	ND	ug/Kg
Aroclor 1260		50	ND	66	ug/Kg

Ref: 1061 Eastshore Highway, Albany; Project: 90-007

Parameter	Method	Reporting Limit	Descriptor, Lab No. and Results SB-2-C 04-02-91 81700	Units
Oil & Grease(Total)	EPA9071	50	680	mg/Kg
Oil & Grease(Non-Polar)	SM5520EF	50	370	mg/Kg
METHOD 8010				
DATE ANALYZED			04-11-91	
DILUTION FACTOR*			1	
Bromodichloromethane		2.0	ND	ug/Kg
Bromoform		2.0	ND	ug/Kg
Bromomethane		2.0	ND	ug/Kg
Carbon tetrachloride		2.0	ND	ug/Kg
Chlorobenzene		2.0	ND	ug/Kg
Chloroethane		2.0	ND	ug/Kg
2-Chloroethylvinyl ether		5.0	ND	ug/Kg
Chloroform		2.0	ND	ug/Kg
Chloromethane		2.0	ND	ug/Kg
Dibromochloromethane		2.0	ND	ug/Kg
1,2-Dichlorobenzene		2.0	ND	ug/Kg
1,3-Dichlorobenzene		2.0	ND	ug/Kg
1,4-Dichlorobenzene		2.0	ND	ug/Kg
Dichlorodifluoromethane		2.0	ND	ug/Kg
1,1-Dichloroethane		2.0	ND	ug/Kg
1,2-Dichloroethane		2.0	ND	ug/Kg
1,1-Dichloroethene		2.0	ND	ug/Kg
trans-1,2-Dichloroethene		2.0	ND	ug/Kg
1,2-Dichloropropane		2.0	ND	ug/Kg
cis-1,3-Dichloropropene		2.0	ND	ug/Kg
trans-1,3-Dichloropropene		2.0	ND	ug/Kg
Methylene Chloride		50	ND	ug/Kg
1,1,2,2-Tetrachloroethane		2.0	ND	ug/Kg
Tetrachloroethene		2.0	ND	ug/Kg
1,1,1-Trichloroethane		2.0	ND	ug/Kg
1,1,2-Trichloroethane		2.0	ND	ug/Kg
Trichloroethene		2.0	ND	ug/Kg
Trichlorofluoromethane		2.0	ND	ug/Kg
Vinyl chloride		2.0	ND	ug/Kg

NET Pacific, Inc

Client No: 654 Date: 04-25-91
Client Name: Aegis Environmental Inc.
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Ref: 1061 Eastshore Highway, Albany; Project: 90-007

Parameter	Method	Reporting Limit	Descriptor, Lab No. and Results SB-2-C 04-02-91 81700	Units
PETROLEUM HYDROCARBONS			--	
VOLATILE (SOIL)			--	
DILUTION FACTOR *			1	
DATE ANALYZED			04-07-91	
METHOD GC FID/5030			--	
as Gasoline		1	ND	mg/Kg
as Mineral Spirits		10	ND	mg/kg
METHOD 8020			--	
DILUTION FACTOR *			1	
DATE ANALYZED			04-07-91	
Benzene		2.5	ND	ug/Kg
Ethylbenzene		2.5	ND	ug/Kg
Toluene		2.5	ND	ug/Kg
Xylenes, total		2.5	ND	ug/Kg
PETROLEUM HYDROCARBONS			--	
EXTRACTABLE (SOIL)			--	
DILUTION FACTOR *			10	
DATE EXTRACTED			04-07-91	
DATE ANALYZED			04-10-91	
METHOD GC FID/3550			--	
as Diesel		1	ND	mg/Kg
as Motor Oil		10	260	mg/Kg

NET Pacific, Inc

Client No: 654 Date: 04-25-91
Client Name: Aegis Environmental Inc.
NET Log No: 6839 Page: 7

Ref: 1061 Eastshore Highway, Albany; Project: 90-007

Parameter	Method	Reporting Limit	Descriptor, Lab No. and Results SB-2-C 04-02-91 81700	Units
METHOD 8080				
DATE EXTRACTED			04-11-91	
DATE ANALYZED			04-15-91	
DILUTION FACTOR *			1	
POLYCHLORINATED BIPHENYLS			--	
Aroclor 1016		100	ND	ug/Kg
Aroclor 1221		500	ND	ug/Kg
Aroclor 1232		200	ND	ug/Kg
Aroclor 1242		100	ND	ug/Kg
Aroclor 1248		100	ND	ug/Kg
Aroclor 1254		50	ND	ug/Kg
Aroclor 1260		50	ND	ug/Kg

NET Pacific, Inc

Client No: 654
Client Name: Aegis Environmental Inc.
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Ref: 1061 Eastshore Highway, Albany; Project: 90-007

Parameter	Method	Reporting Limit	Descriptor, Lab No. and Results SB-3-B 04-02-91 81706	SB-4-C 04-02-91 81707	Units
Oil & Grease(Total)	EPA9071	50	360	2,400	mg/Kg
Oil & Grease(Non-Polar)	SM5520EF	50	150	730	mg/Kg

Ref: 1061 Eastshore Highway, Albany; Project: 90-007

Parameter	Method	Reporting Limit	Descriptor, Lab No. and Results SB-3-B 04-02-91 81706	SB-4-C 04-02-91 81707	Units
METHOD 8010					
DATE ANALYZED			04-11-91	04-11-91	
DILUTION FACTOR*			1	1	
Bromodichloromethane		2.0	ND	ND	ug/Kg
Bromoform		2.0	ND	ND	ug/Kg
Bromomethane		2.0	ND	ND	ug/Kg
Carbon tetrachloride		2.0	ND	ND	ug/Kg
Chlorobenzene		2.0	ND	ND	ug/Kg
Chloroethane		2.0	ND	ND	ug/Kg
2-Chloroethylvinyl ether		5.0	ND	ND	ug/Kg
Chloroform		2.0	ND	ND	ug/Kg
Chloromethane		2.0	ND	ND	ug/Kg
Dibromochloromethane		2.0	ND	ND	ug/Kg
1,2-Dichlorobenzene		2.0	ND	ND	ug/Kg
1,3-Dichlorobenzene		2.0	ND	ND	ug/Kg
1,4-Dichlorobenzene		2.0	ND	ND	ug/Kg
Dichlorodifluoromethane		2.0	ND	ND	ug/Kg
1,1-Dichloroethane		2.0	ND	ND	ug/Kg
1,2-Dichloroethane		2.0	ND	ND	ug/Kg
1,1-Dichloroethene		2.0	ND	ND	ug/Kg
trans-1,2-Dichloroethene		2.0	ND	ND	ug/Kg
1,2-Dichloropropane		2.0	ND	ND	ug/Kg
cis-1,3-Dichloropropene		2.0	ND	ND	ug/Kg
trans-1,3-Dichloropropene		2.0	ND	ND	ug/Kg
Methylene Chloride		50	ND	ND	ug/Kg
1,1,2,2-Tetrachloroethane		2.0	ND	ND	ug/Kg
Tetrachloroethene		2.0	ND	ND	ug/Kg
1,1,1-Trichloroethane		2.0	ND	ND	ug/Kg
1,1,2-Trichloroethane		2.0	ND	ND	ug/Kg
Trichloroethene		2.0	ND	ND	ug/Kg
Trichlorofluoromethane		2.0	ND	ND	ug/Kg
Vinyl chloride		2.0	ND	ND	ug/Kg

NET Pacific, Inc.

Client No: 654 Date: 04-25-91
Client Name: Aegis Environmental Inc.
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Ref: 1061 Eastshore Highway, Albany; Project: 90-007

Parameter	Method	Reporting Limit	Descriptor, Lab No. and Results SB-3-B 04-02-91 81706	SB-4-C 04-02-91 81707	Units
PETROLEUM HYDROCARBONS			--	--	
VOLATILE (SOIL)			--	--	
DILUTION FACTOR *			1	1	
DATE ANALYZED			04-07-91	04-07-91	
METHOD GC FID/5030			--	--	
as Gasoline		1	ND	3.0	mg/Kg
METHOD 8020			--	--	
DILUTION FACTOR *			1	1	
DATE ANALYZED			04-07-91	04-07-91	
Benzene		2.5	ND	12	ug/Kg
Ethylbenzene		2.5	ND	5.2	ug/Kg
Toluene		2.5	ND	120	ug/Kg
Xylenes, total		2.5	ND	18	ug/Kg
PETROLEUM HYDROCARBONS			--	--	
EXTRACTABLE (SOIL)			--	--	
DILUTION FACTOR *			2	10	
DATE EXTRACTED			04-07-91	04-07-91	
DATE ANALYZED			04-10-91	04-10-91	
METHOD GC FID/3550			--	--	
as Diesel		1	ND	ND	mg/Kg
as Motor Oil		10	74	240	mg/Kg

NET Pacific, Inc.

Client No: 654 Date: 04-25-91
Client Name: Aegis Environmental Inc.
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Ref: 1061 Eastshore Highway, Albany; Project: 90-007

Parameter	Method	Reporting Limit	Descriptor, Lab No. and Results SB-5-B 04-03-91 81708	MW-5-B 04-02-91 81709	Units
Oil & Grease(Total)	EPA9071	50	580	470	mg/Kg
Oil & Grease(Non-Polar)	SM5520EF	50	300	250	mg/Kg

Ref: 1061 Eastshore Highway, Albany; Project: 90-007

Parameter	Method	Reporting Limit	Descriptor, Lab No. and Results SB-5-B 04-03-91 81708	MW-5-B 04-02-91 81709	Units
METHOD 8010					
DATE ANALYZED			04-11-91	04-11-91	
DILUTION FACTOR*			1	1	
Bromodichloromethane		2.0	ND	ND	ug/Kg
Bromoform		2.0	ND	ND	ug/Kg
Bromomethane		2.0	ND	ND	ug/Kg
Carbon tetrachloride		2.0	ND	ND	ug/Kg
Chlorobenzene		2.0	ND	ND	ug/Kg
Chloroethane		2.0	ND	ND	ug/Kg
2-Chloroethylvinyl ether		5.0	ND	ND	ug/Kg
Chloroform		2.0	ND	ND	ug/Kg
Chloromethane		2.0	ND	ND	ug/Kg
Dibromochloromethane		2.0	ND	ND	ug/Kg
1,2-Dichlorobenzene		2.0	ND	ND	ug/Kg
1,3-Dichlorobenzene		2.0	ND	ND	ug/Kg
1,4-Dichlorobenzene		2.0	ND	ND	ug/Kg
Dichlorodifluoromethane		2.0	ND	ND	ug/Kg
1,1-Dichloroethane		2.0	ND	ND	ug/Kg
1,2-Dichloroethane		2.0	ND	ND	ug/Kg
1,1-Dichloroethene		2.0	ND	ND	ug/Kg
trans-1,2-Dichloroethene		2.0	ND	ND	ug/Kg
1,2-Dichloropropane		2.0	ND	ND	ug/Kg
cis-1,3-Dichloropropene		2.0	ND	ND	ug/Kg
trans-1,3-Dichloropropene		2.0	ND	ND	ug/Kg
Methylene Chloride		50	ND	ND	ug/Kg
1,1,2,2-Tetrachloroethane		2.0	ND	ND	ug/Kg
Tetrachloroethene		2.0	ND	ND	ug/Kg
1,1,1-Trichloroethane		2.0	ND	ND	ug/Kg
1,1,2-Trichloroethane		2.0	ND	ND	ug/Kg
Trichloroethene		2.0	ND	ND	ug/Kg
Trichlorofluoromethane		2.0	ND	ND	ug/Kg
Vinyl chloride		2.0	ND	ND	ug/Kg

Ref: 1061 Eastshore Highway, Albany; Project: 90-007

Parameter	Method	Reporting Limit	Descriptor, Lab No. and Results SB-5-B 04-03-91 81708	MW-5-B 04-02-91 81709	Units
PETROLEUM HYDROCARBONS			--	--	
VOLATILE (SOIL)			--	--	
DILUTION FACTOR *			1	1	
DATE ANALYZED			04-07-91	04-07-91	
METHOD GC FID/5030			--	--	
as Gasoline		1	ND	ND	mg/Kg
METHOD 8020			--	--	
DILUTION FACTOR *			1	1	
DATE ANALYZED			04-07-91	04-07-91	
Benzene		2.5	ND	ND	ug/Kg
Ethylbenzene		2.5	ND	ND	ug/Kg
Toluene		2.5	ND	ND	ug/Kg
Xylenes, total		2.5	ND	ND	ug/Kg
PETROLEUM HYDROCARBONS			--	--	
EXTRACTABLE (SOIL)			--	--	
DILUTION FACTOR *			4	4	
DATE EXTRACTED			04-07-91	04-07-91	
DATE ANALYZED			04-10-91	04-10-91	
METHOD GC FID/3550			--	--	
as Diesel		1	ND	ND	mg/Kg
as Motor Oil		10	120	150	mg/Kg

NET Pacific Inc

Client No: 654 Date: 04-25-91
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Ref: 1061 Eastshore Highway, Albany; Project: 90-007

			Descriptor, Lab No. and Results		
			MW-6-B 04-02-91	MW-7-A 04-03-91	
Parameter	Method	Reporting Limit	81710	81711	Units
Oil & Grease(Total)	EPA9071	50	73	110	mg/Kg
Oil & Grease(Non-Polar)	SM5520EF	50	55	58	mg/Kg

Ref: 1061 Eastshore Highway, Albany; Project: 90-007

Parameter	Method	Reporting Limit	Descriptor, Lab No. and Results MW-6-B 04-02-91 81710	 MW-7-A 04-03-91 81711	Units
METHOD 8010					
DATE ANALYZED			04-11-91	04-11-91	
DILUTION FACTOR*			1	1	
Bromodichloromethane		2.0	ND	ND	ug/Kg
Bromoform		2.0	ND	ND	ug/Kg
Bromomethane		2.0	ND	ND	ug/Kg
Carbon tetrachloride		2.0	ND	ND	ug/Kg
Chlorobenzene		2.0	ND	ND	ug/Kg
Chloroethane		2.0	ND	ND	ug/Kg
2-Chloroethylvinyl ether		5.0	ND	ND	ug/Kg
Chloroform		2.0	ND	ND	ug/Kg
Chloromethane		2.0	ND	ND	ug/Kg
Dibromochloromethane		2.0	ND	ND	ug/Kg
1,2-Dichlorobenzene		2.0	ND	ND	ug/Kg
1,3-Dichlorobenzene		2.0	ND	ND	ug/Kg
1,4-Dichlorobenzene		2.0	ND	ND	ug/Kg
Dichlorodifluoromethane		2.0	ND	ND	ug/Kg
1,1-Dichloroethane		2.0	ND	ND	ug/Kg
1,2-Dichloroethane		2.0	ND	ND	ug/Kg
1,1-Dichloroethene		2.0	ND	ND	ug/Kg
trans-1,2-Dichloroethene		2.0	ND	ND	ug/Kg
1,2-Dichloropropane		2.0	ND	ND	ug/Kg
cis-1,3-Dichloropropene		2.0	ND	ND	ug/Kg
trans-1,3-Dichloropropene		2.0	ND	ND	ug/Kg
Methylene Chloride		50	ND	ND	ug/Kg
1,1,2,2-Tetrachloroethane		2.0	ND	ND	ug/Kg
Tetrachloroethene		2.0	ND	ND	ug/Kg
1,1,1-Trichloroethane		2.0	ND	ND	ug/Kg
1,1,2-Trichloroethane		2.0	ND	ND	ug/Kg
Trichloroethene		2.0	ND	ND	ug/Kg
Trichlorofluoromethane		2.0	ND	ND	ug/Kg
Vinyl chloride		2.0	ND	ND	ug/Kg

Ref: 1061 Eastshore Highway, Albany; Project: 90-007

Parameter	Method	Reporting Limit	Descriptor, Lab No. and Results MW-6-B 04-02-91 81710	MW-7-A 04-03-91 81711	Units
PETROLEUM HYDROCARBONS			--	--	
VOLATILE (SOIL)			--	--	
DILUTION FACTOR *			1	1	
DATE ANALYZED			04-08-91	04-07-91	
METHOD GC FID/5030			--	--	
as Gasoline		1	ND	ND	mg/Kg
METHOD 8020			--	--	
DILUTION FACTOR *			1	1	
DATE ANALYZED			04-08-91	04-07-91	
Benzene		2.5	ND	ND	ug/Kg
Ethylbenzene		2.5	ND	ND	ug/Kg
Toluene		2.5	ND	ND	ug/Kg
Xylenes, total		2.5	ND	ND	ug/Kg
PETROLEUM HYDROCARBONS			--	--	
EXTRACTABLE (SOIL)			--	--	
DILUTION FACTOR *			1	5	
DATE EXTRACTED			04-07-91	04-07-91	
DATE ANALYZED			04-10-91	04-10-91	
METHOD GC FID/3550			--	--	
as Diesel		1	ND	ND	mg/Kg
as Motor Oil		10	27	220	mg/Kg

NET Pacific Inc

Client No: 654
Client Name: Aegis Environmental Inc.
NET Log No: 6839

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Ref: 1061 Eastshore Highway, Albany; Project: 90-007

Parameter	Method	Reporting Limit	Descriptor, Lab No. and Results MW-8-A 04-02-91 81712	Units
Oil & Grease(Total)	EPA9071	50	88	mg/Kg
Oil & Grease(Non-Polar)	SM5520EF	50	ND	mg/Kg

NET Pacific Inc

Client No: 654
Client Name: Aegis Environmental Inc.
NET Log No: 6839

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Ref: 1061 Eastshore Highway, Albany; Project: 90-007

Parameter	Method	Reporting Limit	Descriptor, Lab No. and Results MW-8-A 04-02-91 81712	Units
METHOD 8010				
DATE ANALYZED			04-11-91	
DILUTION FACTOR*			1	
Bromodichloromethane		2.0	ND	ug/Kg
Bromoform		2.0	ND	ug/Kg
Bromomethane		2.0	ND	ug/Kg
Carbon tetrachloride		2.0	ND	ug/Kg
Chlorobenzene		2.0	ND	ug/Kg
Chloroethane		2.0	ND	ug/Kg
2-Chloroethylvinyl ether		5.0	ND	ug/Kg
Chloroform		2.0	ND	ug/Kg
Chloromethane		2.0	ND	ug/Kg
Dibromochloromethane		2.0	ND	ug/Kg
1,2-Dichlorobenzene		2.0	ND	ug/Kg
1,3-Dichlorobenzene		2.0	ND	ug/Kg
1,4-Dichlorobenzene		2.0	ND	ug/Kg
Dichlorodifluoromethane		2.0	ND	ug/Kg
1,1-Dichloroethane		2.0	ND	ug/Kg
1,2-Dichloroethane		2.0	ND	ug/Kg
1,1-Dichloroethene		2.0	ND	ug/Kg
trans-1,2-Dichloroethene		2.0	ND	ug/Kg
1,2-Dichloropropane		2.0	ND	ug/Kg
cis-1,3-Dichloropropene		2.0	ND	ug/Kg
trans-1,3-Dichloropropene		2.0	ND	ug/Kg
Methylene Chloride		50	ND	ug/Kg
1,1,2,2-Tetrachloroethane		2.0	ND	ug/Kg
Tetrachloroethene		2.0	ND	ug/Kg
1,1,1-Trichloroethane		2.0	ND	ug/Kg
1,1,2-Trichloroethane		2.0	ND	ug/Kg
Trichloroethene		2.0	ND	ug/Kg
Trichlorofluoromethane		2.0	ND	ug/Kg
Vinyl chloride		2.0	ND	ug/Kg

NET Pacific, Inc

Client No: 654 Date: 04-25-91
Client Name: Aegis Environmental Inc.
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Ref: 1061 Eastshore Highway, Albany; Project: 90-007

Parameter	Method	Reporting Limit	Descriptor, Lab No. and Results MW-8-A 04-02-91 81712	Units
PETROLEUM HYDROCARBONS			--	
VOLATILE (SOIL)			--	
DILUTION FACTOR *			1	
DATE ANALYZED			04-07-91	
METHOD GC FID/5030			--	
as Gasoline		1	ND	mg/Kg
METHOD 8020			--	
DILUTION FACTOR *			1	
DATE ANALYZED			04-07-91	
Benzene		2.5	ND	ug/Kg
Ethylbenzene		2.5	ND	ug/Kg
Toluene		2.5	ND	ug/Kg
Xylenes, total		2.5	ND	ug/Kg
PETROLEUM HYDROCARBONS			--	
EXTRACTABLE (SOIL)			--	
DILUTION FACTOR *			2	
DATE EXTRACTED			04-07-91	
DATE ANALYZED			04-10-91	
METHOD GC FID/3550			--	
as Diesel		1	ND	mg/Kg
as Motor Oil		10	46	mg/Kg

Ref: 1061 Eastshore Highway, Albany; Project: 90-007

QUALITY CONTROL DATA

Parameter	Reporting Limits	Units	Cal Verf Stand % Recovery	Blank Data	Spike % Recovery	Duplicate Spike % Recovery	RPD
Diesel	1	mg/Kg	97	ND	N/A	N/A	2.2
Motor Oil	10	mg/Kg	99	ND	N/A	N/A	N/A
Chlorobenzene	2.0	ug/Kg	88	ND	75	87	14
1,1-DCE	2.0	ug/Kg	113	ND	111	109	1.0
TCE	2.0	ug/Kg	90	ND	101	107	5.0
Gasoline	1	mg/Kg	97	ND	91	100	9.4
Benzene	2.5	ug/Kg	102	ND	82	89	6.5
Toluene	2.5	ug/Kg	112	ND	84	88	5.1
Gasoline	1	mg/kg	97	ND	86	90	4.5
Gasoline	1	mg/Kg	97	ND	87	88	1.1
Aroclor 1254	50	ug/Kg	90	ND	98	100	2.0
COMMENT: Blank Results were ND on other analytes tested.							
O&G total	50	mg/Kg	110	ND	111	104	6.5
O&G non-polar	50	mg/Kg	103	ND	N/A	N/A	N/A

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.

Phone (916) 782 2110
FAX (916) 786-7830

AEGIS Environmental Consultants, Inc.

Sample Identification/Field Chain of Custody Record

Send results to:
Aegis Environmental
801 Riverside, Suite C
Roseville, CA 95678

Site Address: 1061 Eastshore Hwy Albany, CA
AEGIS Project #: 90-007
Shipped By: Aegis Environmental, Inc.
Shipped To: NET Pacific
Project Manager Larry Braybrooks

For Shell Projects Only
WIC:
AFE:
CT/DL:
Shell Engineer:
Hazardous Materials Suspected? (yes/no)

Sampling Point	Location	Field ID#	Date	Sample Type	No. of Containers	Analysis Required
3' bg	SB-1	SB1-C	4-2-91	soil/Brass	1	8080, 5520, 3550/8015, 8020/8015/5030 w/mineral sp
2' bg	SB-2	SB2-B	"		1	" + 8080 PCB only
2.5' bg	SB-2	SB2-C	"		1	" + 8080 "
2' bg	SB-3	SB3-B	"		1	5520, 3550/8015 8020/8010, 5030/8015
2.5' bg	SB-4	SB4-C	"		1	"
2.' bg	SB-5	SB5-B	"		1	"
2' bg	MW-5	MW5-B	4-3-91		1	"
2' bg	MW-6	MW6-B	4-2-91		1	"

Sampler(s) (signature) Larry Braybrooks

Field ID	Relinquished By (signature)	Received By (signature)	Date/Time		Comments
none	Unwanted	Mike Tavani	4/4/91	1250	
	Mike Tavani				

Sealed for shipment by: (signature) Larry Braybrooks Date/Time: 4/4/91 9:00 Shipment Method: Courier
Received for Lab by: (signature) Kim Date/Time: Comments: Hold samples pending results of initial analysis - 10 day turnaround -

Receiving Laboratory: Please return original form after signing for receipt of samples.

White/Original Yellow/Lab Copy Pink/File Copy

Phone (916) 782 2110
FAX (916) 786-7830

AEGIS Environmental Consultants, Inc.

Sample Identification/Field Chain of Custody Record

Send results to:
Aegis Environmental
801 Riverside, Suite C
Roseville, CA 95678

Site Address: 1061 Eastshore Hwy, Albany, CA
AEGIS Project #: 90-007
Shipped By: Aegis Environmental, Inc.
Shipped To: NET Pacific
Project Manager Larry Braybrooks

For Shell Projects Only
WIC:
AFE:
CT/DL:
Shell Engineer:
Hazardous Materials Suspected? (yes/no)

Sampling Point	Location	Field ID#	Date	Sample Type	No. of Containers	Analysis Required
1' bg	MW-7	MW7-A	4-3-91	soil/Brass	1	5520, 5550/8015 8020/8010, 5030/8015
1.5' bg	MW-8	MW8-A	4-2-91	"	1	"

Sampler(s) (signature) Larry Braybrooks

Field ID	Relinquished By (signature)	Received By (signature)	Date/Time		Comments
above	A (Generator)	Mike Tavano	4/4/91	1250	
	Mike Tavano	(Lab NCS)			

Sealed for shipment by: (signature) Larry Braybrooks Date/Time: 4/4/91 9:00 Shipment Method: Courier
Received for Lab by: (signature) Lab sample Date/Time: 4/5/91 0800 Comments: Hold samples pending results of initial analysis - 10 day turnaround -

Receiving Laboratory: Please return original form after signing for receipt of samples.

White/Original Yellow/Lab Copy Pink/File Copy

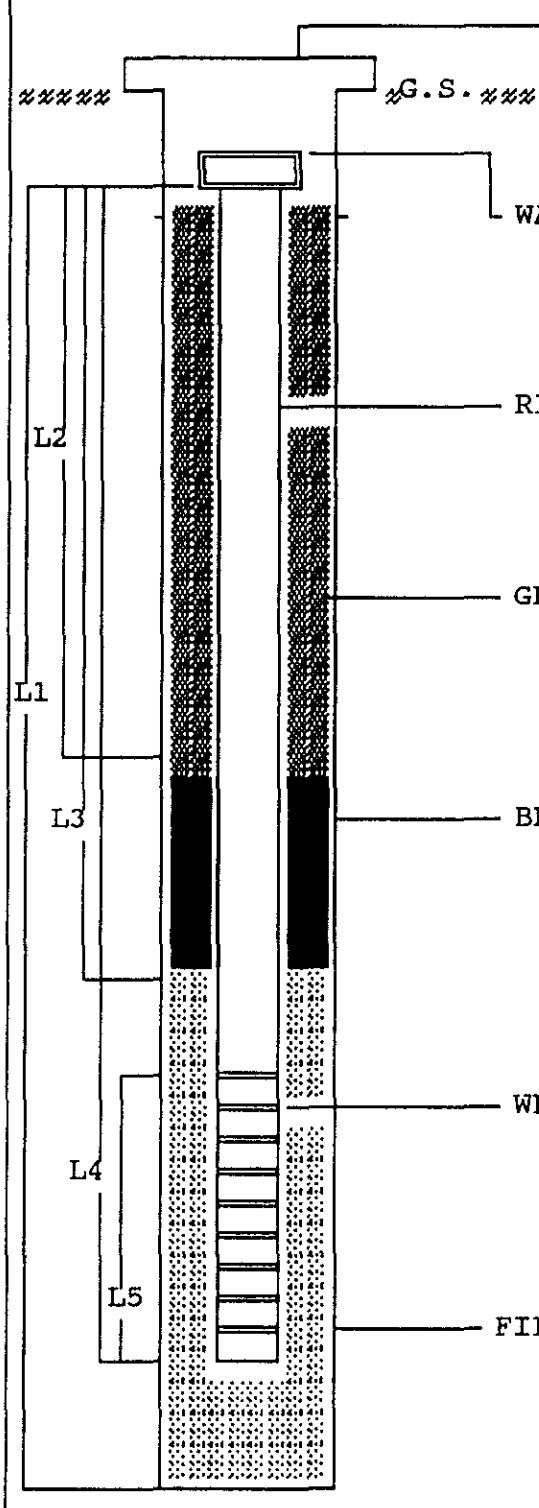
APPENDIX D

MONITORING WELL CONSTRUCTION DETAILS

MONITORING WELL CONSTRUCTION DETAILS

E.C. Buehrer
PROJECT: 1061 Eastshore Hwy. Albany, CA. DATE : 4/02/91

PROJECT NO.: 90-007 WELL NO.: 5



CHRISTY BOX
Box Diameter: 8 in.
Type (flush/above): above
Distance Above Ground : 1.0 in.

WATER PROOF LOCKING CAP
Type: Geostore
Lock Cap: yes/expanding

RISER MATERIAL
Type Material: PVC
Diameter: 4 in.
Joint Type: flush threaded

GROUT SEAL
Material Mix: Portland Cement
Total Depth From Surface: 1.0 ft.

BENTONITE SEAL
Type: pellets
Size: 1/4 in.
Total Thickness: 1.5 ft.

WELL SCREEN
Type Material: PVC
Diameter: 4 in.
Joint Type: flush threaded
Slot Size: 0.01
Total Length: 10 ft.

FILTER PACK
Type Material: 1/30 sand
Total Thickness: 11.0 ft.
Depth to Bottom: 13.5 ft.
Distance Above Screen: 1.0 ft.

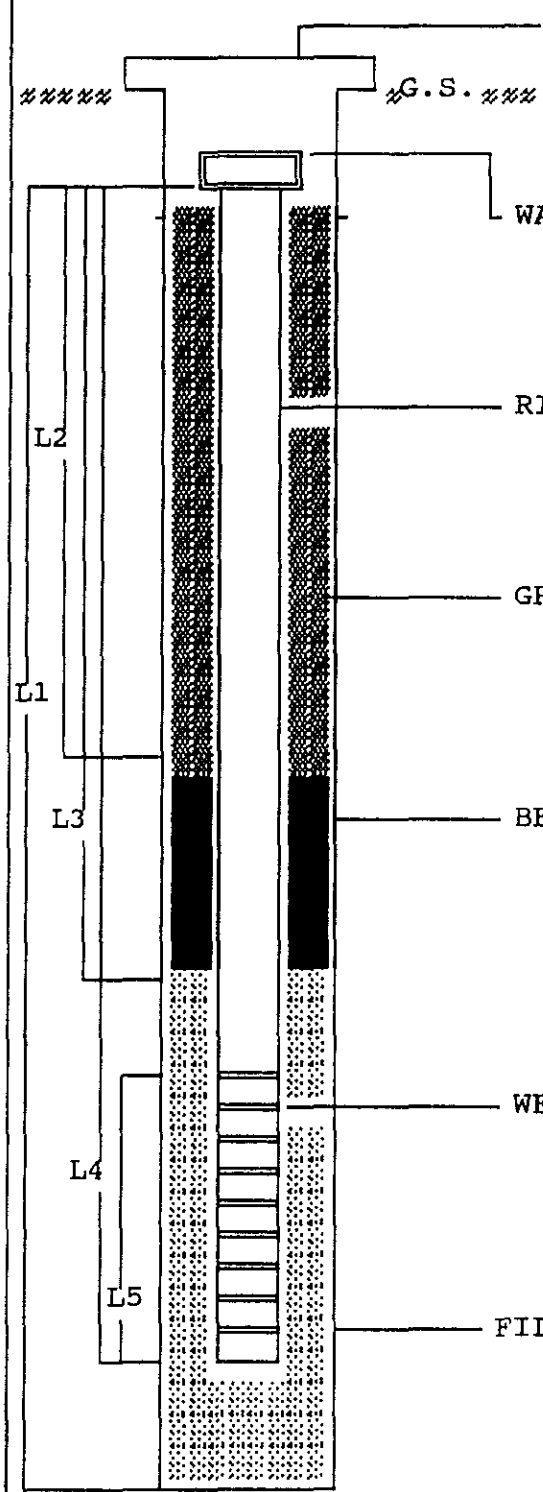
L1 14.0 ft.
L2 1.0 ft.
L3 2.5 ft.
L4 13.5 ft.
L5 10.0 ft.

TOTAL DEPTH OF WELL: 13.5 ft.
TOTAL DEPTH OF BORING: 14.0 ft.
DIAMETER OF BORING: 10.0 in.
METHOD OF DRILLING: hollow stem aug
DATE STARTED: 4/2/91
DATE COMPLETED: 4/3/91

MONITORING WELL CONSTRUCTION DETAILS

E.C. Buehrer
PROJECT: 1061 Eastshore Hwy. Albany, CA. DATE : 4/02/91

PROJECT NO.: 90-007 WELL NO.: 6



CHRISTY BOX
Box Diameter: 8 in.
Type (flush/above): above
Distance Above Ground : 10.0 in.

WATER PROOF LOCKING CAP
Type: Geostore
Lock Cap: yes/expanding

RISER MATERIAL
Type Material: PVC
Diameter: 4 in.
Joint Type: flush threaded

GROUT SEAL
Material Mix: Portland cmnt.
Total Depth From Surface: 1.0 ft.

BENTONITE SEAL
Type: pellets
Size: 1/4 in.
Total Thickness: 1 ft.

WELL SCREEN
Type Material: PVC
Diameter: 4 in.
Joint Type: flush threaded
Slot Size: 0.01
Total Length: 10 ft.

FILTER PACK
Type Material: 1/30 sand
Total Thickness: 10.5 ft.
Depth to Bottom: 12.5 ft.
Distance Above Screen: 6 in.

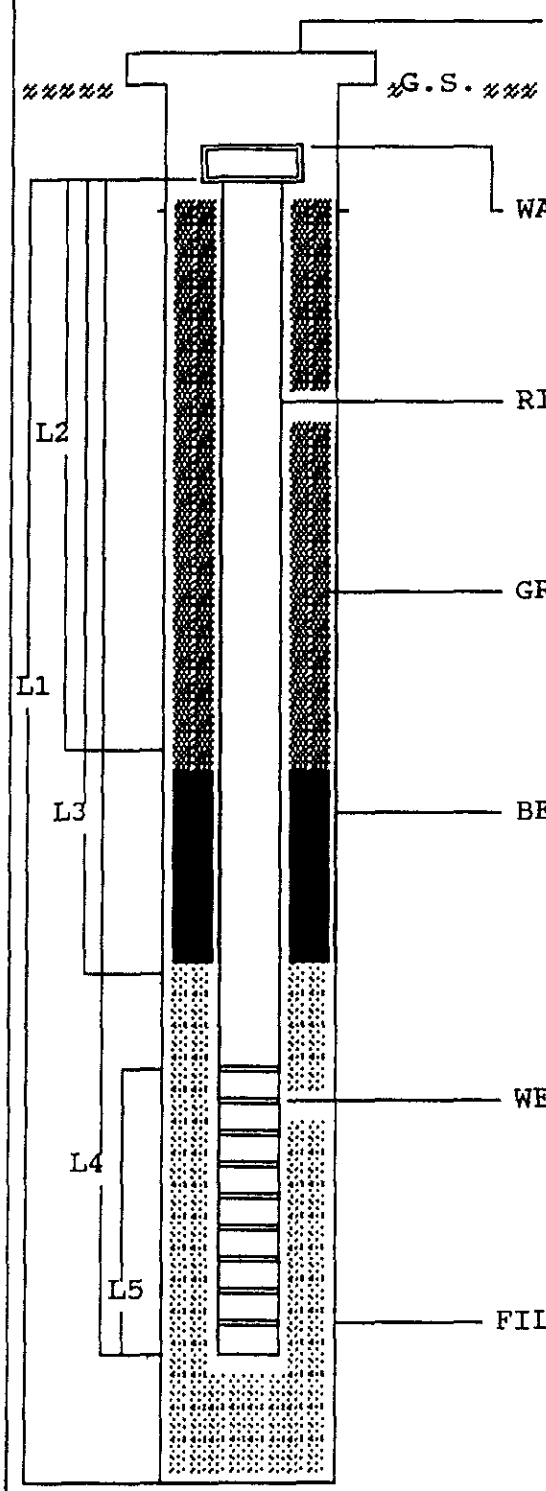
L1 12.5 ft.
L2 1.0 ft.
L3 2.0 ft.
L4 12.5 ft.
L5 10.0 ft.

TOTAL DEPTH OF WELL: 12.5 ft.
TOTAL DEPTH OF BORING: 12.5 ft.
DIAMETER OF BORING: 10.0 in.
METHOD OF DRILLING: hollow stem aug
DATE STARTED: 4/2/91
DATE COMPLETED: 4/3/91

MONITORING WELL CONSTRUCTION DETAILS

E.C. Buehrer
PROJECT: 1061 Eastshore Hwy. Albany, CA. DATE : 4/02/91

PROJECT NO.: 90-007 WELL NO.: 7



Box Diameter: NA
Type (flush/above): NA
Distance Above Ground : NA

Type: Geostore
Lock Cap: yes/expanding

Type Material: PVC
Diameter: 4 in.
Joint Type: flush threaded

Material Mix: NA
Total Depth From Surface: NA

Type: pellets
Size: 1/4 in.
Total Thickness: 0.5 ft.

Type Material: PVC
Diameter: 4 in.
Joint Type: flush threaded
Slot Size: 0.01
Total Length: 10 ft.

Type Material: 1/30 sand
Total Thickness: 11.25 ft.
Depth to Bottom: 11.5 ft.
Distance Above Screen: 3 in.

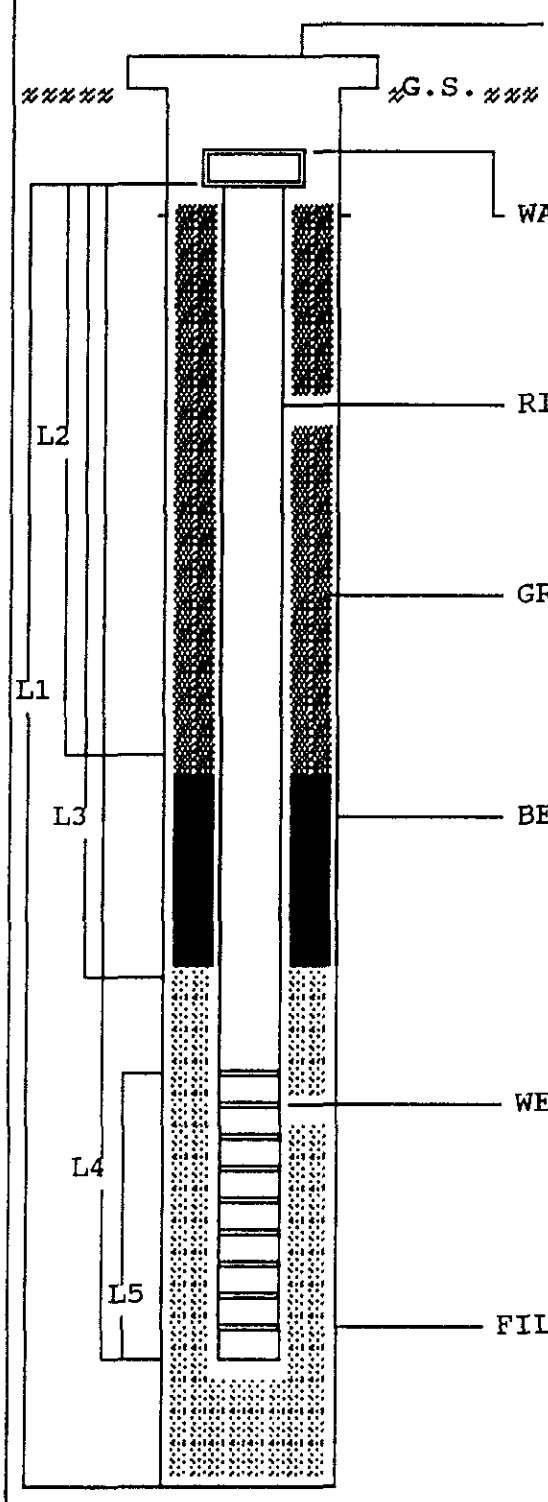
L1 11.5 ft.
L2 0.0 ft.
L3 0.5 ft.
L4 10.5 ft.
L5 10.0 ft.

TOTAL DEPTH OF WELL: 10.5 ft.
TOTAL DEPTH OF BORING: 11.5 ft.
DIAMETER OF BORING: 10.0 in.
METHOD OF DRILLING: hollow stem aug
DATE STARTED: 4/2/91
DATE COMPLETED: 4/3/91

MONITORING WELL CONSTRUCTION DETAILS

E.C. Buehrer
PROJECT: 1061 Eastshore Hwy. Albany, CA. DATE : 4/02/91

PROJECT NO.: 90-007 WELL NO.: 8



CHRISTY BOX
Box Diameter: 8 in.
Type (flush/above): above
Distance Above Ground : 0.5 in.

WATER PROOF LOCKING CAP
Type: Geostore
Lock Cap: yes/expanding

RISER MATERIAL
Type Material: PVC
Diameter: 4 in.
Joint Type: flush threaded

GROUT SEAL
Material Mix: Portland Cement
Total Depth From Surface: 1.0 ft.

BENTONITE SEAL
Type: pellets
Size: 1/4 in.
Total Thickness: 1.0 ft.

WELL SCREEN
Type Material: PVC
Diameter: 4 in.
Joint Type: flush threaded
Slot Size: 0.01
Total Length: 10 ft.

FILTER PACK
Type Material: 1/30 sand
Total Thickness: 11.0 ft.
Depth to Bottom: 13.0 ft.
Distance Above Screen: 1.0 ft.

L1 13.0 ft.
L2 1.0 ft.
L3 2.0 ft.
L4 13.0 ft.
L5 10.0 ft.

TOTAL DEPTH OF WELL: 13.0 ft.
TOTAL DEPTH OF BORING: 13.0 ft.
DIAMETER OF BORING: 10.0 in.
METHOD OF DRILLING: hollow stem aug
DATE STARTED: 4/2/91
DATE COMPLETED: 4/3/91

APPENDIX E

GROUNDWATER SAMPLE LABORATORY REPORTS

NET NATIONAL ENVIRONMENTAL TESTING, INC.

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

RECEIVED
APR 26 1991
Ans'd.

Larry Braybrooks
Aegis Environmental Inc.
801 Riverside Ave., Ste C
Roseville, CA 95678

Date: 04-23-91
NET Client Acct No: 654
NET Pacific Log No: 6910
Received: 04-09-91 1700

Client Reference Information

1061 E. Shore Highway, Albany; Project: 10-90007

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)

Ref: 1061 E. Shore Highway, Albany; Project: 10-90007

			Descriptor, Lab No. and Results		
			MW-5 04-08-91	MW-6 04-08-91	
Parameter	Method	Reporting Limit	82131	82132	Units
PETROLEUM HYDROCARBONS			--	--	
VOLATILE (WATER)			--	--	
DILUTION FACTOR *			1	1	
DATE ANALYZED			04-10-91	04-10-91	
METHOD GC FID/5030			--	--	
as Gasoline		0.05	ND	ND	mg/L
as Mineral Spirits		0.05	ND	0.15	mg/L
METHOD 602			--	--	
DILUTION FACTOR *			1	1	
DATE ANALYZED			04-10-91	04-10-91	
Benzene		0.5	ND	ND	ug/L
Ethylbenzene		0.5	0.6	0.6	ug/L
Toluene		0.5	1.8	1.8	ug/L
Xylenes, total		0.5	1.0	1.0	ug/L
PETROLEUM HYDROCARBONS			--	--	
EXTRACTABLE (WATER)			--	--	
DILUTION FACTOR *			1	1	
DATE EXTRACTED			04-14-91	04-14-91	
DATE ANALYZED			04-16-91	04-16-91	
METHOD GC FID/3510			--	--	
as Diesel		0.05	0.22	0.21	mg/L
as Motor Oil		0.5	ND	ND	mg/L

NET Pacific, Inc.

Client No: 654 Date: 04-23-91
Client Name: Aegis Environmental Inc.
NET Log No: 6910 Page: 2

Ref: 1061 E. Shore Highway, Albany; Project: 10-90007

Parameter	Method	Reporting Limit	Descriptor, Lab No. and Results MW-5 04-08-91 82131	MW-6 04-08-91 82132	Units
Oil & Grease(Total)	EPA9070	5	ND	ND	mg/L
Oil & Grease(Non-Polar)	SM5520BF	5	ND	ND	mg/L
METHOD 8010					
DATE ANALYZED			04-18-91	04-18-91	
DILUTION FACTOR*			1	1	
Bromodichloromethane		0.4	ND	ND	ug/L
Bromoform		0.4	ND	ND	ug/L
Bromomethane		0.4	ND	ND	ug/L
Carbon tetrachloride		0.4	ND	ND	ug/L
Chlorobenzene		0.4	ND	ND	ug/L
Chloroethane		0.4	ND	ND	ug/L
2-Chloroethylvinyl ether		1.0	ND	ND	ug/L
Chloroform		0.4	ND	ND	ug/L
Chloromethane		0.4	ND	ND	ug/L
Dibromochloromethane		0.4	ND	ND	ug/L
1,2-Dichlorobenzene		0.4	ND	ND	ug/L
1,3-Dichlorobenzene		0.4	ND	ND	ug/L
1,4-Dichlorobenzene		0.4	ND	ND	ug/L
Dichlorodifluoromethane		0.4	ND	ND	ug/L
1,1-Dichloroethane		0.4	ND	ND	ug/L
1,2-Dichloroethane		0.4	ND	ND	ug/L
1,1-Dichloroethene		0.4	ND	ND	ug/L
trans-1,2-Dichloroethene		0.4	ND	ND	ug/L
1,2-Dichloropropane		0.4	ND	ND	ug/L
cis-1,3-Dichloropropene		0.4	ND	ND	ug/L
trans-1,3-Dichloropropene		0.4	ND	ND	ug/L
Methylene Chloride		10	ND	ND	ug/L
1,1,2,2-Tetrachloroethane		0.4	ND	ND	ug/L
Tetrachloroethene		0.4	ND	ND	ug/L
1,1,1-Trichloroethane		0.4	ND	ND	ug/L
1,1,2-Trichloroethane		0.4	ND	ND	ug/L
Trichloroethene		0.4	ND	ND	ug/L
Trichlorofluoromethane		0.4	ND	ND	ug/L
Vinyl chloride		2.0	ND	ND	ug/L

NET Pacific Inc.

Client No: 654 Date: 04-23-91
Client Name: Aegis Environmental Inc.
NET Log No: 6910 Page: 5

Ref: 1061 E. Shore Highway, Albany; Project: 10-90007

			Descriptor, Lab No. and Results		
			MW-7 04-08-91	MW-8 04-08-91	
Parameter	Method	Reporting Limit	82133	82134	Units
PETROLEUM HYDROCARBONS			--	--	
VOLATILE (WATER)			--	--	
DILUTION FACTOR *			1	1	
DATE ANALYZED			04-10-91	04-10-91	
METHOD GC FID/5030			--	--	
as Gasoline		0.05	ND	ND	mg/L
as Mineral Spirits		0.05	ND	ND	mg/L
METHOD 602			--	--	
DILUTION FACTOR *			1	1	
DATE ANALYZED			04-10-91	04-10-91	
Benzene		0.5	ND	ND	ug/L
Ethylbenzene		0.5	ND	ND	ug/L
Toluene		0.5	1.4	1.6	ug/L
Xylenes, total		0.5	0.8	1.0	ug/L
PETROLEUM HYDROCARBONS			--	--	
EXTRACTABLE (WATER)			--	--	
DILUTION FACTOR *			1	1	
DATE EXTRACTED			04-14-91	04-14-91	
DATE ANALYZED			04-16-91	04-16-91	
METHOD GC FID/3510			--	--	
as Diesel		0.05	ND	ND	mg/L
as Motor Oil		0.5	ND	ND	mg/L

Ref: 1061 E. Shore Highway, Albany; Project: 10-90007

Parameter	Method	Reporting Limit	Descriptor, Lab No. and Results MW-7 04-08-91 82133	 MW-8 04-08-91 82134	Units
Oil & Grease(Total)	EPA9070	5	ND	ND	mg/L
Oil & Grease(Non-Polar)	SM5520BF	5	ND	ND	mg/L
METHOD 8010					
DATE ANALYZED			04-18-91	04-18-91	
DILUTION FACTOR*			1	1	
Bromodichloromethane		0.4	ND	ND	ug/L
Bromoform		0.4	ND	ND	ug/L
Bromomethane		0.4	ND	ND	ug/L
Carbon tetrachloride		0.4	ND	ND	ug/L
Chlorobenzene		0.4	ND	ND	ug/L
Chloroethane		0.4	ND	ND	ug/L
2-Chloroethylvinyl ether		1.0	ND	ND	ug/L
Chloroform		0.4	ND	ND	ug/L
Chloromethane		0.4	ND	ND	ug/L
Dibromochloromethane		0.4	ND	ND	ug/L
1,2-Dichlorobenzene		0.4	ND	ND	ug/L
1,3-Dichlorobenzene		0.4	ND	ND	ug/L
1,4-Dichlorobenzene		0.4	ND	ND	ug/L
Dichlorodifluoromethane		0.4	ND	ND	ug/L
1,1-Dichloroethane		0.4	ND	ND	ug/L
1,2-Dichloroethane		0.4	ND	ND	ug/L
1,1-Dichloroethene		0.4	ND	ND	ug/L
trans-1,2-Dichloroethene		0.4	ND	ND	ug/L
1,2-Dichloropropane		0.4	ND	ND	ug/L
cis-1,3-Dichloropropene		0.4	ND	ND	ug/L
trans-1,3-Dichloropropene		0.4	ND	ND	ug/L
Methylene Chloride		10	ND	ND	ug/L
1,1,2,2-Tetrachloroethane		0.4	ND	ND	ug/L
Tetrachloroethene		0.4	ND	ND	ug/L
1,1,1-Trichloroethane		0.4	ND	ND	ug/L
1,1,2-Trichloroetnane		0.4	ND	ND	ug/L
Trichloroethene		0.4	ND	ND	ug/L
Trichlorofluoromethane		0.4	ND	ND	ug/L
Vinyl chloride		2.0	ND	ND	ug/L

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.

Phone (916) 782 2110
FAX (916) 786-7830

AEGIS Environmental Consultants, Inc.

Sample Identification/Field Chain of Custody Record

Send results to:
Aegis Environmental
801 Riverside, Suite C
Roseville, CA 95678

(.G/1)

Site Address: 1061 E. SHORE HWY ALBANY CA
AEGIS Project #: 10-90007
Shipped By: AEGIS ENV. INC.
Shipped To: NET PACIFIC (SANTA ROSA)
Project Manager: LARRY BRAYBROOKS

For Shell Projects Only
WIC:
AFE:
CT/DL:
Shell Engineer:
Hazardous Materials Suspected? (yes/no)

Sampling Point	Location	Field ID#	Date	Sample Type	No. of Containers	Analysis Required
MW-5	1061 E. SHORE HWY ALBANY, CA.	MW-5	4/8/91	WATER	8	O&G 5520 GRAVIMETRIC
MW-6	↓	MW-6	↓	↓	↓	DIESEL 3510/8015 HALOCARBONS/BTEX
MW-7	↓	MW-7	↓	↓	↓	8010/8020 GAS/MINERAL SPIRITS
MW-8	↓	MW-8	↓	↓	↓	5030/8015

Sampler(s) (signature) [signature]

Field ID	Relinquished By (signature)	Received By (signature)	Date	Time	Comments
MW'S 5,6,7&8	[signature]	[signature]	4/9/91	9 AM	
	Anthony W. Bellini	[signature]	[illegible]	[illegible]	

Sealed for shipment by: (signature) [signature] Date/Time: 4/9/91 9AM Shipment Method: NET COURIER
Received for Lab by: (signature) [signature] Date/Time: [illegible] Comments: STANDARD TURNAROUND

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NATIONAL ENVIRONMENTAL TESTING, INC.

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

RECEIVED
MAY 28 1991
Ans'd. AB

Clark Owen
Aegis Environmental Inc.
801 Riverside Ave., Ste C
Roseville, CA 95678

Date: 05-23-91
NET Client Acct No: 654
NET Pacific Log No: 7443
Received: 05-10-91 0800

Client Reference Information

1061 East Shore Highway, Albany; Project: 90-007

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: 654 Date: 05-23-91
Client Name: Aegis Environmental Inc.
NET Log No: 7443 Page: 2

Ref: 1061 East Shore Highway, Albany; Project: 90-007

			Descriptor, Lab No. and Results		
			MW-1 05-08-91	MW-2 05-08-91	
Parameter	Method	Reporting Limit	84885	84886	Units
PETROLEUM HYDROCARBONS			--	--	
VOLATILE (WATER)			--		
DILUTION FACTOR *			1	1	
DATE ANALYZED			05-19-91	05-20-91	
METHOD GC FID/5030			--	--	
as Gasoline		0.05	ND	ND	mg/L
as Mineral Spirits		0.05	0.12	ND	mg/L
METHOD 602			--	--	
DILUTION FACTOR *			1	1	
DATE ANALYZED			05-19-91	05-20-91	
Benzene		0.5	ND	ND	ug/L
Ethylbenzene		0.5	ND	ND	ug/L
Toluene		0.5	ND	0.6	ug/L
Xylenes, total		0.5	ND	ND	ug/L
PETROLEUM HYDROCARBONS			--	--	
EXTRACTABLE (WATER)			--	--	
DILUTION FACTOR *			1	1	
DATE EXTRACTED			05-13-91	05-13-91	
DATE ANALYZED			05-13-91	05-13-91	
METHOD GC FID/3510			--	--	
as Diesel		0.05	0.18	0.22	mg/L
as Motor Oil		0.5	ND	ND	mg/L

NET Pacific, Inc

Client No: 654 Date: 05-23-91
Client Name: Aegis Environmental Inc.
NET Log No: 7443 Page: 3

Ref: 1061 East Shore Highway, Albany; Project: 90-007

			Descriptor, Lab No. and Results		
			MW-3 05-08-91	MW-4 05-08-91	
Parameter	Method	Reporting Limit	84887	84888	Units
PETROLEUM HYDROCARBONS			--	--	
VOLATILE (WATER)			--	--	
DILUTION FACTOR *			1	1	
DATE ANALYZED			05-19-91	05-19-91	
METHOD GC FID/5030			--	--	
as Gasoline		0.05	ND	ND	mg/L
as Mineral Spirits		0.05	0.10	0.05	mg/L
METHOD 602			--	--	
DILUTION FACTOR *			1	1	
DATE ANALYZED			05-19-91	05-19-91	
Benzene		0.5	1.0	ND	ug/L
Ethylbenzene		0.5	ND	ND	ug/L
Toluene		0.5	ND	ND	ug/L
Xylenes, total		0.5	ND	ND	ug/L
PETROLEUM HYDROCARBONS			--	--	
EXTRACTABLE (WATER)			--	--	
DILUTION FACTOR *			1	1	
DATE EXTRACTED			05-13-91	05-13-91	
DATE ANALYZED			05-13-91	05-13-91	
METHOD GC FID/3510			--	--	
as Diesel		0.05	0.23	0.15	mg/L
as Motor Oil		0.5	ND	ND	mg/L

Ref: 1061 East Shore Highway, Albany; Project: 90-007

QUALITY CONTROL DATA

Parameter	Reporting Limits	Units	Cal Verf Stand % Recovery	Blank Data	Spike % Recovery	Duplicate Spike % Recovery	RPD
Diesel	0.05	mg/L	94	ND	68	70	2.3
Motor Oil	0.5	mg/L	94	ND	N/A	N/A	N/A
Gasoline	0.05	mg/L	87	ND	80	88	9.2
Benzene	0.5	ug/L	102	ND	91	100	9.2
Toluene	0.5	ug/L	102	ND	97	105	8.7
Gasoline	0.05	mg/L	94	ND	93	95	2.1
Benzene	0.5	ug/L	114	ND	103	100	3.0
Toluene	0.5	ug/L	117	ND	103	101	2.0

COMMENT: Blank Results were ND on other analytes tested.

Phone (916) 782-2110
FAX (916) 786-7830

AEGIS Environmental Consultants, Inc.

(7443)

Sample Identification/Field Chain of Custody Record

Send results to:
Aegis Environmental
801 Riverside, Suite C
Roseville, CA 95678

Site Address: [illegible]
AEGIS Project #: [illegible]
Shipped By: [illegible]
Shipped To: NET
Project Manager: [illegible]

For Shell Projects Only
~~WIC:~~
~~AFE:~~
~~CT/DL:~~
~~Shell Engineer:~~
Hazardous Materials Suspected? (yes/no)

Sampling Point	Location	Field ID#	Date	Sample Type	No. of Containers	Analysis Required
MW 1	[illegible]	MW 1	5-9-91	WATER	5	* [illegible]
MW 2	↓	MW 2	↓	↓	↓	↓
MW 3	↓	MW 3	↓	↓	↓	↓
MW 4	↓	MW4	↓	↓	↓	↓

Sampler(s) (signature): [signature]

Field ID	Relinquished By (signature)	Received By (signature)	Date/Time	Comments
MW 1 2 3 4	[signature]	[signature] 4:45 pm	5/9/91 9 am	(SEALED BY AEGIS)
	[signature]			[illegible]

Sealed for shipment by: (signature) [signature] Date/Time: 5/9/91 9:00 am Shipment Method: [illegible]

Received for Lab by: (signature) [illegible] Date/Time: 5/10/91 [illegible] Comments: * 10 DAY TURNAROUND

[illegible]

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