

**Maximum Allowable Concentration Limits
Oyster Point Landfill**

South San Francisco, California

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**Prepared for:
City of South San Francisco**

**Prepared by:
Gabewell, Inc.
with
PES Environmental, Inc.**

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1.0 INTRODUCTION

The Oyster Point Landfill is a closed, unlined Class III landfill located along the San Francisco Bay in the City of South San Francisco (City) (Figure 1). The City owns the landfill. The majority of the landfill is open space, but a portion of the landfill has been developed and includes a public marina, a boat launch, a small yacht club, a boat sales building, and a small office and hotel complex (Figure 2). The San Mateo Harbor District (Harbor District) operates the public marina on the landfill and is responsible for ongoing landfill maintenance.

The Regional Water Quality Control Board (RWQCB) issued order No. 00-046 on June 21, 2000 (Order). The Order imposed several requirements addressing water quality issues. One of those requirements was preparation and implementation of a groundwater and leachate Monitoring Program. A Water Quality Monitoring Plan (WQMP) was prepared and submitted to the RWQCB in November 2000 in compliance with the Order. The WQMP was later amended in August 2001 (Addendum 1). Monitoring is conducted at the landfill per the amended WQMP.

The Order stipulated that the WQMP include discussion of:

- Points of Compliance
- Contaminants of Concern
- Monitoring Parameters
- Maximum Allowable Concentration Limits (MACLs)

The WQMP discussed and identified all of the above, with the exception of the MACLs. MACLs were not proposed in the WQMP because background water quality needed to first be characterized. This involved the collection of a data set representative of the background water quality.

This report presents an evaluation of the water quality data collected since monitoring began in November 2000. It includes an evaluation of the site hydrology and identifies applicable regulatory criteria. Based on observed background water quality, groundwater flow directions and applicable criteria, we propose MACLs to use as indicators of potential offsite leachate migration and recommend modifications to the WQMP.

This report is organized as follows:

- Section 2 describes the current landfill monitoring program.
- Section 3 discusses the water elevation and quality data collected to date.
- Section 4 presents the proposed monitoring program, including proposed MACLs and recommended modifications to the WQMP.

2.0 SUMMARY OF WATER QUALITY MONITORING PROGRAMS

2.1 Detection Monitoring Program

There are a total of 18 monitoring wells currently installed at the landfill and monitored as part of the current detection monitoring program (Figure 3). Table 1 summarizes the construction details of the wells and identifies the lithologic units the wells monitor. These wells are monitored for water elevation and water quality parameters as outlined in Table 2.

Of the 18 monitoring wells present at the site, wells GW-4a, GW-5a, GW-6a, GW-11a, GW-14a, GW-15a, and GW-16a are installed within the perimeter berms that separate the waste from the Bay. They are monitored to detect migration from the A-zone to the surrounding receiving water. Well GW-7a is located in the Cabot, Cabot and Forbes fill and monitors potential horizontal migration to the south. Well GW-2b, installed in the alluvial water-bearing zone beneath the Bay Mud, monitors the potential vertical migration of leachate to the B-zone. These nine wells have been considered the points of compliance for leachate and groundwater quality monitoring. The wells used as points of compliance are also identified in Figure 3. Proposed modifications to the monitoring program, including the wells considered points of compliance, are discussed in Section 4.

Per the WQMP, the analytical program includes the following analyses:

- Volatile organic compounds (VOCs) by EPA Method 8260
- Semi volatile organic compounds (SVOCs) by EPA Method 8270

The Sampling and Analysis Plan (SAP) is included in the WQMP. The sampling schedule and list of analytical parameters are detailed in Table 2.

2.2 Applicable Regulatory Criteria

The detection monitoring program has been implemented in part to establish a database to allow statistical data analysis and other evaluation techniques to develop MACLs for the monitoring parameters. The landfill extends into San Francisco Bay. MACLs should reflect background conditions and concentrations that are protective of the beneficial uses of San Francisco Bay and the surrounding groundwater as identified by the RWQCB in the Order.

Beneficial uses identified by the RWQCB for San Francisco Bay included protection of wildlife and fish habitat, recreation, and fishing.

Existing and potential beneficial uses of groundwater in the vicinity of the Oyster Point Landfill, as identified by the RWQCB, include:

- Municipal and domestic water supply
- Industrial process water supply
- Industrial service water supply
- Agricultural water supply

As discussed in the WQMP, groundwater downgradient of the landfill is brackish; specifically: groundwater monitored by GW-2b contains total dissolved solids (TDS) at 3,170 mg/L and chloride at 1,530 mg/L. The concentration of TDS exceeds the potential beneficial use standard of 3,000 mg/L for water supply. For this reason, groundwater beneath the site is not considered a potential source of municipal or domestic water supply. Similarly, groundwater adjacent to the landfill and monitored by GW-7a contains TDS at 8,610 mg/L and chloride at 4,800 mg/L. Therefore, for the purpose of development of appropriate standards, protection of aquatic organisms and the health of humans who consume these organisms are the criteria used to develop MACLs.

The regulatory standards that were identified in the WQMP include:

- California Regional Water Quality Control Board Region 2 Basin Plan (RWQCB, June 1995)
- 40 Code of Federal Regulations (CFR) Part 131 *Water Quality Standards; Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California* (US EPA, May 2000)
- Saltwater Ecological Protection Zone, Tier 1 Standards in California Regional Water Quality Control Board, San Francisco Bay Region, Order 95-136, written for San Francisco International Airport

Order 95-136 has been updated and superceded by Order 99-045. This Order includes what is identified as Ecological Protection Zone Tier 1 Standards for water. These limits are based on the U.S. National Ambient Water Quality Criteria for the State of California and the Board's Basin Plan, Shallow Water Effluent Limitations. The airport is located immediately south of the Oyster Point Landfill and is similarly constructed on fill that extends into the Bay. For this reason, the requirements for water quality for the airport are also applicable to the Oyster Point Landfill.

Based on the absence of VOCs and SVOCs in native Bay Mud sediments, these compounds were included as monitoring parameters. Regulatory criteria for VOC and SVOCs are summarized in Table 3.

Of the criteria listed in Table 3, the most stringent regulatory standard is considered the appropriate MACL for each individual parameter. Where no standard has been established, recommended levels based on toxicity are applied.

3.0 DISCUSSION OF WATER QUALITY MONITORING RESULTS

3.1 Groundwater and Leachate Elevations

Leachate and groundwater elevations have been collected monthly since July 2000. Measured elevations are summarized in Table 4. Hydrographs for each well are presented in Figures 4a to 4r.

Two sets of water level data are plotted on each hydrograph. Water levels labeled "Original Survey Data" are calculated directly from the original wellhead elevation survey. A new survey of wellhead reference elevations was conducted in February 2003 to measure the amount of landfill subsidence. The water levels labeled "Transition to New Survey Data" are water levels that have been corrected for the measured subsidence. We assumed that the subsidence was constant between the two survey dates. Therefore the wellhead elevation correction applied to each measurement is a percentage of the total subsidence, based on the date of the measurement. As an example, for a water level measurement taken one-third of the way between surveys, the wellhead elevation was assumed to have dropped one-third of the difference between the two surveyed elevations.

The hydrograph data labeled "Transition to New Survey Data" were used to identify water level trends. Both long-term and seasonal water level trends are apparent in the hydrographs presented in Figures 4a through 4r. Each of these trends is discussed separately below.

3.1.1 Long-Term Water Level Trends

Long-term trends were estimated by using a linear regression to fit trend lines through the water level data. Anomalous early time data were removed from the analyses. Two separate trend lines were fit: one line fitting all data (excluding anomalous early time data); and a second line fitting only data collected since January 2002. This approach was used to identify changes in the rate at which water levels are rising in and around Oyster Point Landfill. A small yet consistent long-term water level rise is apparent in most hydrographs. The results of the long-term trend analyses are presented in Table 5.

The data included in Table 5 indicate that water levels are rising in all wells except well GW-2b, including wells in the upgradient natural water-bearing zones. The greatest rate of water level rise is observed in well GW-8c, the westernmost well monitoring the upgradient bedrock zone. The data further indicate that the rate of water level rise is generally diminishing. Exceptions include wells GW-1a, GW-3a, MW-5, GW-4a, and GW-9a.

Figure 5 shows contours of the average estimated water level rise over the entire history of each well, as determined by the regression analysis for each well. The contours in

Figure 5 are dominated by the water level rise in well GW-8c. All other wells show water level rises of between 0.3 and 1.6 inches per year. Excluding well GW-8c, the greatest rates of water level rise appear to be concentrated around the southeast section of Oyster Point Landfill, with other scattered wells showing estimated rises over 1 inch per year.

Figure 6 shows contours of the average estimated water level rise since January 2002, as determined by the regression analysis for each well. As in the previous figure, the contours in Figure 6 are dominated by the water level rise in well GW-8c. A more pronounced water level rise, however, is evident surrounding well GW-1a.

Figures 5 and 6 suggest two possible sources for the estimated water level rise. First, an apparently natural water level rise in the water-bearing sediments west of the landfill influences water levels in the western portion of Oyster Point Landfill. Second, water levels beneath and southeast of well GW-1a may be rising due to recharge from rainfall and/or irrigation of the landscaped portions of the landfill. In addition, consolidation of the landfill continues, which also contributes to the apparent rise in water level elevations.

3.1.2 Seasonal Water Level Trends

A number of the hydrographs shown on Figures 4a through 4r display seasonal water level variations. Seasonal variations are pronounced in some hydrographs, but veiled in others. Not all seasonal variations follow the same pattern; different seasonal signatures appear in different wells.

The most apparent seasonal fluctuations appear in wells GW-8c, GW-12a, GW-13a, and MW-5. Water levels in each of these wells peak in January or February of each year, then steadily decline throughout the remainder of the year. All four wells that display this pattern are located in the western portion of Oyster Point Landfill. The fluctuation pattern and magnitude, along with the location of the wells that display this pattern, suggest that seasonal fluctuations from rainfall in the natural water bearing zones are the cause of these fluctuations. This observation lends credence to the conclusion that water levels in the western portion of the landfill are heavily influenced by water level fluctuations in the natural water-bearing sediments.

A second seasonal pattern is apparent in wells GW-5a, GW-10a, GW-11a, GW-15a, and GW-17a. Water levels in these wells generally rise in January, but either remain constant through the spring or peak in April or May of each year. The reason for this seasonal pattern is unclear.

3.1.3 Water Level Flow Directions

Maps showing monthly water level contours between January 2003 and April 2004 are included in Appendix A. These maps suggest relatively consistent groundwater flow directions. Groundwater flow directions are dominated by the groundwater high in the natural water-bearing formations west of Oyster Point. Within the landfill area, a slight groundwater high exists in the middle of the landfill, with groundwater gradients generally pointing outward in all directions. Gradients pointing outward from the middle of the landfill are consistent with the anticipated flow regime, similar to the groundwater flow on a small island.

One anomaly in the groundwater flow directions results from consistently high water levels measured at well GW-5a. This well is screened in the perimeter berm at the southeast corner of Oyster Point. The effect of these relatively high water levels is to reverse the expected groundwater gradient from a generally outward gradient to an inward gradient in this corner of Oyster Point. This area of the landfill is landscaped, and soft, wet soil has been observed within the irrigated areas near well GW-5a. Over-irrigation, or a leaking irrigation system, are postulated to be a cause of the higher water levels at this well. A less pronounced anomaly is GW-14a when compared to GW-13a. GW-13a has historically had a lower water level elevation than the water level monitored in GW-14a, which is located in the landfill berm. The reason for the higher elevation in GW-14a is not known, but may be related to landscape irrigation.

Groundwater gradients suggest that appropriate points of compliance to monitor potential leachate migration from the landfill include wells GW-4a, GW-5a, GW-6a, GW-11a, GW-14a, GW-15a, and GW-16a. However, a review of the borehole logs for wells GW-6a, GW-11a, GW-14a, GW-15a and GW-16a indicates they contain waste materials and therefore their utility as indicators of leachate migration may be limited. Potential leachate migration is further discussed in Section 3.3.

3.2 Water Quality Data

The laboratory analytical results are summarized in Tables 6 and 7. The laboratory data sheets for these results have been presented in previously submitted Annual and Semi-Annual Monitoring Reports so they are not included here.

3.2.1 Monitoring Parameters Detected in Leachate and Groundwater

In general, VOCs were more commonly detected in the monitoring wells than SVOCs. Of the SVOCs detected, many were detected in only one well, or in several wells, but inconsistently and at concentrations near the detection limit (Table 7). Because these parameters were not consistently detected in the leachate, they are not considered as

potential monitoring parameters for leachate migration. Parameters that fall into this category include all of the SVOCs on Table 7 except Naphthalene.

Although VOCs were more commonly detected than SVOCs, several parameters were similarly either not detected in a majority of the monitoring wells or were not detected consistently above the detection limit. VOCs consistently detected in leachate monitoring wells include:

- Benzene
- Toluene
- Ethylbenzene
- Total xylenes
- Chlorobenzene
- 1,4-Dichlorobenzene
- Isopropylbenzene
- 1,3,5-Trimethylbenzene
- 1,2,4-Trimethylbenzene
- N-butylbenzene
- N-propylbenzene

The chemical analytical data for these parameters were reviewed to identify the subset of parameters for which regulatory criteria are established. These data were plotted to identify time-dependent trends. The plots are shown in Figures 7a and 7b through 13a and 13b for wells within the landfill and those outside the landfill, including perimeter point of compliance wells and background wells, respectively.

Of the parameters consistently detected for which regulatory criteria are established the following were plotted:

- Benzene
- Toluene
- Ethylbenzene
- Total Xylenes
- Chlorobenzene
- 1,4-Dichlorobenzene
- Naphthalene

Naphthalene and 1,4-dichlorobenzene are measured by both the analytical methods (U.S. EPA Test Methods 8260 and 8270) used to identify VOCs and SVOCs. The analytical method for VOCs consistently measured higher concentrations than the analytical method for SVOCs. This is most likely attributed to the sample collection procedures used for each of the analytical methods. Since both naphthalene and 1,4-dichlorobenzene are volatile compounds, the collection of samples in 40-milliliter glass VOA vials for

analysis of VOCs provides less of a chance for volatilization losses due to the relatively short exposure time of the sample to the atmosphere during filling. Also, sampling protocols require zero headspace (ie., no air present) in the VOA vials after filling. This requirement specifically minimizes the loss of volatile components in the sample vial. In comparison, samples collected for SVOC analysis are placed in one-liter glass amber bottles. Filling these bottles requires decanting several well bailer volumes into the bottle, increasing sample exposure to the atmosphere. In addition, sample protocols allow headspace within the bottle after filling, which can lead to small losses of the volatile components.

Only three parameters; benzene, chlorobenzene and naphthalene, were detected in all wells monitoring leachate quality. Ethylbenzene and total xylenes were detected in the leachate monitoring wells excluding MW-5. Several of these parameters were also detected in the perimeter monitoring wells.

The concentration data for benzene, toluene, ethylbenzene, total xylenes, chlorobenzene, 1,4-dichlorobenzene, and naphthalene were plotted to identify time-dependent trends for each of the parameters within the monitoring wells. The plots are shown in Figures 7a and 7b through 13a and 13b for wells located within and outside the landfill. The data indicate that the concentrations of chemical constituents have remained relatively consistent since groundwater monitoring activities began in 1999. Parameters not plotted exhibit similar consistent trends. Assuming that these trends continue over time, the data indicate that concentrations of VOCs and SVOCs in leachate and groundwater have stabilized.

3.2.2 Monitoring Parameters Present in Leachate Above Regulatory Criteria

As shown in figures 7a through 13a, of the parameters consistently detected in the leachate, only benzene, chlorobenzene, ethylbenzene, naphthalene, and total xylenes are present in leachate above established regulatory criteria. None of these parameters were detected in the wells identified as perimeter monitoring wells at concentrations exceeding regulatory criteria (Figures 7b through 13b), including those wells that intercept landfill waste.

3.3 Leachate Migration

When evaluated together, the hydrogeologic and chemical analytical data indicate that constituents of concern are not migrating from the landfill at concentrations exceeding regulatory criteria. Additionally, concentrations of VOCs and SVOCs in leachate have stabilized.

As would be expected, leachate generally flows from the center of the landfill to the edges bound by the Bay. There are anomalies such as GW-5a and GW-14a, which are installed along the perimeter of the landfill, that contain water levels that are higher than

those measured in the nearest monitoring well installed in the waste. The reasons for this are not fully known, but it is suspected to be due in part to localized infiltration of irrigation water from nearby landscaping.

In general, leachate levels are increasing a few tenths of an inch to over an inch each year. The increase is attributed to both infiltration of rain and irrigation water and to consolidation of the waste. The rate of increase in leachate levels appears to be slowing over time. The decreasing rate is likely due to the natural decline in consolidation over time and improvements to the site to repair leaky irrigation systems and to grade and vegetate the site to eliminate ponding and promote surface water runoff. These improvements are described in the Annual Report prepared for the landfill each year.

Several VOC and SVOC monitoring parameters have been detected in the wells installed in the waste and along the perimeter of the landfill. Of these parameters, 12 are present in the majority of wells monitoring leachate quality. Of these 12 parameters, regulatory criteria are established for seven. Of the seven, five parameters are present above the regulatory criteria in at least one leachate monitoring well.

Wells GW-4a, GW-5a, GW-6a, GW-11a, GW-14a, GW-15a, and GW-16a monitor the perimeter of the landfill. GW-6a, GW-11a, GW-14a, GW-15a, and GW-16a intercept landfill wastes. Several of the seven monitoring parameters have been detected in the wells that intercept waste; however, the concentrations of those parameters are below regulatory limits.

4.0 PROPOSED MODIFICATIONS TO THE MONITORING PROGRAM

The purpose of the detection monitoring program is to detect “measurably significant” leachate migration from the waste-bearing unit into surrounding media, including underlying soil and groundwater and nearby surface water. Components of the detection monitoring program include:

- Points of compliance
- Contaminants of concern and monitoring parameters
- Procedures for data evaluation

Based on the analysis and discussion presented in Section 3 the following MACLs and revisions to the monitoring program are proposed.

4.1 Proposed MACLs

In selecting the proposed MACLs the following criteria were used:

- Parameters that were detected in a majority of wells monitoring leachate quality and therefore are representative of leachate quality.
- Parameters that are present in leachate at concentrations above established regulatory criteria.
- Regulatory criteria applied included the more stringent of either the U.S. EPA California Toxics Rule Criteria for Enclosed Bays and Estuaries or the Tier 1 limit established in RWQCB Order 99-045, followed by EPA recommended ambient water quality criteria based on toxicity.

Following this process the selected monitoring parameters and MACLs include:

Parameters	MACL	Source
Benzene	71 ug/l	USEPA California Toxics Rule Criteria (May 2000), Order 99-045
Ethylbenzene	86 ug/l	Order 99-045
Chlorobenzene	129 ug/l	USEPA Recommended Ambient Water Quality Criteria
Naphtalene	470 ug/l	Order 99-045
Total Xylenes	2,200 ug/l	Order 99-045

4.2 Proposed Modifications to Water Quality Monitoring Program

4.2.1 Points of Compliance

The detection monitoring program includes 18 wells as shown on Figure 3. GW-8c monitors up-gradient background water quality. GW-2b monitors down-gradient water quality in the sands underlying the landfill site. The remaining wells monitor either leachate quality or the quality of water along the perimeter of the landfill. Wells GW-1a, GW-3a, GW-9a, GW-10a, GW-12a, GW-13a, GW-17a and MW-5 are installed within the landfill limits and monitor leachate quality. Wells GW-4a, GW-5a, GW-6a, GW-11a, GW-14a, GW-15a and GW-16a are installed along the perimeter berms of the landfill. Wells GW-6a, GW-11a, GW-14a, GW-15a and GW-16a encounter landfill waste material. Well GW-7a monitors groundwater quality in earthfill adjacent to, but outside of the landfill limits. It is also considered a perimeter monitoring well.

The data collected are used to characterize leachate quality. As described above, the landfill contains VOCs and SVOCs associated with the waste. Evaluation of the site hydrogeology indicates the potential for these parameters to migrate from the landfill. The wells installed in the perimeter berms and wells GW-2b and GW-7a are considered points of compliance.

As described, water quality in GW-2b does not meet the beneficial use criteria for domestic or industrial supply. The data collected to date also indicate that leachate is not migrating to this underlying zone. Similarly, well GW-7a monitors brackish water contained in the Cabot-Cabot and Forbes earthfill adjacent to the landfill. The well is located on the other side of the storm water and tidal slough that bounds the southwest portion of the landfill. No contaminants of concern have been detected in this well. These wells are maintained in the detection-monitoring program however, because they monitor the groundwater down and cross gradient from the landfill waste.

The proposed points of compliance include: GW-2b, GW-4a, GW-5a, GW-6a, GW-7a, GW-11a, GW-14a, GW-15a, and GW-16a.

4.2.2 Monitoring Program

The current detection monitoring program includes monthly measurement of water elevations in the leachate and groundwater wells. These measurements have established the seasonal and long-term behavior of the wells. A reduction in the frequency of monitoring to quarterly is therefore proposed. Quarterly monitoring will allow continued observation of the identified trends. All 18 wells are proposed to be included in the water level monitoring program

Water samples have been collected from the leachate wells on a semi-annual basis and from the perimeter wells on a quarterly basis. The data has been used to characterize the water quality in each of the zones.

Contaminants of concern exceed regulatory criteria in 5 wells; GW-1a, GW-3a, GW-10a, GW-12a, and GW-13a. Continued monitoring of the other leachate wells is of little value. It is therefore proposed to reduce the number of leachate monitoring wells to the five wells where contaminants have been detected above regulatory standards, and furthermore to reduce the frequency of monitoring to annually. It is further proposed to limited monitoring of the landfill perimeter to those wells identified as points of compliance. Those nine wells are proposed to be monitored semi-annually for two years and if no increasing trend in concentration is observed, to then be sampled annually.

The proposed revised detection monitoring program is summarized on Table 8.

5.0 REFERENCES

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Gabewell with PES Environmental, Inc., 2001. Addendum 1 to Water Quality Monitoring Plan, Oyster Point Landfill, South San Francisco, California. August.

Gabewell with PES Environmental, Inc., 2003. 2002 Annual Report, Oyster Point Landfill, South San Francisco, California. January.

RWQCB, 2000. Order No. 00-046. June 21.

RWQCB, 1999. Order 99-045.

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Tables

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Table 1
Monitoring Well Construction Summary
MACLS Report
Oyster Point Landfill
South San Francisco, California

Well Designation	Screened Lithology	Borehole Depth (feet bgs)	Bottom Seal Interval (feet bgs)	Screened Interval (feet bgs)	Sandpack Interval (feet bgs)	Sanitary Seal Interval (feet bgs)
GW-1a	waste	25	na	15 - 25	14 - 25	13 - 14
GW-2b	alluvium	140	131 - 140	116 - 131	114.5 - 131	112 - 114.5
GW-3a	waste	40	25 - 40	15 - 25	14 - 25	13 - 14
GW-4a	reworked clayey silt	16	na	6 - 16	5 - 16	4 - 5
GW-5a	reworked clayey silt	34.5	20 - 34.5	10 - 20	9 - 20	8 - 9
GW-6a	waste/reworked clayey silt	25	na	15 - 25	14 - 25	13 - 14
GW-7a	gravel fill	16	13.5 - 16	5.5 - 13.5	4.5 - 13.5	3.5 - 4.5
GW-8c	bedrock	50	45 - 50	35 - 45	32 - 45	30 - 32
GW-9a	gravelly clay	26	na	21 - 26	20 - 26	19 - 20
GW-10a	waste	39.5	37 - 39.5	22 - 37	20 - 37	18 - 20
GW-11a	waste/reworked clayey silt	15	na	5 - 15	4 - 15	3 - 4
GW-12a	waste	35.5	34 - 35.5	23 - 33	21 - 34	19 - 21
GW-13a	waste	30	26 - 30	15 - 25	14 - 26	12 - 14
GW-14a	waste	15	12 - 15	4 - 12	3.5 - 12	2 - 3.5
GW-15a	waste/reworked clayey silt/clayey gravel	20	18 - 20	7 - 17	6.5 - 18	4 - 6.5
GW-16a	silty sand	19.5	10.5 - 19.5	5 - 10	4.5 - 10.5	2.5 - 4.5
GW-17a	waste	31.5	26 - 31.5	10 - 25	8 - 26	6 - 8
MW-5*	waste/reworked clayey silt	20	na	16 - 20	15 - 20	nr

Notes:

- feet bgs = feet below ground surface
- na = not applicable (base of well is bottom of borehole)
- Both bottom seal and sanitary seal composed of bentonite
- * well MW-5 installed by Applied Consultants in 1989
- nr = not reported in well log

Table 2
Summary of Detection Monitoring Program
MACLs Report
Oyster Point Landfill
South San Francisco, California

Monitoring Point	Unit Monitored	Frequency	Monitoring Parameters
GW-1a	Waste	Quarterly Beginning December 2000 Semiannually Beginning December 2001	VOC's, SVOC's
GW-2b	Alluvium Beneath Landfill	Quarterly Beginning December 2000	VOC's, SVOC's
GW-3a	Waste	Quarterly Beginning December 2000 Semiannually Beginning December 2001	VOC's, SVOC's
GW-4a	Perimeter Berm	Quarterly Beginning December 2000	VOC's, SVOC's
GW-5a	Perimeter Berm	Quarterly Beginning December 2000	VOC's, SVOC's
GW-6a	Perimeter Berm and Waste	Quarterly Beginning December 2000 Semiannually Beginning December 2001	VOC's, SVOC's
GW-7a	Shallow Offsite Water-Bearing Zone	Quarterly Beginning December 2000 Semiannually Beginning December 2001	VOC's, SVOC's
GW-8c	Shallow Bedrock Water-Bearing Zone	Quarterly Beginning December 2000 Semiannually Beginning December 2001	VOC's, SVOC's
GW-9a	Shallow Water-Bearing Zone within Landfill	Quarterly Beginning December 2000 Semiannually Beginning December 2001	VOC's, SVOC's
GW-10a	Waste	Quarterly Beginning December 2000 Semiannually Beginning December 2001	VOC's, SVOC's
GW-11a	Perimeter Berm and Waste	Quarterly Beginning December 2000 Semiannually Beginning December 2001	VOC's, SVOC's

Table 2 (Continued)
Summary of Detection Monitoring Program
MACLs Report
Oyster Point Landfill
South San Francisco, California

Monitoring Point	Unit Monitored	Frequency	Monitoring Parameters
GW-12a	Waste	Quarterly Beginning December 2000 Semiannually Beginning December 2001	VOC's, SVOC's
GW-13a	Waste	Quarterly Beginning December 2000 Semiannually Beginning December 2001	VOC's, SVOC's
GW-14a	Perimeter Berm and Waste	Quarterly Beginning December 2000 Semiannually Beginning December 2001	VOC's, SVOC's
GW-15a	Perimeter Berm and Waste	Quarterly Beginning December 2000 Semiannually Beginning December 2001	VOC's, SVOC's
GW-16a	Perimeter Berm and Waste	Quarterly Beginning December 2000	VOC's, SVOC's
GW-17a	Waste	Quarterly Beginning December 2000 Semiannually Beginning December 2001	VOC's, SVOC's
MW-5	Waste	Quarterly Beginning December 2000 Semiannually Beginning December 2001	VOC's, SVOC's

Table 3
Summary of Regulatory Criteria
MACLs Report
Oyster Point Landfill
South San Francisco, California

Parameter	California Toxics Rule (USEPA) Enclosed Bays and Estuaries	U.S. EPA Recommended Ambient Water Quality Criteria			RWQCB Order 99-045
	Human Health (30-day Ave.) Aquatic Organism Consumption	Toxicity (lowest observed effect level)			Tier 1 Limits
		Acute	Chronic	Other	
Benzene	71 ⁽¹⁾	5,100		700 ⁽²⁾	71
Toluene	20,000	6,300	5,000		5,000
Ethylbenzene	29,000	430			86
Total Xylenes					2,200
MTBE					8,000
Chlorobenzene	21,000	160 ⁽³⁾	129 ⁽³⁾		
Isopropylbenzene					
1,3,5-Trimethylbenzene					
1,2,4-Trimethylbenzene					
4-Isopropyltoluene					
1,2-Dichlorobenzene	17,000	1970 ⁽⁴⁾	129 ⁽³⁾		
1,3-Dichlorobenzene	2,600	1970 ⁽⁴⁾	129 ⁽³⁾		
1,4-Dichlorobenzene	2,600	1970 ⁽⁴⁾	129 ⁽³⁾		
N-Propylbenzene					
Sec-Butylbenzene					
N-Butylbenzene					
Chloroform		12,000 ⁽⁵⁾	6,400 ⁽⁵⁾	11,500 ⁽⁵⁾⁽⁶⁾	470
Tert-Butylbenzene					
2-Chlorotoluene					
Bis (2-Ethylhexyl) Phthalate	5.9				
Phenanthrene		300			
Acenaphthene	2,700	970	710	500 ⁽⁶⁾	
Anthracene	11,000	300			
Benzyl Alcohol					
Dibenzofuran					
Fluoranthene					
Fluorene	14,000	300			
2-Methylnaphthalene					
Naphthalene		2,300			470
Nitrobenzene	1,900	6,680			
Pyrene	11,000	300			
2,4-Dimethylphenol	2,300				
Dimethylphthalate	2,900,000	2,944		3.4 ⁽⁶⁾⁽⁸⁾	
Di-N-Butylphthalate					
N-Nitroso-Di-N-Propylamine					

- Notes:** 1) Based on carcinogenicity at 1 in 1 million risk level
2) Adverse affect on fish species after 168 days
3) For chlorinated benzenes
4) For dichlorobenzenes
5) For Halomethanes
6) Decrease in or toxicity to algae cells
7) Sum of 13 PNA's
8) For sum of phthalate esters

Table 4
Groundwater and Leachate Elevations
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Well Designation	Date Measured	Screened Lithology	Original TOC Elevation (ft. MLLW)	Depth to Groundwater (feet)	Original GW Elevation (ft. MLLW)	TOC Elevation on 2/21/2003 (ft. MLLW)	Adjusted TOC Elevations (ft. MLLW)	New GW Elevation (ft. MLLW)
GW-1a	8/19/1999	waste	18.19	10.21	7.98	17.75	18.19	7.98
	12/7/1999		18.19	13.84	4.35		18.15	4.31
	2/7/2000		18.19	12.00	6.19		18.13	6.13
	7/18/2000		18.19	10.32	7.87		18.08	7.76
	9/18/2000		18.19	11.80	6.39		18.06	6.26
	10/27/2000		18.19	13.84	4.35		18.04	4.20
	11/28/2000		18.19	11.72	6.47		18.03	6.31
	12/27/2000		18.19	11.99	6.20		18.02	6.03
	1/30/2001		18.19	12.11	6.08		18.01	5.90
	2/28/2001		18.19	11.73	6.46		18.00	6.27
	3/28/2001		18.19	11.67	6.52		17.99	6.32
	5/4/2001		18.19	11.72	6.47		17.98	6.26
	5/31/2001		18.19	11.81	6.38		17.97	6.16
	6/11/2001		18.19	11.81	6.38		17.97	6.16
	7/31/2001		18.19	11.84	6.35		17.95	6.11
	8/30/2001		18.19	11.81	6.38		17.94	6.13
	9/24/2001		18.19	8.84	9.35		17.93	9.09
	10/30/2001		18.19	11.81	6.38		17.92	6.11
	11/28/2001		18.19	11.75	6.44		17.91	6.16
	12/26/2001		18.19	11.84	6.35		17.90	6.06
	1/7/2002		18.19	11.72	6.47		17.90	6.18
	2/15/2002		18.19	11.51	6.68		17.88	6.37
	3/18/2002		18.19	11.70	6.49		17.87	6.17
	4/30/2002		18.19	11.58	6.61		17.86	6.28
	5/30/2002		18.19	11.51	6.68		17.85	6.34
	6/19/2002		18.19	11.57	6.62		17.84	6.27
	7/14/2002		18.19	11.60	6.59		17.83	6.23
	8/10/2002		18.19	11.60	6.59		17.82	6.22
	9/21/2002		18.19	11.69	6.50		17.81	6.12
	10/26/2002		18.19	11.62	6.57		17.80	6.18
	11/16/2002		18.19	11.73	6.46		17.79	6.06
	12/13/2002		18.19	11.73	6.46		17.78	6.05
	1/11/2003		18.19	11.50	6.69		17.77	6.27
	2/8/2003		18.19	11.43	6.76		17.76	6.33
	3/13/2003		18.19	11.59	6.60		17.75	6.16
	4/19/2003		18.19	11.49	6.70		17.75	6.26
	5/23/2003		18.19	11.33	6.86		17.75	6.42
	6/24/2003		18.19	7.25	10.94		17.75	10.50
	7/18/2003		18.19	11.45	6.74		17.75	6.30
	8/2/2003		18.19	11.50	6.69		17.75	6.25
	9/22/2003		18.19	11.46	6.73		17.75	6.29
	10/11/2003		18.19	11.52	6.67		17.75	6.23
	11/22/2003		18.19	11.47	6.72		17.75	6.28
	12/7/2003		18.19	11.44	6.75		17.75	6.31
1/11/2004	18.19	11.20	6.99	17.75	6.55			
2/8/2004	18.19	11.38	6.81	17.75	6.37			
3/6/2004	18.19	11.57	6.62	17.75	6.18			
4/10/2004	18.19	11.24	6.95	17.75	6.51			
GW-2b	8/19/1999	alluvium	17.66	12.24	5.42	17.31	17.66	5.42
	12/7/1999		17.66	12.06	5.60		17.63	5.57
	2/7/2000		17.66	11.13	6.53		17.61	6.48
	7/18/2000		17.66	11.84	5.82		17.57	5.73
	9/18/2000		17.66	11.64	6.02		17.55	5.91
	10/27/2000		17.66	13.91	3.75		17.54	3.63
	11/28/2000		17.66	9.93	7.73		17.53	7.60
	12/27/2000		17.66	10.10	7.56		17.53	7.43
	1/30/2001		17.66	13.03	4.63		17.52	4.49
	2/28/2001		17.66	12.65	5.01		17.51	4.86
	3/28/2001		17.66	13.98	3.68		17.50	3.52
	5/4/2001		17.66	10.56	7.10		17.49	6.93
	5/31/2001		17.66	13.62	4.04		17.49	3.87
	6/11/2001		17.66	13.52	4.14		17.48	3.96
	7/31/2001		17.66	10.91	6.75		17.47	6.56
	8/30/2001		17.66	10.49	7.17		17.46	6.97
	9/24/2001		17.66	11.03	6.63		17.45	6.42
	10/30/2001		17.66	9.84	7.82		17.44	7.60
	11/28/2001		17.66	9.95	7.71		17.44	7.49
	12/26/2001		17.66	9.96	7.70		17.43	7.47
	1/7/2002		17.66	10.04	7.62		17.43	7.39
	2/15/2002		17.66	10.67	6.99		17.42	6.75

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Well Designation	Date Measured	Screened Lithology	Original TOC Elevation (ft. MLLW)	Depth to Groundwater (feet)	Original GW Elevation (ft. MLLW)	TOC Elevation on 2/1/2003 (ft. MLLW)	Adjusted TOC Elevations (ft. MLLW)	New GW Elevation (ft. MLLW)
GW-2b (Continued)	3/18/2002		17.66	13.78	3.88		17.41	3.63
	4/30/2002		17.66	10.89	6.77		17.40	6.51
	5/30/2002		17.66	12.32	5.34		17.39	5.07
	6/19/2002		17.66	11.32	6.34		17.38	6.06
	7/14/2002		17.66	13.36	4.30		17.38	4.02
	8/10/2002		17.66	14.93	2.73		17.37	2.44
	9/21/2002		17.66	13.00	4.66		17.36	4.36
	10/26/2002		17.66	11.83	5.83		17.35	5.52
	11/16/2002		17.66	10.11	7.55		17.34	7.23
	12/13/2002		17.66	10.48	7.18		17.33	6.85
	1/11/2003		17.66	11.85	5.81		17.33	5.48
	2/8/2003		17.66	13.15	4.51		17.32	4.17
	3/13/2003		17.66	11.02	6.64		17.31	6.29
	4/19/2003		17.66	15.36	2.30		17.31	1.95
	5/23/2003		17.66	11.75	5.91		17.31	5.56
	6/24/2003		17.66	12.61	5.05		17.31	4.70
	7/18/2003		17.66	14.09	3.57		17.31	3.22
	8/2/2003		17.66	13.89	3.77		17.31	3.42
	9/22/2003		17.66	11.14	6.52		17.31	6.17
	10/11/2003		17.66	12.29	5.37		17.31	5.02
	11/22/2003		17.66	10.02	7.64		17.31	7.29
	12/7/2003		17.66	11.08	6.58		17.31	6.23
	1/11/2004		17.66	12.01	5.65		17.31	5.30
	2/8/2004		17.66	12.33	5.33		17.31	4.98
	3/6/2004		17.66	10.41	7.25		17.31	6.90
	4/10/2004		17.66	14.54	3.12		17.31	2.77
GW-3a	8/19/1999	waste	20.18	14.28	5.90	19.65	20.18	5.90
	12/7/1999		20.18	14.06	6.12		20.14	6.08
	2/7/2000		20.18	14.15	6.03		20.11	5.96
	7/18/2000		20.18	13.86	6.32		20.04	6.18
	9/18/2000		20.18	13.85	6.33		20.02	6.17
	10/27/2000		20.18	13.96	6.22		20.00	6.04
	11/28/2000		20.18	13.64	6.54		19.99	6.35
	12/27/2000		20.18	13.86	6.32		19.98	6.12
	1/30/2001		20.18	13.96	6.22		19.96	6.00
	2/28/2001		20.18	13.66	6.52		19.95	6.29
	3/28/2001		20.18	13.50	6.68		19.94	6.44
	5/4/2001		20.18	13.68	6.50		19.93	6.25
	5/31/2001		20.18	13.96	6.22		19.92	5.96
	6/11/2001		20.18	13.64	6.54		19.91	6.27
	7/31/2001		20.18	13.67	6.51		19.89	6.22
	8/30/2001		20.18	13.71	6.47		19.88	6.17
	9/24/2001		20.18	13.72	6.46		19.87	6.15
	10/30/2001		20.18	13.56	6.62		19.85	6.29
	11/28/2001		20.18	13.66	6.52		19.84	6.18
	12/26/2001		20.18	13.53	6.65		19.83	6.30
	1/7/2002		20.18	13.55	6.63		19.83	6.28
	2/15/2002		20.18	13.40	6.78		19.81	6.41
	3/18/2002		20.18	13.60	6.58		19.80	6.20
	4/30/2002		20.18	13.38	6.80		19.78	6.40
	5/30/2002		20.18	13.31	6.87		19.77	6.46
	6/19/2002		20.18	13.37	6.81		19.76	6.39
	7/14/2002		20.18	13.37	6.81		19.75	6.38
	8/10/2002		20.18	13.39	6.79		19.74	6.35
	9/21/2002		20.18	13.47	6.71		19.72	6.25
	10/26/2002		20.18	13.35	6.83		19.71	6.36
	11/16/2002		20.18	13.44	6.74		19.70	6.26
	12/13/2002		20.18	13.45	6.73		19.69	6.24
	1/11/2003		20.18	13.32	6.86		19.67	6.35
2/8/2003		20.18	13.30	6.88		19.66	6.36	
3/13/2003		20.18	13.23	6.95		19.65	6.42	
4/19/2003		20.18	13.21	6.97		19.65	6.44	
5/23/2003		20.18	13.11	7.07		19.65	6.54	
6/24/2003		20.18	13.33	6.85		19.65	6.32	
7/18/2003		20.18	13.21	6.97		19.65	6.44	
8/2/2003		20.18	13.22	6.96		19.65	6.43	
9/22/2003		20.18	13.20	6.98		19.65	6.45	
10/11/2003		20.18	13.24	6.94		19.65	6.41	
11/22/2003		20.18	13.18	7.00		19.65	6.47	
12/7/2003		20.18	13.12	7.06		19.65	6.53	
1/11/2004		20.18	12.88	7.30		19.65	6.77	

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GW-3a (Continued)	2/8/2004		20.18	13.05	7.13		19.65	6.60
	3/6/2004		20.18	13.24	6.94		19.65	6.41
	4/10/2004		20.18	12.97	7.21		19.65	6.68
GW-4a	8/19/1999	reworked clayey silt	8.91	3.44	5.47	8.71	8.91	5.47
	12/7/1999		8.91	3.99	4.92		8.89	4.90
	2/7/2000		8.91	2.81	6.10		8.88	6.07
	7/18/2000		8.91	3.28	5.63		8.86	5.58
	9/18/2000		8.91	4.07	4.84		8.85	4.78
	10/27/2000		8.91	2.94	5.97		8.84	5.90
	11/28/2000		8.91	2.85	6.06		8.84	5.99
	12/27/2000		8.91	3.34	5.57		8.83	5.49
	1/30/2001		8.91	3.54	5.37		8.83	5.29
	2/28/2001		8.91	3.25	5.66		8.82	5.57
	3/28/2001		8.91	4.33	4.58		8.82	4.49
	5/4/2001		8.91	3.63	5.28		8.81	5.18
	5/31/2001		8.91	3.86	5.05		8.81	4.95
	6/11/2001		8.91	4.06	4.85		8.81	4.75
	7/31/2001		8.91	3.26	5.65		8.80	5.54
	8/30/2001		8.91	3.38	5.53		8.80	5.42
	9/24/2001		8.91	3.47	5.44		8.79	5.32
	10/30/2001		8.91	3.26	5.65		8.79	5.53
	11/28/2001		8.91	2.86	6.05		8.78	5.92
	12/26/2001		8.91	2.43	6.48		8.78	6.35
	1/7/2002		8.91	3.16	5.75		8.78	5.62
	2/15/2002		8.91	3.01	5.90		8.77	5.76
	3/18/2002		8.91	3.23	5.68		8.77	5.54
	4/30/2002		8.91	2.92	5.99		8.76	5.84
	5/30/2002		8.91	3.18	5.73		8.75	5.57
	6/19/2002		8.91	3.49	5.42		8.75	5.26
	7/14/2002		8.91	3.27	5.64		8.75	5.48
	8/1/2002		8.91	3.22	5.69		8.74	5.52
	9/21/2002		8.91	3.57	5.34		8.74	5.17
	10/26/2002		8.91	3.36	5.55		8.73	5.37
	11/16/2002		8.91	5.80	3.11		8.73	2.93
	12/13/2002		8.91	2.61	6.30		8.72	6.11
	1/11/2003		8.91	2.67	6.24		8.72	6.05
	2/8/2003		8.91	3.63	5.28		8.72	5.09
	3/13/2003		8.91	3.48	5.43		8.71	5.23
	4/19/2003		8.91	3.26	5.65		8.71	5.45
	5/23/2003		8.91	3.38	5.53		8.71	5.33
	6/24/2003		8.91	3.76	5.15		8.71	4.95
	7/18/2003		8.91	3.50	5.41		8.71	5.21
	8/2/2003		8.91	3.52	5.39		8.71	5.19
	9/22/2003		8.91	2.95	5.96		8.71	5.76
	10/11/2003		8.91	3.60	5.31		8.71	5.11
11/22/2003	8.91	2.86	6.05	8.71	5.85			
12/7/2003	8.91	2.28	6.63	8.71	6.43			
1/11/2004	8.91	2.73	6.18	8.71	5.98			
2/8/2004	8.91	3.25	5.66	8.71	5.46			
3/6/2004	8.91	3.09	5.82	8.71	5.62			
4/10/2004	8.91	3.42	5.49	8.71	5.29			
GW-5a	8/19/1999	reworked clayey silt	12.34	5.94	6.40	11.93	12.34	6.40
	12/7/1999		12.34	5.74	6.60		12.31	6.57
	2/7/2000		12.34	5.03	7.31		12.29	7.26
	7/18/2000		12.34	4.48	7.86		12.23	7.75
	9/18/2000		12.34	5.13	7.21		12.22	7.09
	10/27/2000		12.34	4.90	7.44		12.20	7.30
	11/28/2000		12.34	4.51	7.83		12.19	7.68
	12/27/2000		12.34	5.11	7.23		12.18	7.07
	1/30/2001		12.34	5.91	6.43		12.17	6.26
	2/28/2001		12.34	5.03	7.31		12.16	7.13
	3/28/2001		12.34	5.30	7.04		12.16	6.86
	5/4/2001		12.34	6.33	6.01		12.14	5.81
	5/31/2001		12.34	5.57	6.77		12.14	6.57
	6/11/2001		12.34	5.58	6.76		12.13	6.55
	7/31/2001		12.34	5.41	6.93		12.12	6.71
	8/30/2001		12.34	5.40	6.94		12.11	6.71
	9/24/2001		12.34	5.39	6.95		12.10	6.71
	10/30/2001		12.34	5.58	6.76		12.09	6.51
	11/28/2001		12.34	5.52	6.82		12.08	6.56

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GW-5a (Continued)	12/26/2001		12.34	5.00	7.34		12.07	7.07	
	1/7/2002		12.34	4.86	7.48		12.07	7.21	
	2/15/2002		12.34	5.01	7.33		12.05	7.04	
	3/18/2002		12.34	5.21	7.13		12.04	6.83	
	4/30/2002		12.34	4.69	7.65		12.03	7.34	
	5/30/2002		12.34	4.96	7.38		12.02	7.06	
	6/19/2002		12.34	5.07	7.27		12.01	6.94	
	7/14/2002		12.34	6.26	6.08		12.01	5.75	
	8/10/2002		12.34	5.52	6.82		12.00	6.48	
	9/21/2002		12.34	5.46	6.88		11.98	6.52	
	10/26/2002		12.34	6.02	6.32		11.97	5.95	
	11/16/2002		12.34	4.97	7.37		11.97	7.00	
	12/13/2002		12.34	5.15	7.19		11.96	6.81	
	1/11/2003		12.34	5.32	7.02		11.95	6.63	
	2/8/2003		12.34	5.01	7.33		11.94	6.93	
	3/13/2003		12.34	4.71	7.63		11.93	7.22	
	4/19/2003		12.34	5.53	6.81		11.93	6.40	
	5/23/2003		12.34	4.69	7.65		11.93	7.24	
	6/24/2003		12.34	5.05	7.29		11.93	6.88	
	7/18/2003		12.34	6.00	6.34		11.93	5.93	
	8/2/2003		12.34	5.44	6.90		11.93	6.49	
	9/22/2003		12.34	4.98	7.36		11.93	6.95	
	10/11/2003		12.34	5.51	6.83		11.93	6.42	
	11/22/2003		12.34	4.58	7.76		11.93	7.35	
	12/11/2003		12.34	4.49	7.85		11.93	7.44	
	1/11/2004		12.34	5.02	7.32		11.93	6.91	
	2/8/2004		12.34	4.72	7.62		11.93	7.21	
	3/6/2004		12.34	4.60	7.74		11.93	7.33	
	4/10/2004		12.34	5.45	6.89		11.93	6.48	
	GW-6a	8/19/1999	waste/reworked clayey silt	13.27	2.83	10.44	12.93	13.27	10.44
		12/7/1999		13.27	8.30	4.97		13.24	4.94
		2/7/2000		13.27	8.15	5.12		13.23	5.08
		7/18/2000		13.27	7.93	5.34		13.18	5.25
		9/18/2000		13.27	8.11	5.16		13.17	5.06
		10/27/2000		13.27	8.42	4.85		13.16	4.74
		11/28/2000		13.27	7.88	5.39		13.15	5.27
		12/27/2000		13.27	6.36	6.91		13.14	6.78
		1/30/2001		13.27	8.12	5.15		13.13	5.01
		2/28/2001		13.27	8.72	4.55		13.12	4.40
		3/28/2001		13.27	7.81	5.46		13.12	5.31
		5/4/2001		13.27	7.87	5.40		13.11	5.24
		5/31/2001		13.27	7.81	5.46		13.10	5.29
		6/11/2001		13.27	11.84	1.43		13.10	1.26
		7/31/2001		13.27	7.87	5.40		13.08	5.21
		8/30/2001		13.27	8.89	4.38		13.08	4.19
		9/24/2001		13.27	7.95	5.32		13.07	5.12
		10/30/2001		13.27	7.88	5.39		13.06	5.18
		11/28/2001		13.27	7.90	5.37		13.05	5.15
12/26/2001			13.27	7.75	5.52		13.05	5.30	
1/7/2002			13.27	7.78	5.49		13.04	5.26	
2/15/2002			13.27	7.54	5.73		13.03	5.49	
3/18/2002			13.27	7.90	5.37		13.02	5.12	
4/30/2002			13.27	7.58	5.69		13.01	5.43	
5/30/2002			13.27	7.62	5.65		13.00	5.38	
6/19/2002			13.27	7.74	5.53		13.00	5.26	
7/14/2002			13.27	7.62	5.65		12.99	5.37	
8/10/2002			13.27	7.65	5.62		12.99	5.34	
9/21/2002			13.27	7.72	5.55		12.98	5.26	
10/26/2002			13.27	7.69	5.58		12.97	5.28	
11/16/2002			13.27	7.69	5.58		12.96	5.27	
12/13/2002			13.27	7.68	5.59		12.95	5.27	
1/11/2003			13.27	7.33	5.94		12.95	5.62	
2/8/2003			13.27	7.45	5.82		12.94	5.49	
3/13/2003			13.27	7.32	5.95		12.93	5.61	
4/19/2003			13.27	7.61	5.66		12.93	5.32	
5/23/2003			13.27	7.46	5.81		12.93	5.47	
6/24/2003			13.27	7.64	5.63		12.93	5.29	
7/18/2003			13.27	7.51	5.76		12.93	5.42	
8/2/2003			13.27	7.54	5.73		12.93	5.39	
9/22/2003			13.27	7.46	5.81		12.93	5.47	
10/11/2003			13.27	7.60	5.67		12.93	5.33	

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GW-6a (Continued)	11/22/2003		13.27	7.67	5.60		12.93	5.26
	12/7/2003		13.27	7.46	5.81		12.93	5.47
	1/11/2004		13.27	7.19	6.08		12.93	5.74
	2/8/2004		13.27	7.40	5.87		12.93	5.53
	3/6/2004		13.27	7.36	5.91		12.93	5.57
	4/10/2004		13.27	7.29	5.98		12.93	5.64
GW-7a	8/19/1999	gravel fill	10.45	5.64	4.81	10.42	10.45	4.81
	12/7/1999		10.45	4.95	5.50		10.45	5.50
	2/7/2000		10.45	4.71	5.74		10.45	5.74
	7/18/2000		10.45	4.68	5.77		10.44	5.76
	9/18/2000		10.45	4.81	5.64		10.44	5.63
	10/27/2000		10.45	4.52	5.93		10.44	5.92
	11/28/2000		10.45	4.51	5.94		10.44	5.93
	12/27/2000		10.45	5.02	5.43		10.44	5.42
	1/30/2001		10.45	5.54	4.91		10.44	4.90
	2/28/2001		10.45	4.70	5.75		10.44	5.74
	3/28/2001		10.45	4.83	5.62		10.44	5.61
	5/4/2001		10.45	4.71	5.74		10.44	5.73
	5/31/2001		10.45	4.66	5.79		10.44	5.78
	6/11/2001		10.45	4.74	5.71		10.43	5.69
	7/31/2001		10.45	4.61	5.84		10.43	5.82
	8/30/2001		10.45	4.56	5.89		10.43	5.87
	9/24/2001		10.45	4.69	5.76		10.43	5.74
	10/30/2001		10.45	4.69	5.76		10.43	5.74
	11/28/2001		10.45	4.52	5.93		10.43	5.91
	12/26/2001		10.45	4.51	5.94		10.43	5.92
	1/7/2002		10.45	4.51	5.94		10.43	5.92
	2/15/2002		10.45	4.50	5.95		10.43	5.93
	3/18/2002		10.45	4.80	5.65		10.43	5.63
	4/30/2002		10.45	4.55	5.90		10.43	5.88
	5/30/2002		10.45	4.56	5.89		10.43	5.87
	6/19/2002		10.45	4.68	5.77		10.43	5.75
	7/14/2002		10.45	4.50	5.95		10.43	5.93
	8/10/2002		10.45	4.42	6.03		10.42	6.00
	9/21/2002		10.45	4.67	5.78		10.42	5.75
	10/26/2002		10.45	4.73	5.72		10.42	5.69
	11/16/2002		10.45	4.65	5.80		10.42	5.77
	12/13/2002		10.45	4.32	6.13		10.42	6.10
	1/11/2003		10.45	4.21	6.24		10.42	6.21
	2/8/2003		10.45	4.63	5.82		10.42	5.79
	3/13/2003		10.45	4.58	5.87		10.42	5.84
	4/19/2003		10.45	4.62	5.83		10.42	5.80
	5/23/2003		10.45	4.62	5.83		10.42	5.80
	6/24/2003		10.45	4.73	5.72		10.42	5.69
	7/18/2003		10.45	4.60	5.85		10.42	5.82
	8/2/2003		10.45	4.61	5.84		10.42	5.81
	9/22/2003		10.45	4.45	6.00		10.42	5.97
	10/11/2003		10.45	4.68	5.77		10.42	5.74
	11/22/2003		10.45	4.46	5.99		10.42	5.96
12/7/2003	10.45	4.09	6.36	10.42	6.33			
1/11/2004	10.45	4.38	6.07	10.42	6.04			
2/8/2004	10.45	4.73	5.72	10.42	5.69			
3/6/2004	10.45	4.84	5.61	10.42	5.58			
4/10/2004	10.45	4.42	6.03	10.42	6.00			
GW-8c	8/19/1999	bedrock	58.66	39.98	18.68	58.65	58.66	18.68
	12/7/1999		58.66	40.72	17.94		58.66	17.94
	2/7/2000		58.66	36.75	21.91		58.66	21.91
	7/18/2000		58.66	38.48	20.18		58.66	20.18
	9/18/2000		58.66	39.01	19.65		58.66	19.65
	10/27/2000		58.66	40.35	18.31		58.66	18.31
	11/28/2000		58.66	39.53	19.13		58.66	19.13
	12/27/2000		58.66	39.28	19.38		58.66	19.38
	1/30/2001		58.66	38.33	20.33		58.66	20.33
	2/28/2001		58.66	33.05	25.61		58.66	25.61
	3/28/2001		58.66	33.81	24.85		58.66	24.85
	5/4/2001		58.66	36.26	22.40		58.66	22.40
	5/31/2001		58.66	37.62	21.04		58.66	21.04
	6/11/2001		58.66	37.70	20.96		58.65	20.95
	7/31/2001		58.66	39.52	19.14		58.65	19.13
	8/30/2001		58.66	39.94	18.72		58.65	18.71

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GW-8c (Continued)	9/24/2001		58.66	40.16	18.50		58.65	18.49	
	10/30/2001		58.66	41.51	17.15		58.65	17.14	
	11/28/2001		58.66	39.55	19.11		58.65	19.10	
	12/26/2001		58.66	36.37	22.29		58.65	22.28	
	1/7/2002		58.66	29.40	29.26		58.65	29.25	
	2/15/2002		58.66	33.90	24.76		58.65	24.75	
	3/18/2002		58.66	34.30	24.36		58.65	24.35	
	4/30/2002		58.66	36.34	22.32		58.65	22.31	
	5/30/2002		58.66	37.59	21.07		58.65	21.06	
	6/19/2002		58.66	38.00	20.66		58.65	20.65	
	7/14/2002		58.66	39.06	19.60		58.65	19.59	
	8/10/2002		58.66	39.62	19.04		58.65	19.03	
	9/21/2002		58.66	40.13	18.53		58.65	18.52	
	10/26/2002		58.66	40.47	18.19		58.65	18.18	
	11/16/2002		58.66	40.02	18.64		58.65	18.63	
	12/13/2002		58.66	39.89	18.77		58.65	18.76	
	1/11/2003		58.66	29.71	28.95		58.65	28.94	
	2/8/2003		58.66	32.37	26.29		58.65	26.28	
	3/13/2003		58.66	33.59	25.07		58.65	25.06	
	4/19/2003		58.66	33.66	25.00		58.65	24.99	
	5/23/2003		58.66	33.90	24.76		58.65	24.75	
	6/24/2003		58.66	35.59	23.07		58.65	23.06	
	7/18/2003		58.66	37.89	20.77		58.65	20.76	
	8/22/2003		58.66	38.54	20.12		58.65	20.11	
	9/22/2003		58.66	39.42	19.24		58.65	19.23	
	10/11/2003		58.66	39.98	18.68		58.65	18.67	
	11/22/2003		58.66	39.98	18.68		58.65	18.67	
	12/7/2003		58.66	38.37	20.29		58.65	20.28	
	1/11/2004		58.66	30.66	28.00		58.65	27.99	
	2/8/2004		58.66	32.17	26.49		58.65	26.48	
	3/6/2004		58.66	29.47	29.19		58.65	29.18	
	4/10/2004		58.66	33.36	25.30		58.65	25.29	
	GW-9a	8/19/1999	gravelly clay	36.50	---		36.47	36.50	
		12/7/1999		36.50	24.75	11.75		36.50	11.75
		2/7/2000		36.50	23.67	12.83		36.50	12.83
		7/18/2000		36.50	24.83	11.67		36.50	11.67
		9/18/2000		36.50	24.79	11.71		36.50	11.71
		10/27/2000		36.50	24.75	11.75		36.50	11.75
		11/28/2000		36.50	24.27	12.23		36.49	12.22
		12/27/2000		36.50	25.10	11.40		36.49	11.39
		1/30/2001		36.50	24.64	11.86		36.49	11.85
		2/28/2001		36.50	22.79	13.71		36.49	13.70
		3/28/2001		36.50	24.85	11.65		36.49	11.64
		5/4/2001		36.50	24.16	12.34		36.49	12.33
		5/31/2001		36.50	24.78	11.72		36.49	11.71
		6/11/2001		36.50	25.04	11.46		36.49	11.45
		7/31/2001		36.50	---			36.49	
		8/30/2001		36.50	---			36.49	
		9/24/2001		36.50	---			36.48	
		10/30/2001		36.50	---			36.48	
		11/28/2001		36.50	---			36.48	
12/26/2001		36.50		23.04	13.46	36.48		13.44	
1/7/2002		36.50		22.62	13.88	36.48		13.86	
2/15/2002		36.50		23.81	12.69	36.48		12.67	
3/18/2002		36.50		23.58	12.92	36.48		12.90	
4/30/2002		36.50		25.04	11.46	36.48		11.44	
5/30/2002		36.50		25.55	10.95	36.48		10.93	
6/19/2002		36.50		25.96	10.54	36.48		10.52	
7/14/2002		36.50		DRY		36.47			
8/10/2002		36.50		DRY		36.47			
9/21/2002		36.50		DRY		36.47			
10/26/2002		36.50		25.91	10.59	36.47		10.56	
11/16/2002		36.50		25.42	11.08	36.47		11.05	
12/13/2002		36.50		25.79	10.71	36.47		10.68	
1/11/2003		36.50		22.77	13.73	36.47		13.70	
2/8/2003		36.50		24.66	11.84	36.47		11.81	
3/13/2003		36.50		24.68	11.82	36.47		11.79	
4/19/2003		36.50		23.74	12.76	36.47		12.73	
5/23/2003		36.50		24.08	12.42	36.47		12.39	
6/24/2003		36.50		25.06	11.44	36.47		11.41	
7/18/2003		36.50		DRY		36.47			

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GW-9a (Continued)	8/2/2003		36.50	DRY			36.47	
	9/22/2003		36.50	DRY		36.47		
	10/11/2003		36.50	DRY		36.47		
	11/22/2003		36.50	25.59	10.91	36.47	10.88	
	12/7/2003		36.50	23.77	12.73	36.47	12.70	
	1/11/2004		36.50	22.75	13.75	36.47	13.72	
	2/8/2004		36.50	23.37	13.13	36.47	13.10	
	3/6/2004		36.50	23.31	13.19	36.47	13.16	
	4/10/2004		36.50	24.55	11.95	36.47	11.92	
GW-10a	8/19/1999	waste	24.16	18.85	5.31	23.80	24.16	5.31
	12/7/1999		24.16	18.87	5.29		24.13	5.26
	2/7/2000		24.16	18.87	5.29		24.11	5.24
	7/18/2000		24.16	18.39	5.77		24.07	5.68
	9/18/2000		24.16	18.51	5.65		24.05	5.54
	10/27/2000		24.16	18.61	5.55		24.04	5.43
	11/28/2000		24.16	18.51	5.65		24.03	5.52
	12/27/2000		24.16	18.55	5.61		24.02	5.47
	1/30/2001		24.16	18.67	5.49		24.01	5.34
	2/28/2001		24.16	18.32	5.84		24.01	5.69
	3/28/2001		24.16	18.13	6.03		24.00	5.87
	5/4/2001		24.16	18.91	5.25		23.99	5.08
	5/31/2001		24.16	18.21	5.95		23.98	5.77
	6/11/2001		24.16	18.21	5.95		23.98	5.77
	7/31/2001		24.16	18.47	5.69		23.96	5.49
	8/30/2001		24.16	18.51	5.65		23.95	5.44
	9/24/2001		24.16	18.52	5.64		23.95	5.43
	10/30/2001		24.16	18.59	5.57		23.94	5.35
	11/28/2001		24.16	18.51	5.65		23.93	5.42
	12/26/2001		24.16	18.42	5.74		23.92	5.50
	1/7/2002		24.16	18.41	5.75		23.92	5.51
	2/15/2002		24.16	17.96	6.20		23.91	5.95
	3/18/2002		24.16	18.15	6.01		23.90	5.75
	4/30/2002		24.16	17.98	6.18		23.89	5.91
	5/30/2002		24.16	18.01	6.15		23.88	5.87
	6/19/2002		24.16	18.20	5.96		23.87	5.67
	7/14/2002		24.16	18.22	5.94		23.87	5.65
	8/10/2002		24.16	18.28	5.88		23.86	5.58
	9/21/2002		24.16	18.45	5.71		23.85	5.40
	10/26/2002		24.16	18.48	5.68		23.84	5.36
	11/16/2002		24.16	18.50	5.66		23.83	5.33
	12/13/2002		24.16	18.57	5.59		23.82	5.25
	1/11/2003		24.16	18.15	6.01		23.82	5.67
	2/8/2003		24.16	18.06	6.10		23.81	5.75
	3/13/2003		24.16	18.03	6.13		23.80	5.77
	4/19/2003		24.16	18.04	6.12		23.80	5.76
5/23/2003	24.16	17.94	6.22	23.80	5.86			
6/24/2003	24.16	18.20	5.96	23.80	5.60			
7/18/2003	24.16	18.13	6.03	23.80	5.67			
8/2/2003	24.16	18.18	5.98	23.80	5.62			
9/22/2003	24.16	18.13	6.03	23.80	5.67			
10/11/2003	24.16	18.27	5.89	23.80	5.53			
11/22/2003	24.16	18.37	5.79	23.80	5.43			
12/7/2003	24.16	18.36	5.80	23.80	5.44			
1/11/2004	24.16	17.94	6.22	23.80	5.86			
2/8/2004	24.16	17.94	6.22	23.80	5.86			
3/6/2004	24.16	17.88	6.28	23.80	5.92			
4/10/2004	24.16	17.64	6.52	23.80	6.16			
GW-11a	8/19/1999	waste/reworked clayey silt	8.51	3.67	4.84	8.28	8.51	4.84
	12/7/1999		8.51	3.58	4.93		8.49	4.91
	2/7/2000		8.51	3.35	5.16		8.48	5.13
	7/18/2000		8.51	3.20	5.31		8.45	5.25
	9/18/2000		8.51	2.37	6.14		8.44	6.07
	10/27/2000		8.51	3.32	5.19		8.43	5.11
	11/28/2000		8.51	3.21	5.30		8.43	5.22
	12/27/2000		8.51	3.45	5.06		8.42	4.97
	1/30/2001		8.51	3.53	4.98		8.42	4.89
	2/28/2001		8.51	3.87	4.64		8.41	4.54
	3/28/2001		8.51	3.00	5.51		8.41	5.41
	5/4/2001		8.51	3.15	5.36		8.40	5.25
	5/31/2001		8.51	2.97	5.54		8.40	5.43

**Table 4
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Well Designation	Date Measured	Screened Lithology	Original TOC Elevation (ft. MLLW)	Depth to Groundwater (feet)	Original GW Elevation (ft. MLLW)	TOC Elevation on 2/21/2003 (ft. MLLW)	Adjusted TOC Elevations (ft. MLLW)	New GW Elevation (ft. MLLW)	
GW-11a (Continued)	6/11/2001		8.51	3.17	5.34		8.39	5.22	
	7/31/2001		8.51	3.16	5.35		8.38	5.22	
	8/30/2001		8.51	3.58	4.93		8.38	4.80	
	9/24/2001		8.51	3.31	5.20		8.37	5.06	
	10/30/2001		8.51	3.56	4.95		8.37	4.81	
	11/28/2001		8.51	3.19	5.32		8.36	5.17	
	12/26/2001		8.51	3.16	5.35		8.36	5.20	
	1/7/2002		8.51	2.97	5.54		8.36	5.39	
	2/15/2002		8.51	2.87	5.64		8.35	5.48	
	3/18/2002		8.51	1.05	5.46		8.34	5.29	
	4/30/2002		8.51	2.95	5.56		8.34	5.39	
	5/30/2002		8.51	2.89	5.62		8.33	5.44	
	6/19/2002		8.51	2.91	5.60		8.33	5.42	
	7/14/2002		8.51	11.60	-3.09		8.32	-3.28	
	8/10/2002		8.51	3.07	5.44		8.32	5.25	
	9/21/2002		8.51	3.21	5.30		8.31	5.10	
	10/26/2002		8.51	3.15	5.36		8.30	5.15	
	11/16/2002		8.51	2.10	6.41		8.30	6.20	
	12/13/2002		8.51	3.12	5.39		8.30	5.18	
	1/11/2003		8.51	2.73	5.78		8.29	5.56	
	2/8/2003		8.51	2.87	5.64		8.29	5.42	
	3/13/2003		8.51	2.82	5.69		8.28	5.46	
	4/19/2003		8.51	2.90	5.61		8.28	5.38	
	5/23/2003		8.51	2.78	5.73		8.28	5.50	
	6/24/2003		8.51	2.89	5.62		8.28	5.39	
	7/18/2003		8.51	3.01	5.50		8.28	5.27	
	8/2/2003		8.51	2.97	5.54		8.28	5.31	
	9/22/2003		8.51	2.99	5.52		8.28	5.29	
	10/11/2003		8.51	3.13	5.38		8.28	5.15	
	11/22/2003		8.51	3.12	5.39		8.28	5.16	
	12/7/2003		8.51	2.96	5.55		8.28	5.32	
	1/11/2004		8.51	2.58	5.93		8.28	5.70	
	2/8/2004		8.51	2.90	5.61		8.28	5.38	
	3/6/2004		8.51	2.86	5.65		8.28	5.42	
	4/10/2004		8.51	2.69	5.82		8.28	5.59	
	GW-12a	2/7/2000	waste	28.96	23.70	5.26	28.96	28.96	5.26
		7/18/2000		28.96	22.98	5.98	28.96	28.96	5.98
		9/18/2000		28.96	23.08	5.88	28.96	28.96	5.88
		10/27/2000		28.96	23.12	5.84	28.96	28.96	5.84
		11/28/2000		28.96	23.02	5.94	28.96	28.96	5.94
		12/27/2000		28.96	23.30	5.66	28.96	28.96	5.66
		1/30/2001		28.96	23.31	5.65	28.96	28.96	5.65
		2/28/2001		28.96	22.93	6.03	28.96	28.96	6.03
		3/28/2001		28.96	22.54	6.42	28.96	28.96	6.42
		5/4/2001		28.96	22.94	6.02	28.96	28.96	6.02
		5/31/2001		28.96	22.75	6.21	28.96	28.96	6.21
		6/11/2001		28.96	22.84	6.12	28.96	28.96	6.12
		7/31/2001		28.96	23.04	5.92	28.96	28.96	5.92
8/30/2001			28.96	23.13	5.83	28.96	28.96	5.83	
9/24/2001			28.96	23.08	5.88	28.96	28.96	5.88	
10/30/2001			28.96	23.21	5.75	28.96	28.96	5.75	
11/28/2001			28.96	23.05	5.91	28.96	28.96	5.91	
12/26/2001			28.96	23.04	5.92	28.96	28.96	5.92	
1/7/2002			28.96	22.63	6.33	28.96	28.96	6.33	
2/15/2002			28.96	22.39	6.57	28.96	28.96	6.57	
3/18/2002			28.96	22.55	6.41	28.96	28.96	6.41	
4/30/2002			28.96	22.54	6.42	28.96	28.96	6.42	
5/30/2002			28.96	22.64	6.32	28.96	28.96	6.32	
6/19/2002			28.96	22.82	6.14	28.96	28.96	6.14	
7/14/2002			28.96	22.88	6.08	28.96	28.96	6.08	
8/10/2002			28.96	22.94	6.02	28.96	28.96	6.02	
9/21/2002			28.96	23.19	5.77	28.96	28.96	5.77	
10/26/2002			28.96	23.22	5.74	28.96	28.96	5.74	
11/16/2002			28.96	23.33	5.63	28.96	28.96	5.63	
12/13/2002			28.96	23.39	5.57	28.96	28.96	5.57	
1/11/2003			28.96	22.73	6.23	28.96	28.96	6.23	
2/8/2003			28.96	22.60	6.36	28.96	28.96	6.36	
3/13/2003		28.96	22.70	6.26	28.96	28.96	6.26		
4/19/2003		28.96	22.63	6.33	28.96	28.96	6.33		
5/23/2003		28.96	22.59	6.37	28.96	28.96	6.37		
6/24/2003		28.96	22.79	6.17	28.96	28.96	6.17		

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GW-12a (Continued)	7/18/2003		28.96	22.84	6.12		28.96	6.12
	8/2/2003		28.96	22.87	6.09		28.96	6.09
	9/22/2003		28.96	22.95	6.01		28.96	6.01
	10/11/2003		28.96	23.05	5.91		28.96	5.91
	11/22/2003		28.96	23.12	5.84		28.96	5.84
	12/7/2003		28.96	23.13	5.83		28.96	5.83
	1/11/2004		28.96	22.68	6.28		28.96	6.28
	2/8/2004		28.96	22.59	6.37		28.96	6.37
	3/6/2004		28.96	22.37	6.59		28.96	6.59
	4/10/2004		28.96	22.29	6.67		28.96	6.67
GW-13a	2/7/2000	waste	16.80	3.98	12.82	16.77	16.80	12.82
	7/18/2000		16.80	4.66	12.14		16.80	12.14
	9/18/2000		16.80	12.17	4.63		16.79	4.62
	10/27/2000		16.80	12.10	4.70		16.79	4.69
	11/28/2000		16.80	11.99	4.81		16.79	4.80
	12/27/2000		16.80	11.95	4.85		16.79	4.84
	1/30/2001		16.80	12.27	4.53		16.79	4.52
	2/28/2001		16.80	11.81	4.99		16.79	4.98
	3/28/2001		16.80	11.77	5.03		16.79	5.02
	5/4/2001		16.80	11.88	4.92		16.79	4.91
	5/31/2001		16.80	11.95	4.85		16.79	4.84
	6/11/2001		16.80	12.02	4.78		16.79	4.77
	7/31/2001		16.80	12.10	4.70		16.79	4.69
	8/30/2001		16.80	12.12	4.68		16.78	4.66
	9/24/2001		16.80	12.12	4.68		16.78	4.66
	10/30/2001		16.80	12.06	4.74		16.78	4.72
	11/28/2001		16.80	12.01	4.79		16.78	4.77
	12/26/2001		16.80	11.71	5.09		16.78	5.07
	1/7/2002		16.80	11.33	5.47		16.78	5.45
	2/15/2002		16.80	11.73	5.07		16.78	5.05
	3/18/2002		16.80	11.91	4.89		16.78	4.87
	4/30/2002		16.80	11.83	4.97		16.78	4.95
	5/30/2002		16.80	11.81	4.99		16.78	4.97
	6/19/2002		16.80	12.02	4.78		16.78	4.76
	7/14/2002		16.80	12.08	4.72		16.78	4.70
	8/10/2002		16.80	12.10	4.70		16.78	4.68
	9/21/2002		16.80	12.27	4.53		16.77	4.50
	10/26/2002		16.80	12.29	4.51		16.77	4.48
	11/16/2002		16.80	12.21	4.59		16.77	4.56
	12/13/2002		16.80	12.32	4.48		16.77	4.45
	1/11/2003		16.80	11.83	4.97		16.77	4.94
	2/8/2003		16.80	11.87	4.93		16.77	4.90
	3/13/2003		16.80	11.66	5.14		16.77	5.11
	4/19/2003		16.80	11.88	4.92		16.77	4.89
	5/23/2003		16.80	11.83	4.97		16.77	4.94
	6/24/2003		16.80	12.13	4.67		16.77	4.64
7/18/2003		16.80	12.01	4.79		16.77	4.76	
8/2/2003		16.80	12.02	4.78		16.77	4.75	
9/22/2003		16.80	12.01	4.79		16.77	4.76	
10/11/2003		16.80	12.11	4.69		16.77	4.66	
11/22/2003		16.80	12.22	4.58		16.77	4.55	
12/7/2003		16.80	12.13	4.67		16.77	4.64	
1/11/2004		16.80	11.46	5.34		16.77	5.31	
2/8/2004		16.80	11.47	5.33		16.77	5.30	
3/6/2004		16.80	11.55	5.25		16.77	5.22	
4/10/2004		16.80	11.60	5.20		16.77	5.17	
GW-14a	2/7/2000	waste	8.87	12.53	-3.66	8.83	8.87	-3.66
	7/18/2000		8.87	4.14	4.73		8.86	4.72
	9/18/2000		8.87	4.26	4.61		8.86	4.60
	10/27/2000		8.87	3.73	5.14		8.86	5.13
	11/28/2000		8.87	3.08	5.79		8.86	5.78
	12/27/2000		8.87	4.19	4.68		8.86	4.67
	1/30/2001		8.87	3.97	4.90		8.86	4.89
	2/28/2001		8.87	3.82	5.05		8.86	5.04
	3/28/2001		8.87	4.24	4.63		8.86	4.62
	5/4/2001		8.87	3.76	5.11		8.85	5.09
	5/31/2001		8.87	4.13	4.74		8.85	4.72
	6/11/2001		8.87	4.30	4.57		8.85	4.55
	7/31/2001		8.87	4.13	4.74		8.85	4.72
8/30/2001		8.87	4.10	4.77		8.85	4.75	

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GW-14a (Continued)	9/24/2001		8.87	3.79	5.08		8.85	5.06
	10/30/2001		8.87	3.24	5.63		8.85	5.61
	11/28/2001		8.87	4.65	4.22		8.85	4.20
	12/26/2001		8.87	3.02	5.85		8.85	5.83
	1/7/2002		8.87	3.61	5.26		8.85	5.24
	2/15/2002		8.87	3.47	5.40		8.84	5.37
	3/18/2002		8.87	4.30	4.57		8.84	4.54
	4/30/2002		8.87	3.72	5.15		8.84	5.12
	5/30/2002		8.87	4.00	4.87		8.84	4.84
	6/19/2002		8.87	3.99	4.88		8.84	4.85
	7/14/2002		8.87	3.64	5.23		8.84	5.20
	8/10/2002		8.87	3.70	5.17		8.84	5.14
	9/21/2002		8.87	3.80	5.07		8.84	5.04
	10/26/2002		8.87	3.78	5.09		8.83	5.05
	11/16/2002		8.87	3.30	5.57		8.83	5.53
	12/13/2002		8.87	2.80	6.07		8.83	6.03
	1/11/2003		8.87	2.99	5.88		8.83	5.84
	2/8/2003		8.87	3.87	5.00		8.83	4.96
	3/13/2003		8.87	3.83	5.04		8.83	5.00
	4/19/2003		8.87	3.73	5.14		8.83	5.10
	5/23/2003		8.87	3.99	4.88		8.83	4.84
	6/24/2003		8.87	4.30	4.57		8.83	4.53
	7/18/2003		8.87	3.95	4.92		8.83	4.88
	8/2/2003		8.87	4.00	4.87		8.83	4.83
	9/22/2003		8.87	3.79	5.08		8.83	5.04
	10/11/2003		8.87	4.11	4.76		8.83	4.72
	11/22/2003		8.87	3.16	5.71		8.83	5.67
	12/7/2003		8.87	2.35	6.52		8.83	6.48
	1/11/2004		8.87	3.45	5.42		8.83	5.38
	2/8/2004		8.87	3.77	5.10		8.83	5.06
	3/6/2004		8.87	3.76	5.11		8.83	5.07
4/10/2004		8.87	3.69	5.18		8.83	5.14	
GW-15a	2/7/2000	wasic	9.66	4.45	5.21	9.62	9.66	5.21
	7/18/2000		9.66	4.11	5.55		9.65	5.54
	9/18/2000		9.66	4.31	5.35		9.65	5.34
	10/27/2000		9.66	4.23	5.43		9.65	5.42
	11/28/2000		9.66	3.41	6.25		9.65	6.24
	12/27/2000		9.66	4.33	5.33		9.65	5.32
	1/30/2001		9.66	3.93	5.73		9.65	5.72
	2/28/2001		9.66	3.91	5.75		9.65	5.74
	3/28/2001		9.66	3.93	5.73		9.65	5.72
	5/4/2001		9.66	3.98	5.68		9.64	5.66
	5/31/2001		9.66	4.01	5.65		9.64	5.63
	6/11/2001		9.66	4.07	5.59		9.64	5.57
	7/31/2001		9.66	4.15	5.51		9.64	5.49
	8/30/2001		9.66	4.24	5.42		9.64	5.40
	9/24/2001		9.66	4.38	5.28		9.64	5.26
	10/30/2001		9.66	4.27	5.39		9.64	5.37
	11/28/2001		9.66	3.44	6.22		9.64	6.20
	12/26/2001		9.66	4.04	5.62		9.64	5.60
	1/7/2002		9.66	3.87	5.79		9.64	5.77
	2/15/2002		9.66	3.81	5.85		9.63	5.82
	3/18/2002		9.66	3.90	5.76		9.63	5.73
	4/30/2002		9.66	3.76	5.90		9.63	5.87
	5/30/2002		9.66	3.81	5.85		9.63	5.82
	6/19/2002		9.66	3.99	5.67		9.63	5.64
	7/14/2002		9.66	3.95	5.71		9.63	5.68
	8/10/2002		9.66	4.02	5.64		9.63	5.61
	9/21/2002		9.66	4.21	5.45		9.63	5.42
	10/26/2002		9.66	4.28	5.38		9.62	5.34
	11/16/2002		9.66	4.20	5.46		9.62	5.42
	12/13/2002		9.66	4.17	5.49		9.62	5.45
	1/11/2003		9.66	3.79	5.87		9.62	5.83
2/8/2003		9.66	3.89	5.77		9.62	5.73	
3/13/2003		9.66	4.01	5.65		9.62	5.61	
4/19/2003		9.66	3.79	5.87		9.62	5.83	
5/23/2003		9.66	3.29	6.37		9.62	6.33	
6/24/2003		9.66	4.04	5.62		9.62	5.58	
7/18/2003		9.66	3.89	5.77		9.62	5.73	
8/2/2003		9.66	3.99	5.67		9.62	5.63	
9/22/2003		9.66	3.96	5.70		9.62	5.66	

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GW-13a (Continued)	10/11/2003		9.66	4.16	5.50		9.62	5.46
	11/22/2003		9.66	4.20	5.46		9.62	5.42
	12/7/2003		9.66	4.11	5.55		9.62	5.51
	1/11/2004		9.66	3.76	5.90		9.62	5.86
	2/8/2004		9.66	3.77	5.89		9.62	5.85
	3/6/2004		9.66	3.68	5.98		9.62	5.94
	4/10/2004		9.66	3.62	6.04		9.62	6.00
GW-16a	2/7/2000	reworked clayey silt	9.35	3.52	5.83	9.26	9.35	5.83
	7/18/2000		9.35	3.52	5.83		9.34	5.82
	9/18/2000		9.35	3.76	5.59		9.33	5.57
	10/27/2000		9.35	3.35	6.00		9.33	5.98
	11/28/2000		9.35	3.23	6.12		9.33	6.10
	12/27/2000		9.35	3.83	5.52		9.32	5.49
	1/30/2001		9.35	3.86	5.49		9.32	5.46
	2/28/2001		9.35	3.46	5.89		9.32	5.86
	3/28/2001		9.35	3.72	5.63		9.32	5.60
	5/4/2001		9.35	3.60	5.75		9.31	5.71
	5/31/2001		9.35	3.67	5.68		9.31	5.64
	6/11/2001		9.35	4.10	5.25		9.31	5.21
	7/31/2001		9.35	3.50	5.85		9.31	5.81
	8/30/2001		9.35	3.58	5.77		9.30	5.72
	9/24/2001		9.35	3.80	5.55		9.30	5.50
	10/30/2001		9.35	3.65	5.70		9.30	5.65
	11/28/2001		9.35	3.25	6.10		9.30	6.05
	12/26/2001		9.35	3.35	6.00		9.30	5.95
	1/7/2002		9.35	3.54	5.81		9.29	5.75
	2/15/2002		9.35	3.44	5.91		9.29	5.85
	3/18/2002		9.35	3.67	5.68		9.29	5.62
	4/30/2002		9.35	3.26	6.09		9.29	6.03
	5/30/2002		9.35	3.35	6.00		9.28	5.93
	6/19/2002		9.35	3.66	5.69		9.28	5.62
	7/14/2002		9.35	3.30	6.05		9.28	5.98
	8/10/2002		9.35	3.15	6.20		9.28	6.13
	9/21/2002		9.35	3.43	5.92		9.27	5.84
	10/26/2002		9.35	3.61	5.74		9.27	5.66
	11/16/2002		9.35	3.44	5.91		9.27	5.83
	12/13/2002		9.35	3.53	5.82		9.27	5.74
	1/11/2003		9.35	3.23	6.12		9.26	6.03
	2/8/2003		9.35	3.65	5.70		9.26	5.61
	3/13/2003		9.35	3.92	5.43		9.26	5.34
	4/19/2003		9.35	3.22	6.13		9.26	6.04
	5/23/2003		9.35	3.65	5.70		9.26	5.61
	6/24/2003		9.35	3.95	5.40		9.26	5.31
	7/18/2003		9.35	3.50	5.85		9.26	5.76
	8/2/2003		9.35	3.53	5.82		9.26	5.73
	9/22/2003		9.35	3.33	6.02		9.26	5.93
	10/11/2003		9.35	3.59	5.76		9.26	5.67
	11/22/2003		9.35	3.28	6.07		9.26	5.98
	12/7/2003		9.35	2.84	6.51		9.26	6.42
	1/11/2004		9.35	3.19	6.16		9.26	6.07
2/8/2004	9.35	3.50	5.85	9.26	5.76			
3/6/2004	9.35	3.54	5.81	9.26	5.72			
4/10/2004	9.35	3.25	6.10	9.26	6.01			
GW-17a	2/7/2000	waste	10.22	6.13	4.09	10.08	10.22	4.09
	7/18/2000		10.22	6.48	3.74		10.20	3.72
	9/18/2000		10.22	4.77	5.45		10.19	5.42
	10/27/2000		10.22	4.84	5.38		10.19	5.35
	11/28/2000		10.22	4.67	5.55		10.18	5.51
	12/27/2000		10.22	4.91	5.31		10.18	5.27
	1/30/2001		10.22	4.91	5.31		10.18	5.27
	2/28/2001		10.22	4.55	5.67		10.17	5.62
	3/28/2001		10.22	4.30	5.92		10.17	5.87
	5/4/2001		10.22	4.51	5.71		10.16	5.65
	5/31/2001		10.22	4.56	5.66		10.16	5.60
	6/11/2001		10.22	4.55	5.67		10.16	5.61
	7/31/2001		10.22	4.66	5.56		10.15	5.49
	8/30/2001		10.22	4.77	5.45		10.15	5.38
	9/24/2001		10.22	4.80	5.42		10.15	5.35
	10/30/2001		10.22	4.78	5.44		10.14	5.36
	11/28/2001		10.22	4.62	5.60		10.14	5.52

**Table 4
Groundwater and Leachate Elevations
MACLs Report
Oyster Point Landfill
South San Francisco, California**

Well Designation	Date Measured	Screened Lithology	Original TOC Elevation (ft. MLLW)	Depth to Groundwater (feet)	Original GW Elevation (ft. MLLW)	TOC Elevation on 2/21/2003 (ft. MLLW)	Adjusted TOC Elevations (ft. MLLW)	New GW Elevation (ft. MLLW)	
GW-17a (Continued)	12/26/2001		10.22	4.62	5.60		10.13	5.51	
	1/7/2002		10.22	4.27	5.95		10.13	5.86	
	2/15/2002		10.22	4.24	5.98		10.13	5.89	
	3/18/2002		10.22	4.34	5.88		10.12	5.78	
	4/30/2002		10.22	4.23	5.99		10.12	5.89	
	5/30/2002		10.22	4.29	5.93		10.12	5.83	
	6/19/2002		10.22	4.28	5.94		10.11	5.83	
	7/14/2002		10.22	4.49	5.73		10.11	5.62	
	8/10/2002		10.22	4.51	5.71		10.11	5.60	
	9/21/2002		10.22	4.70	5.52		10.10	5.40	
	10/26/2002		10.22	4.72	5.50		10.10	5.38	
	11/16/2002		10.22	4.77	5.45		10.09	5.32	
	12/13/2002		10.22	4.78	5.44		10.09	5.31	
	1/11/2003		10.22	4.57	5.65		10.09	5.52	
	2/9/2003		10.22	4.31	5.91		10.08	5.77	
	3/13/2003		10.22	4.17	6.05		10.08	5.91	
	4/19/2003		10.22	4.27	5.95		10.08	5.81	
	5/23/2003		10.22	4.14	6.08		10.08	5.94	
	6/24/2003		10.22	4.45	5.77		10.08	5.63	
	7/18/2003		10.22	4.37	5.85		10.08	5.71	
	8/2/2003		10.22	4.39	5.83		10.08	5.69	
	9/22/2003		10.22	4.44	5.78		10.08	5.64	
	10/11/2003		10.22	4.56	5.66		10.08	5.52	
	11/22/2003		10.22	4.63	5.59		10.08	5.45	
	12/7/2003		10.22	4.60	5.62		10.08	5.48	
	1/11/2004		10.22	4.19	6.03		10.08	5.89	
	2/8/2004		10.22	4.19	6.03		10.08	5.89	
	3/6/2004		10.22	4.17	6.05		10.08	5.91	
	4/10/2004		10.22	4.00	6.22		10.08	6.08	
	MW-5	2/7/2000	waste	22.45	16.90	5.55	22.44	22.45	5.55
		7/18/2000		22.45	17.15	5.30		22.45	5.30
		9/18/2000		22.45	17.27	5.18		22.45	5.18
		10/27/2000		22.45	17.36	5.09		22.45	5.09
		11/28/2000		22.45	17.25	5.20		22.45	5.20
		12/27/2000		22.45	16.77	5.68		22.45	5.68
		1/30/2001		22.45	17.14	5.31		22.45	5.31
		2/28/2001		22.45	16.18	6.27		22.45	6.27
		3/28/2001		22.45	16.35	6.10		22.45	6.10
		5/4/2001		22.45	16.83	5.62		22.45	5.62
		5/31/2001		22.45	17.08	5.37		22.45	5.37
		6/11/2001		22.45	17.08	5.37		22.45	5.37
		7/31/2001		22.45	17.31	5.14		22.45	5.14
		8/30/2001		22.45	17.29	5.16		22.44	5.15
		9/24/2001		22.45	17.34	5.11		22.44	5.10
		10/30/2001		22.45	17.33	5.12		22.44	5.11
		11/28/2001		22.45	17.27	5.18		22.44	5.17
		12/26/2001		22.45	16.42	6.03		22.44	6.02
		2/15/2002		22.45	16.46	5.99		22.44	5.98
3/18/2002			22.45	16.64	5.81		22.44	5.80	
4/30/2002			22.45	16.81	5.64		22.44	5.63	
5/30/2002			22.45	16.89	5.56		22.44	5.55	
6/19/2002			22.45	17.06	5.39		22.44	5.38	
7/14/2002			22.45	17.20	5.25		22.44	5.24	
8/10/2002			22.45	17.30	5.15		22.44	5.14	
9/21/2002			22.45	17.42	5.03		22.44	5.02	
10/26/2002			22.45	17.47	4.98		22.44	4.97	
11/16/2002			22.45	17.40	5.05		22.44	5.04	
12/13/2002			22.45	17.54	4.91		22.44	4.90	
1/11/2003			22.45	16.17	6.28		22.44	6.27	
2/8/2003			22.45	16.46	5.99		22.44	5.98	
3/13/2003			22.45	16.68	5.77		22.44	5.76	
4/19/2003			22.45	16.85	5.60		22.44	5.59	
5/23/2003			22.45	16.86	5.59		22.44	5.58	
6/24/2003			22.45	17.01	5.44		22.44	5.43	
7/18/2003			22.45	17.08	5.37		22.44	5.36	
8/2/2003			22.45	17.05	5.40		22.44	5.39	
9/22/2003			22.45	17.05	5.40		22.44	5.39	
10/11/2003			22.45	17.22	5.23		22.44	5.22	
11/22/2003			22.45	17.34	5.11		22.44	5.10	
12/7/2003			22.45	17.35	5.10		22.44	5.09	
1/11/2004			22.45	16.06	6.39		22.44	6.38	

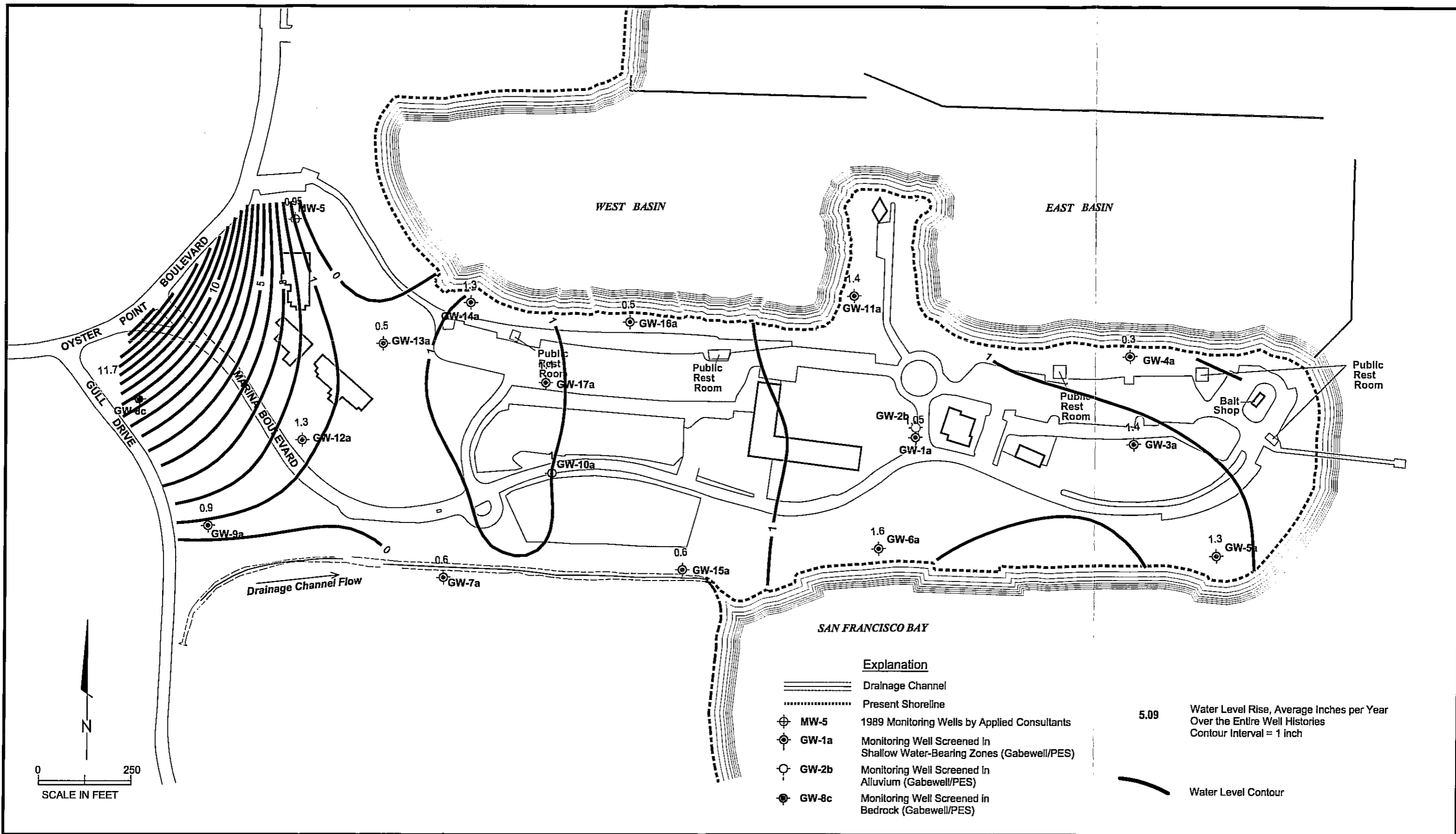
Table 4
Groundwater and Leachate Elevations
MACLs Report
Oyster Point Landfill
South San Francisco, California

Well Designation	Date Measured	Screened Lithology	Original TOC Elevation (ft. MLLW)	Depth to Groundwater (feet)	Original GW Elevation (ft. MLLW)	TOC Elevation on 2/21/2003 (ft. MLLW)	Adjusted TOC Elevations (ft. MLLW)	New GW Elevation (ft. MLLW)
MW-5 (Continued)	2/8/2004		22.45	16.34	6.11		22.44	6.10
	3/6/2004		22.45	15.89	6.56		22.44	6.55
	4/10/2004		22.45	16.47	5.98		22.44	5.97

Notes: TOC = top of casing
 GW = groundwater
 Wells surveyed to Mean Low Low Water (MLLW) as established by NOS Tidal Benchmark Disc 12-1975

Table 5
Calculated Rate of Water Level and Leachate Elevation Change
MACLs Report
Oyster Point Landfill
South San Francisco, California

Well Designation	Initial Date for Regression	Water Level Rise (inches/year)	Initial Date for Regression	Water Level Rise (inches/year)
GW-1a	November, 2000	1.05	January, 2002	2.1
GW-2b	August, 1999	-2.6	January, 2002	-2.8
GW-3a	September, 2000	1.4	January, 2002	1.5
GW-4a	August, 1999	0.3	January, 2002	0.8
GW-5a	March, 2001	1.3	January, 2002	0.7
GW-6a	September, 2001	1.6	January, 2002	1.3
GW-7a	February, 2001	0.6	January, 2002	0.2
GW-8c	August, 1999	11.7	January, 2002	7.9
GW-9a	December, 1999	0.9	January, 2002	3.5
GW-10a	August, 1999	1.0	January, 2002	0.6
GW-11a	November, 2000	1.4	January, 2002	0.1
GW-12a	February, 2000	1.3	January, 2002	0.1
GW-13a	September, 2000	0.5	January, 2002	0.5
GW-14a	July, 2000	1.3	January, 2002	1.0
GW-15a	February, 2000	0.6	January, 2002	0.4
GW-16a	February, 2000	0.5	January, 2002	0.4
GW-17a	September, 2000	1.1	January, 2002	0.3
MW-5	February, 2000	0.95	January, 2002	2.1



Explanation

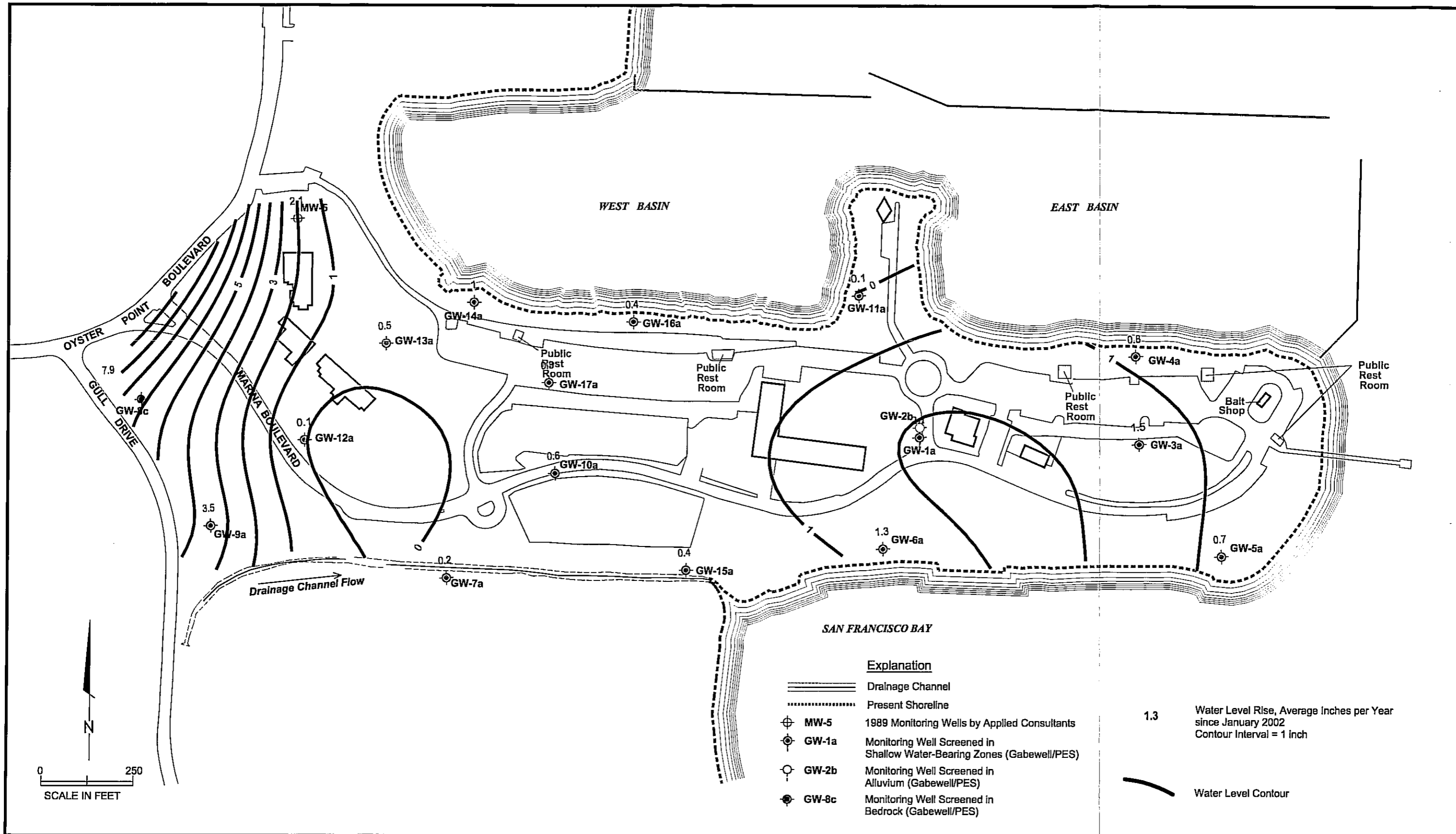
	Drainage Channel
	Present Shoreline
	MW-5 1989 Monitoring Wells by Applied Consultants
	GW-1a Monitoring Well Screened in Shallow Water-Bearing Zones (Gabewell/PES)
	GW-2b Monitoring Well Screened in Alluvium (Gabewell/PES)
	GW-8c Monitoring Well Screened in Bedrock (Gabewell/PES)

5.09 Water Level Rise, Average Inches per Year Over the Entire Well Histories
Contour Interval = 1 inch

Water Level Contour

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Contour Map of Calculated Rise in Water Elevations, Complete Data Set
 MACLs Report
 Oyster Point Landfill
 South San Francisco, California

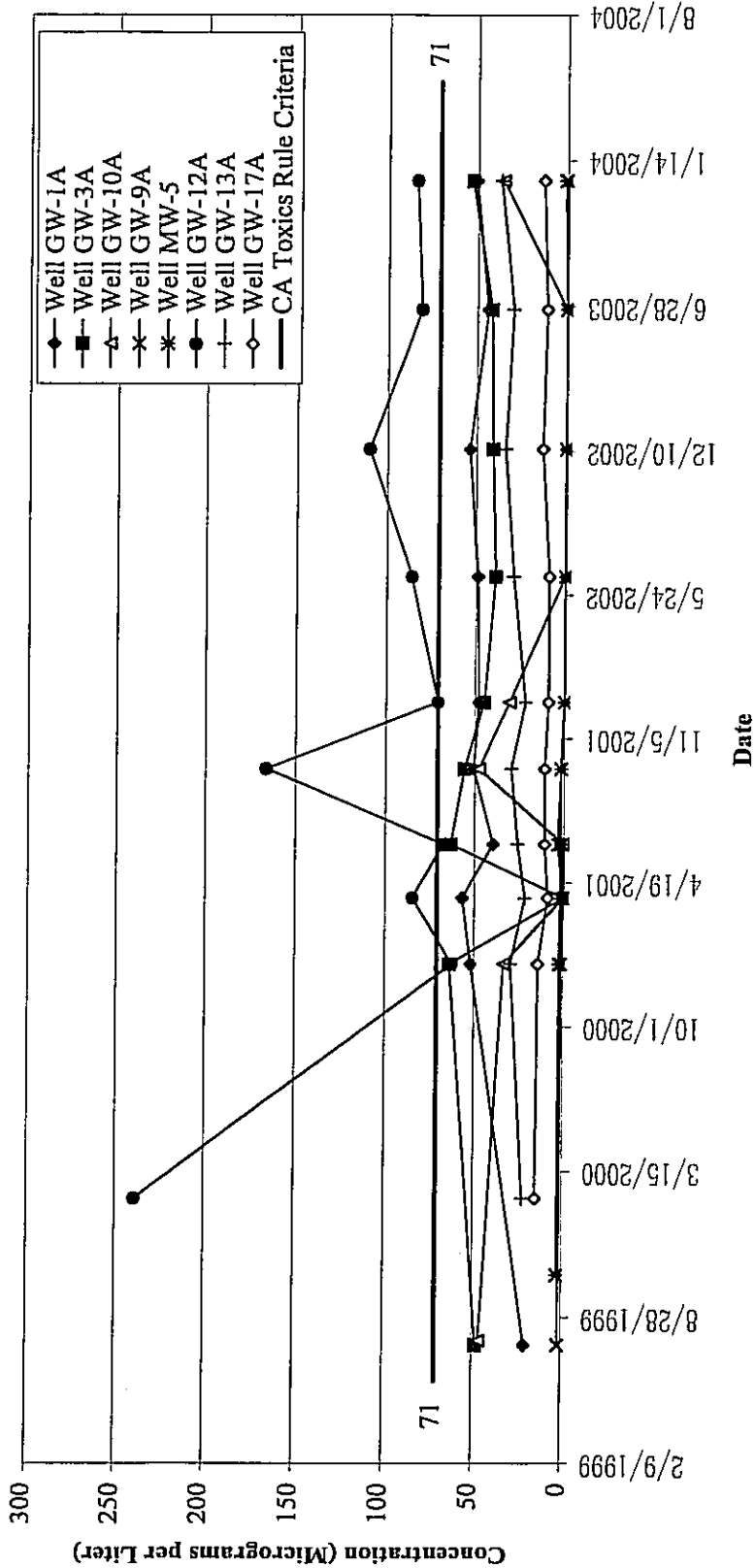


Contour Map of Calculated Rise in Water Elevations, January 2002 to Present
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BENZENE CONCENTRATIONS

Wells Monitoring Leachate



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 Engineering & Environmental Services
 For: **GABEWELL, INC.**

Figure 7a
 Benzene Concentrations in Wells Monitoring Leachate
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BENZENE CONCENTRATIONS

Perimeter and Background Monitoring Wells

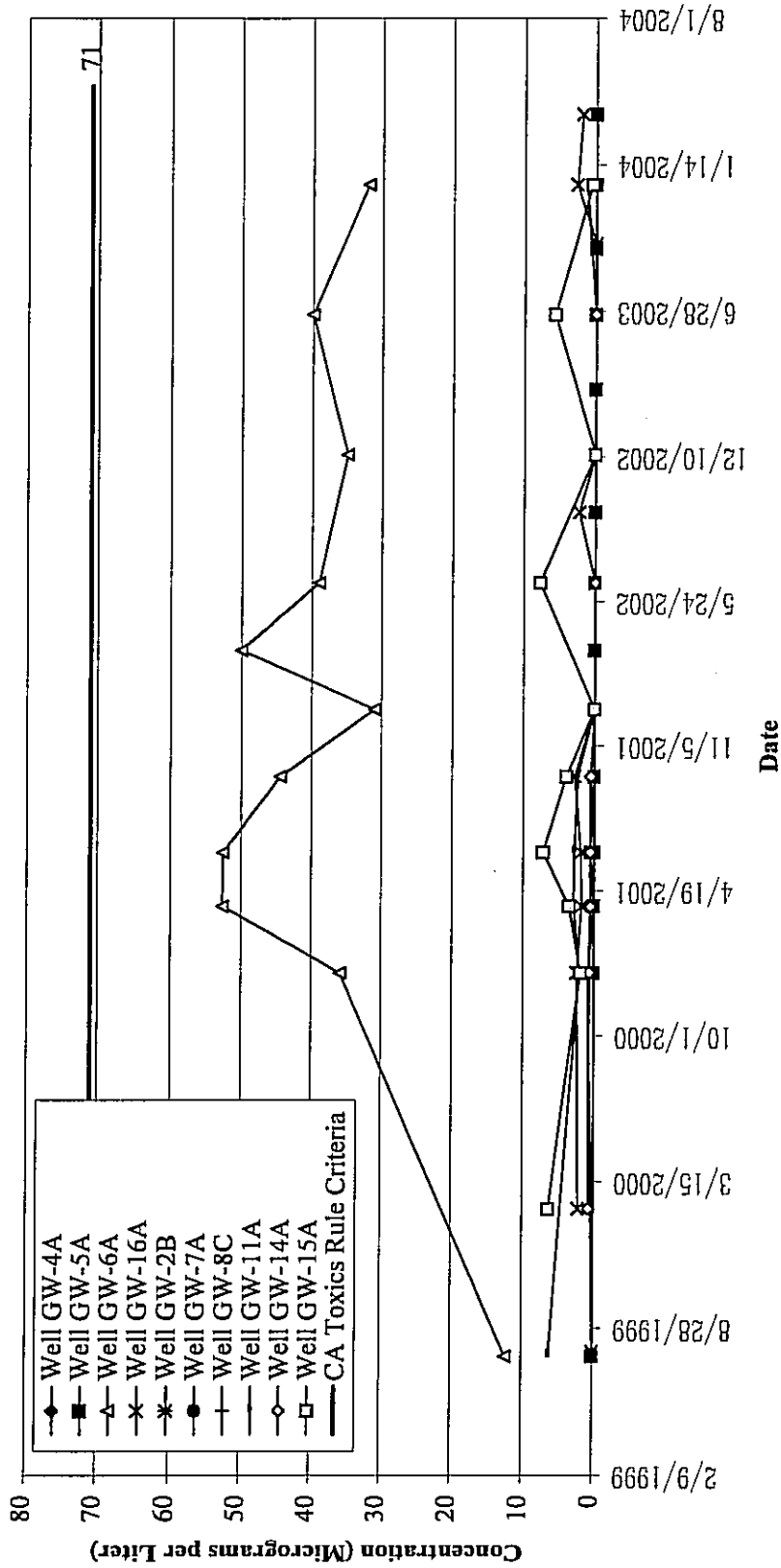


Figure 7b
Benzene Concentrations in Perimeter and Background Wells
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TOLUENE CONCENTRATIONS

Wells Monitoring Leachate

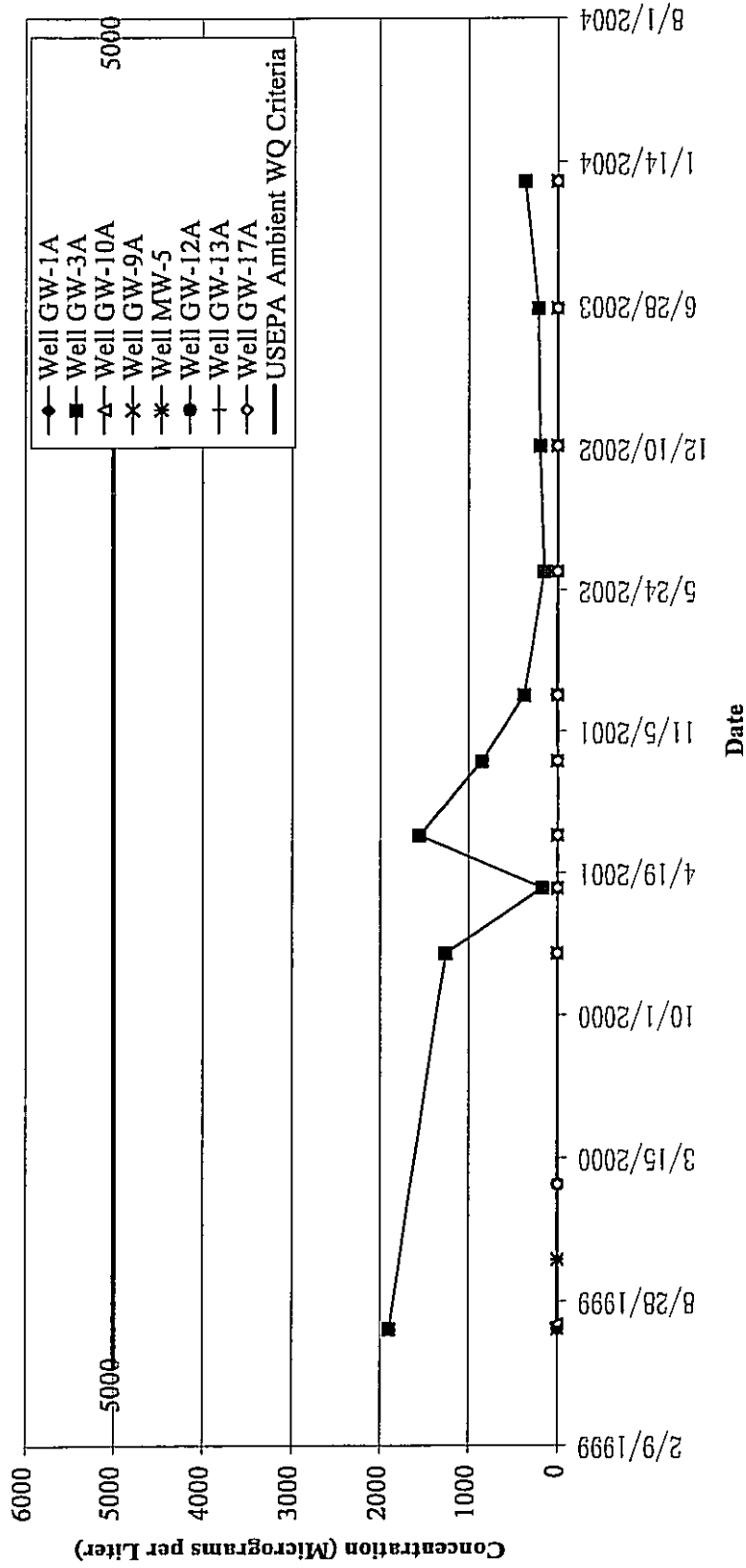


Figure 8a
 Toluene Concentrations in Wells Monitoring Leachate
 MACLS Report
 Oyster Point Landfill
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TOLUENE CONCENTRATIONS

Perimeter and Background Monitoring Wells

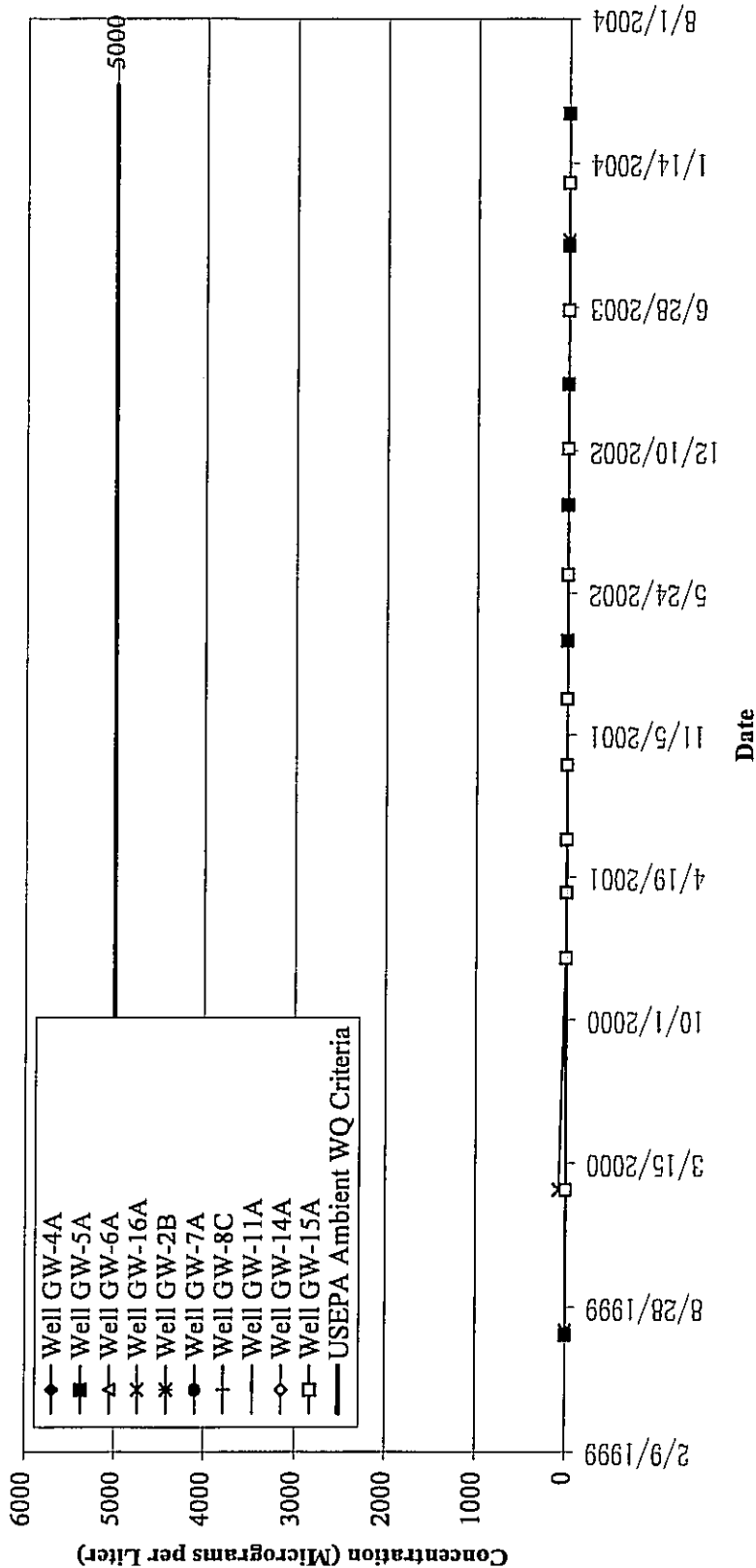


Figure 8b
Toluene Concentrations in Perimeter and Background Wells
 MACIs Report
 Oyster Point Landfill
 South San Francisco, California

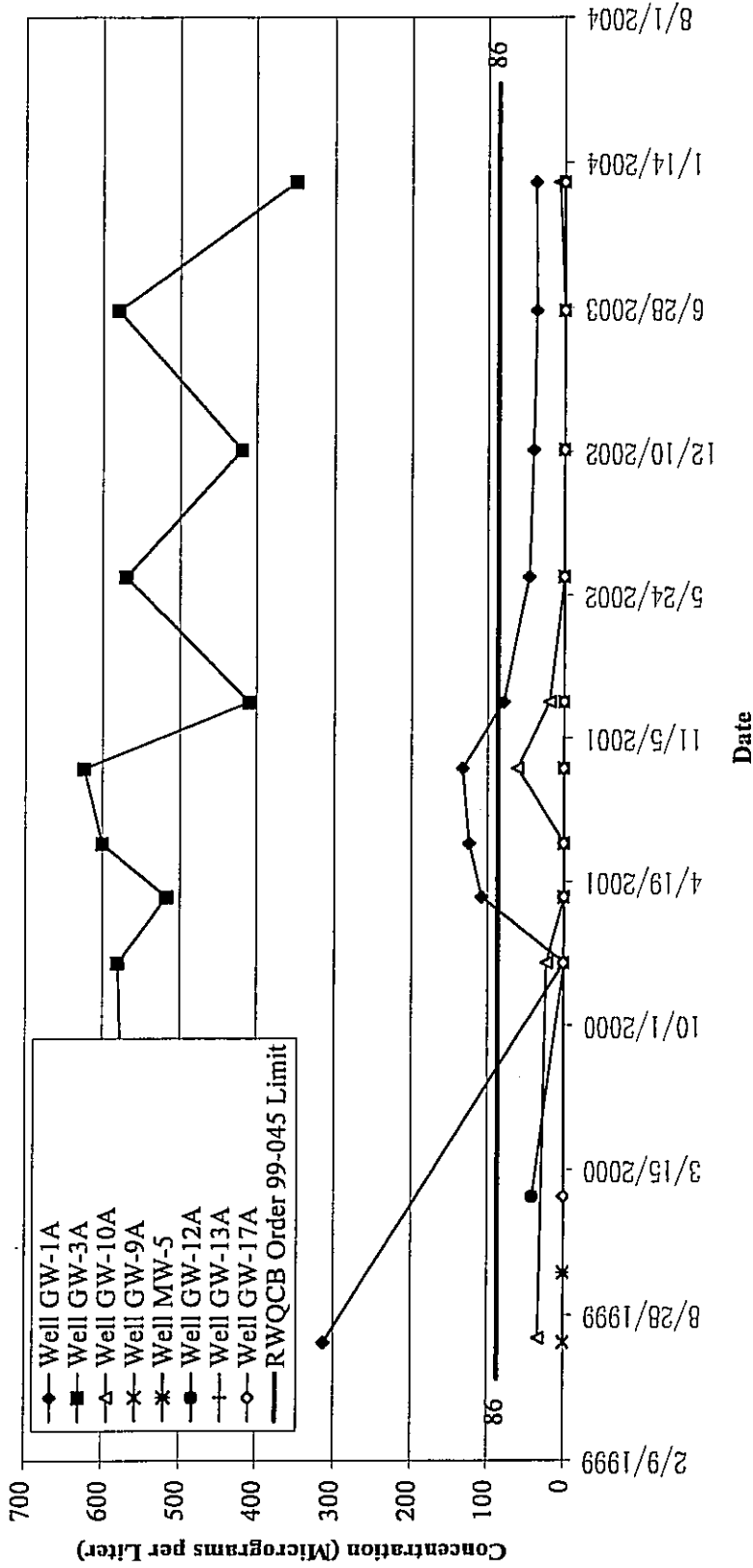
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ETHYLBENZENE CONCENTRATIONS

Wells Monitoring Leachate



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Figure 9a

Ethylbenzene Concentrations in Wells Monitoring Leachate

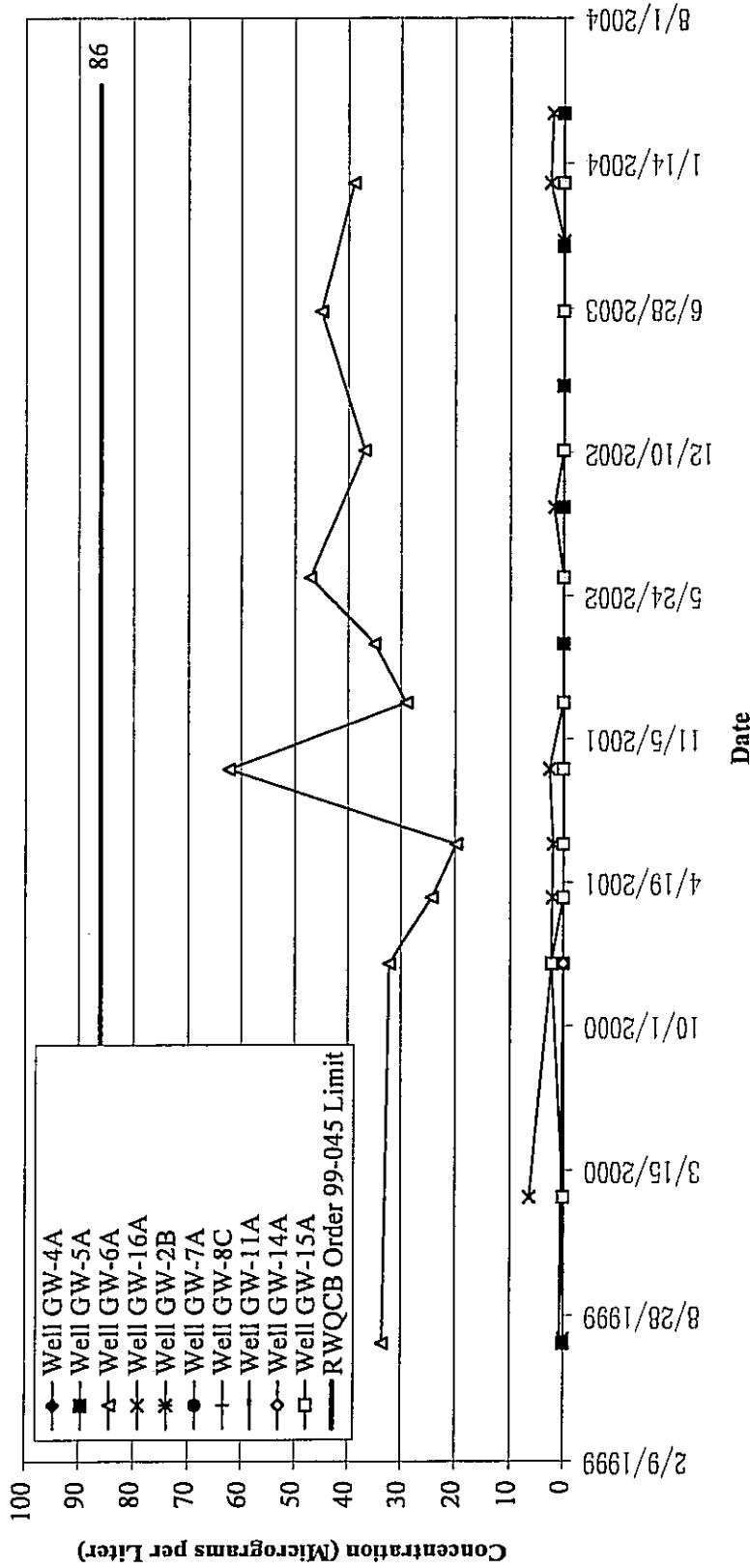
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ETHYLBENZENE CONCENTRATIONS

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Figure 9b

Ethylbenzene Concentrations in Perimeter and Background Wells

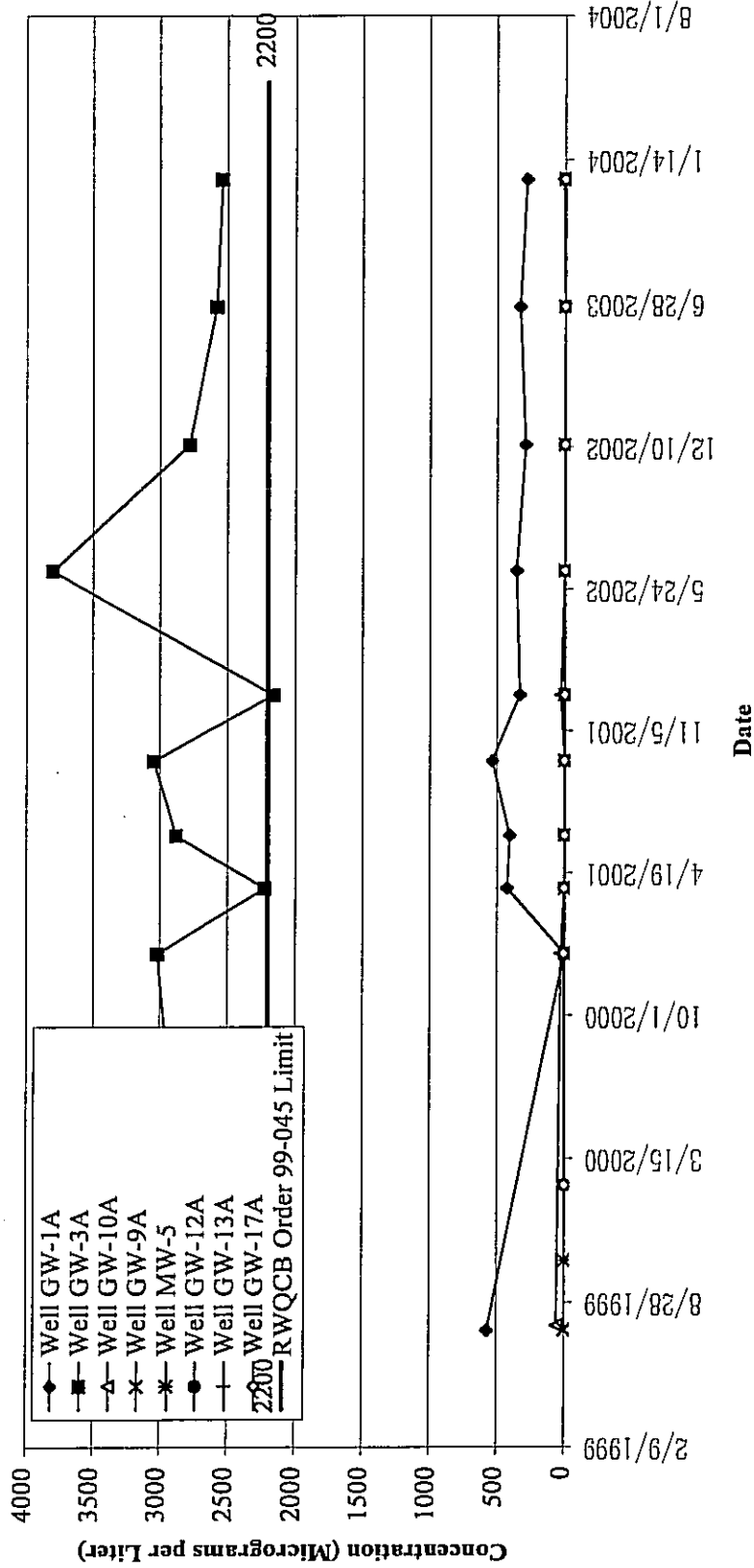
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TOTAL XYLENES CONCENTRATIONS

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Figure 10a

Total Xylenes Concentrations in Wells Monitoring Leachate

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Oyster Point Landfill

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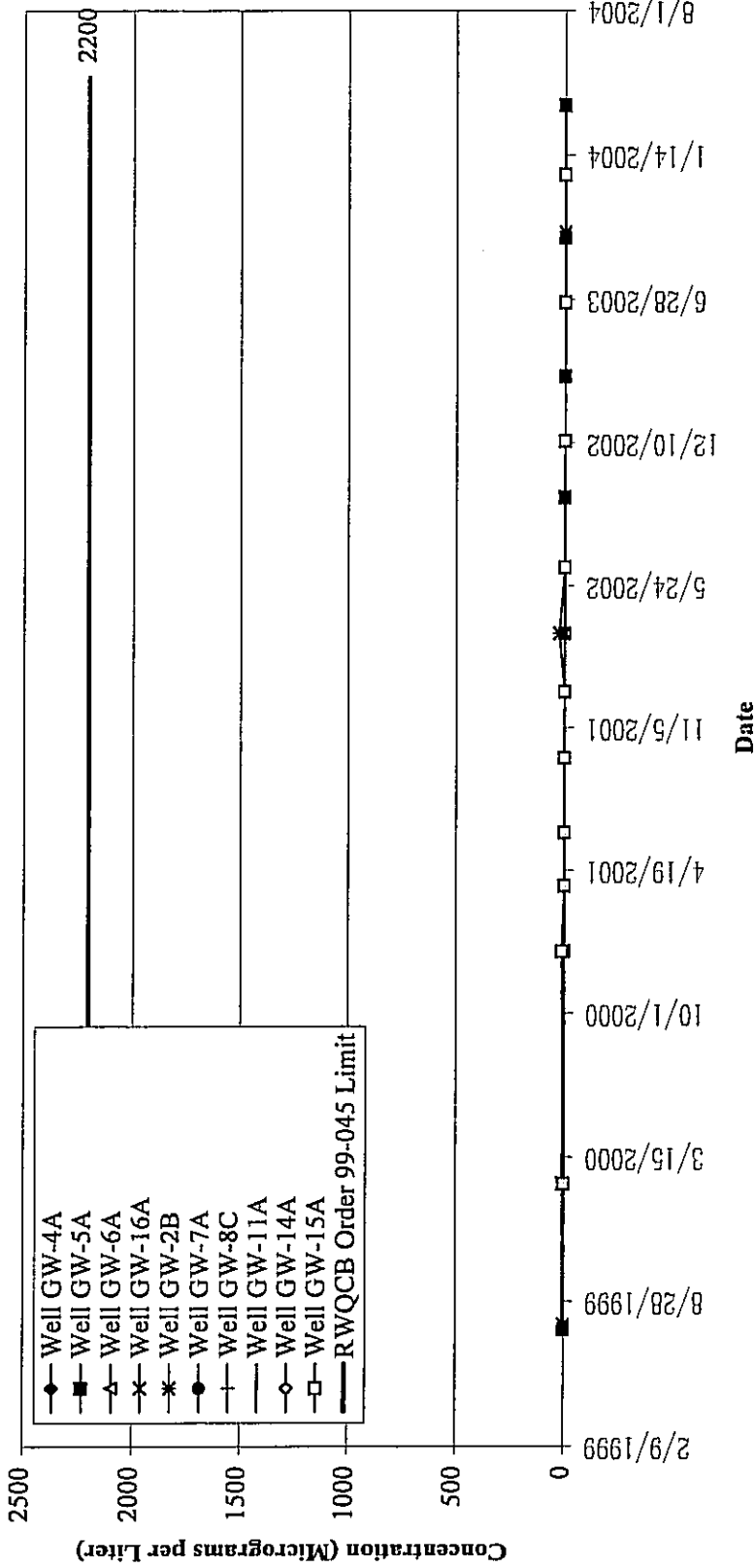
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TOTAL XYLENES CONCENTRATIONS

Perimeter and Background Monitoring Wells



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Figure 10b
 Total Xylenes Concentrations in Perimeter and Background Wells
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CHLOROBENZENE CONCENTRATIONS

Wells Monitoring Leachate

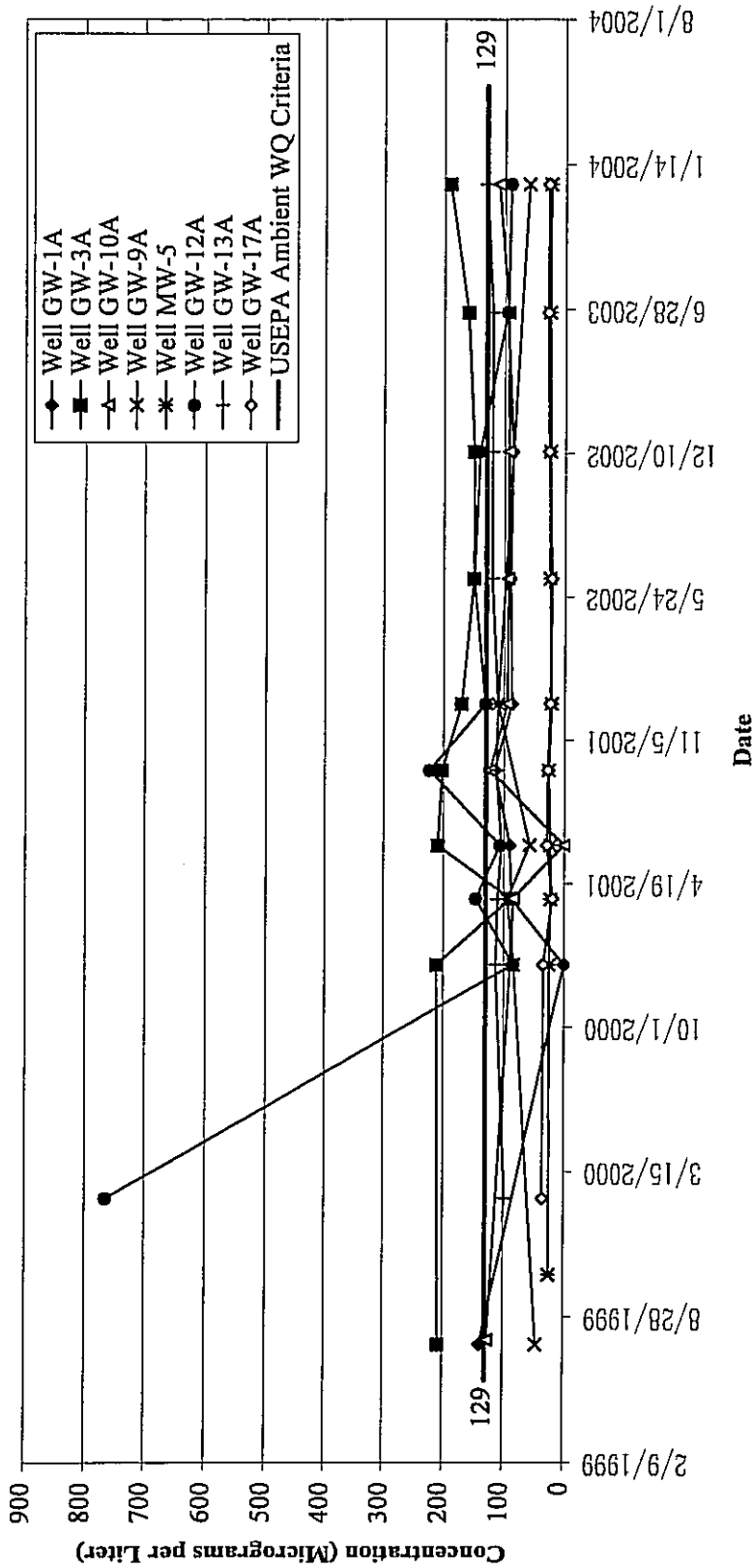


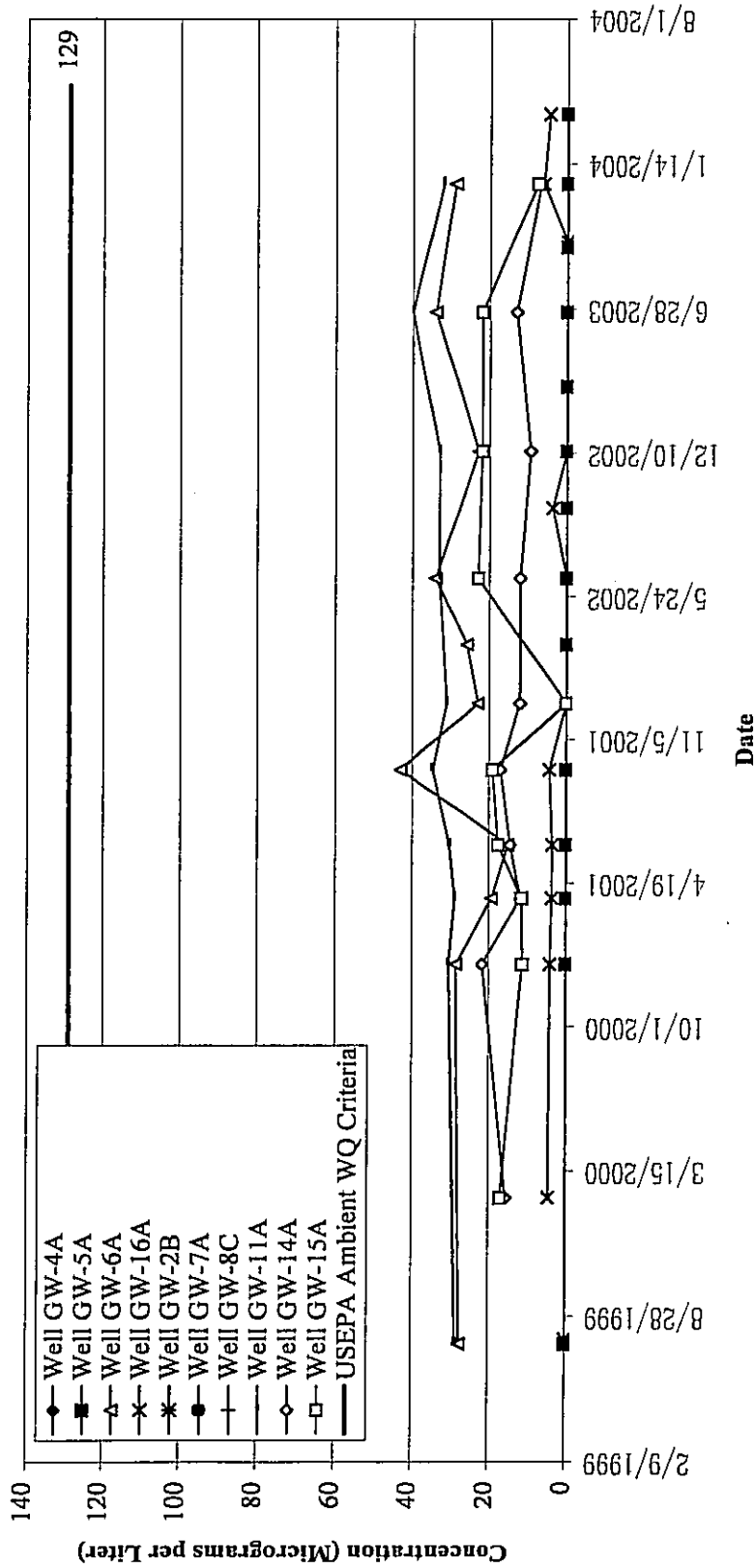
Figure 11a
Chlorobenzene Concentrations in Wells Monitoring Leachate
 MACLS Report
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CHLOROBENZENE CONCENTRATIONS

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Figure 11b
 Chlorobenzene Concentrations in Perimeter and Background Wells
 MACLs Report
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1,4-DICHLOROBENZENE CONCENTRATIONS

Wells Monitoring Leachate

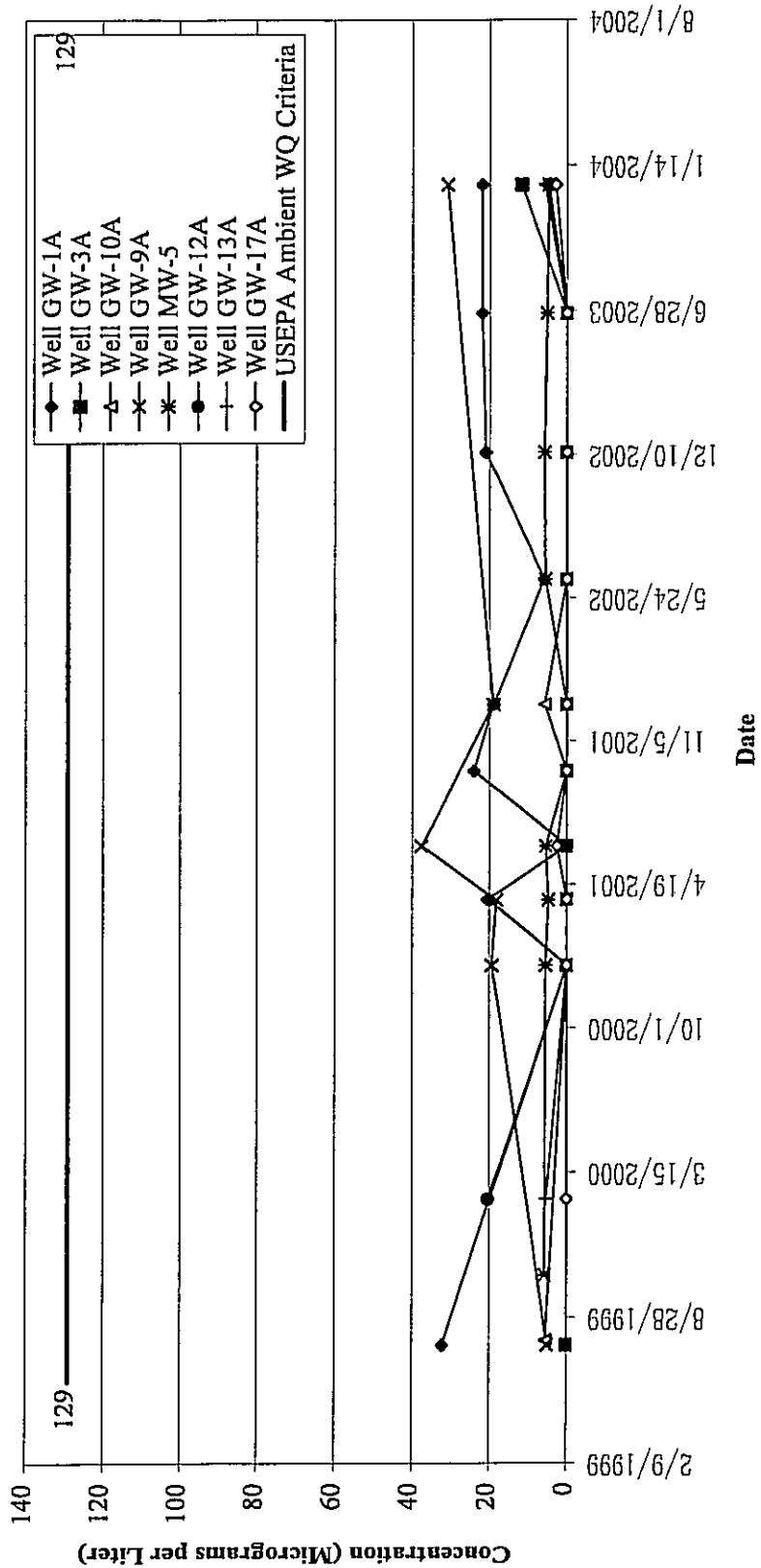


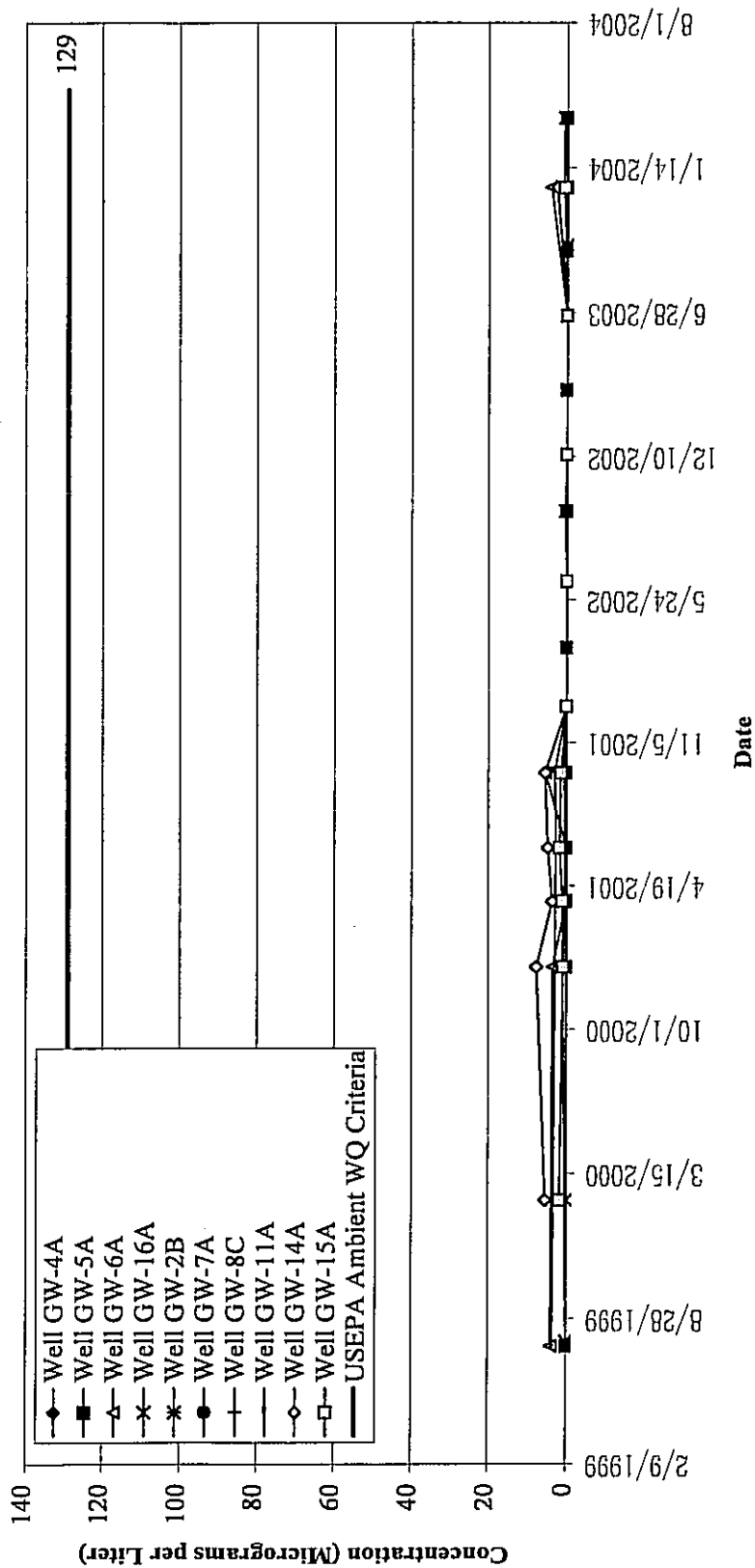
Figure 12a
 1,4-Dichlorobenzene Concentrations in Wells Monitoring Leachate
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1,4-DICHLOROBENZENE CONCENTRATIONS

Perimeter and Background Monitoring Wells



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Figure 12b

1,4-Dichlorobenzene Concentrations in Perimeter and Background Wells

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Oyster Point Landfill

South San Francisco, California

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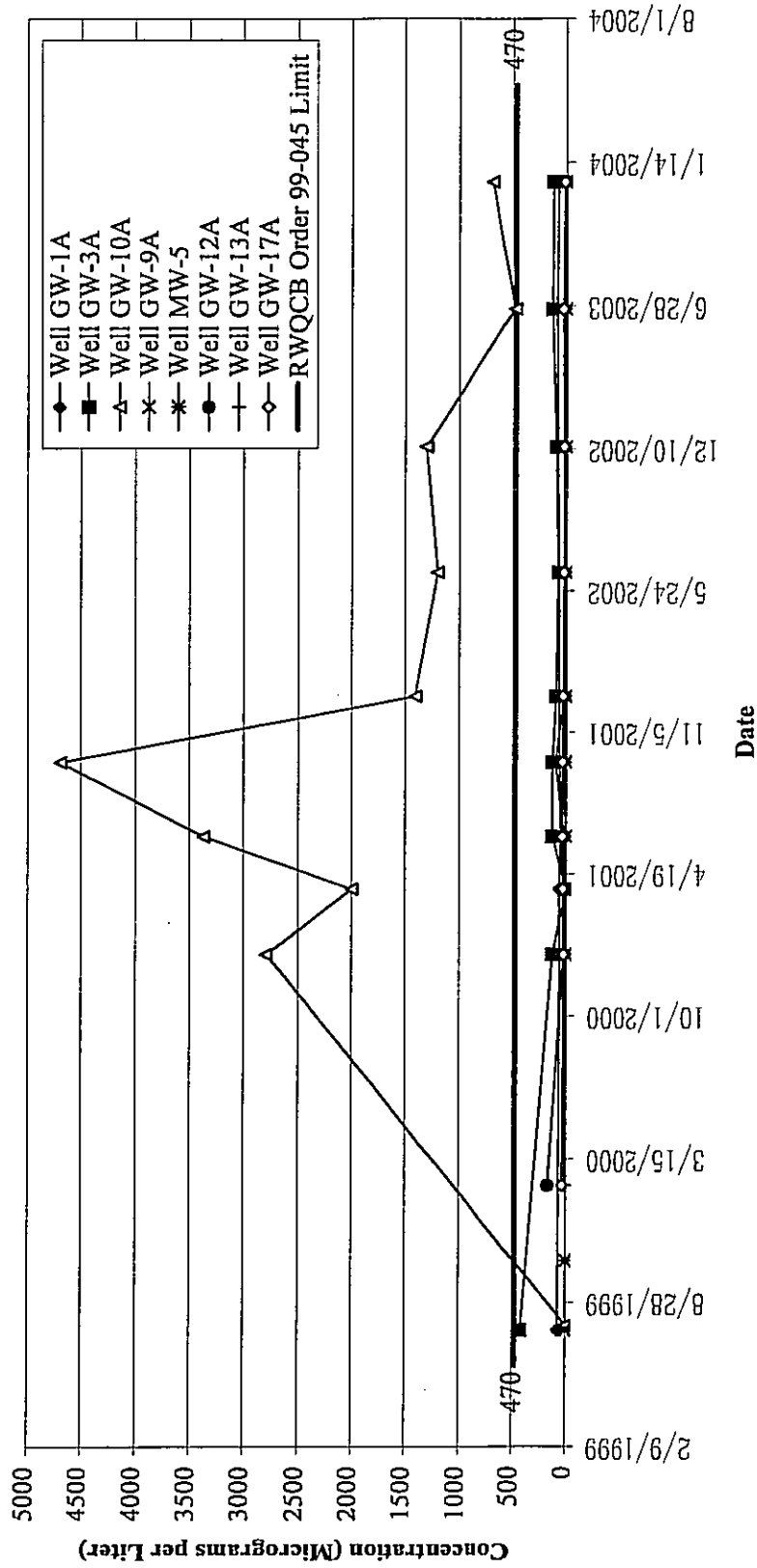
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NAPHTHALENE CONCENTRATIONS

Wells Monitoring Leachate



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Figure 13a

Naphthalene Concentrations in Wells Monitoring Leachate

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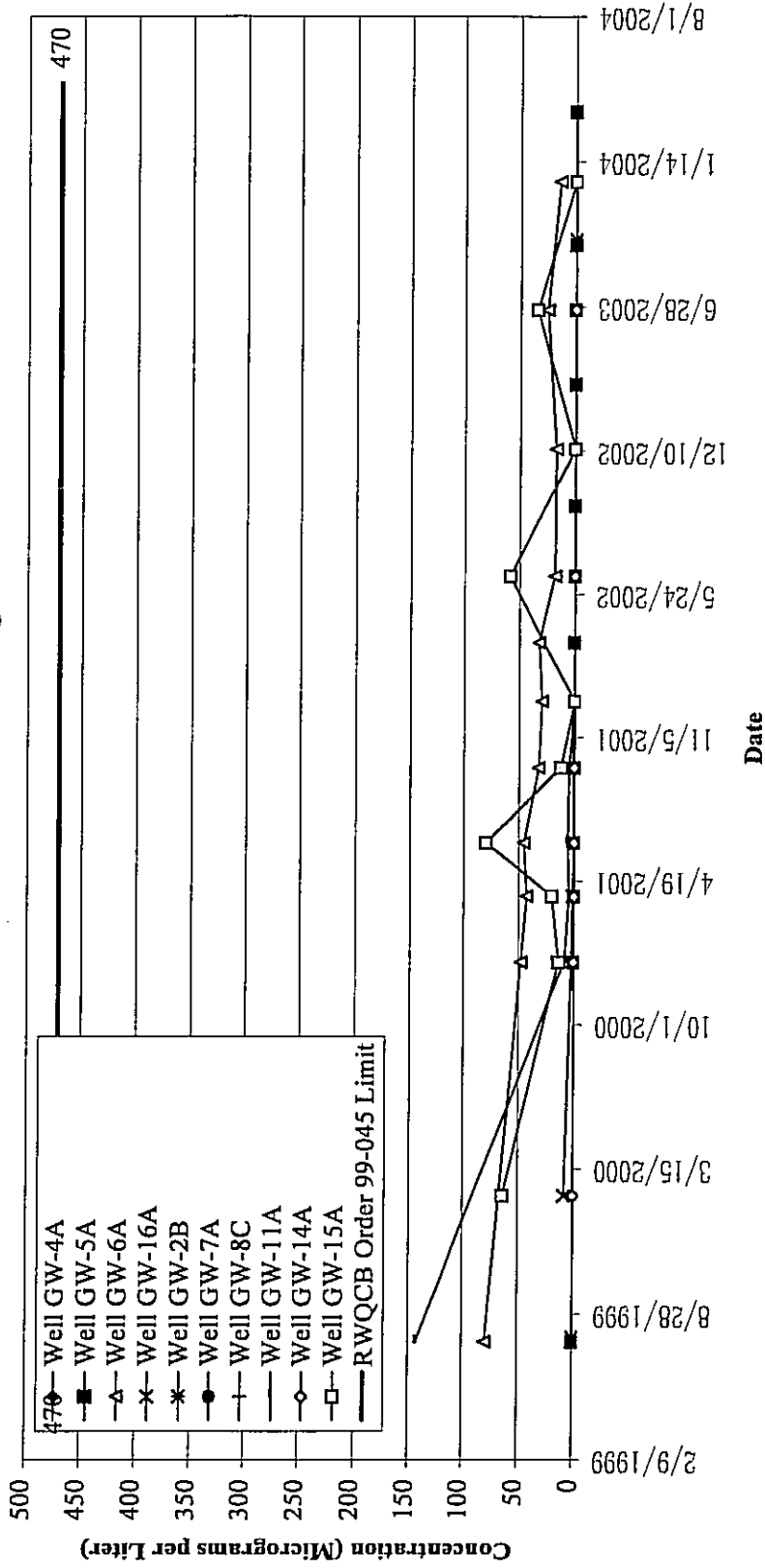
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NAPHTHALENE CONCENTRATIONS

Perimeter and Background Monitoring Wells



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Figure 13b
 Naphthalene Concentrations in Perimeter and Background Wells
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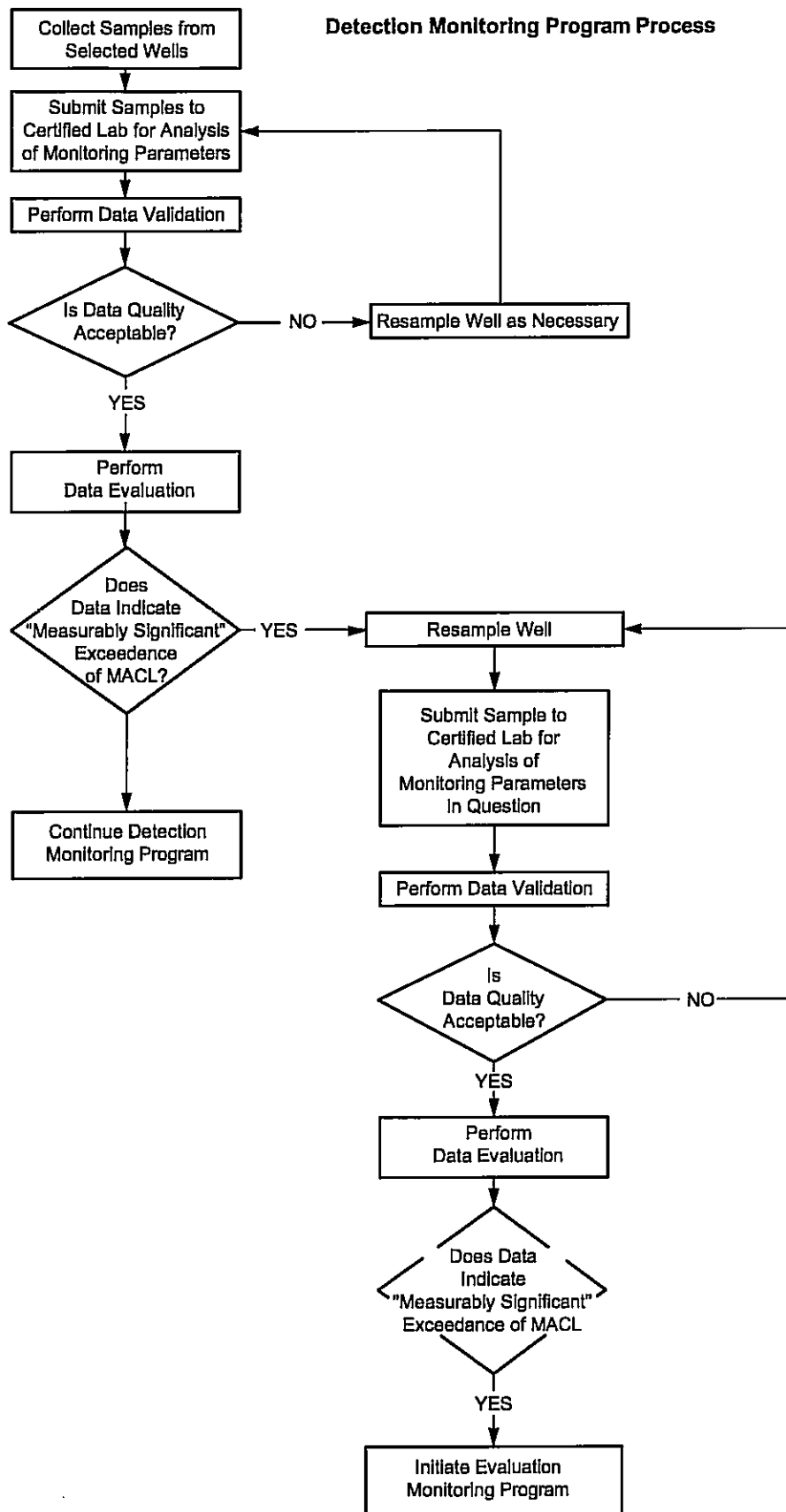
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Appendix A

Detection Monitoring Program Process



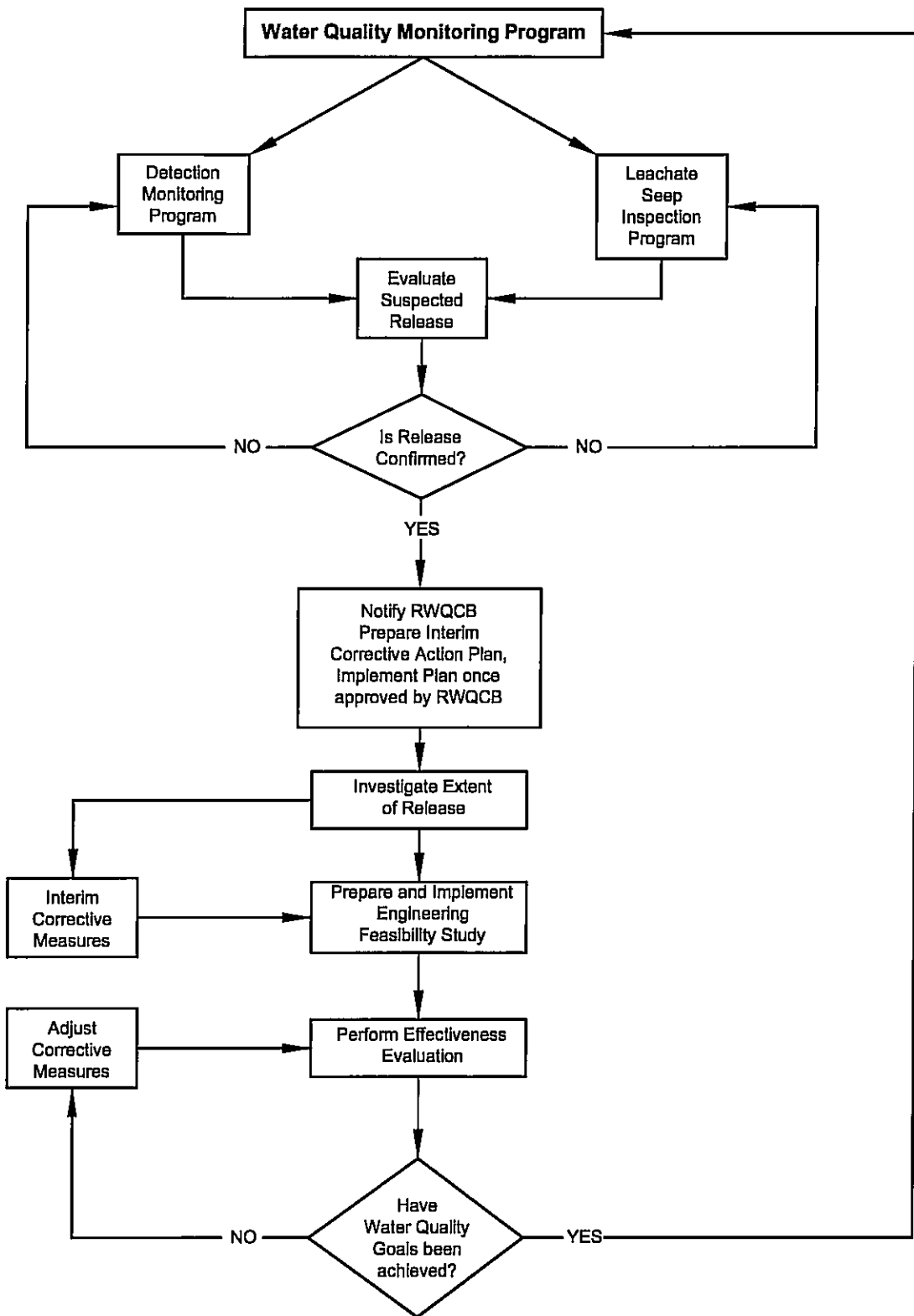
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Detection Monitoring Program Process
 Water Quality Monitoring Plan
 Oyster Point Landfill
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PLATE

4



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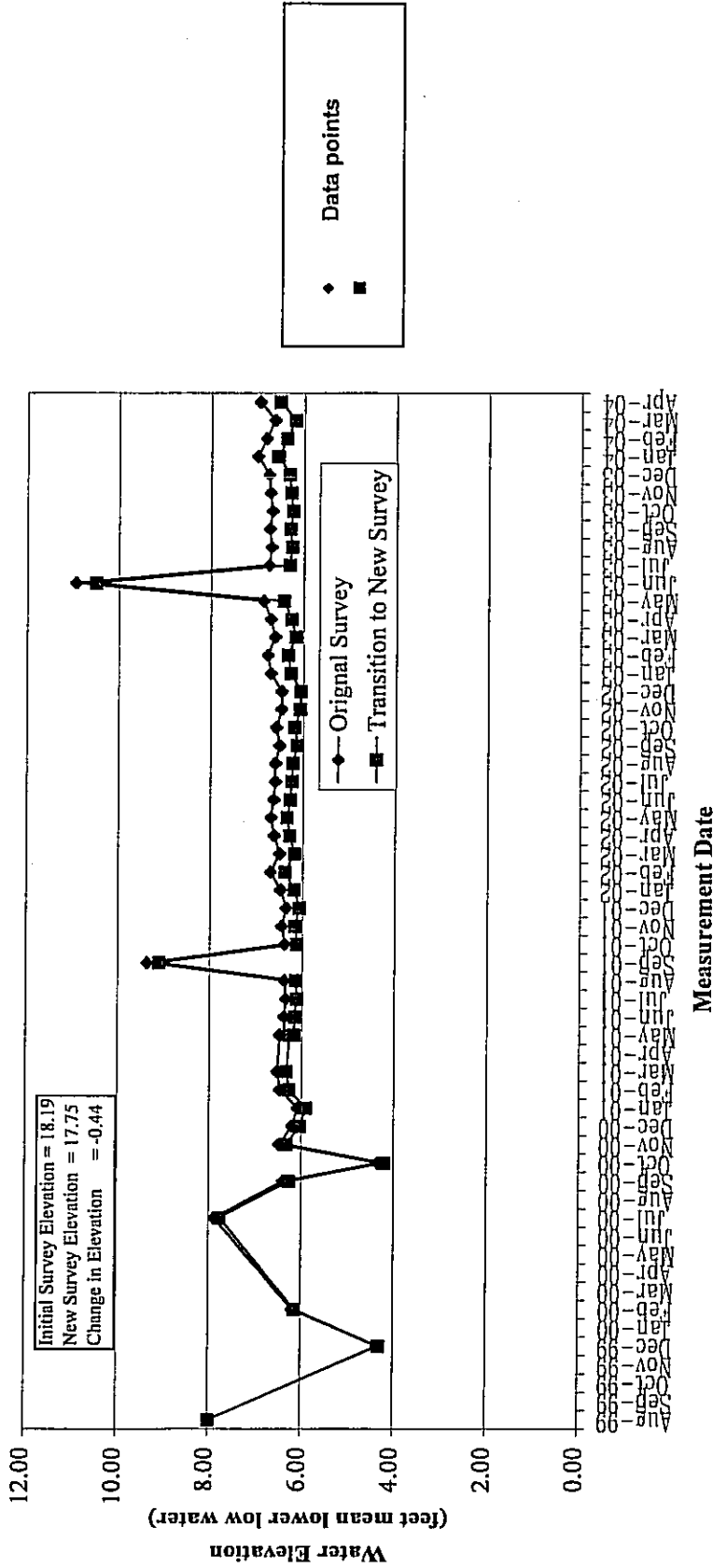
For:
GABEWELL, INC.

Leachate Management Plan
 Water Quality Monitoring Plan
 Oyster Point Landfill
 South San Francisco, California

PLATE

5

WELL GW-1a
Screened in Waste



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For:

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Figure 4a
Hydrograph for Well GW-1a
MACLS Report
Oyster Point Landfill
South San Francisco, California

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WELL GW-2b

Screened in Natural Water-Bearing Zone

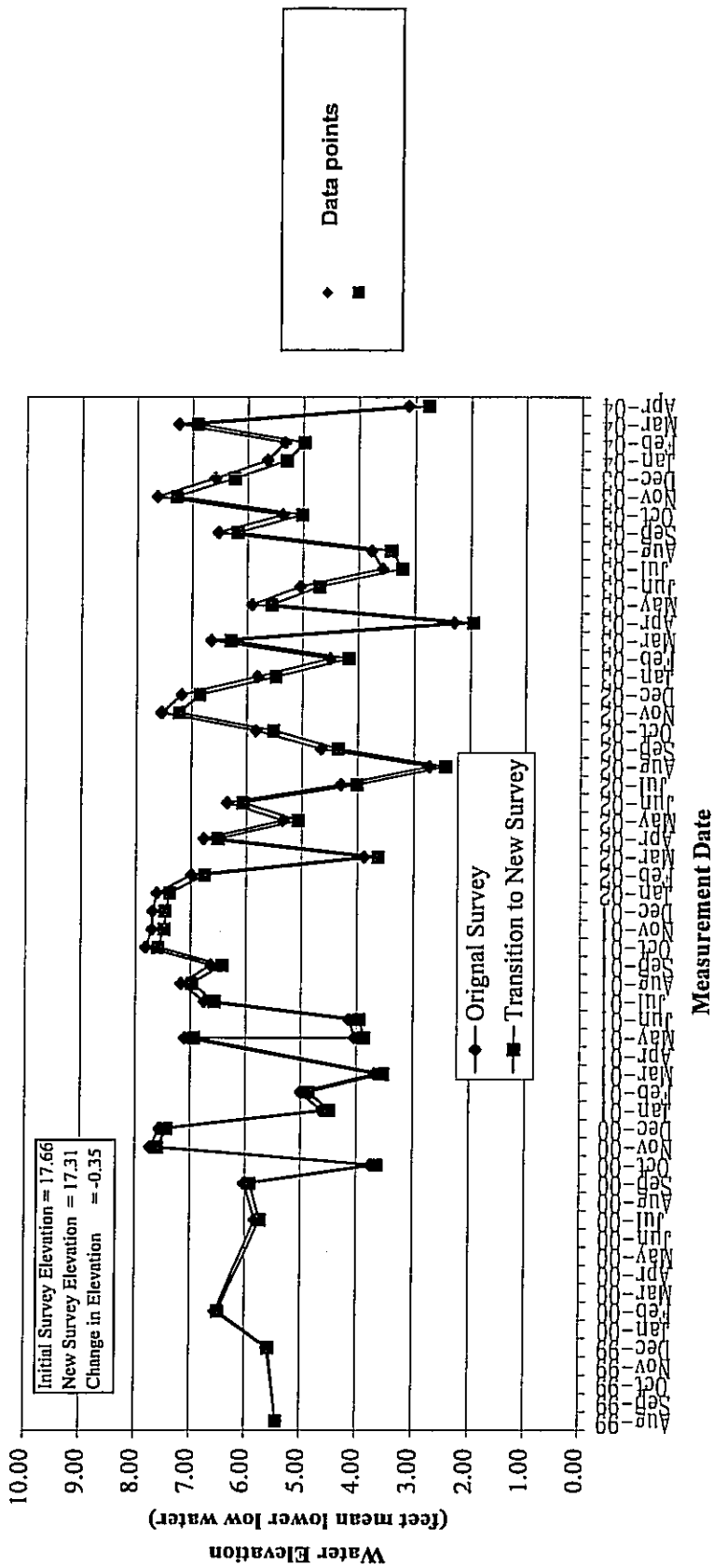
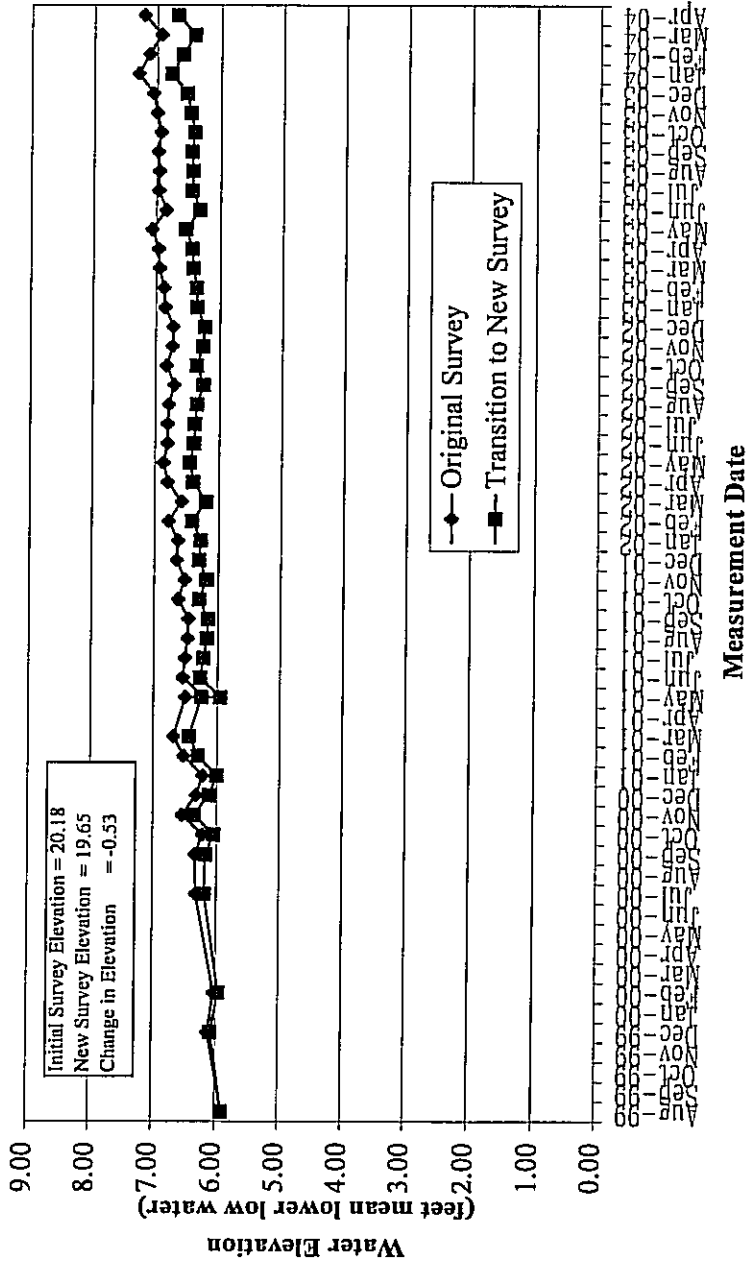


Figure 4b
 Hydrograph for Well GW-2b
 MACLs Report
 Oyster Point Landfill
 South San Francisco, California

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WELL GW-3a
Screened in Waste



◆ Data points
■

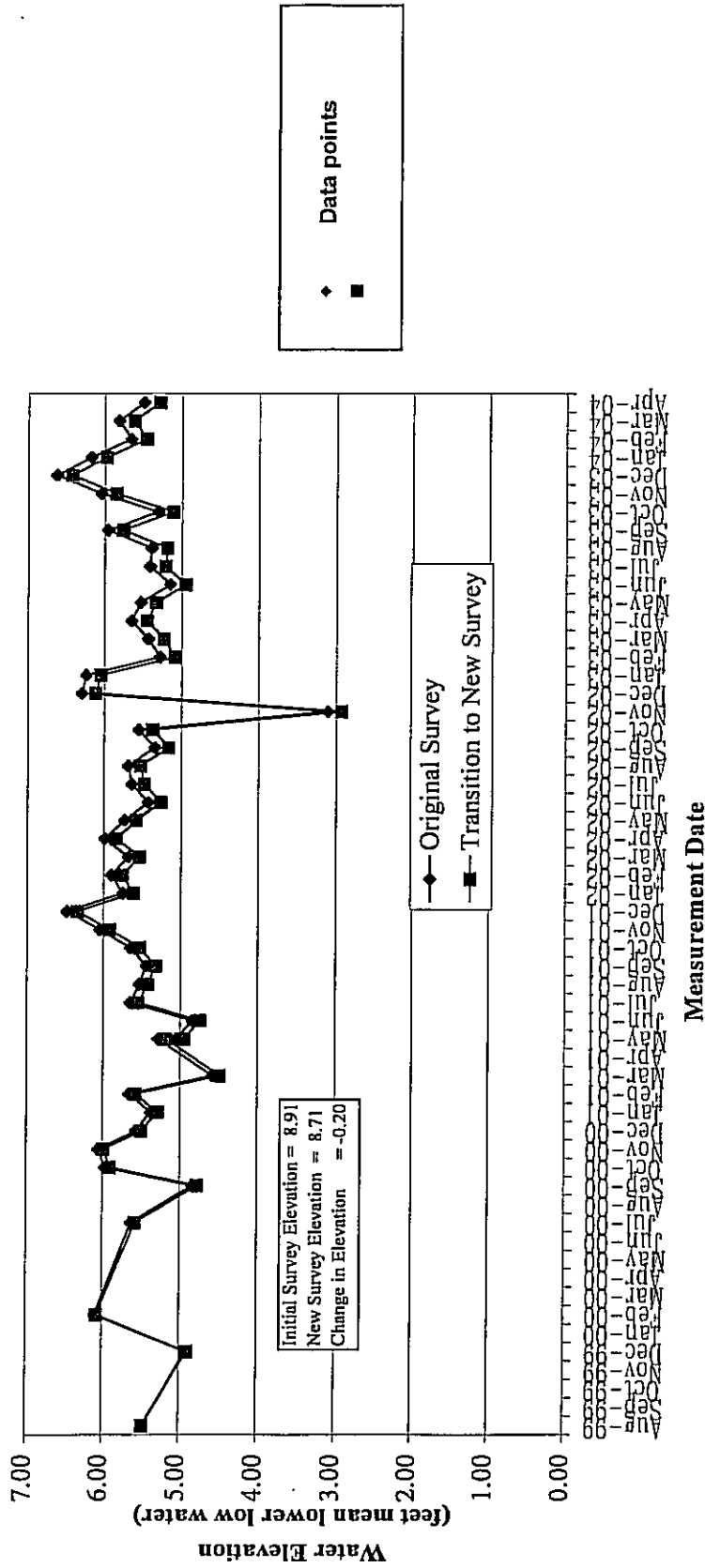


Prepared by:
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Engineering & Environmental Services
For:
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Figure 4c
Hydrograph for Well GW-3a
MACLS Report
Oyster Point Landfill
South San Francisco, California

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WELL GW-4a
Screened in Perimeter Berm



Prepared by:



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Engineering & Environmental Services

For:

GABEWELL, INC.

Figure 4d
Hydrograph for Well GW-4a
MACLs Report
Oyster Point Landfill
South San Francisco, California

650.002.01.020

MACLs Report Hydrographs.xls

AJA

J-04

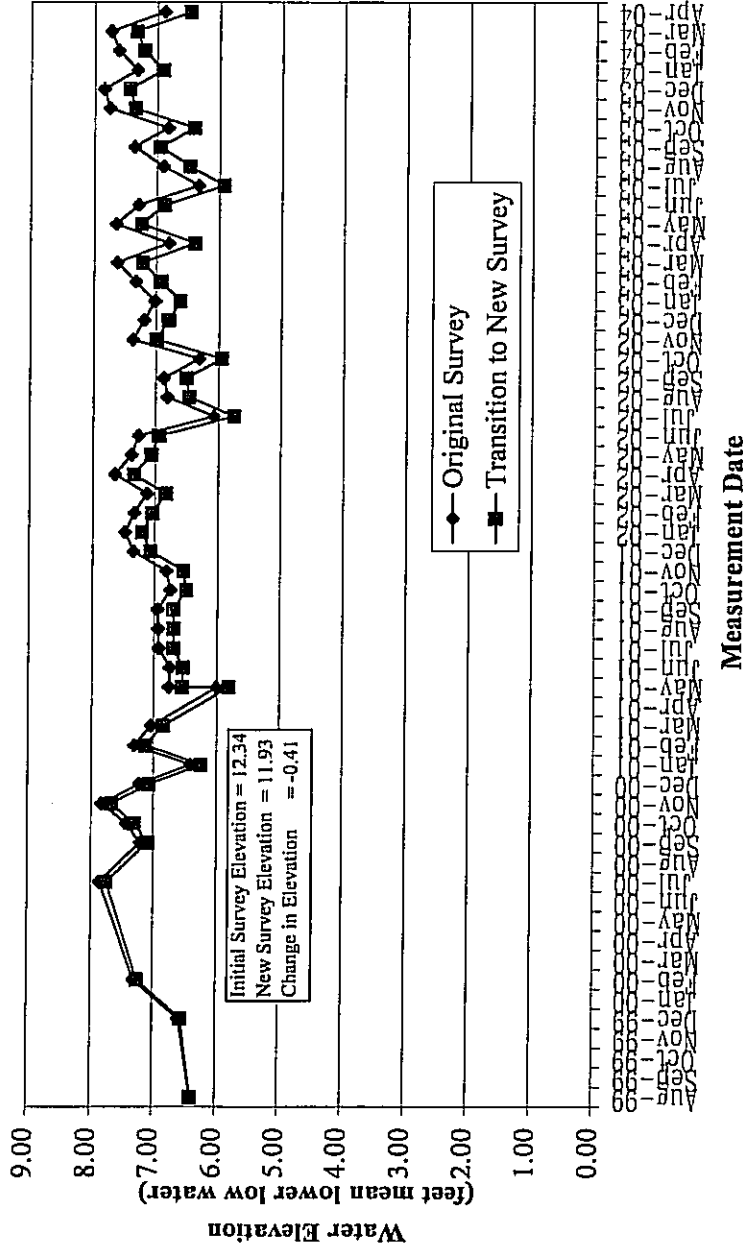
JOB NUMBER

DRAWING NUMBER

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DATE

WELL GW-5a
Screened in Perimeter Berm



Prepared by:



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For:

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Figure 4e
Hydrograph for Well GW-5a
MACLS Report
Oyster Point Landfill
South San Francisco, California

550.002.01.020
JOB NUMBER

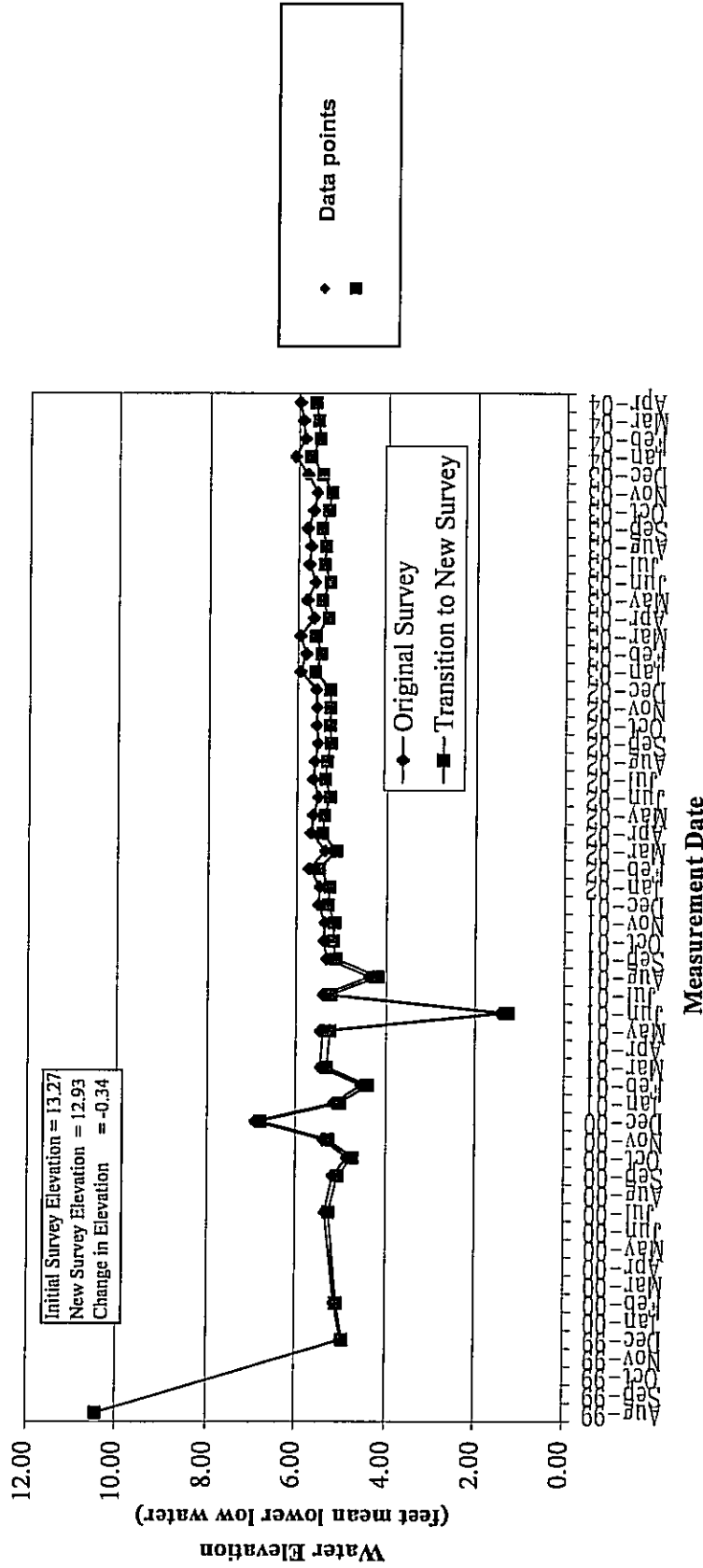
MACLS Report Hydrographs.xls
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WELL GW-6a

Screened in Perimeter Berm and Waste



Prepared by:



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For:

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Figure 4f
Hydrograph for Well GW-6a

MACLs Report
Oyster Point Landfill

WELL GW-7a

Screened in Natural Water-Bearing Zone

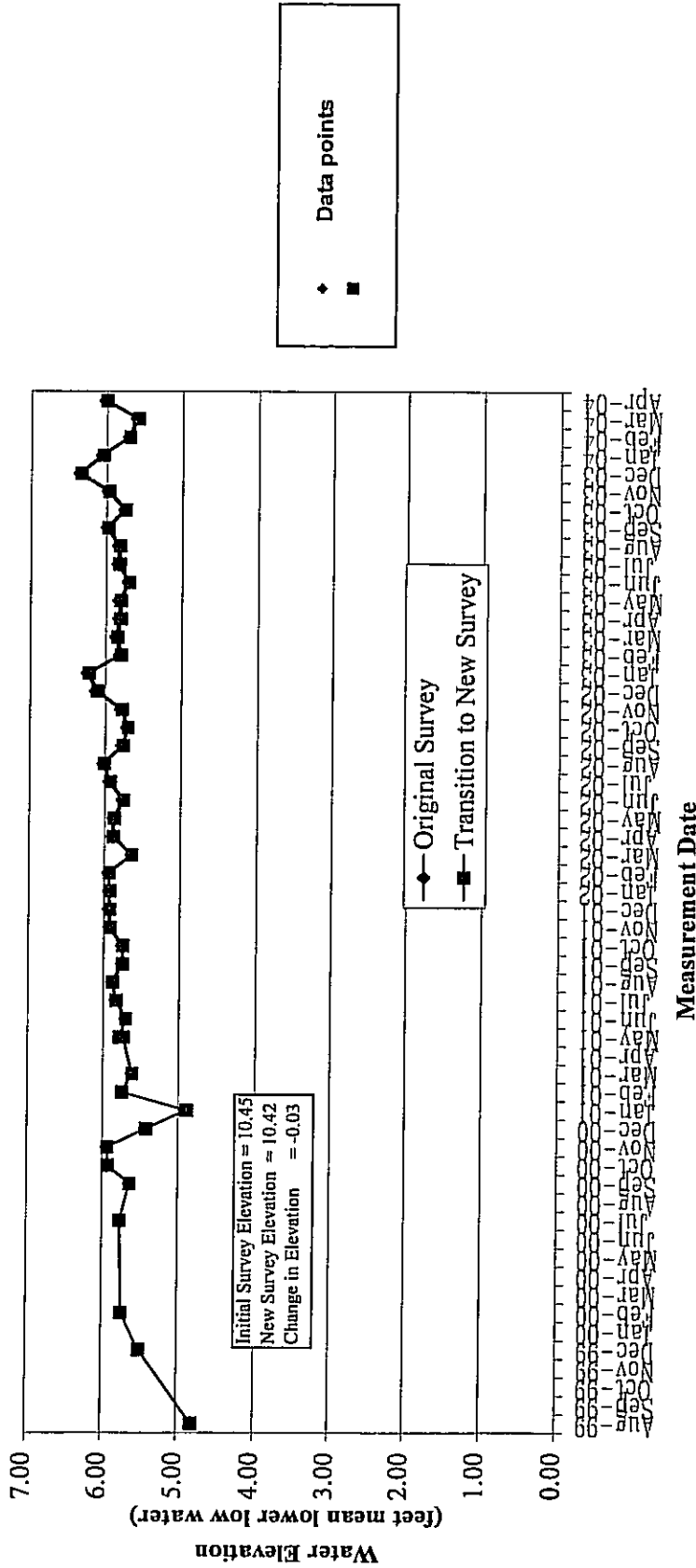


Figure 4g
Hydrograph for Well GW-7a
MACLS Report
Oyster Point Landfill
South San Francisco, California

Prepared by:
PES Environmental, Inc.
Engineering & Environmental Services
For:
GABEWELL, INC.

WELL GW-8c

Screened in Natural Water-Bearing Zone

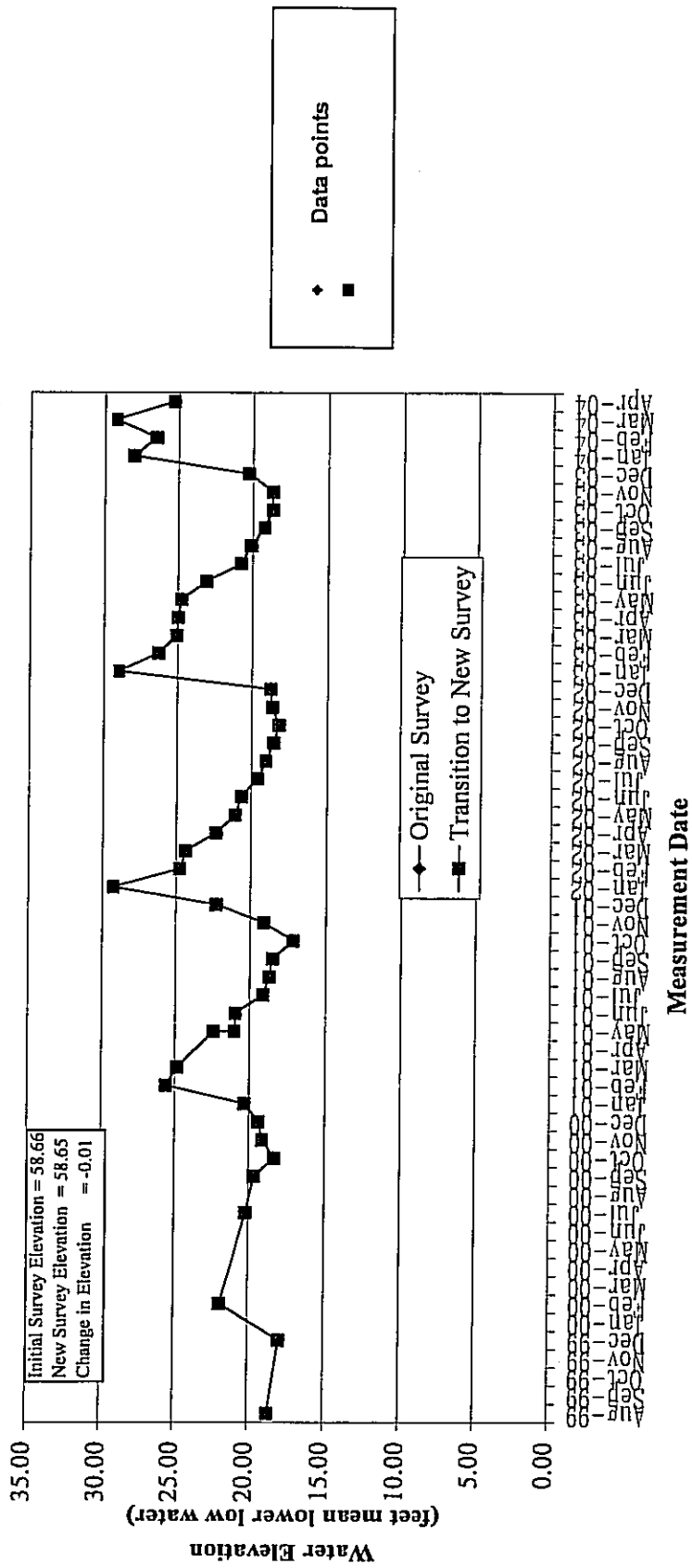


Figure 4h
 Hydrograph for Well GW-8c
 MACLs Report
 Oyster Point Landfill
 South San Francisco, California

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 Engineering & Environmental Services

For:
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WELL GW-9a

Screened in Shallow Water-Bearing Zone within Landfill

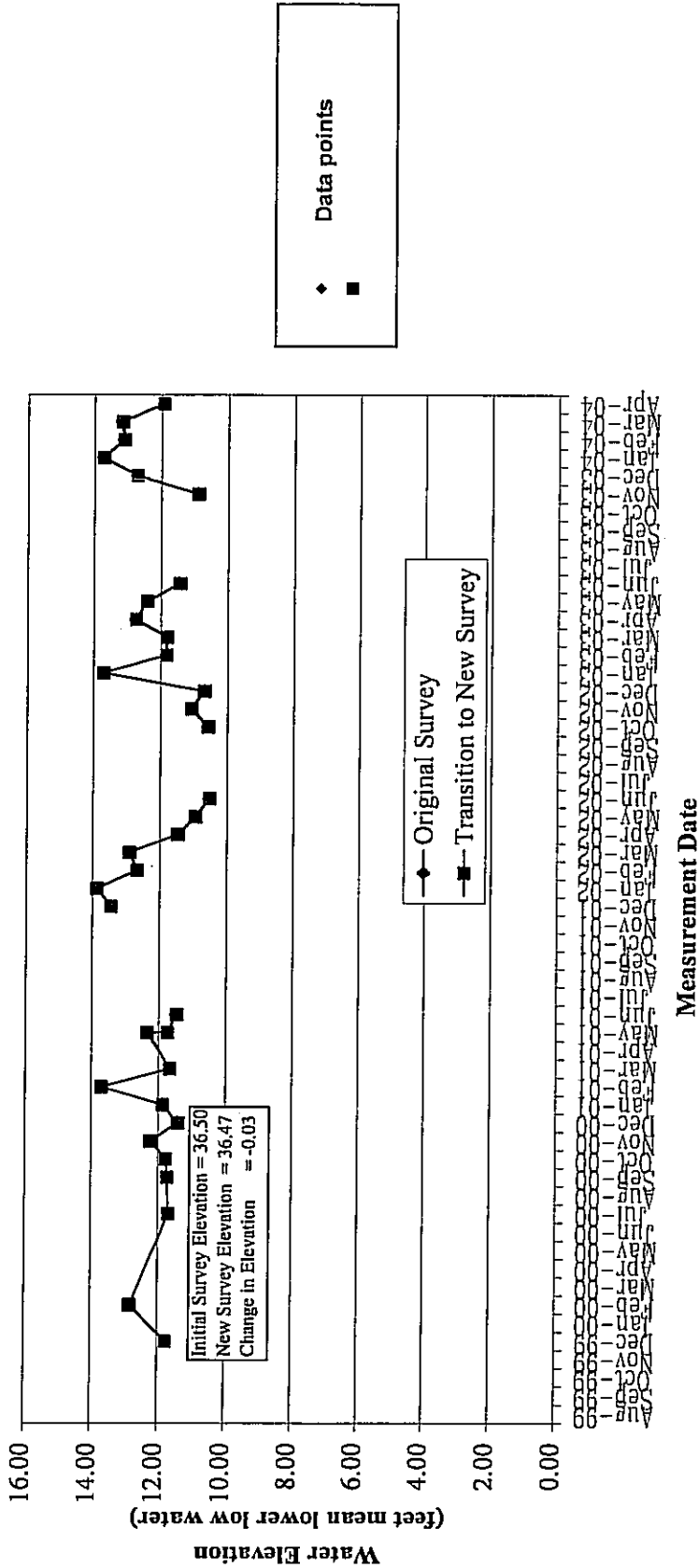
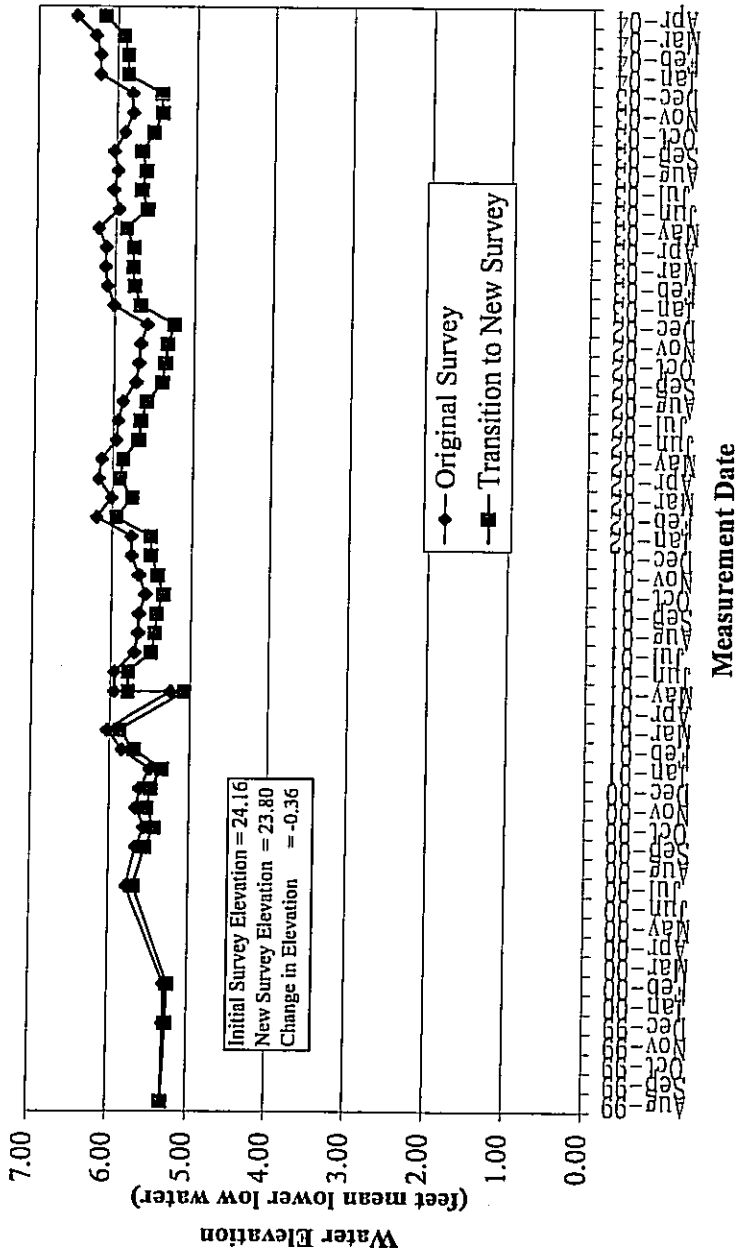


Figure 41
 Hydrograph for Well GW-9a
 MACLs Report
 Oyster Point Landfill
 South San Francisco, California

WELL GW-10a
Screened in Waste



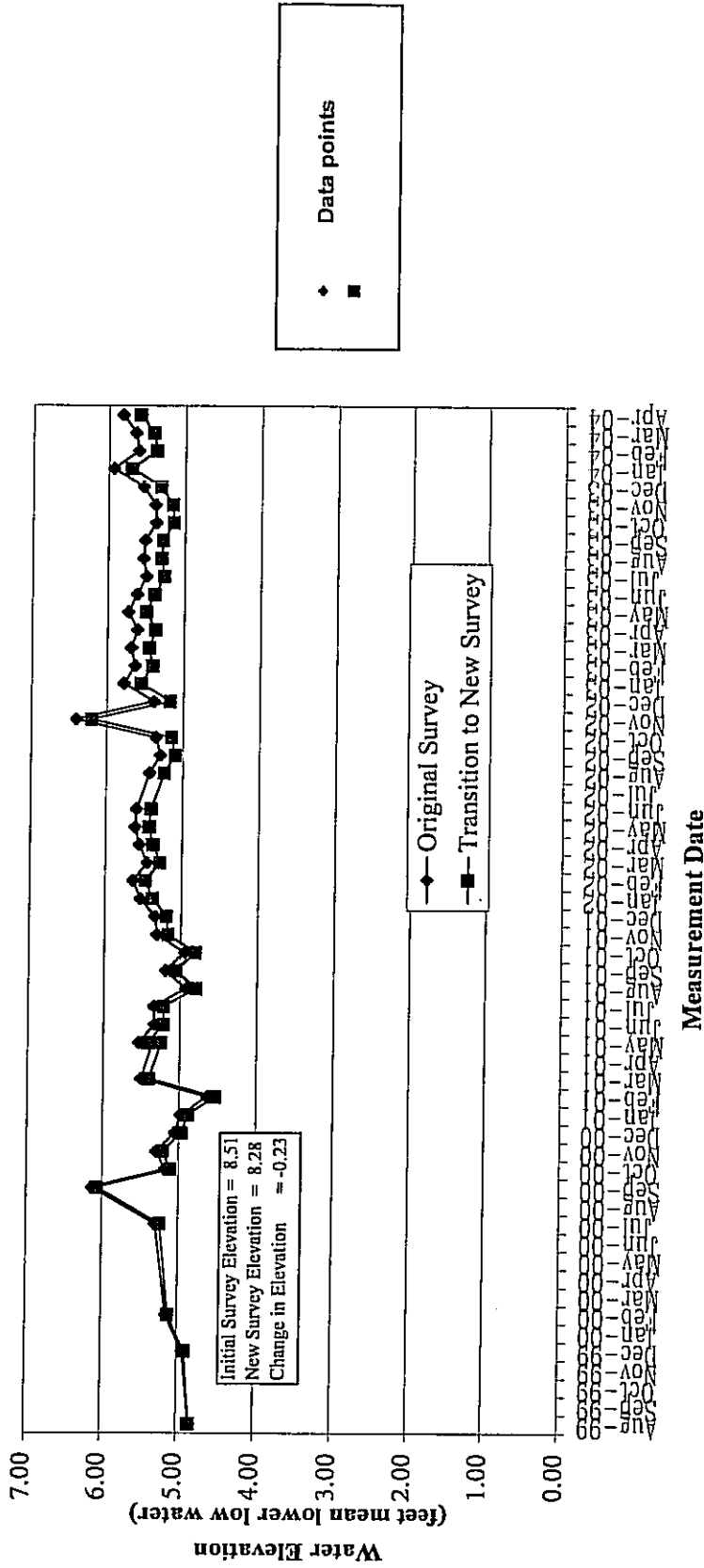
◆ Data points
■

Figure 4j
Hydrograph for Well GW-10a
MACLs Report
Oyster Point Landfill
South San Francisco, California

Prepared by:
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Engineering & Environmental Services
For:
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WELL GW-11a
 Screened in Perimeter Berm and Waste



Prepared by: **PES Environmental, Inc.**
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For: **GABEWELL, INC.**
 MACLS Report Hydrographs.xls

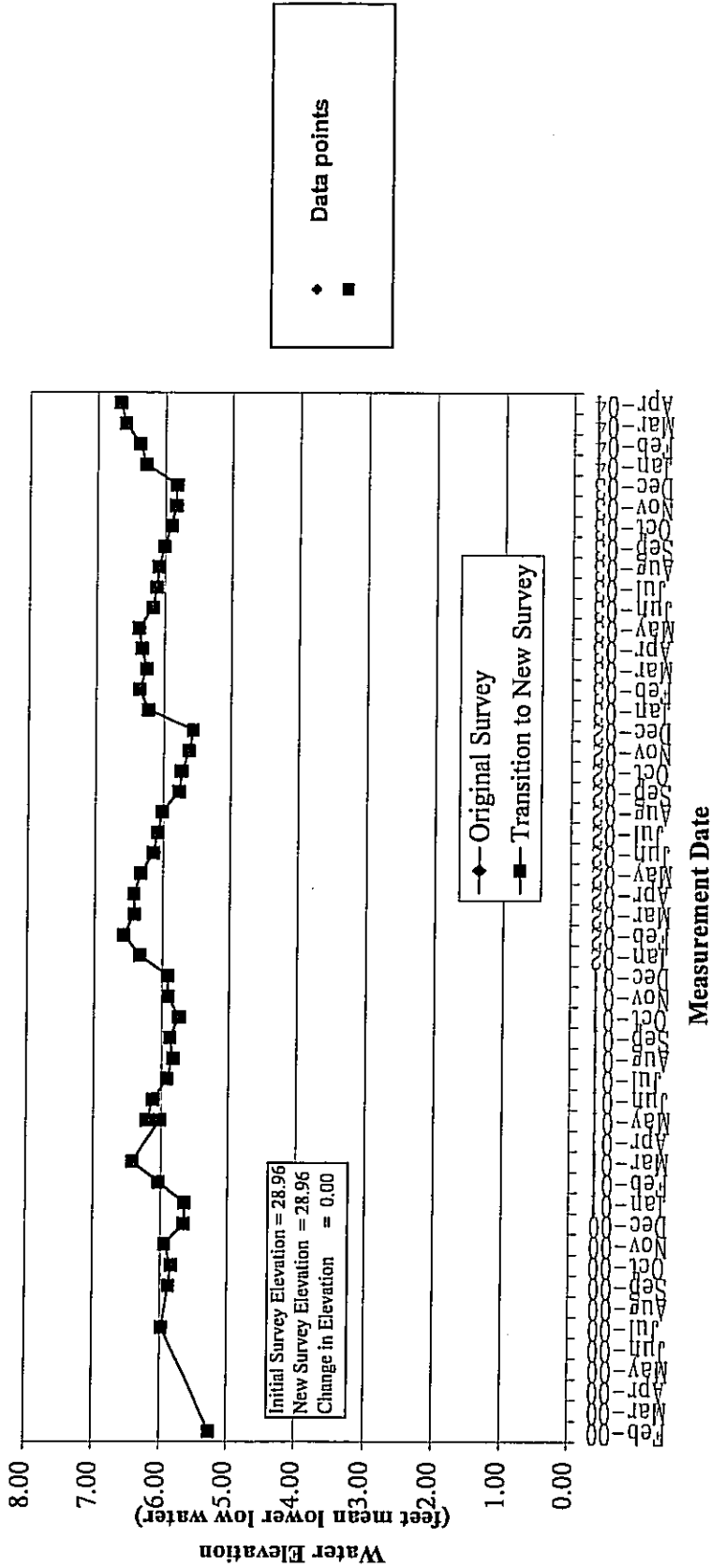
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Figure 4k
 Hydrograph for Well GW-11a
 MACLS Report
 Oyster Point Landfill
 South San Francisco, California

J-04
 DATE

WELL GW-12a
Screened in Waste



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For: **GABEWELL, INC.**

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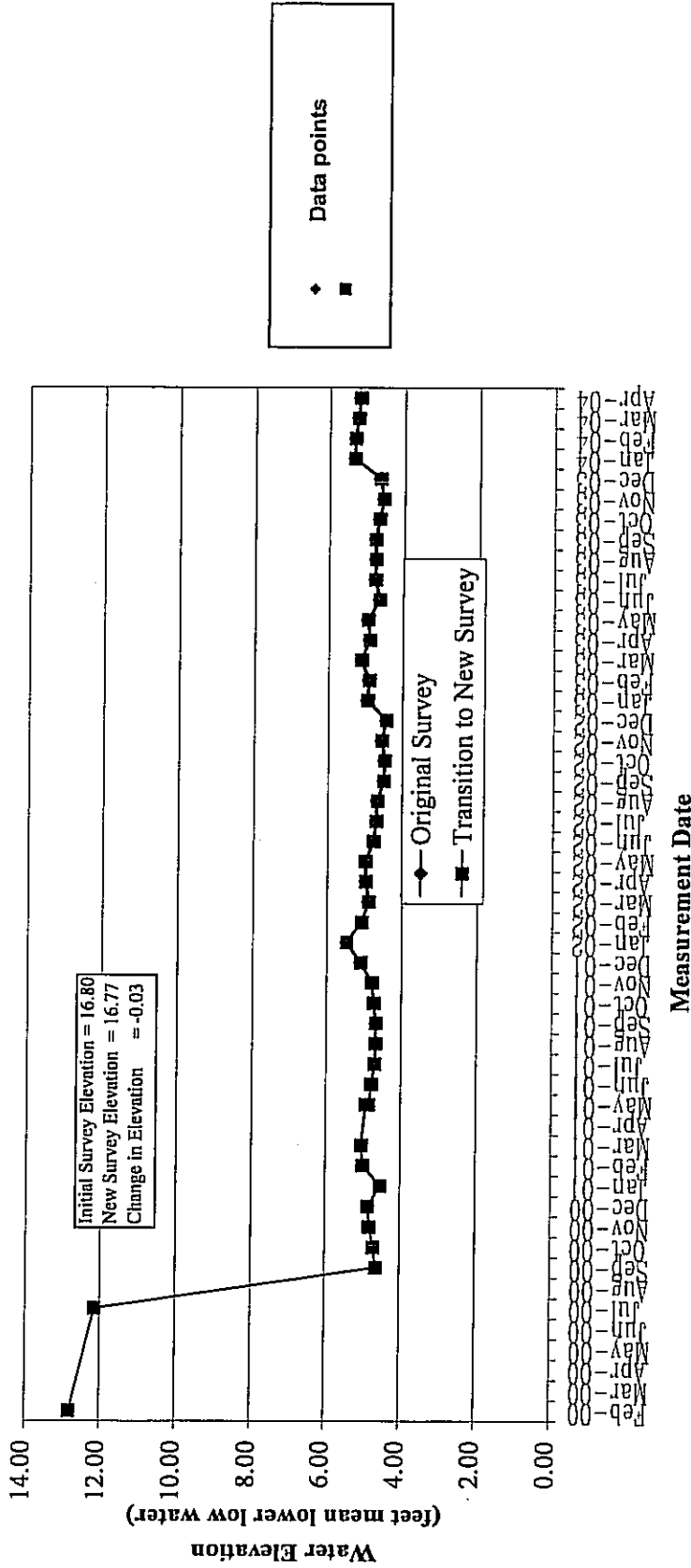
MACLS Report Hydrographs.xls
DRAWING NUMBER

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DATE

Figure 41
Hydrograph for Well GW-12a
MACLS Report
Oyster Point Landfill
South San Francisco, California

WELL GW-13a
Screened in Waste



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For:

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Figure 4m
Hydrograph for Well GW-13a
MACLs Report
Oyster Point Landfill
South San Francisco, California

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MACLs Report Hydrographs.xls

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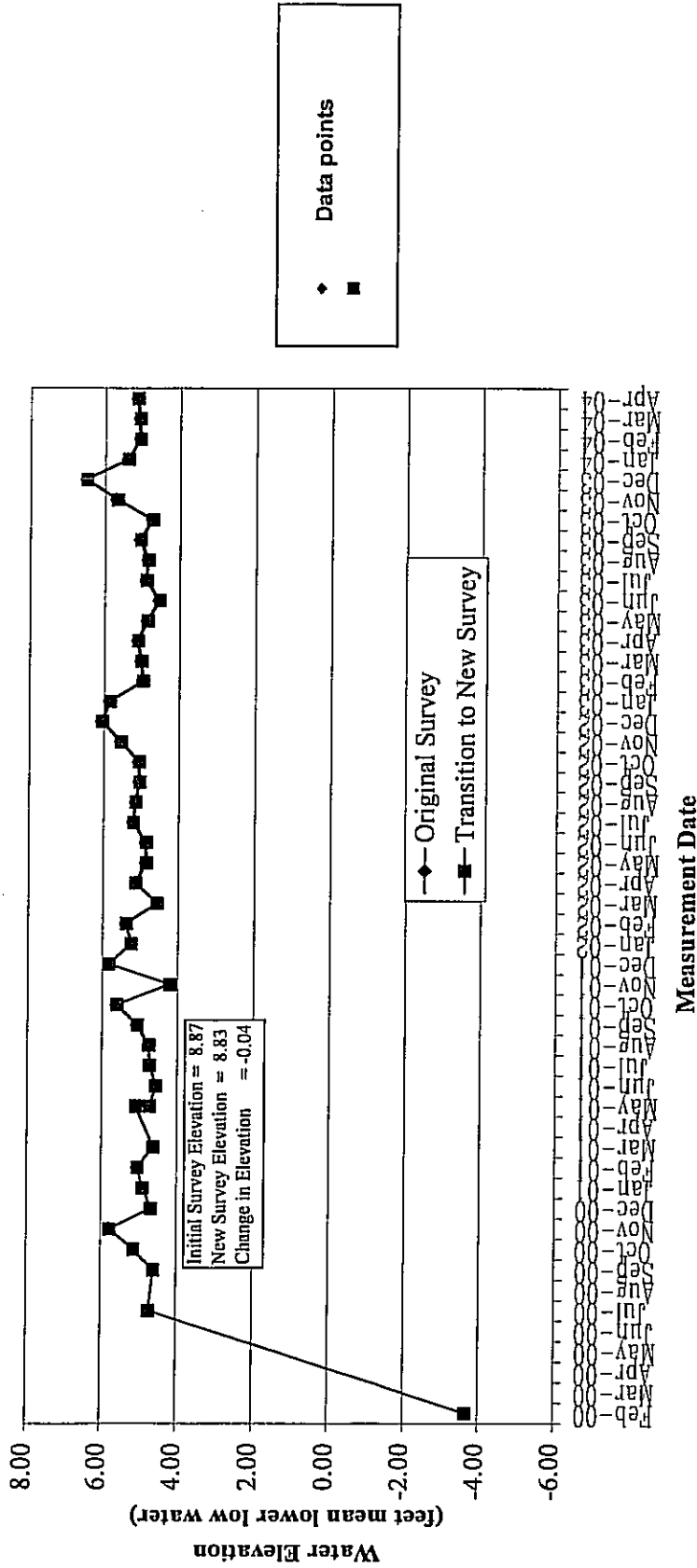
DRAWING NUMBER

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DATE

WELL GW-14a

Screened in Perimeter Berm and Waste



Prepared by:



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 Engineering & Environmental Services

For:

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Figure 4n
 Hydrograph for Well GW-14a
 MACLs Report
 Oyster Point Landfill
 South San Francisco, California

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WELL GW-15a
Screened in Perimeter Berm and Waste

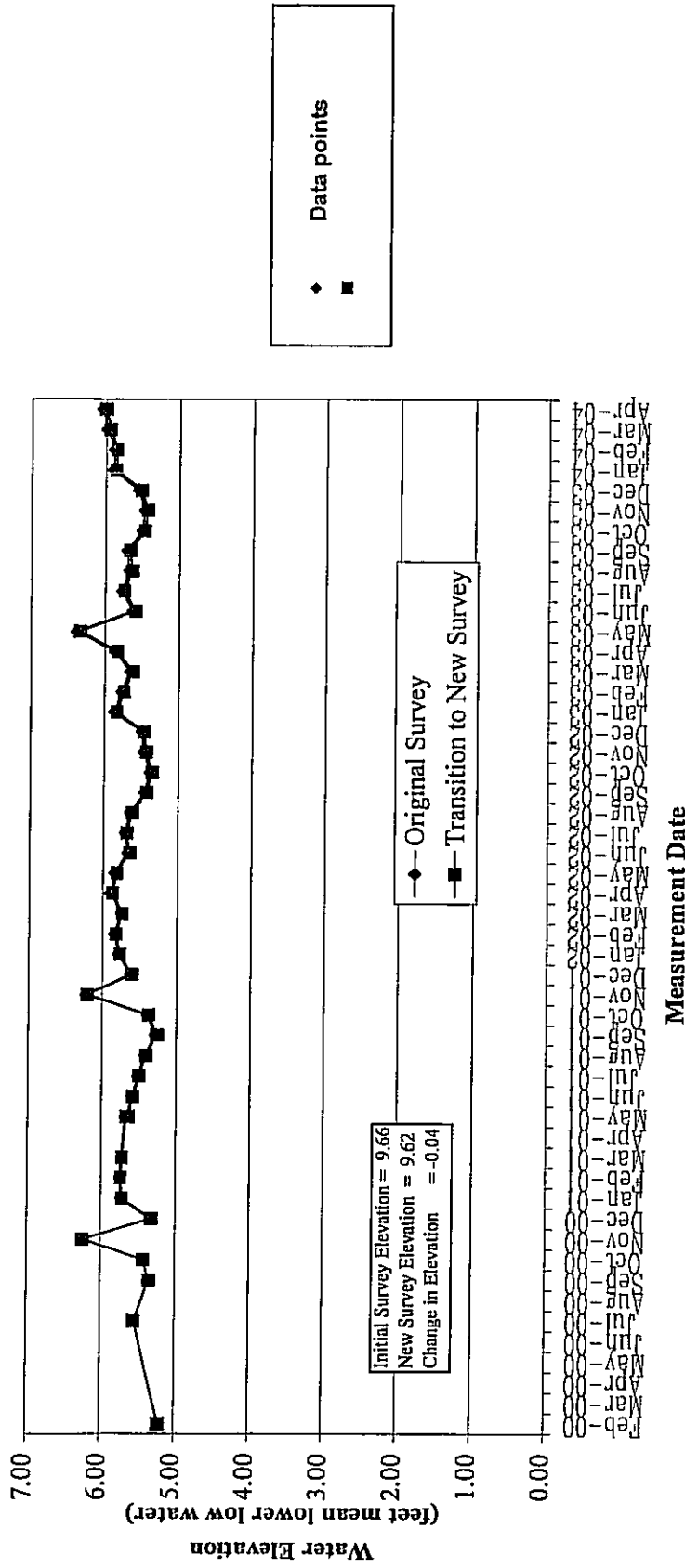


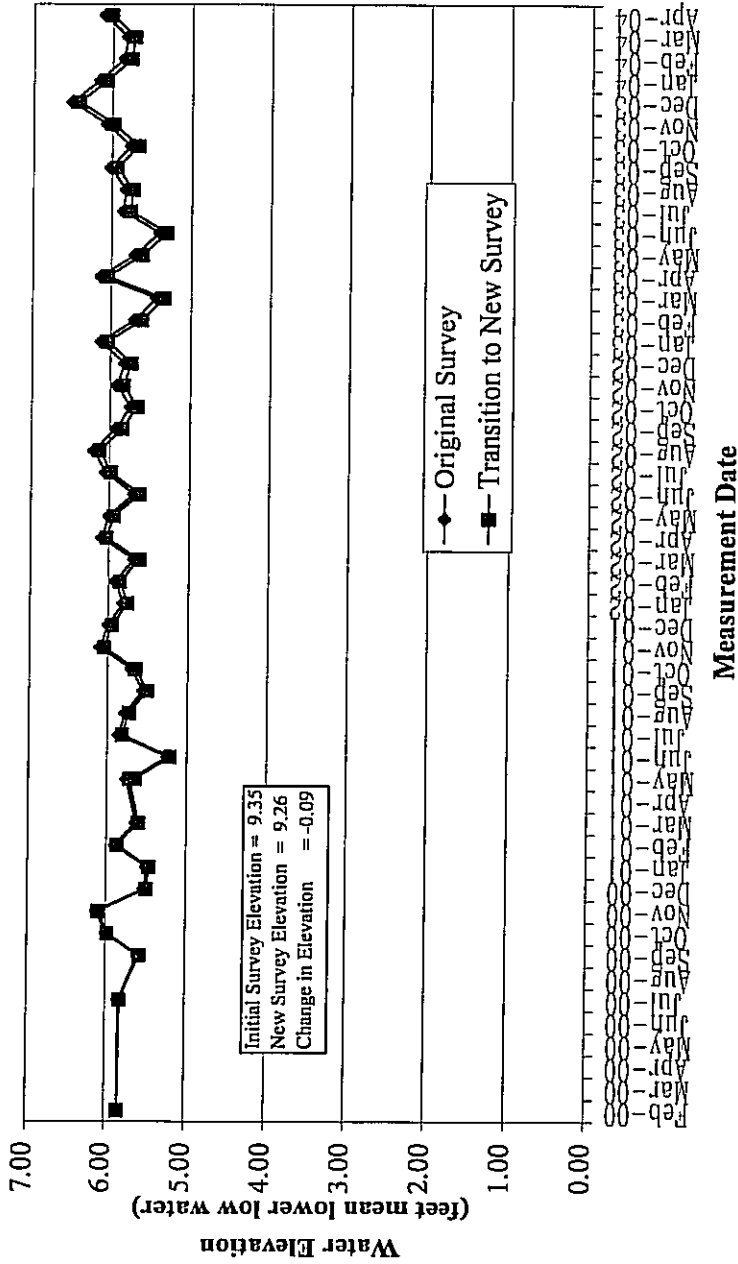
Figure 4o
Hydrograph for Well GW-15a
MACLs Report
Oyster Point Landfill
South San Francisco, California

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WELL GW-16a

Screened in Perimeter Berm and Waste



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For:

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Figure 4p
Hydrograph for Well GW-16a
MACLS Report
Oyster Point Landfill
South San Francisco, California

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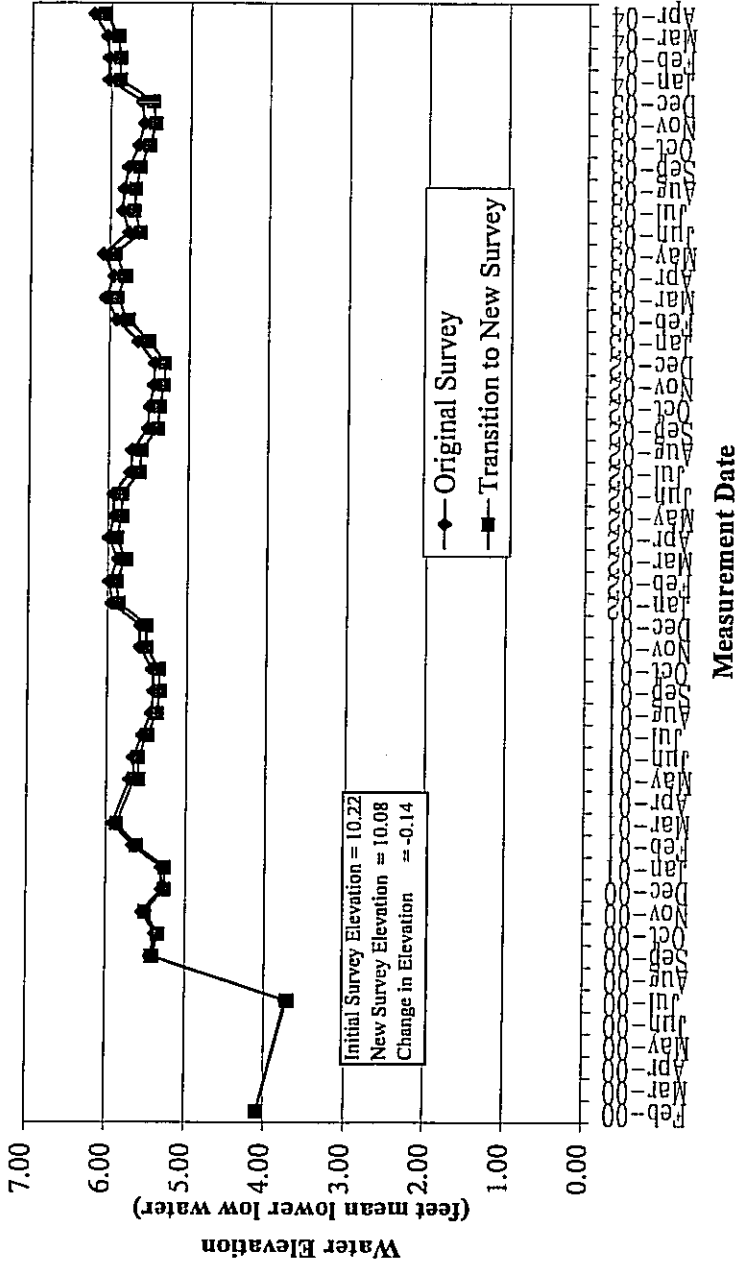
DRAWING NUMBER

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WELL GW-17a
Screened in Waste



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For:

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Figure 4q
Hydrograph for Well GW-17a
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Oyster Point Landfill
South San Francisco, California

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WELL MW-5
Screened in Waste

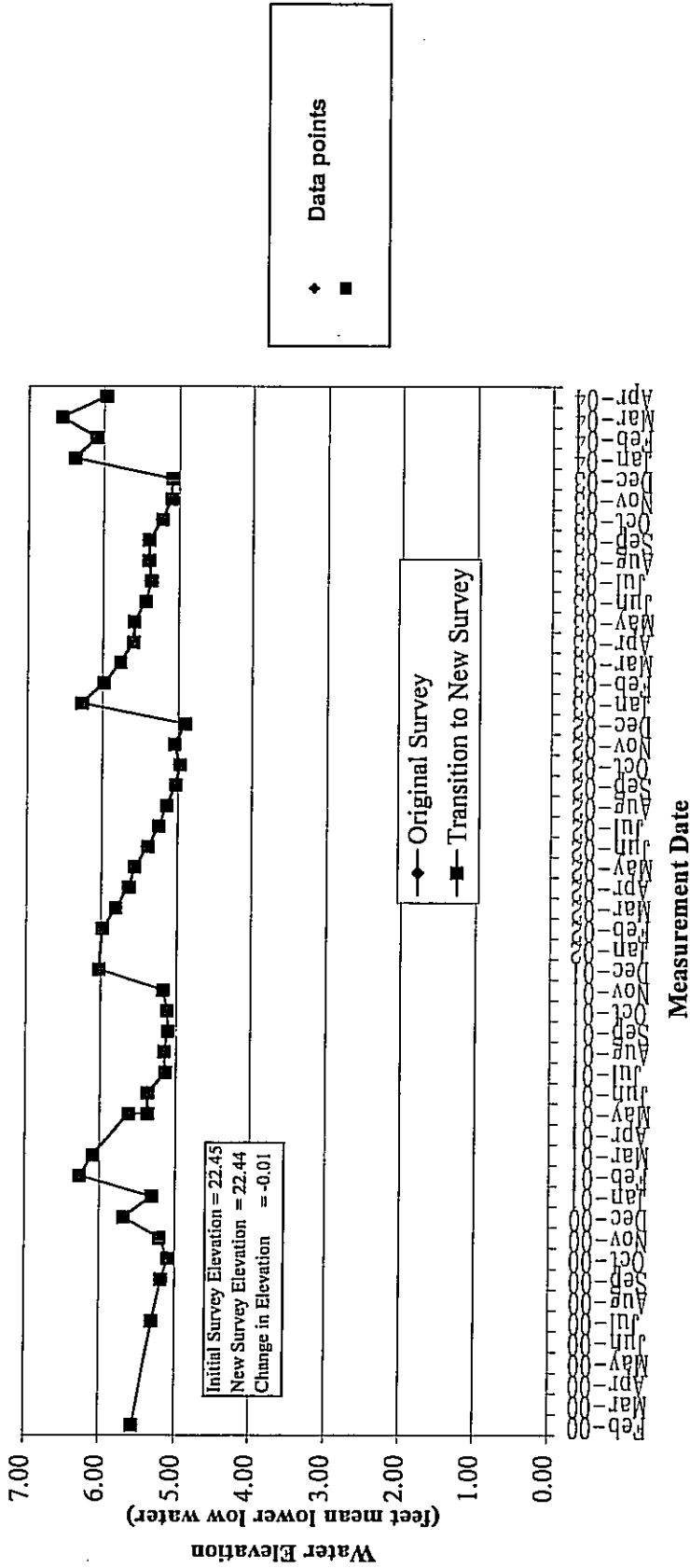


Figure 4r
Hydrograph for Well MW-5
MACLs Report
Oyster Point Landfill
South San Francisco, California

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For:
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Explanation

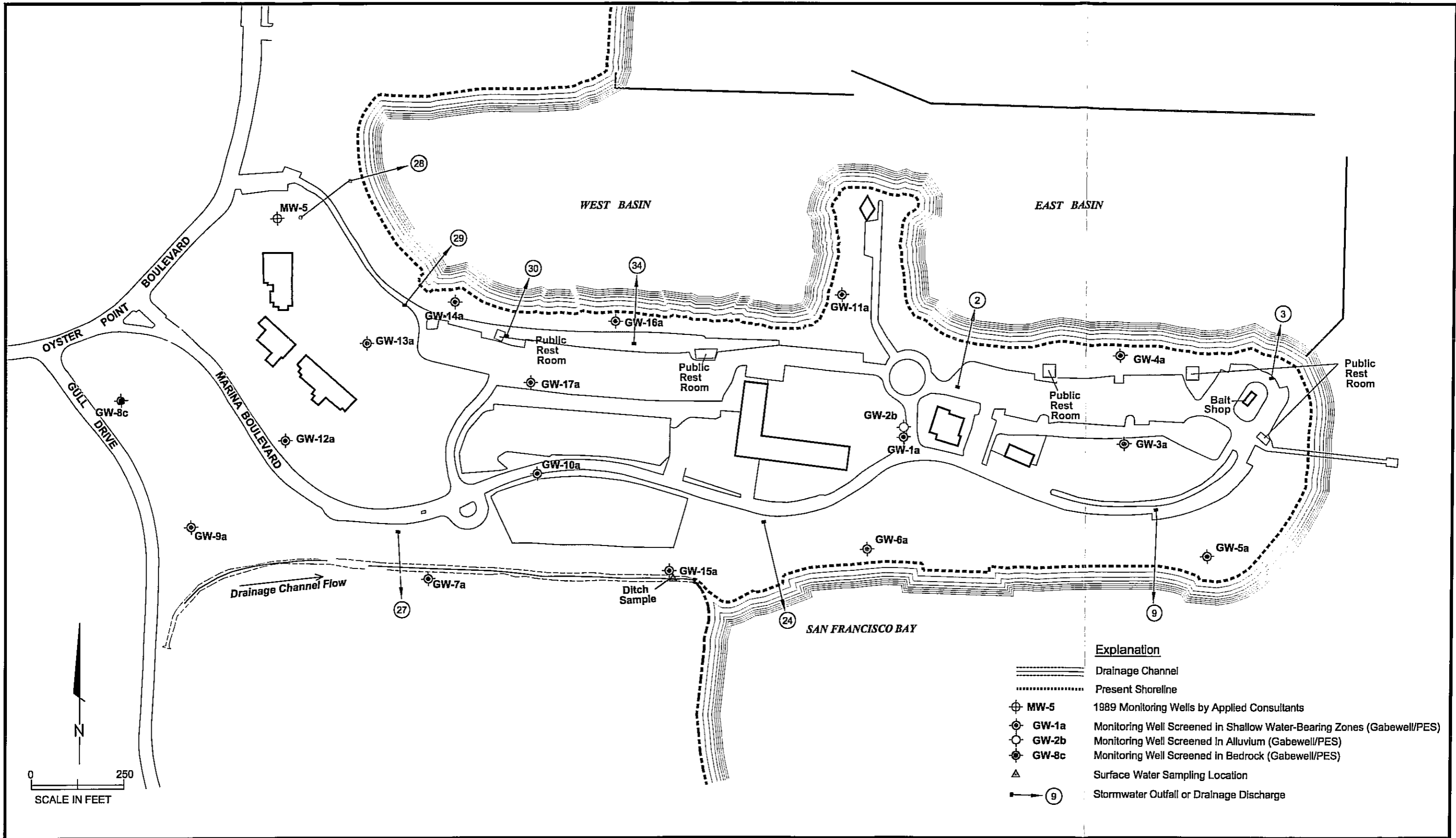
- Approximate Extent of Landfill Cap
- - - - Zero Waste Thickness
Source: Woodward Clyde Consultants, 1976
- Drainage Channel
- - - - Present Shoreline
- - - - Approximate Trace of Original Shoreline

Sources: Keinfelder, Site Plan, July 28, 1998
 Levine Ficke, April 23, 1991
 Woodward Clyde Consultants, 1976
 Aerial photograph by Pacific Aerial Survey
 August 5, 1997
 AV5434-8-16

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 For:
GABEWELL, INC.

Site Plan
 MACLS Report
 Oyster Point Landfill
 South San Francisco, California

Figure
2



Prepared by:
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 For:
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Monitoring Well and Point of Compliance Sampling Locations
 MACLs Report
 Oyster Point Landfill
 South San Francisco, California

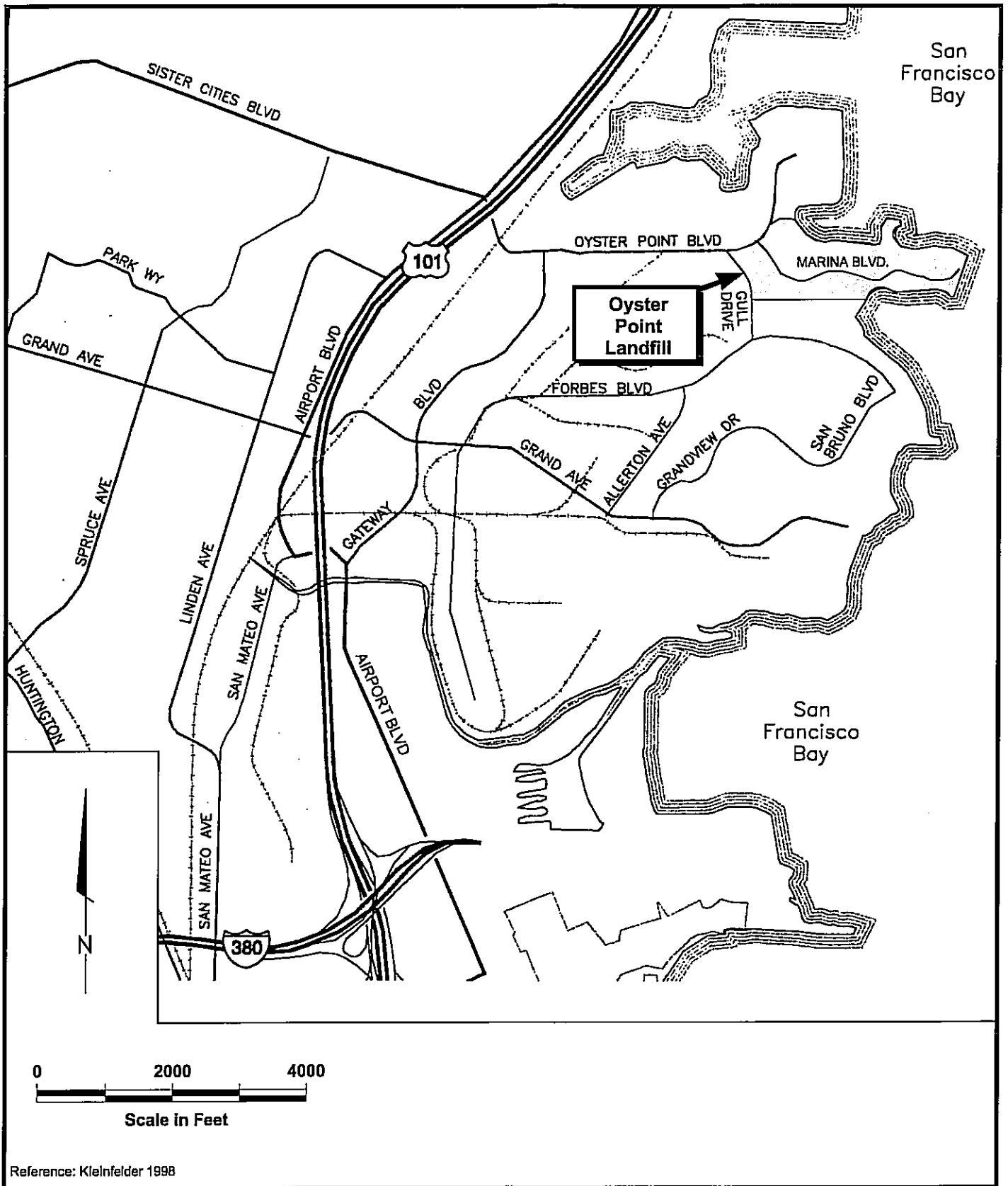
Figure
3

Table 8
Proposed Detection Monitoring Program
MACLs Report
Oyster Point Landfill
South San Francisco, California

Well Designation	Unit Monitored	Monitoring Frequency	Parameters
GW-1a	Waste	Annual	Benzene, Ethylbenzene, Chlorobenzene, Naphthalene, Total Xylenes
GW-3a	Waste	Annual	Benzene, Ethylbenzene, Chlorobenzene, Naphthalene, Total Xylenes
GW-10a	Waste	Annual	Benzene, Ethylbenzene, Chlorobenzene, Naphthalene, Total Xylenes
GW-12a	Waste	Annual	Benzene, Ethylbenzene, Chlorobenzene, Naphthalene, Total Xylenes
GW-13a	Waste	Annual	Benzene, Ethylbenzene, Chlorobenzene, Naphthalene, Total Xylenes
GW-2b	Underlying sand	Semi-annual	Benzene, Ethylbenzene, Chlorobenzene, Naphthalene, Total Xylenes
GW-4a	Perimeter berm	Semi-annual	Benzene, Ethylbenzene, Chlorobenzene, Naphthalene, Total Xylenes
GW-5a	Perimeter berm	Semi-annual	Benzene, Ethylbenzene, Chlorobenzene, Naphthalene, Total Xylenes
GW-6a	Perimeter berm and waste	Semi-annual	Benzene, Ethylbenzene, Chlorobenzene, Naphthalene, Total Xylenes
GW-7a	Adjacent earth fill	Semi-annual	Benzene, Ethylbenzene, Chlorobenzene, Naphthalene, Total Xylenes
GW-11a	Perimeter berm and waste	Semi-annual	Benzene, Ethylbenzene, Chlorobenzene, Naphthalene, Total Xylenes
GW-14a	Perimeter berm and waste	Semi-annual	Benzene, Ethylbenzene, Chlorobenzene, Naphthalene, Total Xylenes
GW-15a	Perimeter berm and waste	Semi-annual	Benzene, Ethylbenzene, Chlorobenzene, Naphthalene, Total Xylenes
GW-16a	Perimeter berm and waste	Semi-annual	Benzene, Ethylbenzene, Chlorobenzene, Naphthalene, Total Xylenes

Note: Water levels will be measured quarterly in these wells

Figures



Reference: Kleinfelder 1998

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Site Location Map
 MACLs Report
 Oyster Point Landfill
 South San Francisco, California

Figure
1

Table 6
 Water Quality Sample Analytical Results - Volatile Organic Compounds
 MACLs Report
 Oyster Point Landfill
 South San Francisco, California

Well Designation	Date Collected	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Chlorobenzene (µg/L)	Isopropylbenzene (µg/L)	1,3,5-Trimethylbenzene (µg/L)	1,2,4-Trimethylbenzene (µg/L)	4-Isopropyltoluene (µg/L)	1,2-Dichlorobenzene (µg/L)	1,3-Dichlorobenzene (µg/L)	1,4-Dichlorobenzene (µg/L)	Naphthalene (µg/L)	N-Propylbenzene (µg/L)	Sec-Butylbenzene (µg/L)	N-Butylbenzene (µg/L)	Chloroform (µg/L)	Tert-Butylbenzene (µg/L)	2-Chlorotoluene (µg/L)		
GW-5a (Continued)	9/22/2003	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	
	12/18/2003	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
	3/23/2004	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
GW-6a	7/21/1999	12.3	<1.00	33.5	5.32	NA	27.7	3.52	<1.00	2.46	<1.00	<1.00	<1.00	3.94	79.4	3.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	
	12/27/2000	35.9	2.10	32.2	8.49	NA	28.7	<0.500	<0.500	1.53	<0.500	<0.500	<0.500	3.59	48.2	3.73	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	
	3/29/2001	52.6	<5.00	24.3	<5.00	NA	19.3	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	42.8	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	
	6/11/2001	52.5	<1.00	19.8	2.47	NA	15.0	2.67	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	45.7	2.46	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	
	9/24/2001	44.4	<5.00	62.4	<5.00	NA	43.1	5.46	<5.00	<5.00	<5.00	<5.00	<5.00	5.55	32	6.56	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	
	12/26/2001	31	<5.0	29	<5.0	<5.0	23	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	29	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	
	3/18/2002	50	<5.0	35	<5.0	<5.0	26	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	32	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	
	6/19/2002	39	<5.0	47	<5.0	<5.0	34	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	18	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	
	12/13/2002	35	<5.0	37	<5.0	<5.0	23	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	17	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	
	6/24/2003	40	<5.0	45	<5.0	<5.0	34	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	25	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	
	12/18/2003	32	0.6	39	3.0	<0.5	29	3.4	<0.5	0.6	<0.5	<0.5	<0.5	4.1	14	4	0.7	<0.5	<0.5	<0.5	<0.5	<0.5	
	GW-7a	7/21/1999	<0.500	<0.500	<0.500	<0.500	NA	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<1.00	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
12/27/2000		<0.500	<0.500	<0.500	<0.500	NA	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<1.00	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	
3/28/2001		<0.500	<0.500	<0.500	<0.500	NA	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<1.00	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	
6/11/2001		<0.500	<0.500	<0.500	<0.500	NA	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<1.00	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	
9/24/2001		<0.500	<0.500	<0.500	<0.500	NA	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<1.00	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	
12/26/2001		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	
6/19/2002		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	
12/13/2002		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	
6/24/2003		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	
12/18/2003		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
GW-8a		7/27/1999	<0.500	<0.500	<0.500	<0.500	NA	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<1.00	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
		12/27/2000	<0.500	<0.500	<0.500	<0.500	NA	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<1.00	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
	3/28/2001	<0.500	<0.500	<0.500	<0.500	NA	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<1.00	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	
	6/11/2001	<0.500	<0.500	<0.500	<0.500	NA	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<1.00	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	
	9/24/2001	<0.500	<0.500	<0.500	<0.500	NA	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<1.00	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	
	12/26/2001	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	
	6/19/2002	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	
	12/13/2002	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	
	6/24/2003	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	
	12/18/2003	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
	GW-9a	7/21/1999	1.64	<1.00	<1.00	<1.00	NA	44.5	<1.00	<1.00	<1.00	<1.00	4.76	<1.00	5.18	<2.0	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
		12/27/2000	1.35	<1.00	<1.00	<1.00	NA	83.7	<1.00	<1.00	<1.00	<1.00	15.2	<1.00	19.4	<2.0	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
3/28/2001		<5.00	<5.00	<5.00	<5.00	NA	94.3	<5.00	<5.00	<5.00	<5.00	8.99	<5.00	18.3	<10.0	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	
6/11/2001		3.29	<1.00	<1.00	<1.00	NA	56.7	<1.00	<1.00	<1.00	<1.00	8.71	<1.00	37.6	<2.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	
12/26/2001		<5.0	<5.0	<5.0	<5.0	<5.0	110	<5.0	<5.0	<5.0	<5.0	9.5	<5.0	19	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	
12/18/2003		<0.5	<0.5	<0.5	<0.5	<0.5	59	<0.5	<0.5	<0.5	<0.5	6.7	0.7	31	<2.0	<0.5	0.9	<0.5	<0.5	<0.5	<0.5	<0.5	
GW-10a	7/27/1999	46.3	9.58	33.3	56.8	NA	126	13.4	7.38	17.8	39.6	2.7	1.02	5.56	<2.0	6.66	1.56	1.16	<1.00	<1.00	<1.00	<1.00	
	12/27/2000	33.6	<20.0	23.0	28.3	NA	89.1	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0	2790	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0	
	3/29/2001	<50.0	<50.0	<50.0	<50.0	NA	83.9	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	2000	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	
	6/11/2001	<50.0	<50.0	<50.0	<50.0	NA	<10.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	3370	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	
	9/24/2001	47.8	<40.0	60.6	<40.0	NA	123	<40.0	<40.0	<40.0	<40.0	<40.0	<40.0	<40.0	4690	<40.0	<40.0	<40.0	<40.0	<40.0	<40.0	<40.0	
	12/26/2001	31	5.4	19	26.7	<5.0	95	11	<5.0	12	<5.0	&											

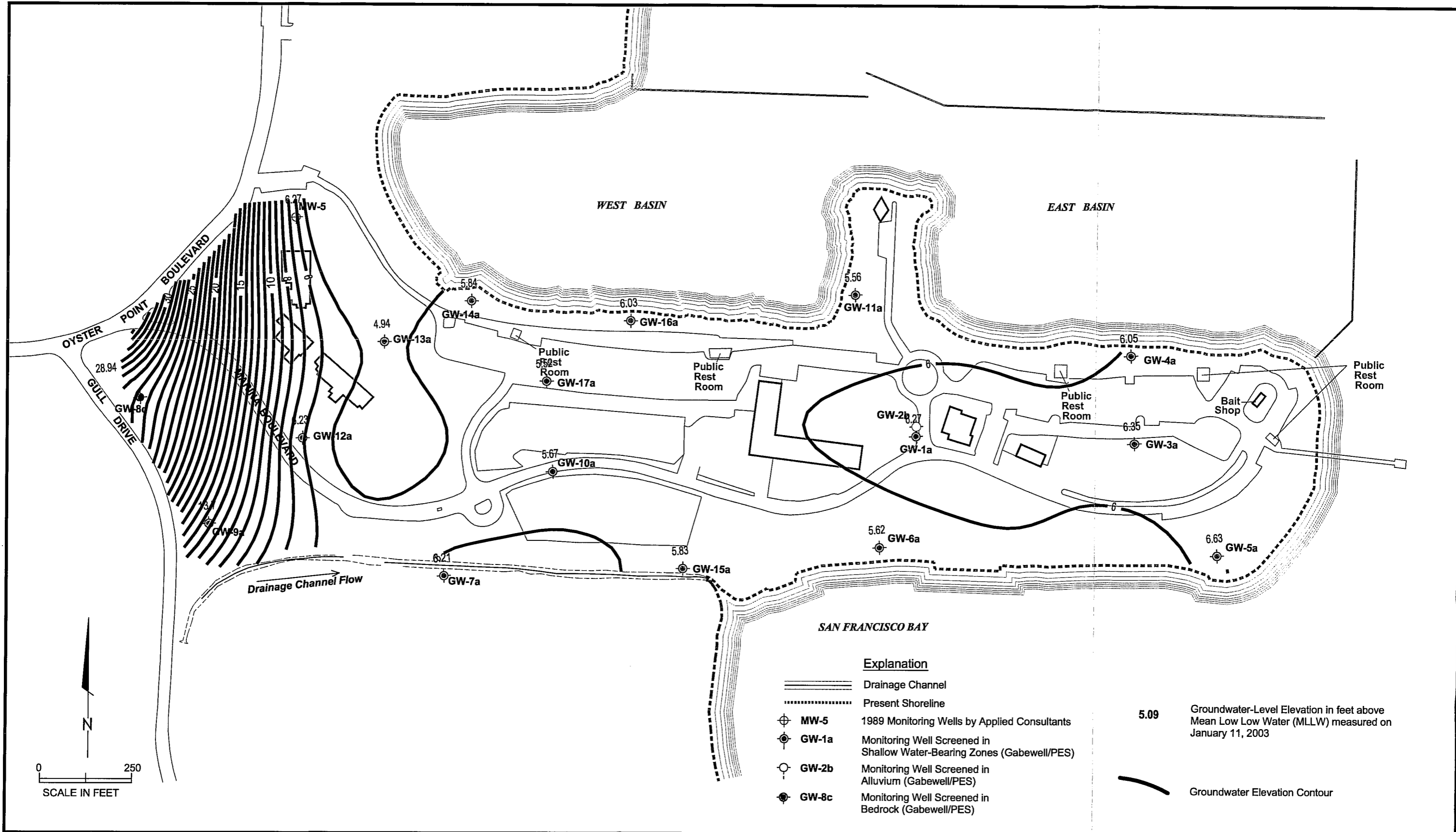
Table 6
 Water Quality Sample Analytical Results - Volatile Organic Compounds
 MACLs Report
 Oyster Point Landfill
 South San Francisco, California

Well Designation	Date Collected	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Chlorobenzene (µg/L)	Isopropylbenzene (µg/L)	1,3,5-Trimethylbenzene (µg/L)	1,2,4-Trimethylbenzene (µg/L)	4-Isopropyltoluene (µg/L)	1,2-Dichlorobenzene (µg/L)	1,3-Dichlorobenzene (µg/L)	1,4-Dichlorobenzene (µg/L)	Naphthalene (µg/L)	N-Propylbenzene (µg/L)	Sec-Butylbenzene (µg/L)	N-Butylbenzene (µg/L)	Chloroform (µg/L)	Tert-Butylbenzene (µg/L)	2-Chlorotoluene (µg/L)
GW-12a	2/7/2000	239	<20.0	41.2	<20.0	NA	765	47.2	<20.0	<20.0	93.6	<20.0	<20.0	<20.0	174	88.8	<20	<20	<20	<20	<20
	12/27/2000	62.6	<5.00	<5.00	<5.00	NA	84.7	5.32	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	24.1	7.14	<5.00	<5.00	<5.00	<5.00	<5.00
	3/29/2001	84.6	<5.00	<5.00	<5.00	NA	146	7.07	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	23.5	9.41	<5.00	<5.00	<5.00	<5.00	<5.00
	6/11/2001	67.7	<2.50	<2.50	<2.50	NA	106	6.00	<2.50	<2.50	3.09	<2.50	<2.50	<2.50	20.7	8.44	<2.50	<2.50	<2.50	<2.50	<2.50
	9/24/2001	166	<20.0	<20.0	<20.0	NA	223	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0	106	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0
	12/26/2001	71	<5.0	<5.0	<5.0	<5.0	130	5.6	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	18	7.3	<5.0	<5.0	<5.0	<5.0	<5.0
	6/19/2002	86	<5.0	<5.0	<5.0	<5.0	150	5.9	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	23	7.6	<5.0	<5.0	<5.0	<5.0	<5.0
	12/13/2002	110	<5.0	<5.0	<5.0	<5.0	140	7.4	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	22	11	<5.0	<5.0	<5.0	<5.0	<5.0
	6/24/2003	81	<5.0	<5.0	<5.0	<5.0	96	8.4	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	26	11	<5.0	<5.0	<5.0	<5.0	<5.0
	12/18/2003	84	<0.5	0.7	2.2	<0.5	90	8.1	<0.5	<0.5	<0.5	<0.5	0.6	0.6	4.8	12	6.0	2.9	1.1	<0.5	0.6
GW-13a	2/7/2000	22.4	<0.500	0.740	2.77	NA	97.9	1.81	1.47	5.21	8.04	0.520	0.860	5.42	7.74	2.31	1.71	2.10	<0.500	<0.500	<0.500
	12/27/2000	29.8	<5.00	<5.00	<5.00	NA	113	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<10.0	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
	3/28/2001	21.6	<5.00	<5.00	<5.00	NA	110	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<10.0	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
	6/11/2001	25.9	<2.50	<2.50	<2.50	NA	104	<2.50	<2.50	<2.50	<2.50	<2.50	<2.50	<2.50	<5.00	<2.50	<2.50	<2.50	<2.50	<2.50	<2.50
	9/24/2001	29.8	<10.0	<10.0	<10.0	NA	112	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	26.8	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
	12/26/2001	22	<5.0	<5.0	<5.0	<5.0	110	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
	6/19/2002	29	<5.0	<5.0	<5.0	<5.0	120	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
	12/13/2002	34	<5.0	<5.0	<5.0	<5.0	120	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
	6/24/2003	30	<5.0	<5.0	<5.0	<5.0	120	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
	12/18/2003	37	<0.5	<0.5	0.5	<0.5	130	1.4	<0.5	<0.5	<0.5	<0.5	<0.5	0.8	4.8	<2.0	1.1	1.3	1.3	<0.5	<0.5
GW-14a	2/7/2000	0.640	<0.500	<0.500	<0.500	NA	15.5	<0.500	<0.500	<0.500	<0.500	<0.500	5.28	5.37	<1.00	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
	12/27/2000	0.630	<0.500	<0.500	<0.500	NA	21.7	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	7.59	<1.00	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
	3/28/2001	0.500	<0.500	<0.500	<0.500	NA	11.7	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	3.71	<1.00	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
	6/11/2001	0.56	<0.500	<0.500	<0.500	NA	14.4	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	4.83	<1.00	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
	9/24/2001	0.54	<0.500	<0.500	<0.500	NA	17	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	5.54	<1.00	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
	12/26/2001	<5.0	<5.0	<5.0	<5.0	<5.0	12	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
	6/19/2002	<5.0	<5.0	<5.0	<5.0	<5.0	12	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
	12/13/2002	<5.0	<5.0	<5.0	<5.0	<5.0	9.4	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
	6/24/03 *	<5.0	<5.0	<5.0	<5.0	<5.0	13	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
	12/18/2003	<0.5	<0.5	<0.5	<0.5	<0.5	7	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	2.5	<2.0	<0.5	0.7	1.1	<0.5	<0.5
GW-15a	2/7/2000	6.32	<0.500	<0.500	1.78	NA	16.9	1.24	<0.500	1.53	2.25	<0.500	<0.500	1.75	64.3	0.94	<0.500	<0.500	<0.500	<0.500	<0.500
	12/27/2000	1.91	3.43	2.29	11.94	NA	11.3	<0.500	<0.500	1.66	<0.500	<0.500	<0.500	0.860	13.5	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
	3/29/2001	3.49	<0.500	<0.500	<0.500	NA	11.4	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	1.01	19.6	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
	6/11/2001	7.19	<1.00	<1.00	<1.00	NA	17.6	1.01	<1.00	<1.00	<1.00	<1.00	<1.00	1.79	80.0	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
	9/24/2001	3.93	<0.500	<0.500	<0.500	NA	19.1	0.81	<0.500	<0.500	<0.500	<0.500	<0.500	1.49	11.9	0.540	<0.500	<0.500	<0.500	<0.500	<0.500
	12/26/2001	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
	6/19/2002	7.7	<5.0	<5.0	<5.0	<5.0	23	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	59	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
	12/13/2002	<5.0	<5.0	<5.0	<5.0	<5.0	22	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
	6/24/2003	5.7	<5.0	<5.0	<5.0	<5.0	22	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	34	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
	12/18/2003	0.5	<0.5	<0.5	<0.5	0.6	7.7	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5
GW-16a	2/7/2000	2.14	79.5	6.41	9.00	NA	4.52	1.55	2.44	7.78	1.67	<0.500	<0.500	<0.500	8.11	2.77	2.25	1.31	<0.500	<0.500	<0.500
	12/27/2000	2.41	2.96	2.25	2.21	NA	4.24	0.990	0.560	1.92	<0.500	<0.500	<0.500	<0.500	2.12	0.990	0.920	<0.500	<0.500	<0.500	
	3/29/2001	1.73	2.42	2.11	2.40	NA	3.74	0.720	0.500	1.78	0.670	<0.500	<0.500	0.510	1.51	0.660	0.790	<0.500	<0.500	<0.500	
	6/11/2001	1.88	1.38	1.94	1.99	NA	3.63	0.77	<0.500	1.35	<0.500	<0.500	<0.500	0.51	<1.00	0.66	0.71	<0.500	<0.500	<0.500	
	9/24/2001	2.75	1.68	2.64	2.97	NA	4.45	1.04	0.61	2.12	<0.500	<0.500	<0.500	0.620	1.33	0.940	0.760	<0.500	<0.500	<0.500	
	12/26/2001	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
	3/18/2002	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
	6/19/2002	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
	9/25/2002	2.24	0.66	1.76	2.54	NA	3.73	0.78	<0.5	1.52	<0.5	<0.5	<0.5	0.51	<2.0	0.68	0.57	<0.5	<0.5	<0.5	

Table 6
Water Quality Sample Analytical Results - Volatile Organic Compounds
MACLs Report
Oyster Point Landfill
South San Francisco, California

Well Designation	Date Collected	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Chlorobenzene (µg/L)	Isopropylbenzene (µg/L)	1,3,5-Trimethylbenzene (µg/L)	1,2,4-Trimethylbenzene (µg/L)	4-Isopropyltoluene (µg/L)	1,2-Dichlorobenzene (µg/L)	1,3-Dichlorobenzene (µg/L)	1,4-Dichlorobenzene (µg/L)	Naphthalene (µg/L)	N-Propylbenzene (µg/L)	Sec-Butylbenzene (µg/L)	N-Butylbenzene (µg/L)	Chloroform (µg/L)	Tert-Butylbenzene (µg/L)	2-Chlorotoluene (µg/L)	
GW-17a (Continued)	6/19/2002	8.9	<5.0	<5.0	<5.0	<5.0	21	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	23	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	
	12/13/2002	13	<5.0	<5.0	<5.0	<5.0	26	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	24	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	
	6/24/2003	11	<5.0	<5.0	<5.0	<5.0	28	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	30	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	
	12/18/2003	13	<0.5	<0.5	1.3	<0.5	27	1.7	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	21	1.7	0.6	0.5	<0.5	<0.5	<0.5	
MW-5	10/25/1999	2.52	<0.500	<0.500	<0.500	NA	23.3	<0.500	<0.500	<0.500	<0.500	1.11	<0.500	5.76	<2.00	<0.500	<0.500	2.78	<0.500	<0.500	<0.500	
	12/27/2000	2.26	<0.500	<0.500	<0.500	NA	23.8	<0.500	<0.500	<0.500	<0.500	0.860	<0.500	5.59	<1.00	<0.500	<0.500	1.44	<0.500	0.510	<0.500	
	3/28/2001	1.79	<0.500	<0.500	<0.500	NA	22.0	<0.500	<0.500	<0.500	<0.500	0.870	<0.500	4.86	<1.00	<0.500	<0.500	1.11	<0.500	<0.500	<0.500	
	6/11/2001	1.71	<0.500	<0.500	<0.500	NA	22.2	<0.500	<0.500	<0.500	<0.500	0.92	<0.500	5.45	1.0	<0.500	<0.500	1.67	<0.500	<0.500	<0.500	
	9/24/2001	1.79	<0.500	<0.500	<0.500	NA	25.7	<0.500	<0.500	<0.500	<0.500	0.93	<0.500	<0.500	1.11	<0.500	1.09	1.91	<0.500	<0.500	<0.500	
	12/26/2001	<5.0	<5.0	<5.0	<5.0	<5.0	21	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	
	6/19/2002	<5.0	<5.0	<5.0	<5.0	<5.0	24	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5.6	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	
	12/13/2002	<5.0	<5.0	<5.0	<5.0	<5.0	24	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5.9	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	
	6/24/2003	<5.0	<5.0	<5.0	<5.0	<5.0	25	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5.2	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	
	12/18/2003	1.1	<0.5	<0.5	<0.5	<0.5	24	<0.5	<0.5	<0.5	<0.5	0.8	<0.5	<0.5	4.8	<2.0	<0.5	1.1	2.0	<0.5	0.5	<0.5
	Surface Water																					
Surface Water Sample - Ditch	8/11/1999	<0.500	<0.500	<0.500	<0.500	NA	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<1.00	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	

Notes:
µg/L = Micrograms per liter
< = Compound not detected at or above the stated laboratory reporting limit
Samples analyzed by EPA Test Method 8260
MTBE= methyl tertiary-butyl ether
NA= Not analyzed
* = Carbon disulfide was detected at a concentration of 14 micrograms per liter.



Explanation

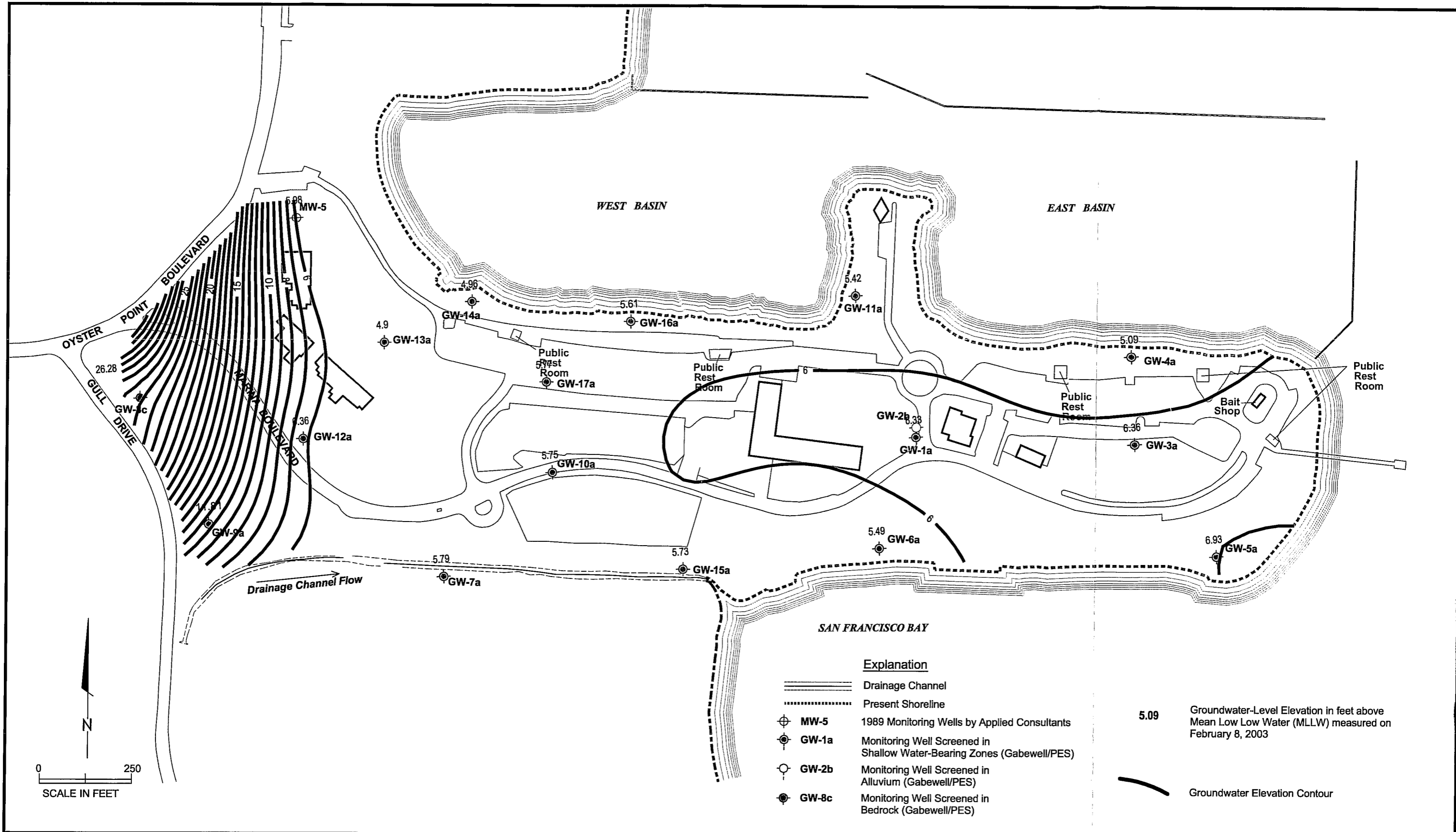
- Drainage Channel
- Present Shoreline
- MW-5 1989 Monitoring Wells by Applied Consultants
- GW-1a Monitoring Well Screened in Shallow Water-Bearing Zones (Gabewell/PES)
- GW-2b Monitoring Well Screened in Alluvium (Gabewell/PES)
- GW-8c Monitoring Well Screened in Bedrock (Gabewell/PES)
- 5.09** Groundwater-Level Elevation in feet above Mean Low Low Water (MLLW) measured on January 11, 2003
- Groundwater Elevation Contour

Prepared by:
PES Environmental, Inc.
 Engineering & Environmental Services
 For:
GABEWELL, INC.

Potentiometric Surface Map,
January 11, 2003
 MACLs Report
 Oyster Point Landfill
 South San Francisco, California

Figure

A-1

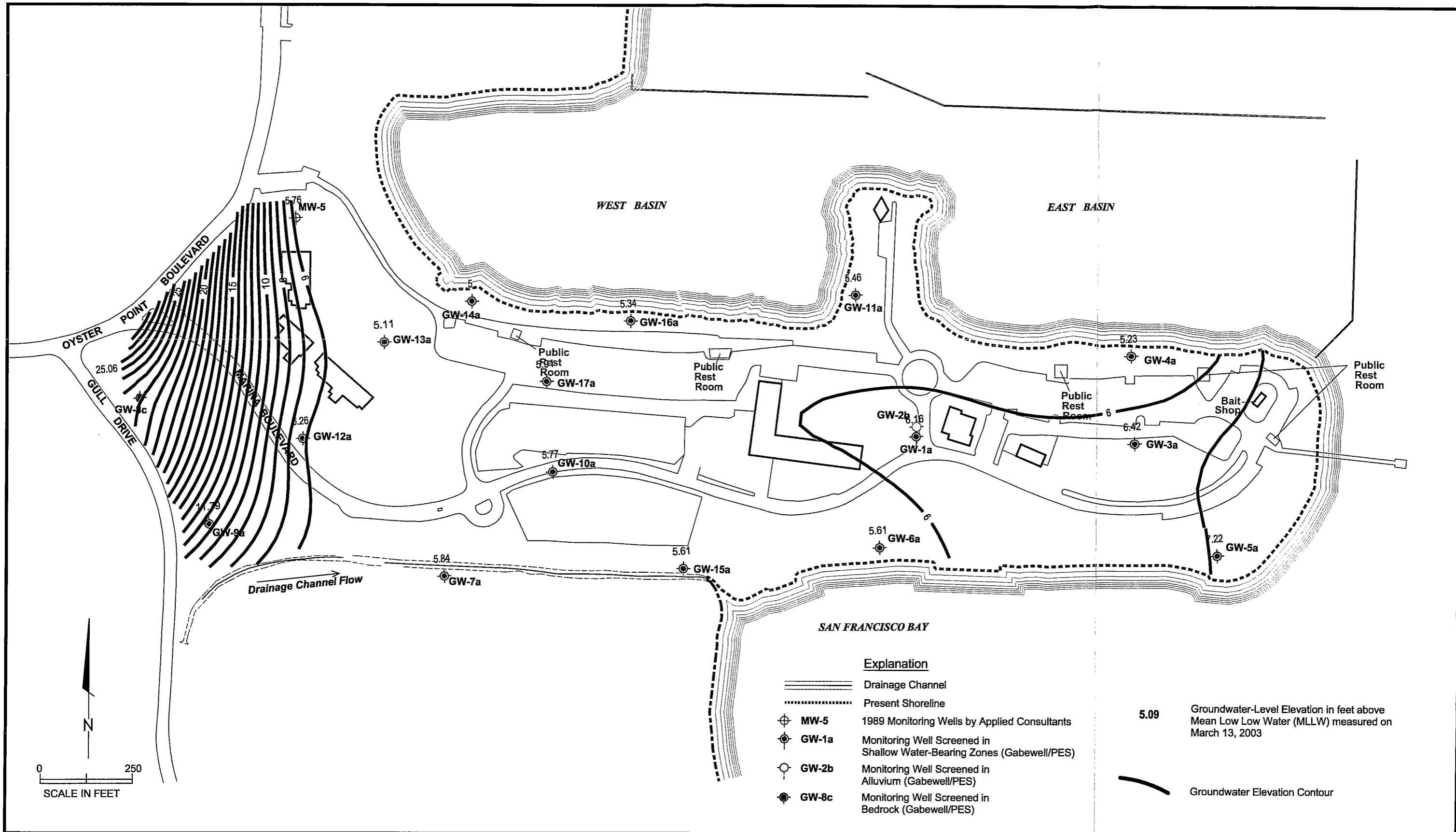


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GABEWELL, INC.

Potentiometric Surface Map,
February 8, 2003
 MACLs Report
 Oyster Point Landfill
 South San Francisco, California

Figure

A-2

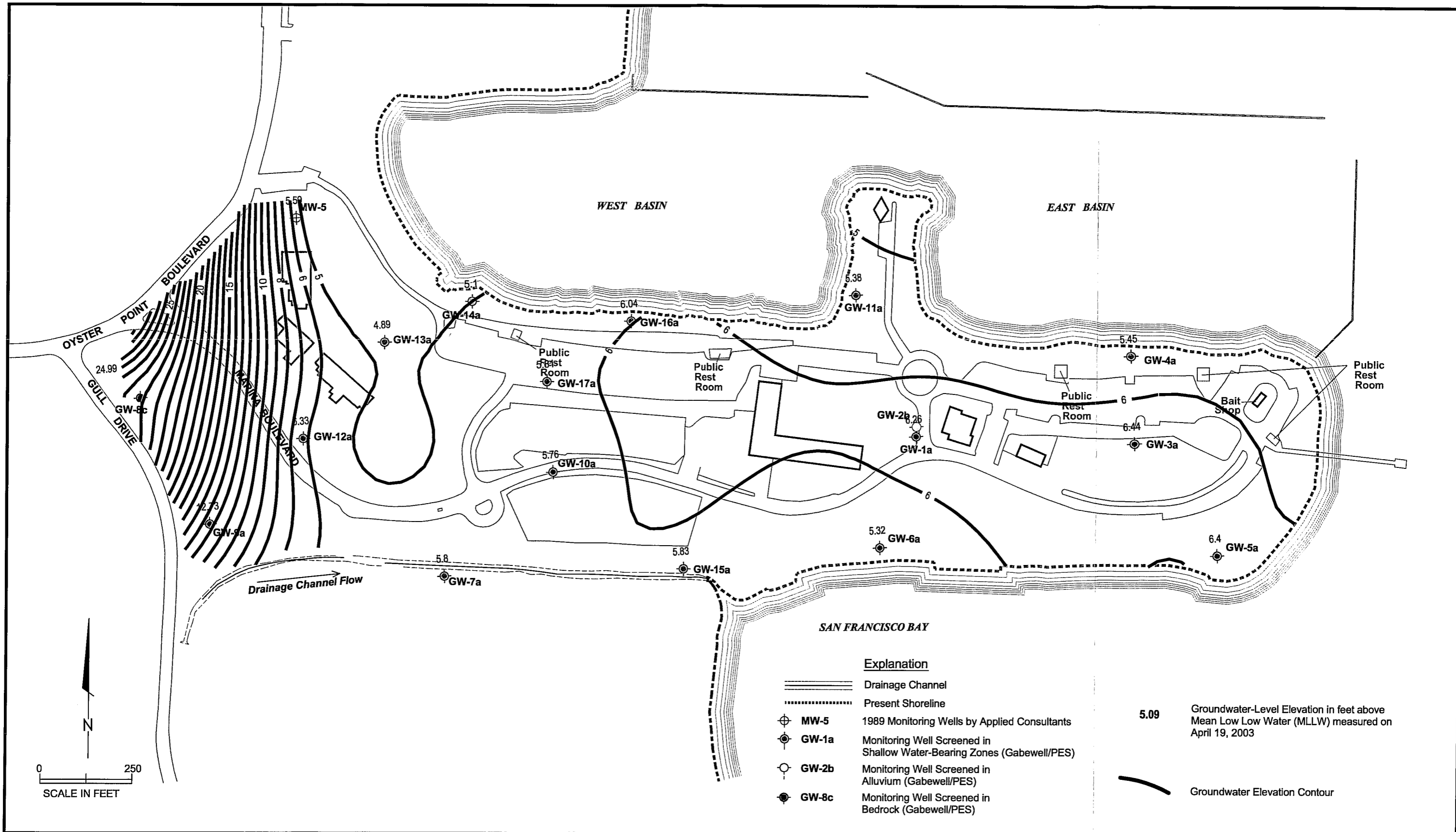


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Potentiometric Surface Map,
March 13, 2003
 MACLs Report
 Oyster Point Landfill
 South San Francisco, California

Figure

A-3

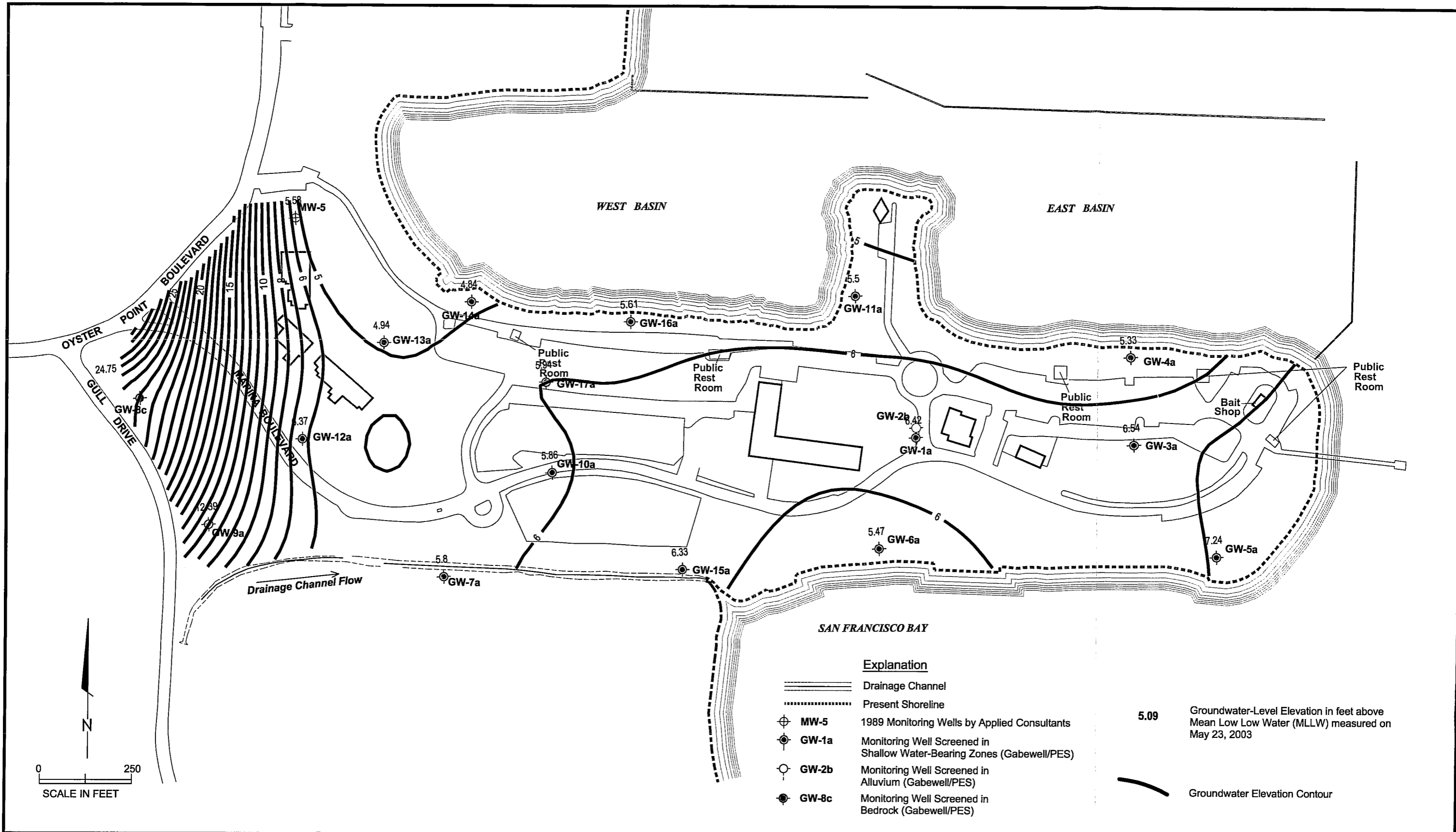


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Potentiometric Surface Map,
April 19, 2003
 MACLs Report
 Oyster Point Landfill
 South San Francisco, California

Figure

A-4



Explanation

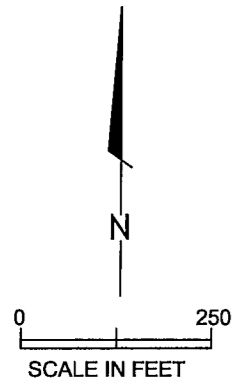
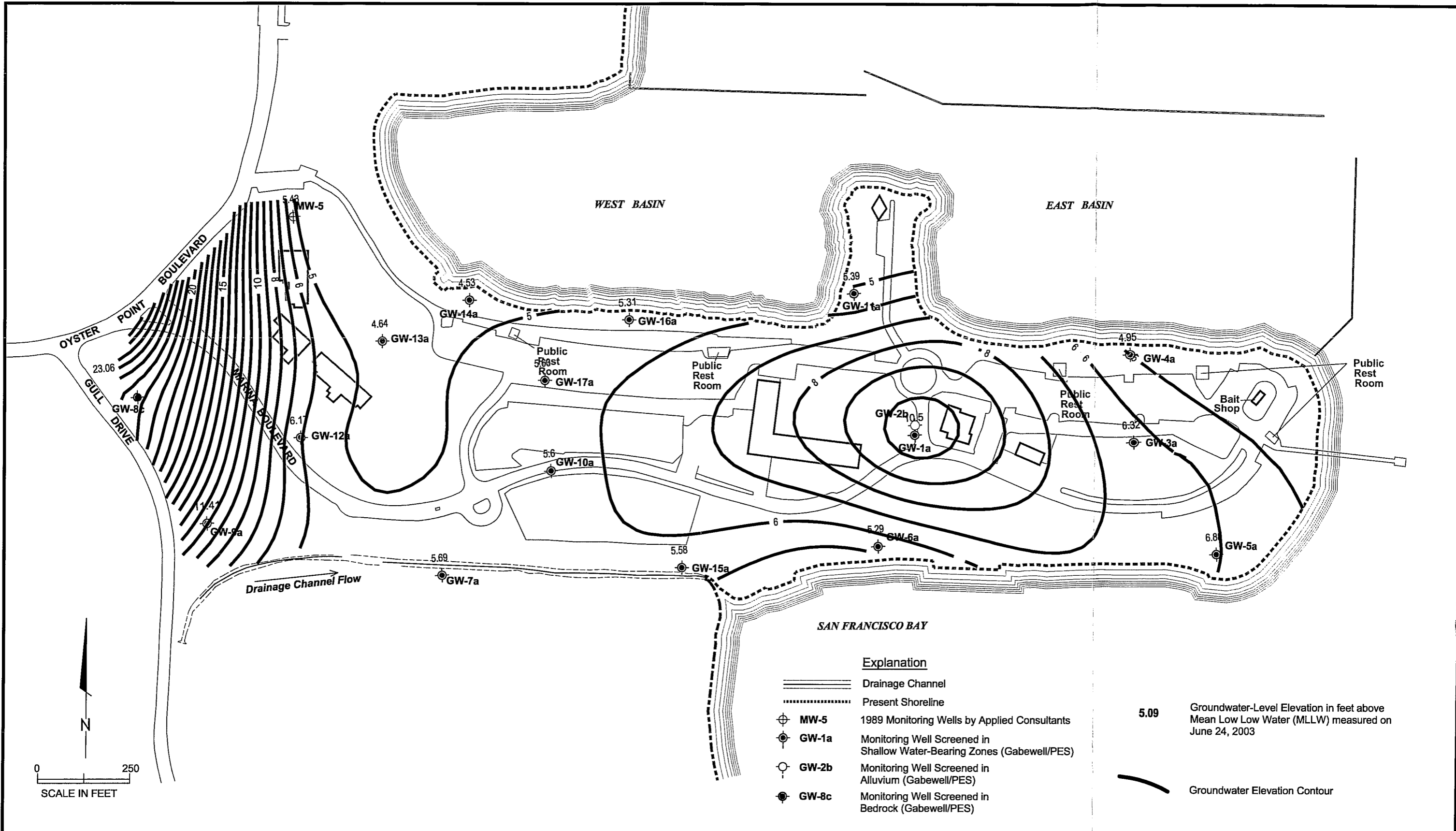
- Drainage Channel
- Present Shoreline
- MW-5 1989 Monitoring Wells by Applied Consultants
- GW-1a Monitoring Well Screened in Shallow Water-Bearing Zones (Gabewell/PES)
- GW-2b Monitoring Well Screened in Alluvium (Gabewell/PES)
- GW-8c Monitoring Well Screened in Bedrock (Gabewell/PES)
- 5.09 Groundwater-Level Elevation in feet above Mean Low Low Water (MLLW) measured on May 23, 2003
- Groundwater Elevation Contour

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PES Environmental, Inc.
 Engineering & Environmental Services
 For:
GABEWELL, INC.

Potentiometric Surface Map,
May 23, 2003
 MACLs Report
 Oyster Point Landfill
 South San Francisco, California

Figure

A-5

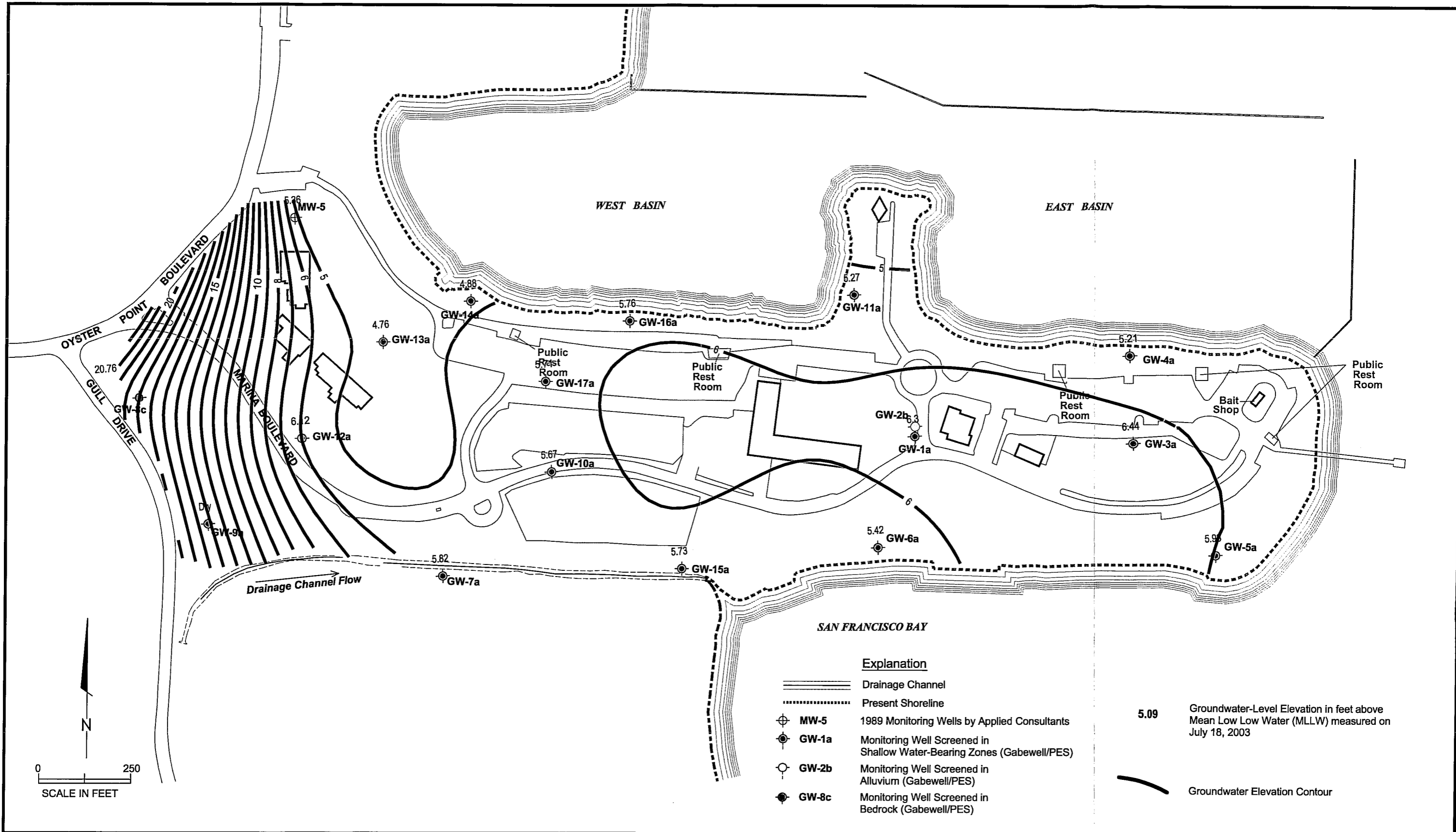


Explanation	
	Drainage Channel
	Present Shoreline
	MW-5 1989 Monitoring Wells by Applied Consultants
	GW-1a Monitoring Well Screened in Shallow Water-Bearing Zones (Gabewell/PES)
	GW-2b Monitoring Well Screened in Alluvium (Gabewell/PES)
	GW-8c Monitoring Well Screened in Bedrock (Gabewell/PES)
5.09	Groundwater-Level Elevation in feet above Mean Low Low Water (MLLW) measured on June 24, 2003
	Groundwater Elevation Contour

Prepared by:
PES Environmental, Inc.
 Engineering & Environmental Services
 For:
GABEWELL, INC.

Potentiometric Surface Map,
June 24, 2003
 MACLs Report
 Oyster Point Landfill
 South San Francisco, California

Figure
A-6

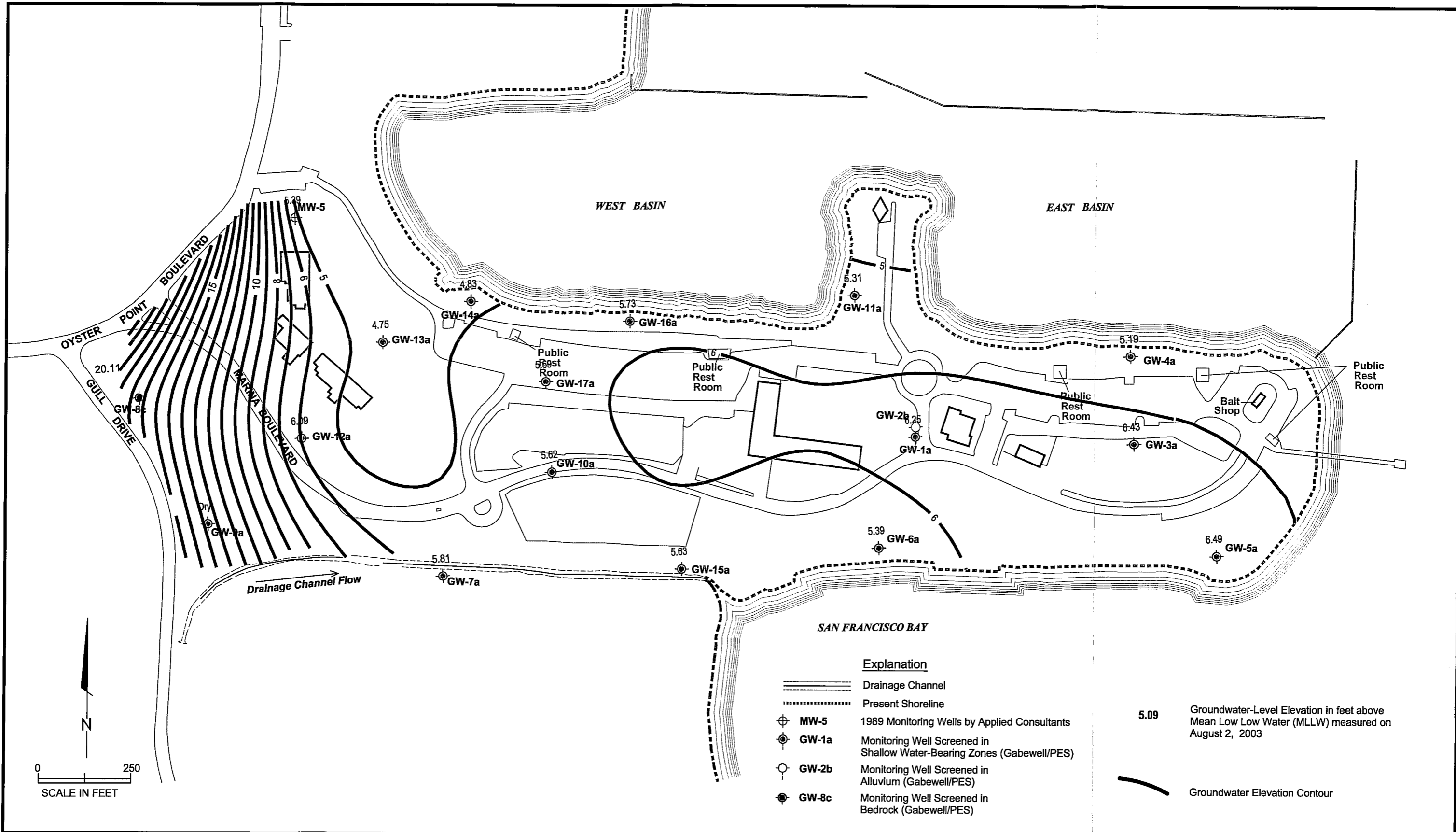


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Potentiometric Surface Map,
July 18, 2003
 MACLs Report
 Oyster Point Landfill
 South San Francisco, California

Figure

A-7

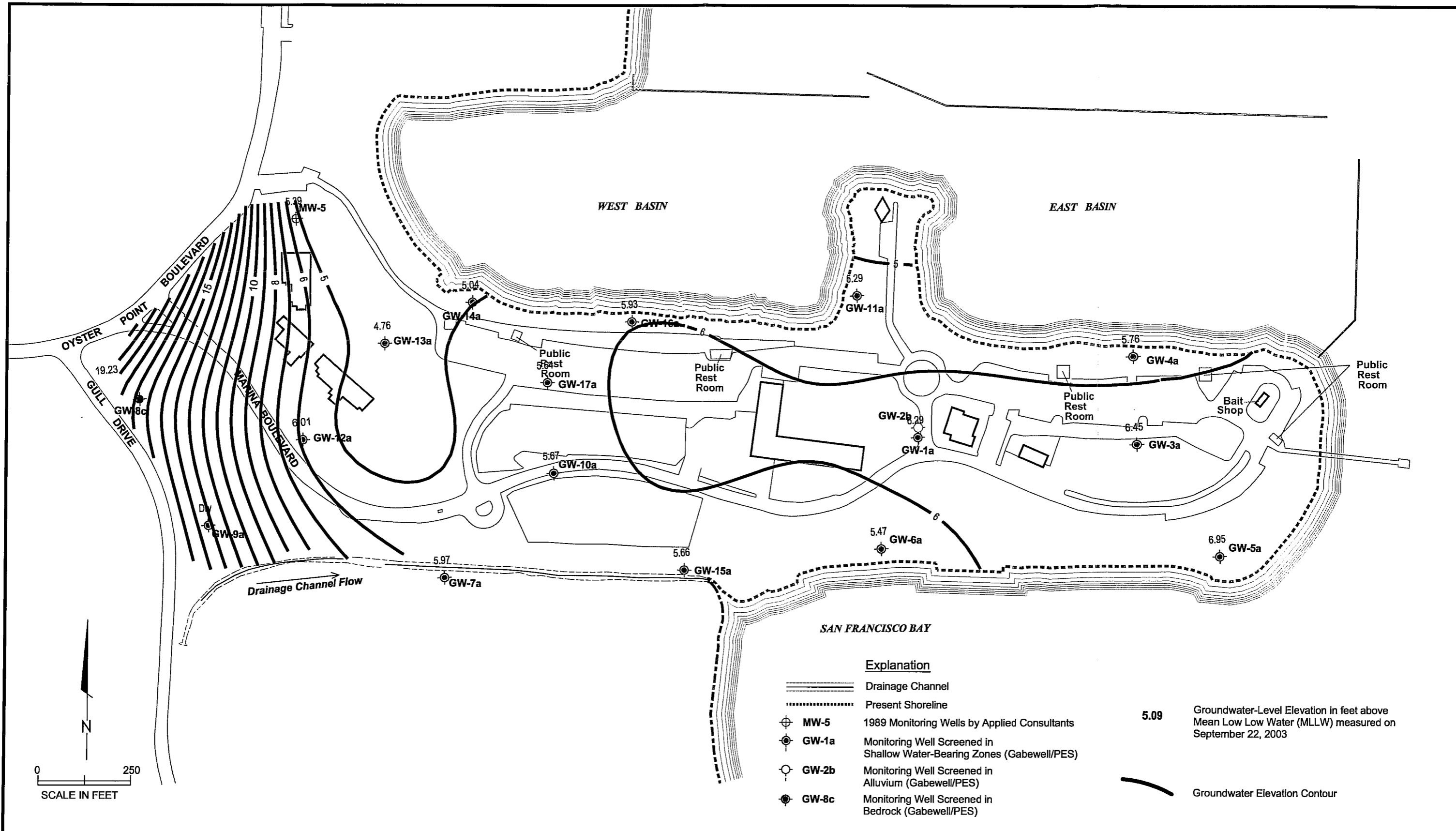


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Potentiometric Surface Map,
August 2, 2003
 MACLs Report
 Oyster Point Landfill
 South San Francisco, California

Figure

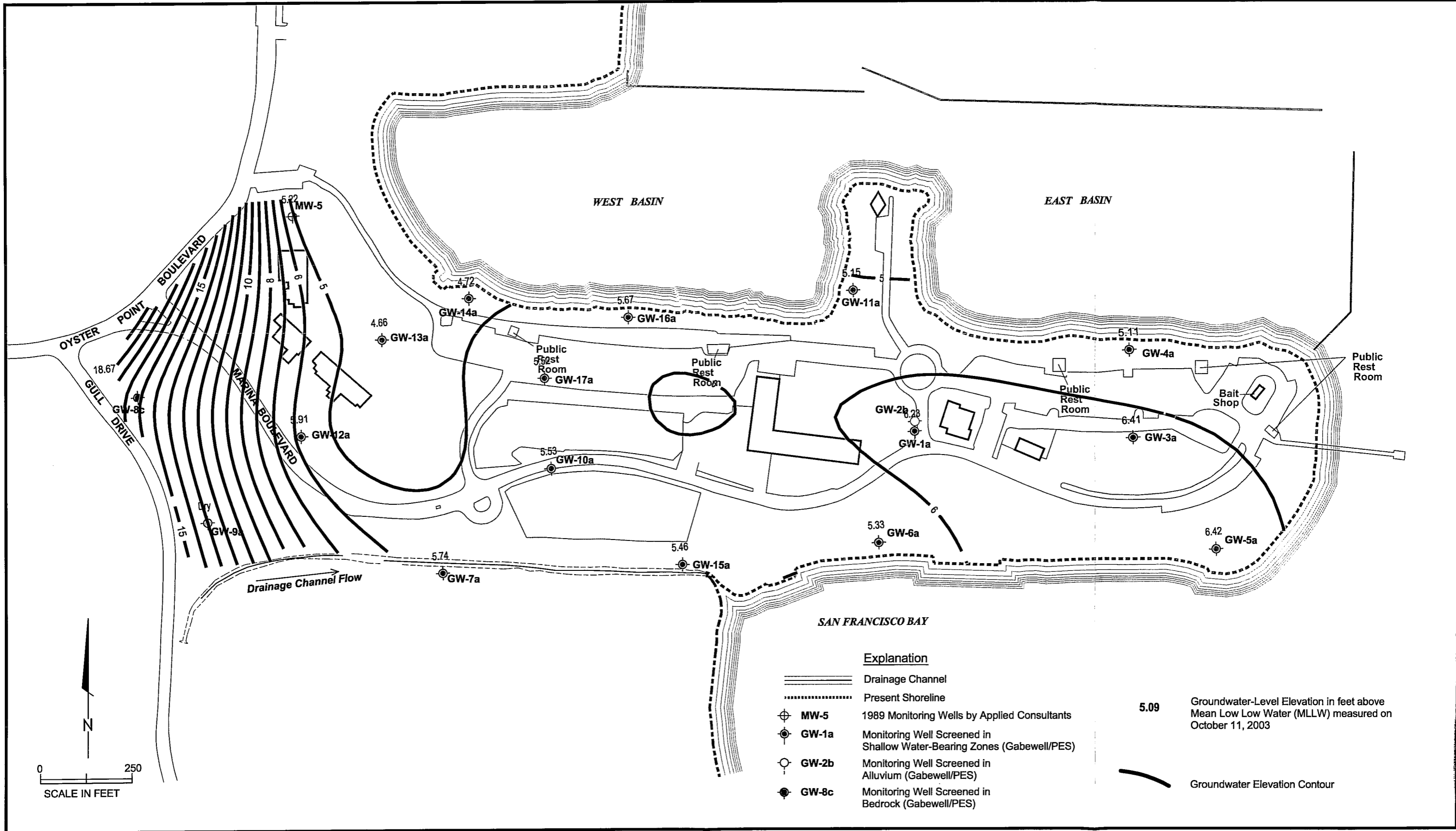
A-8



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GABEWELL, INC.

Potentiometric Surface Map,
September 22, 2003
 MACLs Report
 Oyster Point Landfill
 South San Francisco, California

Figure
A-9



Explanation

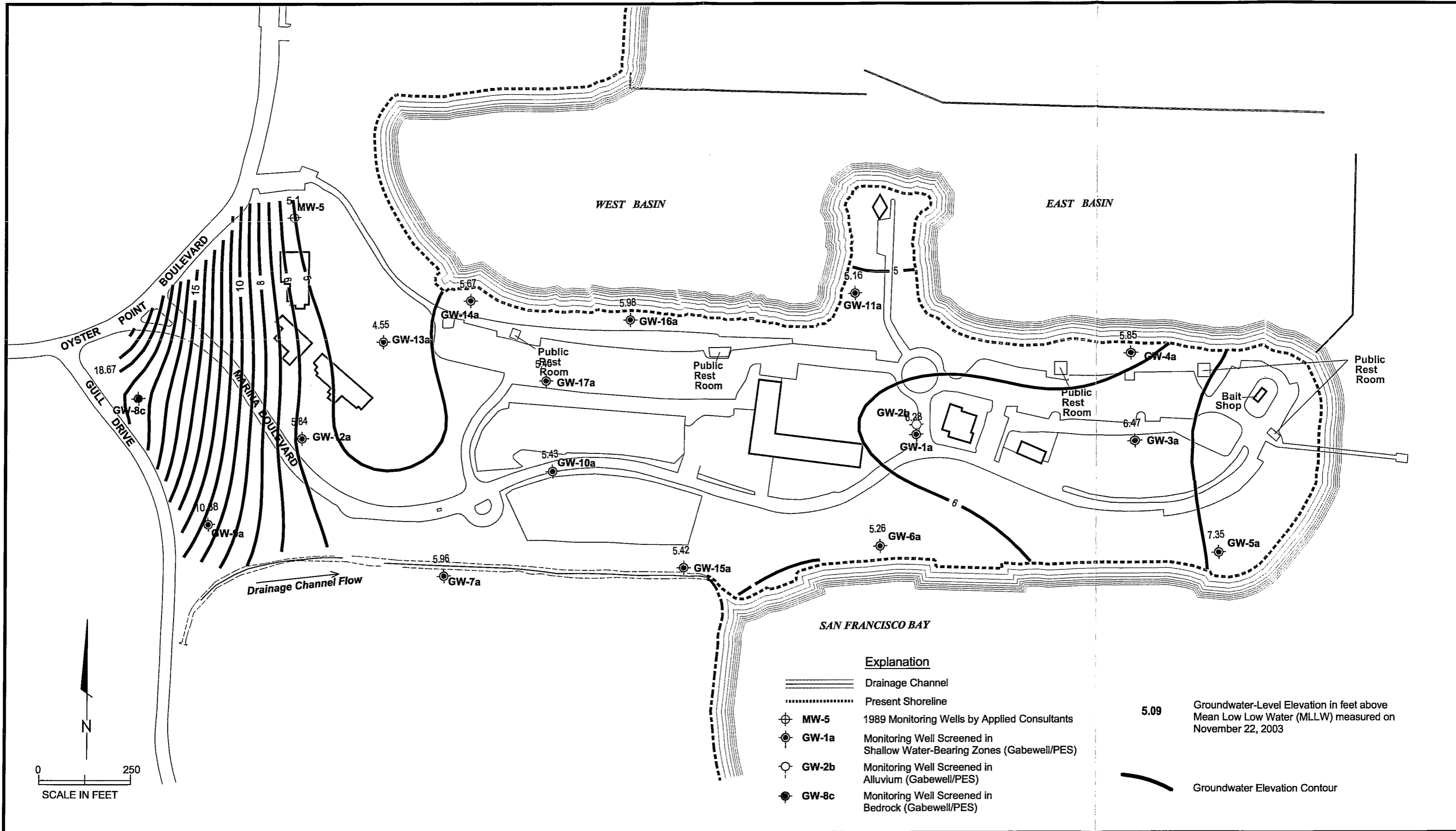
- Drainage Channel
- Present Shoreline
- MW-5 1989 Monitoring Wells by Applied Consultants
- GW-1a Monitoring Well Screened in Shallow Water-Bearing Zones (Gabewell/PES)
- GW-2b Monitoring Well Screened in Alluvium (Gabewell/PES)
- GW-8c Monitoring Well Screened in Bedrock (Gabewell/PES)
- 5.09 Groundwater-Level Elevation in feet above Mean Low Low Water (MLLW) measured on October 11, 2003
- Groundwater Elevation Contour

**Potentiometric Surface Map,
October 11, 2003**
MACLs Report
Oyster Point Landfill
South San Francisco, California

Figure

A-10

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PES Environmental, Inc.
Engineering & Environmental Services
For:
GABEWELL, INC.



SAN FRANCISCO BAY

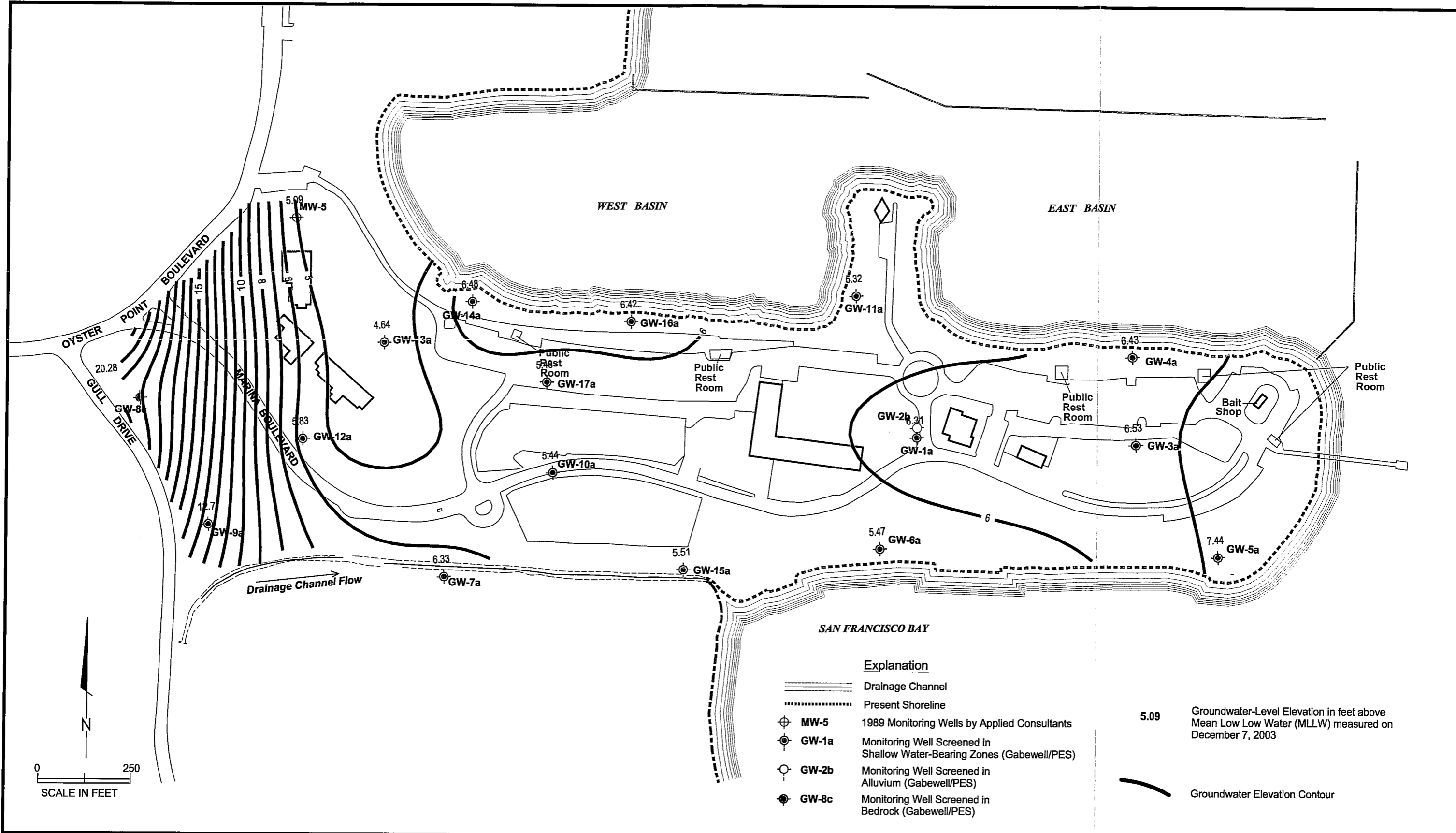
Explanation

- Drainage Channel
- Present Shoreline
- MW-5 1989 Monitoring Wells by Applied Consultants
- GW-1a Monitoring Well Screened in Shallow Water-Bearing Zones (Gabewell/PES)
- GW-2b Monitoring Well Screened in Alluvium (Gabewell/PES)
- GW-8c Monitoring Well Screened in Bedrock (Gabewell/PES)
- 5.09 Groundwater-Level Elevation in feet above Mean Low Low Water (MLLW) measured on November 22, 2003
- Groundwater Elevation Contour

Prepared by:
PES Environmental, Inc.
 Engineering & Environmental Services
 For:
GABEWELL, INC.

Potentiometric Surface Map,
November 22, 2003
 MACLs Report
 Oyster Point Landfill
 South San Francisco, California

Figure
A-11

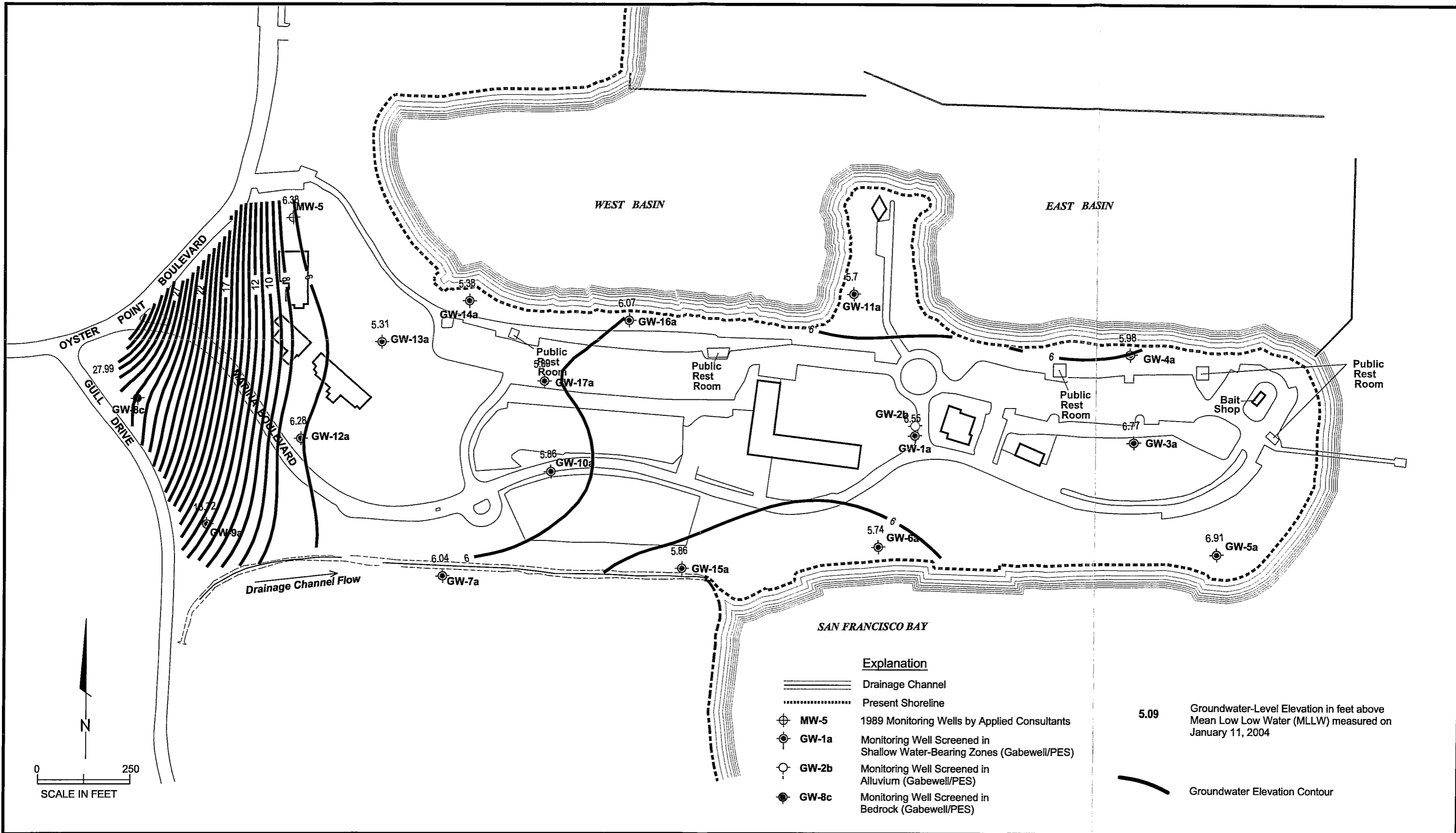


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GABEWELL, INC.

Potentiometric Surface Map,
December 7, 2003
 MACLs Report
 Oyster Point Landfill
 South San Francisco, California

Figure

A-12



SAN FRANCISCO BAY

Explanation

- Drainage Channel
- Present Shoreline
- MW-5 1989 Monitoring Wells by Applied Consultants
- GW-1a Monitoring Well Screened in Shallow Water-Bearing Zones (Gabewell/PES)
- GW-2b Monitoring Well Screened in Alluvium (Gabewell/PES)
- GW-8c Monitoring Well Screened in Bedrock (Gabewell/PES)

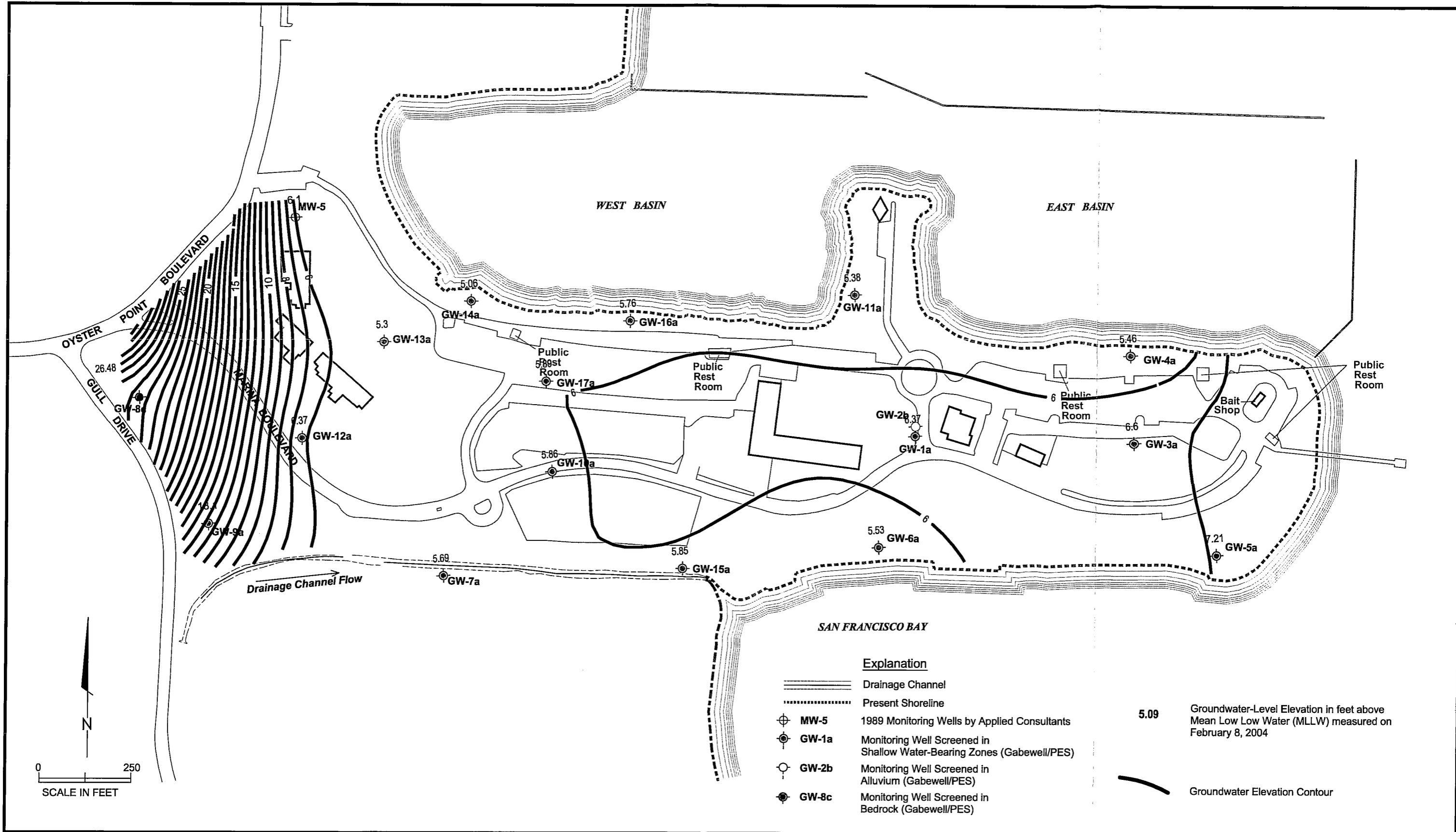
5.09 Groundwater-Level Elevation in feet above Mean Low Low Water (MLLW) measured on January 11, 2004

Groundwater Elevation Contour

Prepared by:
PES Environmental, Inc.
 Engineering & Environmental Services
 For:
GABEWELL, INC.

Potentiometric Surface Map,
January 11, 2004
 MACLs Report
 Oyster Point Landfill
 South San Francisco, California

Figure
A-13

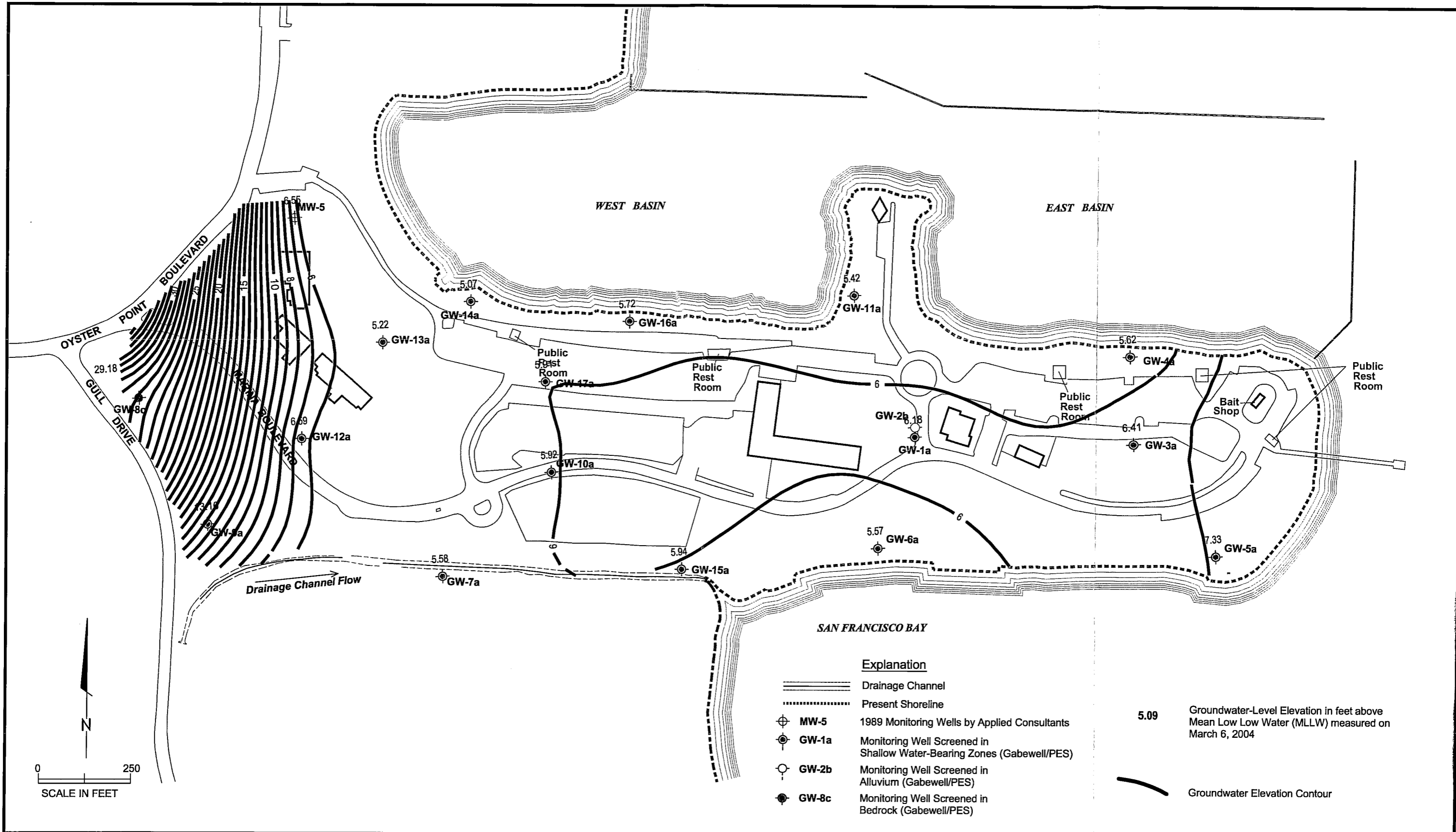


Prepared by:
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 For:
GABEWELL, INC.

Potentiometric Surface Map,
February 8, 2004
 MACLs Report
 Oyster Point Landfill
 South San Francisco, California

Figure

A-14

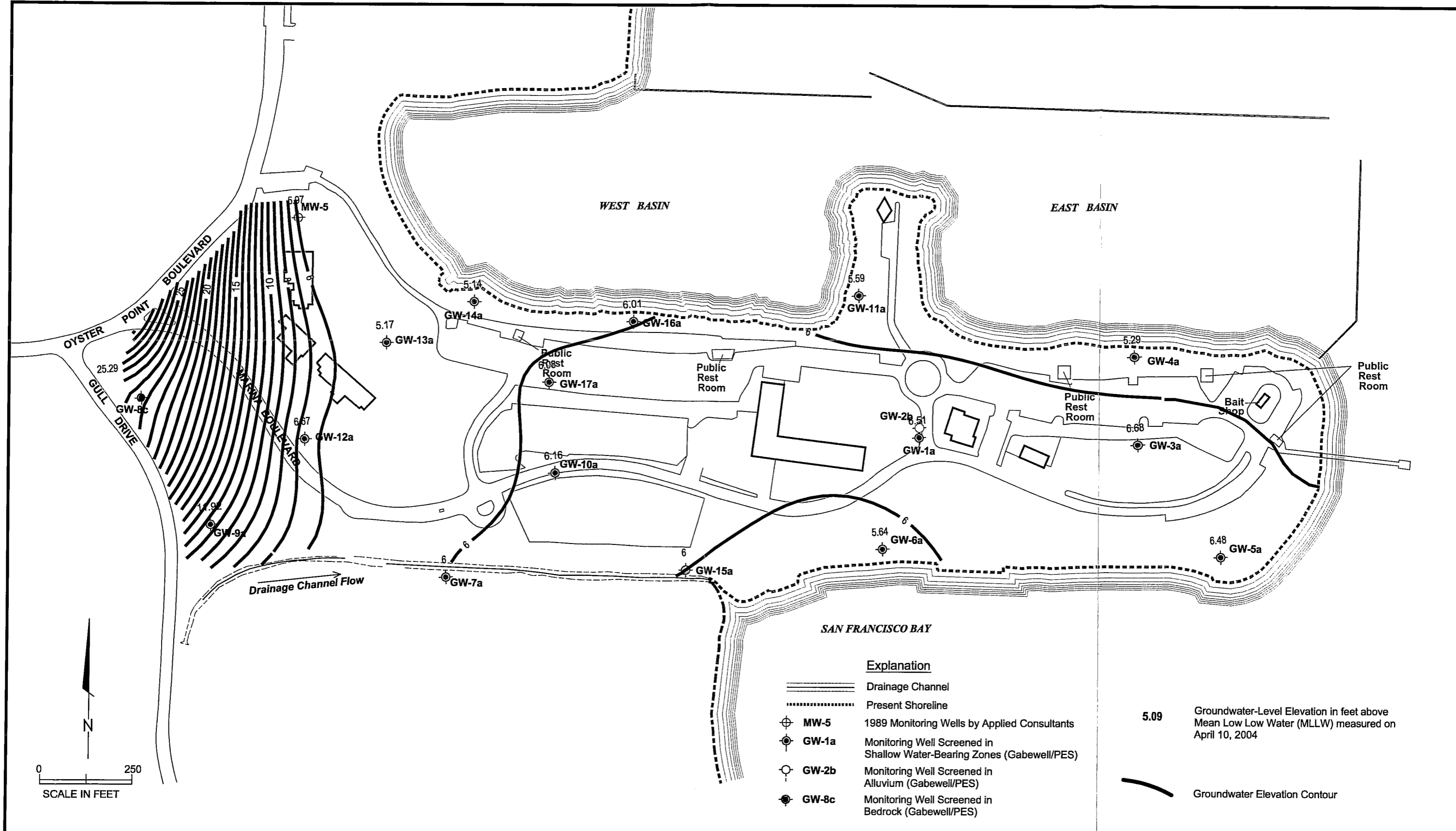


Prepared by:
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Potentiometric Surface Map,
March 6, 2004
 MACLs Report
 Oyster Point Landfill
 South San Francisco, California

Figure

A-15



Explanation

	Drainage Channel
	Present Shoreline
	MW-5 1989 Monitoring Wells by Applied Consultants
	GW-1a Monitoring Well Screened in Shallow Water-Bearing Zones (Gabewell/PES)
	GW-2b Monitoring Well Screened in Alluvium (Gabewell/PES)
	GW-8c Monitoring Well Screened in Bedrock (Gabewell/PES)

5.09 Groundwater-Level Elevation in feet above Mean Low Low Water (MLLW) measured on April 10, 2004

Groundwater Elevation Contour

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PES Environmental, Inc.
 Engineering & Environmental Services
 For:
GABEWELL, INC.

Potentiometric Surface Map,
April 10, 2004
 MACLs Report
 Oyster Point Landfill
 South San Francisco, California

Figure
A-16