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THIRD QUARTER 2006
SITE MONITORING REPORT

REDWOOD REGIONAL PARK
SERVICE YARD
OAKLAND, CALIFORNIA

Prepared for:

EAST BAY REGIONAL PARK DISTRICT
OAKLAND, CALIFORNIA

November 2006

STELLAR
ENVIRONMENTAL SOLUTIONS, INC.
GEOSCIENCE & ENGINEERING CONSULTING

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REDWOOD REGIONAL PARK
SERVICE YARD
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Prepared for:

EAST BAY REGIONAL PARK DISTRICT
P.O. BOX 5381
OAKLAND, CALIFORNIA 94605

Prepared by:

STELLAR ENVIRONMENTAL SOLUTIONS, INC.
2198 SIXTH STREET
BERKELEY, CALIFORNIA 94710

November 22, 2006

Project No. 2006-17

STELLAR
ENVIRONMENTAL SOLUTIONS, INC.
2198 SIXTH STREET, SUITE 201·BERKELEY, CA 94710
TEL: (510)644-3123 · FAX: (510)644-3859
GEOSCIENCE & ENGINEERING CONSULTING

November 22, 2006

Mr. Jerry Wickham, P.G.
Hazardous Materials Specialist
Local Oversight Program
Alameda County Department of Environmental Health
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502

Subject: Third Quarter 2006 Site Monitoring Report
Redwood Regional Park Service Yard Site – Oakland, California
Alameda County Environmental Health Fuel Leak Case No. RO0000246

Dear Mr. Wickham:

Attached is the referenced Stellar Environmental Solutions, Inc. report for the underground fuel storage tank (UFST) site at the Redwood Regional Park Service Yard, located at 7867 Redwood Road, Oakland, California. This project is being conducted for the East Bay Regional Park District (EBRPD), and follows previous site investigation and remediation activities (conducted since 1993) associated with former leaking UFSTs. The key regulatory agencies for this investigation are the Alameda County Environmental Health Care Services Agency, Department of Environmental Health; the Regional Water Quality Control Board; and the California Department of Fish and Game.

This report summarizes groundwater and surface monitoring and sampling activities conducted between July 1 and October 2, 2006 (Third Quarter 2006). Ongoing bioventing activities are reported in technical submittals separate from the ongoing groundwater and surface water monitoring quarterly reports; salient summary discussions will be included in the quarterly groundwater monitoring reports.

I declare, under penalty of perjury, that the information and/or recommendations contained in the attached document or report is true and correct to the best of my knowledge. If you have any questions regarding this report, please contact Mr. Neal Fujita of the EBRPD, or contact me directly at (510) 644-3123.

Sincerely,

Richard S. Makdisi, R.G., R.E.A.
Principal and Project Manager

cc: Carl Wilcox, California Department of Fish and Game
Neal Fujita, East Bay Regional Park District
State of California GeoTracker
Alameda County Environmental Health ftp System

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1.0 INTRODUCTION

PROJECT BACKGROUND

The subject property is the East Bay Regional Park District (EBRPD) Redwood Regional Park Service Yard located at 7867 Redwood Road in Oakland, Alameda County, California. The site has undergone site investigations and remediation since 1993 to address subsurface contamination caused by leakage from one or both of two former underground fuel storage tanks (UFSTs) that contained gasoline and diesel fuel. The Alameda County Environmental Health Care Services Agency, Department of Environmental Health (Alameda County Environmental Health) has provided regulatory oversight of the investigation since its inception (Alameda County Environmental Health Fuel Leak Case No. RO0000246). Other regulatory agencies with historical involvement in site review include the Regional Water Quality Control Board (Water Board) and the California Department of Fish and Game (CDFG).

OBJECTIVES AND SCOPE OF WORK

This report discusses the following activities conducted/coordinated by Stellar Environmental Solutions, Inc. (SES) between July 1 and September 30, 2006 (Third Quarter 2006):

- Collecting water levels in site wells to determine shallow groundwater flow direction;
- Sampling site wells for contaminant analysis and natural attenuation indicators;
- Collecting surface water samples for contaminant analysis; and

HISTORICAL CORRECTIVE ACTIONS AND INVESTIGATIONS

Previous SES reports have provided a full discussion of previous site remediation and investigations; site geology and hydrogeology; residual site contamination; conceptual model for contaminant fate and transport; and evaluation of hydrochemical trends and plume stability. Section 7.0 (References and Bibliography) of this report provides a listing of all technical reports for the site. The following is a summary of the general phases of site work:

- In 2000, a Feasibility Study report for the site was submitted to Alameda County Environmental Health. The study provided detailed analyses of the regulatory implications of site contamination and an assessment of viable corrective actions (SES, 2000d).

- Two instream bioassessment events were conducted in April 1999 and January 2000 to evaluate potential impacts to stream biota associated with the site contamination (no impacts were documented).
- Additional monitoring well installations and corrective action by ORC™ injection proposed by SES were approved by Alameda County Environmental Health in its January 8, 2001 letter to the EBRPD. Two phases of ORC™ injection were conducted—in September 2001 and July 2002.
- A total of 39 groundwater monitoring events have been conducted on a quarterly basis since project inception (November 1994), and a total of 11 groundwater monitoring wells are currently available for monitoring.
- A bioventing pilot test was conducted in September and October 2004 to evaluate the feasibility of this corrective action strategy, and the full-scale bioventing system was installed in November and December 2005. Bioventing activities conducted to date have been, and will continue to be, discussed in bioventing-specific technical reports, and updates will be provided in groundwater monitoring progress reports as they relate to this ongoing program.

SITE DESCRIPTION

Figure 1 shows the location of the project site. The site slopes to the west, from an elevation of approximately 564 feet above mean sea level (amsl) at the eastern edge of the service yard to approximately 545 feet amsl at Redwood Creek, which defines the approximate western edge of the project site with regard to this investigation. Figure 2 shows the site plan.

REGULATORY OVERSIGHT

The lead regulatory agency for the site investigation and remediation is Alameda County Environmental Health (Case No. RO0000246), with oversight provided by the Water Board (State of California GeoTracker Global ID T0600100489). The CDFG is also involved with regard to water quality impacts to Redwood Creek. All workplans and reports have been submitted to these agencies. Historical Alameda County Environmental Health-approved revisions to the groundwater sampling program have included:

- Discontinuing hydrochemical sampling and analysis in wells MW-1, MW-3, MW-5, and MW-6;
- Discontinuing creek surface water sampling at upstream location SW-1;

N

SITE LOCATION ON U.S.G.S. TOPOGRAPHIC MAP

Redwood Reg. Park Service Yard Oakland, CA	By: MJC	MARCH 2006
	Figure 1	

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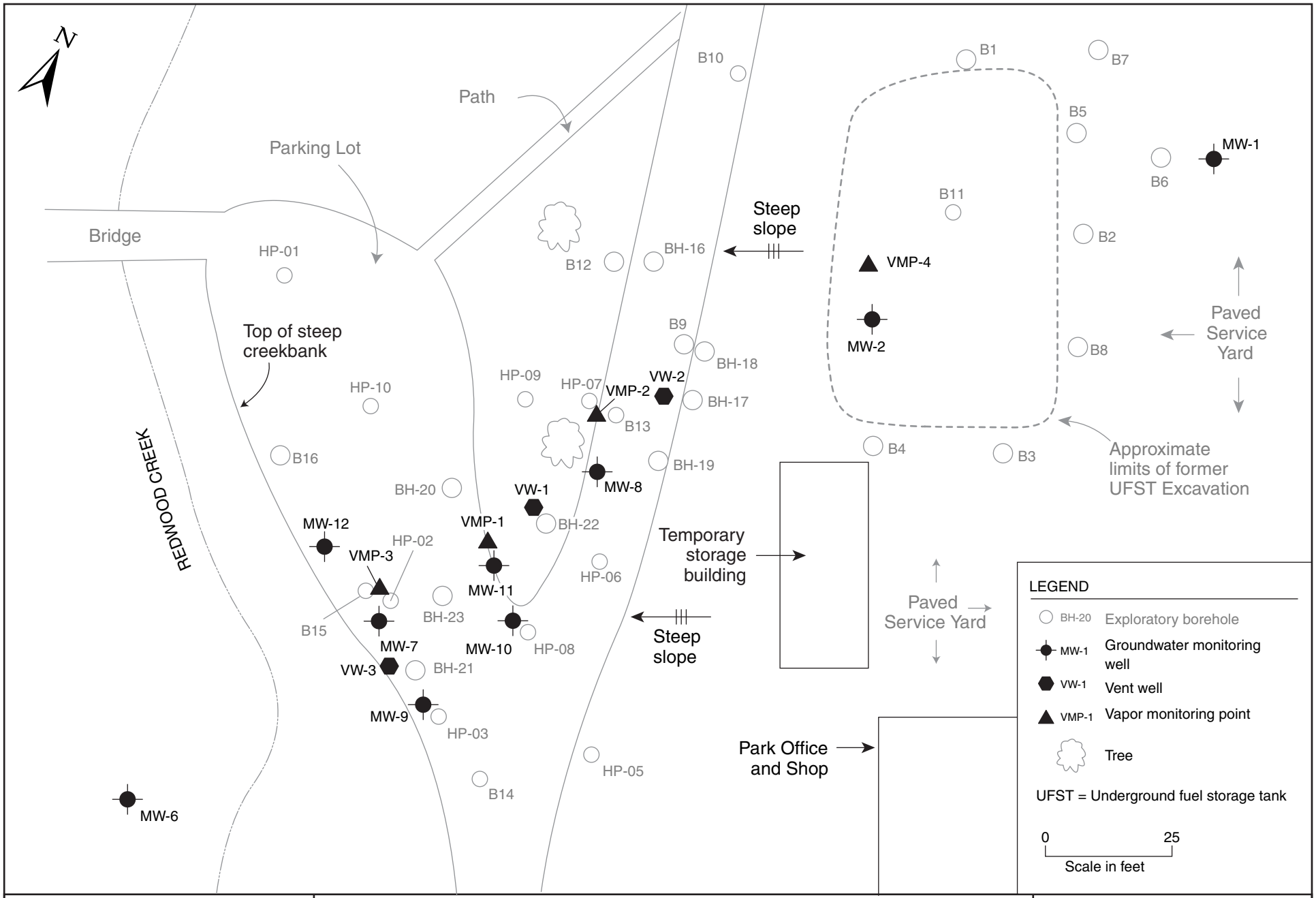

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SITE PLAN AND WELL LOCATIONS
Redwood Regional Park Service Yard, Oakland, CA

Figure 2

by: MJC | JANUARY 2006

2005-02-20

- Discontinuing field measurement and laboratory analyses for natural attenuation indicators, to be re-implemented following the bioventing corrective action; and

- Reducing the frequency of creek surface water sampling from quarterly to semi-annually. The latter recommendation has not yet been implemented due to the EBRPD's continued concern over potential impacts to Redwood Creek.

The site is in compliance with the State Water Resources Control Board's GeoTracker requirements for uploading electronic data and reports. In addition, electronic copies of technical documentation reports published since Q2 2005 have been uploaded to Alameda County Environmental Health's file transfer protocol (ftp) system. Per Alameda County Environmental Health's October 31, 2005 directive entitled "Miscellaneous Administrative Topics and Procedures," effective January 31, 2006, paper copies of reports will no longer be provided to Alameda County Environmental Health.

2.0 PHYSICAL SETTING

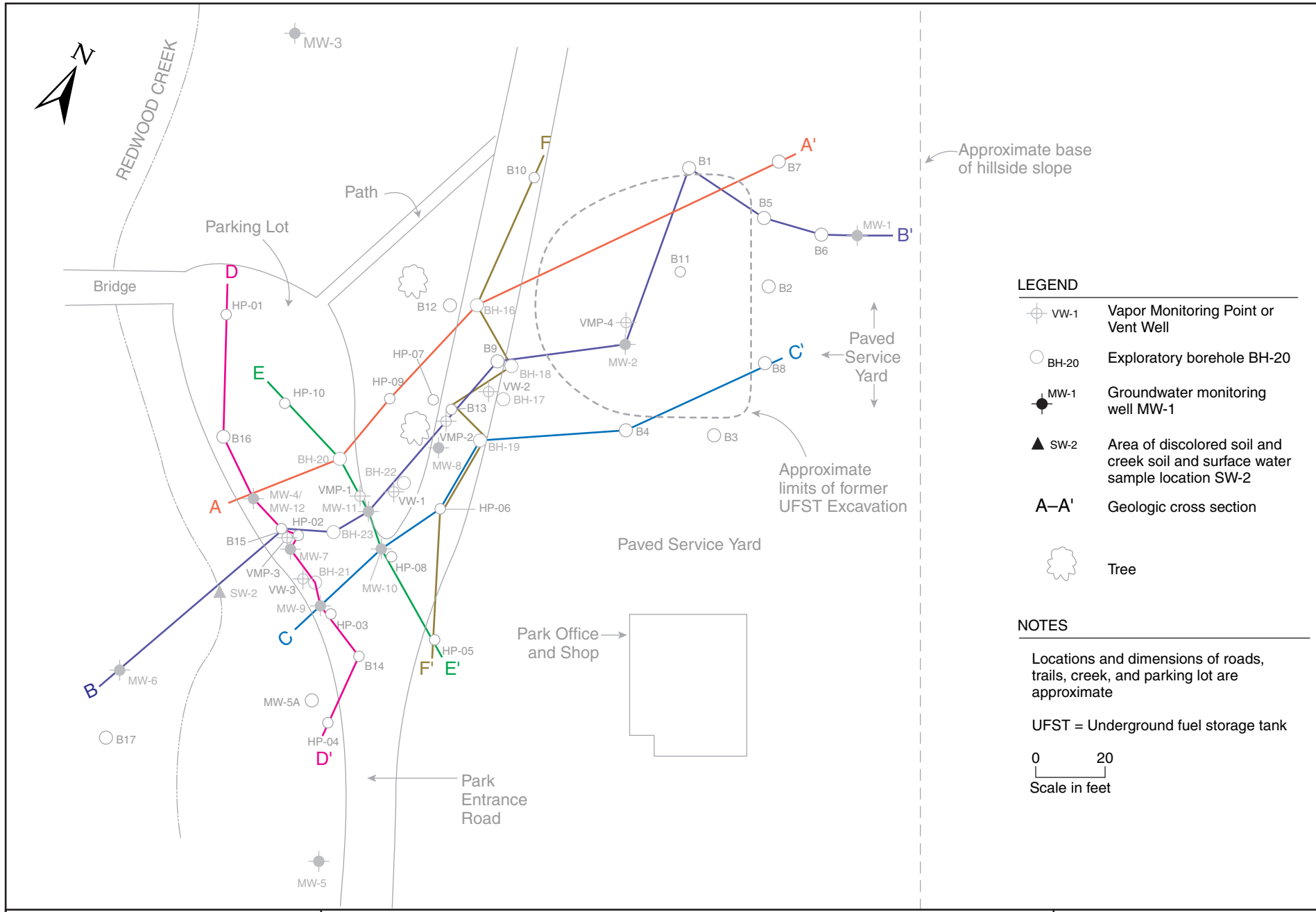
This section discusses the site hydrogeologic conditions based on geologic logging and water level measurements collected at the site since September 1993. Previous SES reports have included detailed discussions of site lithologic and hydrogeologic conditions. In May 2004, Alameda County Environmental Health requested, via email, additional evaluation of site lithology—specifically, the preparation of multiple geologic cross-sections parallel to and perpendicular to the contaminant plume's long axis.

SITE LITHOLOGY

Figure 3 shows the location of geologic cross-sections. Figure 4 shows three sub-parallel geologic cross-sections (A-A' through C-C') along the long axis of the groundwater contaminant plume (i.e., along local groundwater flow direction). Figure 5 shows three sub-parallel geologic cross-sections (D-D' through F-F') roughly perpendicular to groundwater direction. In each figure, the three sub-parallel sections are presented together for ease of comparison. Due to the small scale, these sections show only lithologic conditions (i.e., soil type and bedrock depth). Additional information on water level depths, historical range of water levels, and inferred thickness of soil contamination were presented in a previous report (SES, 2004c) for cross-section B-B'.

Shallow soil stratigraphy consists of a surficial 3- to 10-foot-thick clayey silt unit underlain by a 5- to 15-foot-thick silty clay unit. In the majority of boreholes, a 5- to 10-foot-thick clayey coarse-grained sand and clayey gravel unit that laterally grades to a clay or silty clay was encountered. This unit overlies a weathered siltstone at the base of the observed soil profile. Soils in the vicinity of MW-1 are inferred to be landslide debris.

A previous SES report (SES, 2004c) presented a bedrock surface isopleth map (elevation contours for the top of the bedrock surface) in the contaminant plume area. That isopleth map and Figures 4 and 5 indicate the following: The bedrock surface slopes steeply, approximately 0.3 feet/foot from east to west (toward Redwood Creek) in the upgradient portion of the site (from the service yard to under the entrance road), then shows a gentle east-to-west slope in the downgradient portion of the site (under the gravel parking area) toward Redwood Creek. This



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GEOLOGIC CROSS-SECTION LOCATIONS
Redwood Regional Park Service Yard, Oakland, CA

Figure 3

by: MJC | DECEMBER 2005

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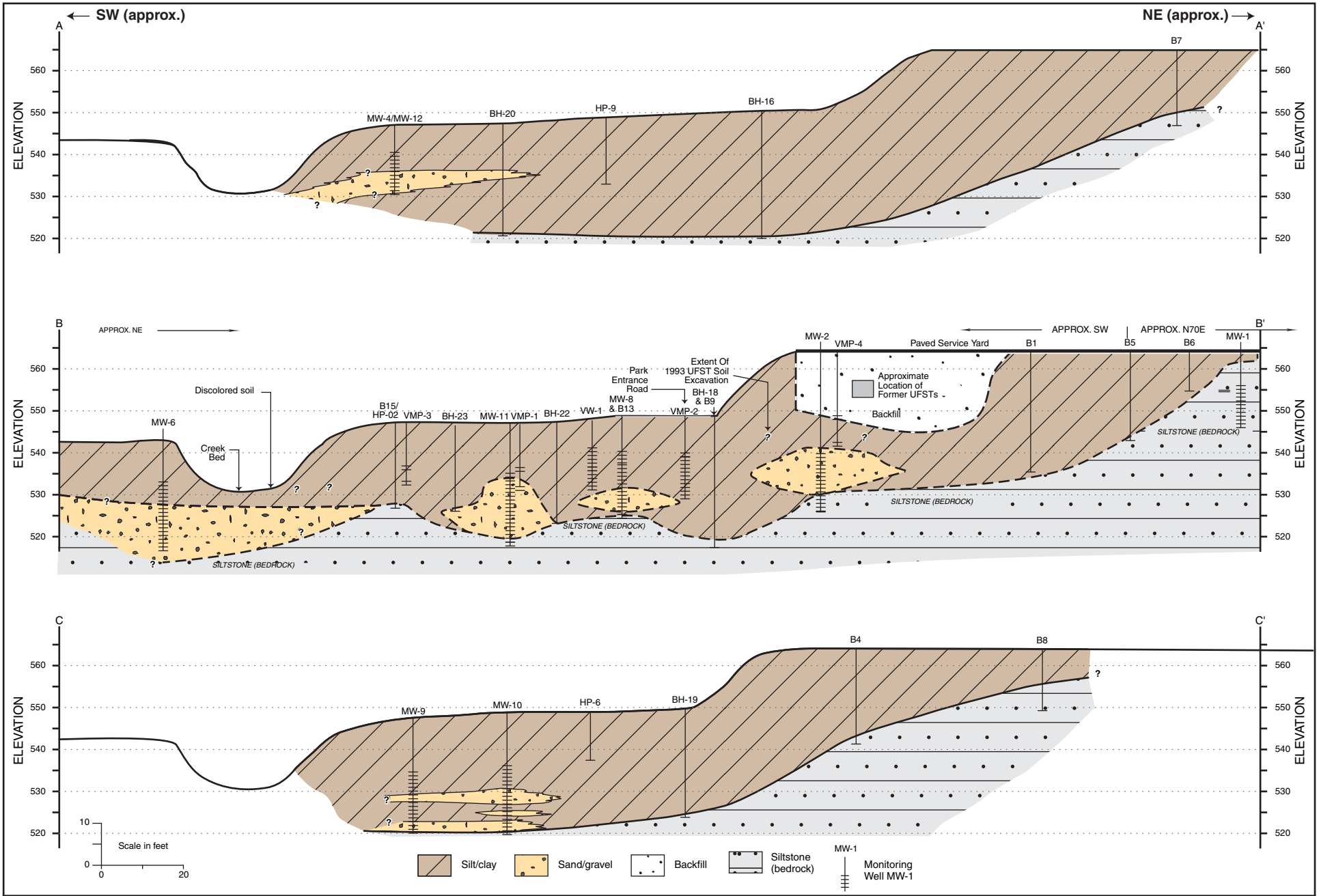

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GEOLOGIC CROSS SECTIONS — A-A' through C-C'
Redwood Regional Park Service Yard, Oakland, CA

Figure 4

by: MJC | DECEMBER 2005

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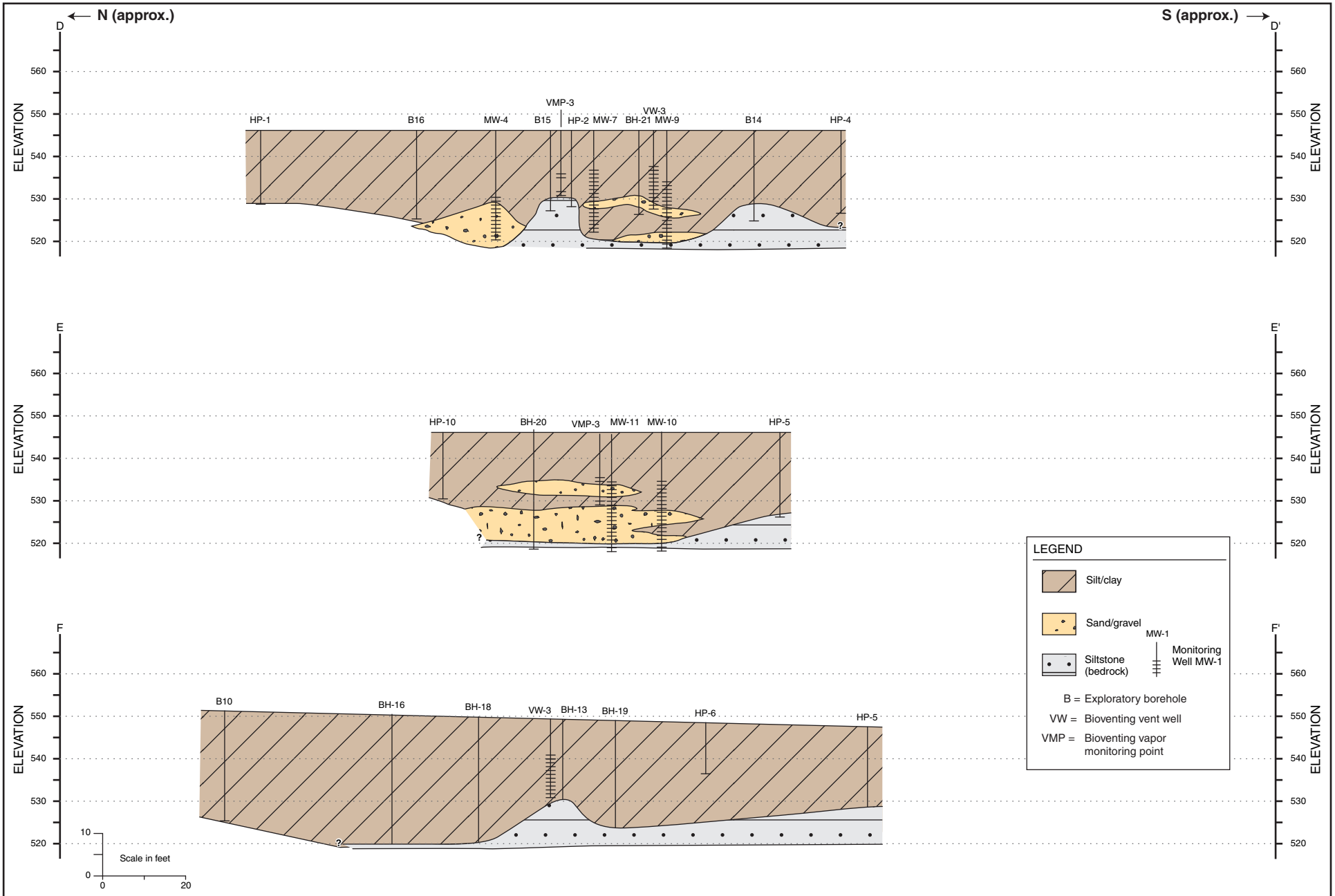

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GEOLOGIC CROSS SECTIONS — D-D' through F-F'
Redwood Regional Park Service Yard, Oakland, CA

Figure 5

by: MJC | DECEMBER 2005

2005-66-13

general gradient corresponds to the local groundwater flow direction. On the southern side of the plume area, bedrock slopes gently from south to north (the opposite of the general topographic gradient). Bedrock topography on the northern side of the plume cannot be determined from the available data.

In the central and downgradient portions of the groundwater contaminant plume (under the entrance road and the parking area), the bedrock surface has local, fairly steep elevation highs and lows, expressing a hummocky surface. Bedrock elevations vary by up to 10 feet over distances of less than 20 feet in this area. Local bedrock elevation highs are observed at upgradient location BH-13 (see cross-section F-F') and at downgradient location B15/HP-02 (see cross-section B-B'). Intervening elevation lows create troughs that trend north-south in the central portion of the plume and east-west in the downgradient portion of the plume.

The bedrock surface (and overlying unconsolidated sediment lithology) suggest that the bedrock surface may have at one time undergone channel erosion from a paleostream(s) flowing sub-parallel to present-day Redwood Creek. Because groundwater flows in the unconsolidated sediments that directly overlie the bedrock surface, it is likely that the hummocky bedrock surface affects local groundwater depth and flow direction. This is an important hydrogeologic control that should be considered if groundwater-specific corrective action is contemplated.

HYDROGEOLOGY

Groundwater at the site occurs under unconfined and semi-confined conditions, generally within the clayey, silty, sand-gravel zone. The top of this zone varies between approximately 12 and 19 feet below ground surface (bgs); the bottom of the water-bearing zone (approximately 25 to 28 feet bgs) corresponds to the top of the siltstone bedrock unit. Seasonal fluctuations in groundwater depth create a capillary fringe of several feet that is saturated in the rainy period (late fall through early spring) and unsaturated during the remainder of the year. The thickness of the saturated zone plus the capillary fringe varies between approximately 10 and 15 feet in the area of contamination. Local perched water zones have been observed well above the top of the capillary fringe. Consistent with the bedrock isopleth map showing an elevation depression in the vicinity of MW-11, historical groundwater elevations in MW-11 are sporadically lower than in the surrounding area. As discussed in the previous sub-section, local groundwater flow direction likely is more variable than expressed by groundwater monitoring well data, due to local variations in bedrock surface topography.

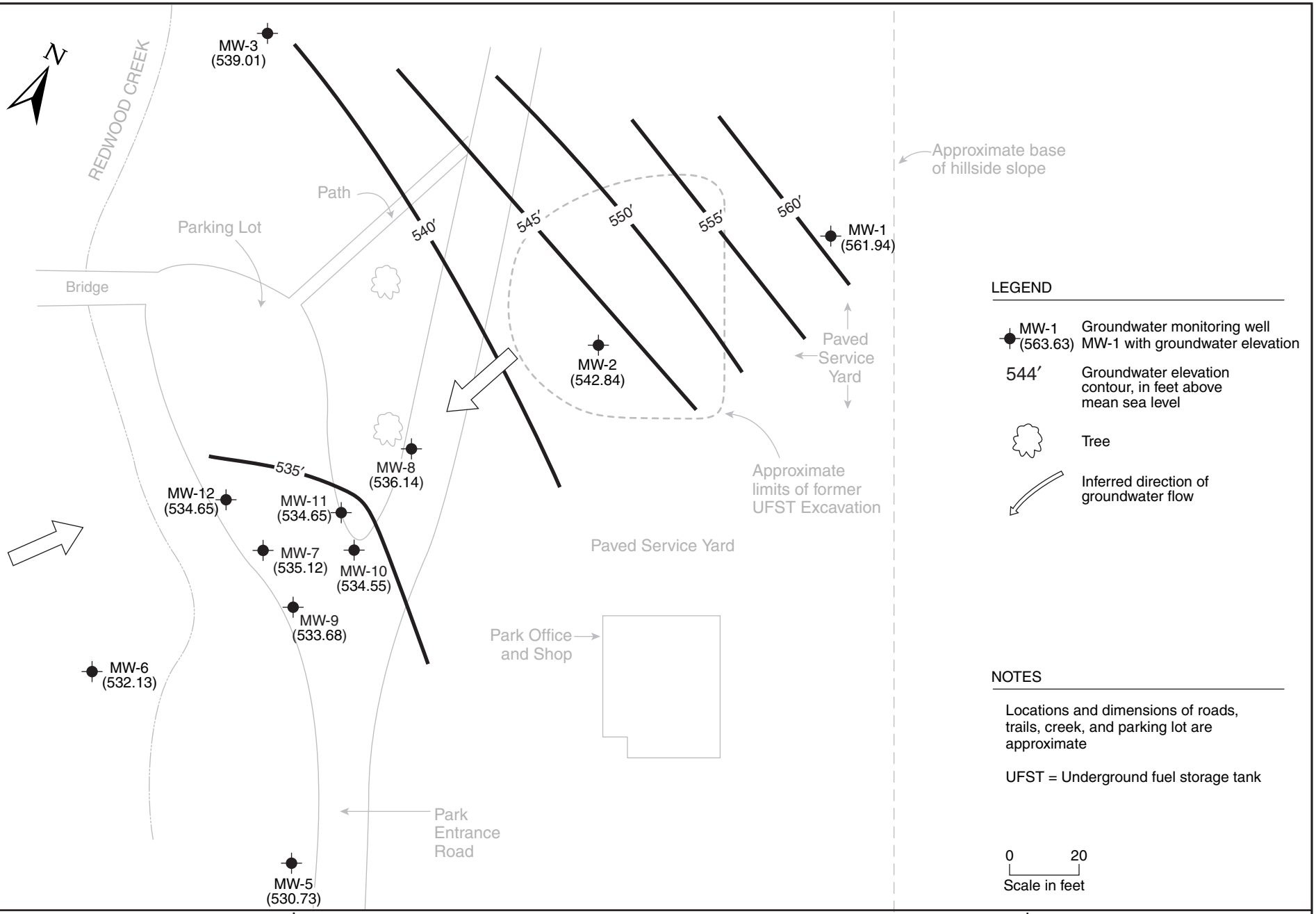
Groundwater elevations in Q3 2006 lowered an average of 2 feet compared to last quarter, which reflects the dry summer season. The lowering of groundwater below the bioventing screened interval zone allowed for a microbial respiration test to be conducted.

Figure 6 is a groundwater elevation map constructed from the current event monitoring well equilibrated water levels. Table 1 (in Section 3.0) summarizes current event groundwater elevation data. Appendix A contains historical groundwater elevation data.

In the upgradient portion of the site (between well MW-1 and MW-2, in landslide debris and the former UFST excavation backfill), the groundwater gradient is approximately 0.25 foot per foot. Downgradient from (west of) the UFST source area (between MW-2 and Redwood Creek), the groundwater gradient is approximately 0.08 foot per foot. The average groundwater elevation was 1.3 feet lower than the previous (June 2006) event, with the greatest lowering of 2.59 feet measured in MW-3. The smallest changes in groundwater elevations was seen in wells nearest to Redwood Creek, with the groundwater elevation in MW-7 measured at 0.22 feet higher than in June 2006. The direction of shallow groundwater flow during the current event was to the west-southwest (toward Redwood Creek), which is consistent with historical site groundwater flow direction.

We assume a site groundwater velocity of 7 to 10 feet per year using general look-up tables for permeability characteristics for the site-specific lithologic data obtained from site investigations. This velocity estimate is conservatively low, but does meet minimum-distance-traveled criteria from the date when contamination was first observed in Redwood Creek (1993) relative to the time of the UST installations (late 1970s). Locally, however, the groundwater velocity could vary significantly. Calculating the specific hydraulic conductivity critical to accurately estimating site-specific groundwater velocity would require direct testing of the water-bearing zone through a slug or pumping test.

Redwood Creek, which borders the site to the west, is a seasonal creek known for the occurrence of rainbow trout. Creek flow in the vicinity of the site shows significant seasonal variation, with little to no flow during the summer and fall dry season, and vigorous flow with depths exceeding 1 foot during the winter and spring wet season. The creek is a gaining stream (i.e., it is recharged by groundwater seeps and springs) in the vicinity of the site, and discharges into Upper San Leandro Reservoir located approximately 1 mile southeast of the site. During low-flow conditions, the groundwater table is below the creek bed in most locations (including the area of historical contaminated groundwater discharge); consequently, there is little to no observable creek flow at these times.



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GROUNDWATER ELEVATION MAP–SEPTEMBER 29, 2006

Redwood Regional Park Service Yard, Oakland, CA

Figure 6

by: MJC | NOVEMBER 2006

2006-17-07

3.0 THIRD QUARTER 2006 ACTIVITIES

This section presents the creek surface water and groundwater sampling and analytical methods for the most recent groundwater monitoring event (Q3 2006), conducted in September 2006. A summary of bioventing-related activities is also provided.

GROUNDWATER AND SURFACE WATER MONITORING ACTIVITIES

Groundwater and surface water analytical results are summarized in Section 5.0. Monitoring and sampling protocols were in accordance with the Alameda County Environmental Health-approved SES technical workplan (SES, 1998a). Current event activities included:

- Measuring static water levels in all 11 of the site wells.
- Collecting post-purge groundwater samples for laboratory analysis of site contaminants from wells located within (or potentially within) the groundwater plume (MW-2, MW-7, MW-8, MW-9, MW-10, MW-11, and MW-12).
- Collecting Redwood Creek surface water samples for laboratory analysis from locations SW-2 and SW-3.

Groundwater monitoring/sampling was conducted on September 29, 2006. Creek sampling was conducted on October 2, 2006 by the SES project manager. The locations of all site monitoring wells and creek water sampling locations are shown on Figure 2 (in Section 1.0). Well construction information and water level data are summarized in Table 1. Appendix B contains the groundwater monitoring field records for the current event.

Because it appears that the previously-injected ORC™ has been depleted, continued monitoring of the natural attenuation parameters—DO, ORP, nitrate, ferrous iron, and sulfate—is of marginal value until such time as additional corrective actions that would increase oxygen concentrations (e.g., bioventing) are implemented. Therefore, monitoring for natural attenuation parameters was discontinued following the Q3 2004 event.

Table 1
Groundwater Monitoring Well Construction and Groundwater Elevation Data –
September 29, 2006 Monitoring Event
Redwood Regional Park Corporation Yard, Oakland, California

Well	Well Depth	Screened Interval	TOC Elevation	Groundwater Elevation (6/20/06)
MW-1	18	7 to17	565.83	561.94
MW-2	36	20 to 35	566.42	542.84
MW-3	42	7 to 41	560.81	539.01
MW-5	26	10 to 25	547.41	530.73
MW-6	26	10 to 25	545.43	532.13
MW-7	24	9 to24	547.56	535.12
MW-8	23	8 to 23	549.13	536.14
MW-9	26	11 to 26	549.28	533.68
MW-10	26	11 to 26	547.22	534.55
MW-11	26	11 to 26	547.75	534.65
MW-12	25	10 to 25	544.67	534.65

Notes:

TOC = Top of casing.

Wells MW-1 through MW-6 are 4-inch diameter; all other wells are 2-inch diameter.

All elevations are feet above U.S. Geological Survey mean sea level.

Groundwater Level Monitoring and Sampling

Groundwater monitoring well water level measurements, purging, sampling, and field analyses were conducted by Blaine Tech Services under the supervision of SES personnel. Groundwater sampling was conducted in accordance with State of California guidelines for sampling dissolved analytes in groundwater associated with leaking UFSTs (State Water Resources Control Board, 1989), and followed the methods and protocols approved by Alameda County Environmental Health in the SES 1998 workplan (SES, 1998a).

As the first task of the monitoring event, static water levels were measured using an electric water level indicator. The wells to be sampled for contaminant analyses were then purged (by bailing and/or pumping) of three wetted casing volumes. Aquifer stability parameters (temperature, pH, electrical conductivity, and turbidity) were measured after each purged casing volume to ensure that representative formation water would be sampled. To minimize the

potential for cross-contamination, wells were purged and sampled in order of increasing contamination (based on the analytical results of the previous quarter).

The sampling-derived purge water and decontamination rinseate (approximately 50 gallons) from the current event was containerized in the onsite plastic tank. Purge water from future events will continue to be accumulated in the onsite tank until it is full, at which time the water will be transported offsite for proper disposal.

Creek Surface Water Sampling

Surface water sampling was conducted by SES on October 2, 2006. Surface water samples were collected from Redwood Creek location SW-2 (immediately downgradient of the former UFST source area and within the area of documented creek bank soil contamination), and SW-3 (approximately 500 feet downstream of the SW-2 location). In accordance with a previous SES recommendation approved by the Alameda County Environmental Health, upstream sample location SW-1 is no longer part of the surface water sampling program.

At the time of sampling, the creek was at a low stage—water depths ranged from approximately 0.5 to 1 foot, with a very slow flow. At the SW-2 location, where contaminated groundwater discharge to the creek historically has been observed, an orange algae was seen growing on the saturated portion of the creek bank. This algae likely is utilizing the petroleum as a carbon source, and therefore is a good indicator of the presence of petroleum contamination. However, neither petroleum sheen nor odor were evident on/at the water surface.

BIOVENTING-RELATED ACTIVITIES

The bioventing system was installed and started up in December 2005/January 2006. One month's worth of weekly system monitoring and air flow optimization events were conducted in January and February 2006. Monthly bioventing system operations and maintenance (O&M) events have been conducted since February 2006. Bioventing activities are discussed in detail in separate technical documents.

4.0 REGULATORY CONSIDERATIONS

This chapter summarizes the regulatory considerations regarding surface water and groundwater contamination. There are no Alameda County Environmental Health or Water Board cleanup orders for the site, although all site work has been conducted under oversight of these agencies.

GROUNDWATER CONTAMINATION

As specified in the Water Board's San Francisco Bay Region Water Quality Control Plan (Regional Water Quality Control Board, 1986), all groundwater are considered potential sources of drinking water unless otherwise approved by the Water Board, and are also assumed to ultimately discharge to a surface water body and potentially impact aquatic organisms. While it is likely that site groundwater would satisfy geology-related criteria for exclusion as a drinking water source (excessive total dissolved solids and/or insufficient sustained yield), Water Board approval for this exclusion has not been obtained for the site. As summarized in Table 2 (in Section 5.0), site groundwater contaminant levels are compared to two sets of criteria: 1) Water Board Tier 1 Environmental Screening Levels (ESLs) for sites where groundwater is a current or potential drinking water source; and 2) ESLs for sites where groundwater is not a current or potential drinking water source.

As stipulated in the ESL document (Water Board, 2005), the ESLs are not cleanup criteria; rather, they are conservative screening-level criteria designed to be protective of both drinking water resources and aquatic environments in general. The groundwater ESLs are composed of multiple components, including ceiling value, human toxicity, indoor air impacts, and aquatic life protection. Exceedance of ESLs suggests that additional investigation and/or remediation is warranted. While drinking water standards [e.g., Maximum Contaminant Levels (MCLs)] are published for the site contaminants of concern, Alameda County Environmental Health has indicated that impacts to nearby Redwood Creek are of primary importance, and that site target cleanup standards should be evaluated primarily in the context of surface water quality criteria.

SURFACE WATER CONTAMINATION

As summarized in Table 2 (in Section 5.0), site surface water contaminant levels are compared to the most stringent screening level criteria published by the State of California, U.S. Environmental Protection Agency, and U.S. Department of Energy. These screening criteria address chronic and acute exposures to aquatic life. As discussed in the ESL document (Water

Board, 2005), benthic communities at the groundwater/surface water interface (e.g., at site groundwater discharge location SW-2) are assumed to be exposed to the full concentration of groundwater contamination prior to dilution/mixing with the surface water). This was also a fundamental assumption in the instream benthic macroinvertebrate bioassessment events, which documented no measurable impacts.

Historical surface water sampling in the immediate vicinity of contaminated groundwater discharge (SW-2) has sporadically documented petroleum contamination, usually in periods of low stream flow, and generally at concentrations several orders of magnitude less than adjacent (within 20 feet) groundwater monitoring well concentrations. It is likely that mixing/dilution between groundwater and surface water precludes obtaining an "instantaneous discharge" surface water sample that is wholly representative of groundwater contamination at the discharge location. Therefore, the most conservative assumption is that surface water contamination at the groundwater/surface water interface is equivalent to the upgradient groundwater contamination (e.g., site downgradient wells MW-7, MW-9, and MW-12).

While site target cleanup standards for groundwater have not been determined, it is likely that no further action will be required by regulatory agencies when groundwater (and surface water) contaminant concentrations are all below their respective screening level criteria. Residual contaminant concentrations in excess of screening level criteria might be acceptable to regulatory agencies if a more detailed risk assessment (e.g., Tier 2 and/or Tier 3) demonstrates that no significant impacts are likely.

5.0 MONITORING EVENT ANALYTICAL RESULTS

This section presents the field and laboratory analytical results of the most recent monitoring event. Table 2 summarizes the contaminant analytical results of the current monitoring event. Figure 7 shows the current event contaminant analytical results and the inferred limits of the gasoline groundwater plume. Appendix C contains the certified analytical laboratory report and chain-of-custody record for the current event. Appendix D contains a summary of historical groundwater and surface analytical results.

CURRENT EVENT GROUNDWATER AND SURFACE WATER RESULTS

Current quarter site groundwater contaminant concentrations in wells MW-7, MW-8, and MW-9 exceed their respective groundwater ESLs for TVHg, TEHd, benzene, and total xylenes (under the *drinking water resource is threatened* criterion) and (under the *drinking water resource is not threatened* criterion). MW-8 and MW-9 also exceeded the ESLs for ethylbenzene under both criterion, while MW-7 exceeded the ESL for ethylbenzene under the *drinking water resource is threatened* criterion. MW-11 exceeded the ESLs (under the *drinking water resource is threatened* criterion) and (under the *drinking water resource is not threatened* criterion) for TVHg, TEHd, and benzene. MW-11 also exceeded the ESL for ethylbenzene under the *drinking water resource is threatened* criterion. The ESLs for TVHg and TEHd were exceeded in MW-12; the ESLs for TVHg and benzene in MW-2 were exceeded under the *drinking water resource is threatened* criterion. The ESL for MTBE was exceeded in wells MW-2, MW-7, MW-10, and MW-12 under the *drinking water resource is threatened* criterion.

Maximum groundwater contaminant concentrations also exceed all surface water screening levels, with the exception of toluene and MTBE.

The maximum groundwater contaminant concentrations were detected in well MW-9 (located approximately two-thirds the distance between the former source area and the creek). Elevated contaminant concentrations were also detected in downgradient wells MW-7, MW-9, and MW-11. The northern edge of the plume in the downgradient area of the plume is defined by well MW-12. The southern edge of the plume in the downgradient area is not strictly defined; however, based on historical groundwater data, it appears to be located between well MW-9 and well MW-5. The current event contaminant plume geometry is consistent with recent historical contaminant distribution, showing the center of contaminant mass in groundwater located downgradient of the former source area.

Table 2
Groundwater and Surface Water Sample
Analytical Results, September 29—October 2, 2006
Redwood Regional Park Corporation Yard, Oakland, California

Location	Contaminant						
	TVHg	**TEHd**	**Benzene**	**Toluene**	**Ethyl-benzene**	**Total Xylenes**	**MTBE**
GROUNDWATER SAMPLES							
MW-2	**270**	52	**31**	*<0.5*	15	6.69	**17**
MW-7	**7,900**	**3,600**	**64**	*<0.5*	**260**	**57.5**	**49**
MW-8	**9,000**	**820**	**170**	7.7	**730**	**539**	*<10*
MW-9	**12,000**	**3,300**	**130**	8.0	**850**	**604**	*<10*
MW-10	88	51	*<0.5*	*<0.5*	*<0.5*	*<0.5*	**9.6**
MW-11	**3,600**	**2,100**	**80**	*<0.5*	**230**	8.8	*<2.0*
MW-12	**910**	**480**	*<0.5*	*<0.5*	9.9	1.5	**21**
Groundwater ESLs [a]	100 / 500	100 / 640	1.0 / 46	40 / 130	30 / 290	13 / 13	5.0 / 1,800
REDWOOD CREEK SURFACE WATER SAMPLES							
SW-2	62	94	*<0.5*	*<0.5*	0.81	*<0.5*	*<2.0*
SW-3	*<50*	**120**	*<0.5*	*<0.5*	*<0.5*	*<0.5*	7.8
Surface Water Screening Levels [a, b]	500	100	46	130	290	13	8,000

Notes:

[a] Water Board Environmental Screening Levels (drinking water resource threatened/not threatened) (Water Board, 2005).

[b] Lowest of chronic and acute surface water criteria published by the State of California, U.S. Environmental Protection Agency, or U.S. Department of Energy.

MTBE = methyl *tertiary*-butyl ether; TVHg = total volatile hydrocarbons - gasoline range; TEHd = total extractable hydrocarbons - diesel range

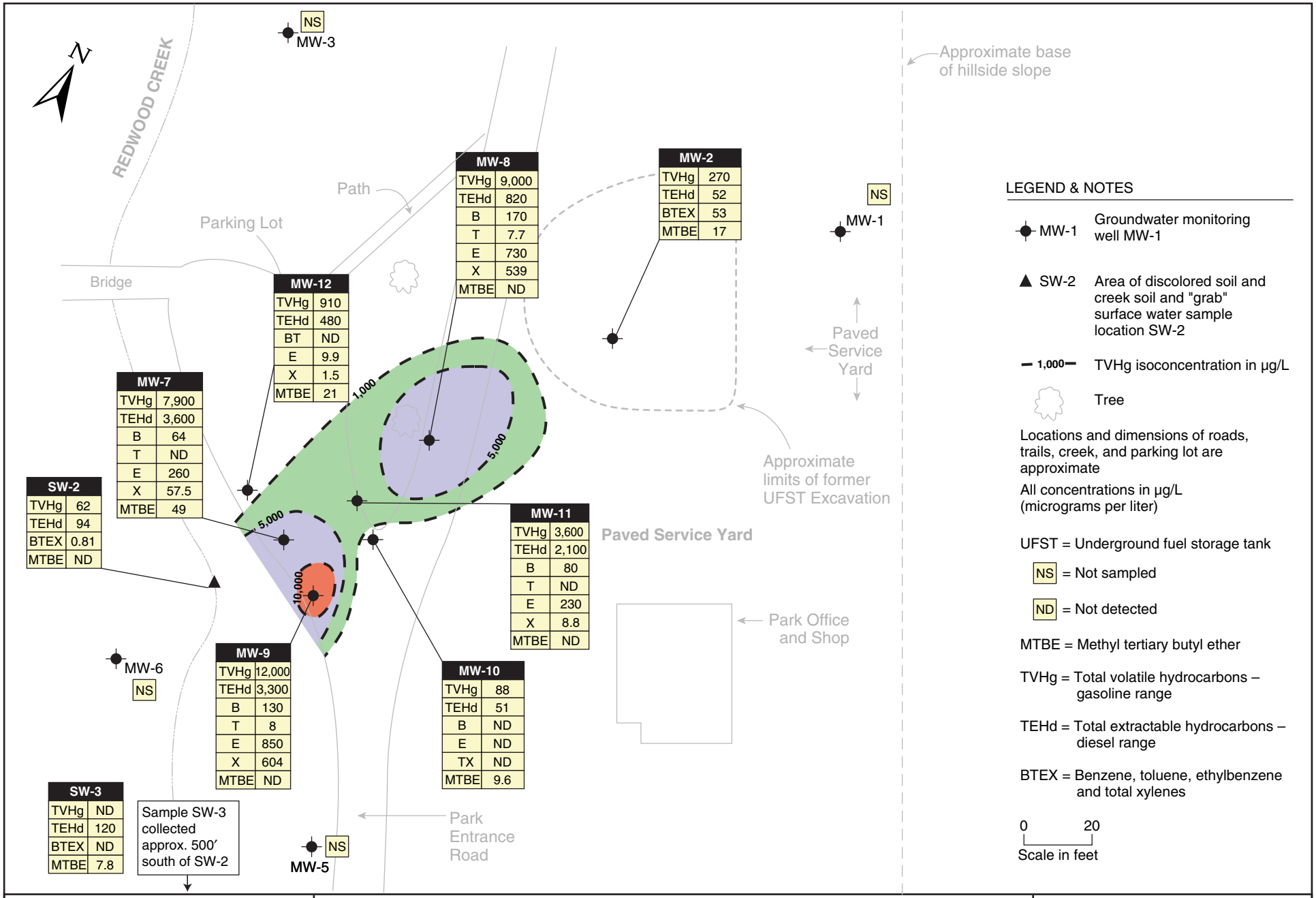
All concentrations expressed in µg/L (equivalent to parts per billion).

Samples in **bold-face type** exceed the ESL and/or surface water screening levels.

Diesel was detected in both surface water samples collected (SW-2 and SW-3), with SW-3 concentrations above and SW-2 concentrations slightly below the 100-µg/L surface water screening level criterion.

QUALITY CONTROL SAMPLE ANALYTICAL RESULTS

Laboratory QC samples (e.g., method blanks, matrix spikes, surrogate spikes) were analyzed by the laboratory in accordance with requirements of each analytical method. All laboratory QC sample results and sample holding times were within the acceptance limits of the methods (see Appendix C).



LEGEND & NOTES

- MW-1 — Groundwater monitoring well MW-1
- SW-2 — Area of discolored soil and creek soil and "grab" surface water sample location SW-2
- 1,000 — TVHg isoconcentration in µg/L
- Tree

Locations and dimensions of roads, trails, creek, and parking lot are approximate

All concentrations in µg/L (micrograms per liter)

UFST = Underground fuel storage tank

NS = Not sampled

ND = Not detected

MTBE = Methyl tertiary butyl ether

TVHg = Total volatile hydrocarbons – gasoline range

TEHd = Total extractable hydrocarbons – diesel range

BTEX = Benzene, toluene, ethylbenzene and total xylenes

0 20

Scale in feet

STELLAR ENVIRONMENTAL SOLUTIONS, INC
GEOSCIENCE & ENGINEERING CONSULTING

ANALYTICAL RESULTS AND GASOLINE PLUME—SEPTEMBER 2006

Redwood Regional Park Service Yard, Oakland, CA

Figure 7

by: MJC | NOVEMBER 2006

2006-17-08

6.0 SUMMARY, CONCLUSIONS AND PROPOSED ACTIONS

The following conclusions and proposed actions are based on the findings of the current event activities, as well as on salient historical data.

SUMMARY AND CONCLUSIONS

- Groundwater sampling has been conducted on an approximately quarterly basis since November 1994 (39 events in the initial site wells). A total of 11 site wells are available for monitoring; 7 of the available wells are currently monitored for contamination.
- Site contaminants of concern include gasoline, diesel, BTEX, and MTBE. Current groundwater concentrations exceed regulatory screening levels for groundwater and surface water.
- The primary environmental risk is discharge of contaminated groundwater to the adjacent Redwood Creek. A stream bioassessment concluded that there were no direct impacts to the surface water benthic community; however, groundwater contamination is sporadically detected in surface water samples, and there is historical visual evidence of plume discharge at the creek/groundwater interface. Surface water samples have sporadically exceeded surface water ESL criteria for gasoline, diesel, and benzene, and generally only under low creek flow conditions. An in-stream bioassessment evaluation conducted in 1999 to 2000 determined that there were no impacts to the benthic macroinvertebrate community.
- The existing well layout adequately constrains the lateral extent of groundwater contamination, and the vertical limit is very likely the top of the near-surface (25 to 28 feet) siltstone bedrock. The saturated interval extends approximately 12 to 15 feet from top of bedrock through the capillary fringe. Groundwater elevations fluctuate seasonally, creating a capillary fringe that varies seasonally in thickness.
- The groundwater contaminant plume has become disconnected from its original source, but continues to be fed from the residual hydrocarbon concentrations in the soil. The groundwater plume has migrated well beyond the former source area (represented by well MW-2) toward Redwood Creek. The plume of groundwater contamination above screening levels appears to be approximately 100 feet long and approximately 40 feet wide. The zone of greatest contamination (greater than 10,000-µg/L TVHg) is currently an approximately 20-foot-wide by 30-foot-long area centered around well MW-8.

- The contaminant plume is neither stable nor reducing, as groundwater contaminant concentrations fluctuate seasonally, and the center of mass of the contaminant plume (represented by maximum concentrations) has alternated between mid-plume and downgradient wells in recent history. Recent groundwater contaminant concentrations are below sitewide historical maxima, and there is no indication that maximum site groundwater concentrations are increasing, which suggests that "worst case" contaminant concentrations may have been reached.
- A two-phase ORC™ injection corrective action program was implemented at the site. In September 2001, approximately 3,000 pounds of ORC™ was injected into 44 boreholes over a 4,400-square foot area of the maximum groundwater contamination. In June 2002, approximately 1,000 pounds of ORC™ was injected in 30 boreholes over a smaller area that showed residual high contaminant concentrations following the initial injection phase. The ORC™ was injected over the full saturated interval (including the capillary fringe). The findings indicate that the corrective action was partially effective in reducing the lateral extent of the groundwater contaminant plume; however, initial contaminant reductions were followed by rebounding to pre-injection concentrations. The data suggest that site conditions support aerobic biodegradation when not limited by oxygen concentrations, notably on the plume margins and upgradient former source area, but not along the centerline of the contaminant plume.
- A September 2003 exploratory borehole program confirmed that sorbed-phase contamination in the seasonally-unsaturated zone is a primary source of long-term contaminant contribution to the groundwater plume. Reduction/removal of this contamination will be necessary to eliminate continued discharge of contaminated groundwater to Redwood Creek and ultimately obtain site closure.
- Soil bioventing appears to be the best remedy for contaminant mass removal in the unsaturated zone, under the restrictive conditions at the site, and appears to be the most appropriate corrective action strategy giving consideration to technical, cost, safety, and aesthetic issues. A 2- to 3-year program of bioventing may reduce unsaturated zone contamination such that it will no longer be a long-term source of contamination to groundwater. A full-scale bioventing system was installed in November/December 2005, and began operating in December 2005.
- The Q3 period also went over into the beginning of October 2006 because the surface water was not sampled until October 2, 2006. Groundwater elevations in Q3 2006 were slightly higher than seasonal normal due to higher than average rainfall in 2006. This has had the ancillary negative effect of keeping much of the bioventing screened zone saturated.

PROPOSED ACTIONS

The EBRPD proposes to implement the following actions to address regulatory concerns:

- Continue the quarterly program of creek and groundwater sampling and reporting.
- Continue to inform regulators of site progress and seek their concurrence with proposed actions.
- Operate the bioventing system as a corrective action to try and reduce the residual contaminated soil in the area of the former source area excavation, and report those results in bioventing-specific technical reports.
- Continue to evaluate analytical results (and bioventing contaminant removal data) in the context of hydrochemical trends, impacts of groundwater contamination on Redwood Creek, and effectiveness of the corrective action.
- Conduct a microbial respiration test to evaluate the effectiveness of the bioventing system.
- Continue to make required Electronic Data Format uploads to the State of California GeoTracker database, and upload an electronic copy of technical reports to Alameda County Environmental Health's ftp system.

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8.0 LIMITATIONS

This report has been prepared for the exclusive use of the East Bay Regional Park District, its authorized representatives, and the regulatory agencies. No reliance on this report shall be made by anyone other than those for whom it was prepared.

The findings and conclusions presented in this report are based on the review of previous investigators' findings at the site, as well as onsite activities conducted by SES since September 1998. This report has been prepared in accordance with generally accepted methodologies and standards of practice. The SES personnel who performed this work are qualified to perform such investigations and have accurately reported the information available, but cannot attest to the validity of that information. No warranty, expressed or implied, is made as to the findings, conclusions, and recommendations included in the report.

The findings of this report are valid as of the present. Site conditions may change with the passage of time, natural processes, or human intervention, which can invalidate the findings and conclusions presented in this report. As such, this report should be considered a reflection of the current site conditions as based on site characterization and corrective actions completed.

APPENDIX A

Historical Groundwater Monitoring Well Water Level Data

HISTORICAL GROUNDWATER ELEVATIONS IN MONITORING WELLS

REDWOOD REGIONAL PARK SERVICE YARD

7867 REDWOOD ROAD, OAKLAND, CALIFORNIA

Well I.D.	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9	MW-10	MW-11	MW-12
TOC Elevation (a)	565.83	566.42	560.81	548.10	547.41	545.43	547.56	549.13	549.28	547.22	547.75	544.67
Date Monitored	Groundwater Elevations (feet above mean sea level)											
09/18/98	563.7	544.2	540.8	534.5	531.1	545.6						
04/06/99	565.2	546.9	542.3	535.6	532.3	532.9						
12/20/99	562.9	544.7	541.5	534.9	531.2	532.2						
09/28/00	562.8	542.7	538.3	532.2	530.9	532.0						
01/11/01	562.9	545.1	541.7	535.0	531.2	532.3	534.9	538.1				
04/13/01	562.1	545.7	541.7	535.1	531.5	532.4	535.3	539.8				
09/01/01	560.9	542.0	537.7	533.9	530.7	531.8	534.0	535.6				
12/17/01	562.2	545.2	542.2	534.8	531.4	532.4	534.8	538.4	534.6	535.7	535.2	
03/14/02	563.0	547.1	542.2	535.5	532.4	533.3	535.7	541.8	535.0	537.6	536.6	
06/18/02	562.1	544.7	541.1	534.6	531.2	532.2	534.8	537.9	534.7	535.6	535.3	
09/24/02	561.4	542.2	537.3	533.5	530.6	531.8	533.5	535.5	535.3	533.8	531.7	
12/18/02	562.4	545.0	542.0	534.8	531.5	532.5	534.6	537.1	536.5	535.2	532.8	
03/27/03	562.6	545.7	541.7	534.8	531.6	532.4	535.1	539.9	537.2	536.2	533.6	
06/19/03	562.3	544.9	541.5	534.8	531.3	532.3	534.9	538.2	536.9	535.7	533.2	
09/10/03	561.6	542.1	537.9	533.8	530.8	531.9	533.7	535.6	535.6	534.1	531.9	
12/10/03	562.4	542.7	537.6	533.7	530.9	531.9	533.7	535.2	535.5	533.8	531.7	
03/18/04	563.1	546.6	541.9	535.0	531.7	532.4	535.2	540.9	537.4	536.6	533.8	
06/17/04	562.1	544.3	540.7	534.3	531.0	532.1	534.6	537.4	536.5	535.1	532.7	
09/21/04	561.5	541.1	536.5	533.1	530.5	531.6	533.1	534.7	532.7	533.2	533.2	
12/14/04	562.2	545.3	541.7	534.7	531.4	532.2	534.6	540.4	536.7	535.5	532.9	
03/16/05	563.8	547.3	541.7	535.3	532.4	532.8	535.6	541.8	538.0	537.1	534.2	
06/15/05	562.9	545.9	541.6	535.0	531.7	532.5	535.0	540.0	535.0	536.1	535.6	
09/13/05	562.3	543.5	539.7	534.4	530.9	532.2	534.3	536.7	536.1	534.7	532.4	
12/15/05	562.2	544.3	541.4	(b)	531.0	532.2	534.5	537.3	534.1	534.7	534.9	535.1
03/30/06	565.8	548.6	542.7	(b)	533.9	534.4	536.2	542.3	536.4	537.3	537.6	535.7
06/20/06	563.6	545.4	541.6	(b)	531.5	532.5	534.9	538.6	534.6	536.2	535.5	535.0
09/29/06	561.9	542.8	539.0	(b)	530.7	532.1	535.1	536.1	533.7	534.6	534.7	534.7

TOC = Top of well Casing

(a) TOC Elevations resurveyed on December 15, 2005 in accordance GeoTracker requirements.

(b) Well decomissioned and replaced by MW-12 in December 2005.

APPENDIX B

Groundwater Monitoring
Field Documentation

SrH or Purge Water Drum Log

Client: STELLAR

Site Address: Redwood Regional Park, Oakland

STATUS OF DRUM(S) UPON ARRIVAL

Date	12/14/04	12/15/05	3/30/06	6/20/06	9/29/06	
Number of drum(s) empty:						
Number of drum(s) 1/4 full:		1 (Baker tank) → 1		1 poly tank		
Number of drum(s) 1/2 full:					1 Green Poly Tank	
Number of drum(s) 3/4 full:					~~3/4~~ 5/8	
Number of drum(s) full:						
Total drum(s) on site:	∅	1	1 tank	1	1 Tank	
Are the drum(s) properly labeled?	NA	Y	Y →		Y	
Drum ID & Contents:			Purgewater →		Purgewater	
If any drum(s) are partially or totally filled, what is the first use date:				–	–	

- If you add any SPH to an empty or partially filled drum, drum must have at least 20 gals. of Purgewater or DI Water.

-If drum contains SPH, the drum MUST be steel AND labeled with the appropriate label.

-All BTS drums MUST be labeled appropriately.

STATUS OF DRUM(S) UPON DEPARTURE

Date	12/14/04	12/15/05	3/30/06	6/20/06	9/29/06	
Number of drums empty:						
Number of drum(s) 1/4 full:		1 (Baker tank) →				
Number of drum(s) 1/2 full:				1	~3/5 (1 Tank	
Number of drum(s) 3/4 full:						
Number of drum(s) full:						
Total drum(s) on site:	∅	1	1 tank →		1 Tank	
Are the drum(s) properly labeled?	NA		Y	Y	Y	
Drum ID & Contents:			Purgewater →	→	→	

LOCATION OF DRUM(S)

Describe location of drum(s): Baker tank near MW1 used for offload.

FINAL STATUS

Number of new drum(s) left on site this event	∅	∅	0	0	0	
Date of inspection:	12/14/04	12/15/05	3/3/06	6/20/06	9/29/06	
Drum(s) labelled properly:	NA	N/A	Y	Y	Y	
Logged by BTS Field Tech:	PC	MW	PC	DM	PC	
Office reviewed by:						

TEST EQUIPMENT CALIBRATION LOG

PROJECT NAME Redwood Regional				PROJECT NUMBER 060929-PC1			
EQUIPMENT NAME	EQUIPMENT NUMBER	DATE/TIME OF TEST	STANDARDS USED	EQUIPMENT READING	CALIBRATED TO: OR WITHIN 10%:	TEMP.	INITIALS
Myron Ultrameter	601939	9/29/06 645	4.0 pH 7.0 ↓ 10.0 ↓ 3900 µS	4.10 pH 7.12 ↓ 10.08 ↓ 3860	Y ~~28~~	26.2 26.8 28.2 27.9?	AC
Hach Turbidimeter	04100003~~744~~	9/29/06 805	5.5 NTU 54 ↓ 535 ↓	5.2 NTU 55 ↓ 514			

WELLHEAD INSPECTION CHECKLIST

Date 9/29/06 Client Stellar

Site Address Redwood Regional, Oakland

Job Number 060929PC1 Technician P. Cornish

Well ID	Well Inspected - No Corrective Action Required	Water Bailed From Wellbox	Wellbox Components Cleaned	Cap Replaced	Debris Removed From Wellbox	Lock Replaced	Other Action Taken (explain below)	Well Not Inspected (explain below)
MW-1	X							
MW-2	X							
MW-3	X							
MW-5	X							
MW-6	X							
MW-7	X							
MW-8							X	
MW-9	X							
MW-10	X							
MW-11	X							
MW-12	X							

NOTES: MW-8 1/3 tabs stripped

WELL GAUGING DATA

Project # 060929-PC1 Date 9/29/06 Client STELLAR

Site Redwood Regional, Oakland

Well ID	Time	Well Size (in.)	Sheen / Odor	Depth to Immiscible Liquid (ft.)	Thickness of Immiscible Liquid (ft.)	Volume of Immiscibles Removed (ml)	Depth to water (ft.)	Depth to well bottom (ft.)	Survey Point: TOB or TOC	Notes
MW-1	845	4					3.84	-	TOC	G.O
MW-2	805	4					23.58	~~38.92~~		
MW-3	809	4					21.80	46.10		G.O.
MW-4	-	well destroyed					-	-		G.O
MW-5	815	4					16.68	27.00		G.O.
MW-6	819	4					13.30	27.45		G.O.
MW-7	822	2					12.44	25.30		
MW-8	834	2					12.99	22.30		
MW-9	825	2					15.60	30.29		
MW-10	831	2					12.67	28.36		
MW-11	~~829~~ 829	2					13.10	27.78		
MW-12	829	2					10.02	23.90		

WELL MONITORING DATA SHEET

Project #: 060929-PC1	Client: Stellar
Sampler: PC	Date: 9/29/06
Well I.D.: MW-2	Well Diameter: 2 3 (4) 6 8 ___
Total Well Depth (TD): 38.92	Depth to Water (DTW): 23.58
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 26.62	

Purge Method: Bailer; Disposable Bailer; Positive Air Displacement; ✓ Electric Submersible; Waterra; Peristaltic; Extraction Pump; Other ___

Sampling Method: Bailer; ✓ Disposable Bailer; Extraction Port; Dedicated Tubing; Other: ___

10 (Gals.)	X 3	= 30	Gals.	
1 Case Volume	Specified Volumes	Calculated Volume		

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius² * 0.163

Time	Temp (°F or (°C))	pH	Cond. (mS or (µS))	Turbidity (NTUs)	Gals. Removed	Observations
855	21.1	7.44	683	>99	10	
	well dewatered					
1158	19.8	7.44	655	141	-	

Did well dewater? (Yes) No Gallons actually evacuated: 11

Sampling Date: 9/29/06 Sampling Time: 1158 Depth to Water: 24.45

Sample I.D.: MW-2 Laboratory: Kiff CalScience Other (CET)

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other: see COC

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

WELL MONITORING DATA SHEET

Project #: 060929-PC1	Client: Stellar
Sampler: PC	Date: 9/29/06
Well I.D.: MW-7	Well Diameter: (2) 3 4 6 8
Total Well Depth (TD): 25.30	Depth to Water (DTW): 12.44
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 15.01	

Purge Method: Bailer; Disposable Bailer; (Positive Air Displacement); Electric Submersible; Waterra; Peristaltic; Extraction Pump; Other

Sampling Method: Bailer; (Disposable Bailer); Extraction Port; Dedicated Tubing; Other

2.1 (Gals.) X	3	= 6.3 Gals.
1 Case Volume	Specified Volumes	Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius² * 0.163

Time	Temp (°F or (°C))	pH	Cond. (mS or (µS))	Turbidity (NTUs)	Gals. Removed	Observations
940	20.1	7.10	581	939	2.1	odor
945	19.9	7.10	580	420	4.2	"
951	19.7	7.21	583	269	6.3	"

Did well dewater? Yes (No) Gallons actually evacuated: 6.3

Sampling Date: 9/29/06 Sampling Time: 1000 Depth to Water:

Sample I.D.: MW-7 Laboratory: Kiff CalScience Other (CET)

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

WELL MONITORING DATA SHEET

Project #: 060929-PC1	Client: Stellar
Sampler: PC	Date: 9/29/06
Well I.D.: MW-8	Well Diameter: ② 3 4 6 8
Total Well Depth (TD): 22.30	Depth to Water (DTW): 12.99
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: PVC Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]:	

Purge Method: Bailer; Disposable Bailer; Positive Air Displacement; Electric Submersible; Waterra; Peristaltic; Extraction Pump; Other_____

Sampling Method: Bailer; Disposable Bailer; Extraction Port; Dedicated Tubing; Other: _____

1.5 (Gals.) X	3	= 4.5 Gals.
1 Case Volume	Specified Volumes	Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius² * 0.163

Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
1102	20.0	7.48	619	>1000	~~2.3~~ 1.5	
1108	20.3	7.33	651	>1000	4.3	
1114	20.3	7.35	660	>1000	4.5	

Did well dewater? Yes No Gallons actually evacuated: 4.5

Sampling Date: 9/29/06 Sampling Time: 1120 Depth to Water:

Sample I.D.: MW-8 Laboratory: Kiff CalScience Other CET

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other: See COC

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

WELL MONITORING DATA SHEET

Project #: 060929-PC1	Client: Stellar
Sampler: PC	Date: 9/29/06
Well I.D.: MW-9	Well Diameter: (2) 3 4 6 8
Total Well Depth (TD): 30.29	Depth to Water (DTW): ~~15.~~ 15.60
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]:	

Purge Method: Bailer; Disposable Bailer; (X) Positive Air Displacement; Electric Submersible; Waterra; Peristaltic; Extraction Pump; Other _____

Sampling Method: Bailer; (X) Disposable Bailer; Extraction Port; Dedicated Tubing; Other: _____

2.4 (Gals.) X	3	=	7.2 Gals.
1 Case Volume	Specified Volumes		Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius² * 0.163

Time	Temp (°F or (C))	pH	Cond. (mS or (µS))	Turbidity (NTUs)	Gals. Removed	Observations
1040	20.1	7.12	675	623	2.5	
1045	19.8	7.11	695	622	5	
1050	19.7	7.40	651	745	7.5	

Did well dewater? Yes (No) Gallons actually evacuated: [redacted]

Sampling Date: 9/29/06 Sampling Time: 1056 Depth to Water:

Sample I.D.: MW-9 Laboratory: Kiff CalScience Other CET

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other: [redacted]

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:		mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:		mV

WELL MONITORING DATA SHEET

Project #: 060929-PC1	Client: Stellar
Sampler: PC	Date: 9/29/06
Well I.D.: MW-10	Well Diameter: (2) 3 4 6 8
Total Well Depth (TD): 28.36	Depth to Water (DTW): 12.67
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (TOC) Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 15.81	

Purge Method: Bailer; Disposable Bailer; (Positive Air Displacement); Electric Submersible; Waterra; Peristaltic; Extraction Pump; Other_____

Sampling Method: Bailer; (Disposable Bailer); Extraction Port; Dedicated Tubing; Other: _____

2.5 (Gals.) X	3	= 7.5 Gals.
1 Case Volume	Specified Volumes	Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius² * 0.163

Time	Temp (°F or (°C))	pH	Cond. (mS or (µS))	Turbidity (NTUs)	Gals. Removed	Observations
915	20.4	8.40	606	71000	2.5	brown
920	20.1	8.14	582	>1000	5	↓
926	20.0	7.82	588	412	7.5	~

Did well dewater? Yes (No) Gallons actually evacuated:

Sampling Date: 9/29/06 Sampling Time: 934 Depth to Water:

Sample I.D.: MW-10 Laboratory: Kiff CalScience Other CET

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other: see COC

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

WELL MONITORING DATA SHEET

Project #: 060929-PC1	Client: STELLAR
Sampler: PC	Date: 9/29/06
Well I.D.: MW-11	Well Diameter: (2) 3 4 6 8
Total Well Depth (TD): 27.74	Depth to Water (DTW): 13.10
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]:	

Purge Method: Bailer; Disposable Bailer; (Positive Air Displacement); Electric Submersible; Waterra; Peristaltic; Extraction Pump; Other _____

Sampling Method: Bailer; (Disposable Bailer); Extraction Port; Dedicated Tubing; Other: _____

2.3	(Gals.) X	3	=	6.9	Gals.
1 Case Volume		Specified Volumes		Calculated Volume	

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius² * 0.163

Time	Temp (°F or (°C))	pH	Cond. (mS or (µS))	Turbidity (NTUs)	Gals. Removed	Observations
1132	20.1	9.98	541	>1000	2.3	thick, brown
1137	20.1	8.60	613	>1000	4.6	
1144	20.1	7.90	625	>1000	7	

Did well dewater? Yes (No)	Gallons actually evacuated: 7		
Sampling Date: 9/29/06	Sampling Time: 1150	Depth to Water:	
Sample I.D.: MW-11	Laboratory: Kiff CalScience Other (CET)		
Analyzed for: TPH-G BTEX MTBE TPH-D	Oxygenates (5) Other: See COC		
EB I.D. (if applicable): @ Time	Duplicate I.D. (if applicable):		
Analyzed for: TPH-G BTEX MTBE TPH-D	Oxygenates (5) Other:		
D.O. (if req'd): Pre-purge:	mg/L	Post-purge:	mg/L
O.R.P. (if req'd): Pre-purge:	mV	Post-purge:	mV

WELL MONITORING DATA SHEET

Project #: 060929-PC1	Client: Stellar
Sampler: PC	Date: 9/29/06
Well I.D.: MW-12	Well Diameter: (2) 3 4 6 8
Total Well Depth (TD): 23.90	Depth to Water (DTW): 10.02
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]:	

Purge Method: Bailer; Disposable Bailer; (Positive Air Displacement); Electric Submersible; Waterra; Peristaltic; Extraction Pump; Other_____

Sampling Method: Bailer; (Disposable Bailer); Extraction Port; Dedicated Tubing; Other: _____

2.2 (Gals.) X	3	= 6.6 Gals.
1 Case Volume	Specified Volumes	Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius² * 0.163

Time	Temp (°F or (°C))	pH	Cond. (mS or (µS))	Turbidity (NTUs)	Gals. Removed	Observations
1012	19.5	7.20	560	>1000	2.2	brown, silty
1016	19.4	7.11	564	>1000	4.4	↓ ↓
1021	19.3	7.16	549	>1000	6.6	

Did well dewater? Yes (No) Gallons actually evacuated: 6.6

Sampling Date: 9/29/06 Sampling Time: 1028 Depth to Water:

Sample I.D.: MW-12 Laboratory: Kiff CalScience Other CET

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other: See COC

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

APPENDIX C

Analytical Laboratory Report and Chain-of-Custody Record

189755

Chain of Custody Record

Lab job no. _____

Date _____

Page 1 of 1

Laboratory Curtis and Tompkins, Ltd.
Address 2323 Fifth Street
Berkeley, California 94710
510-486-0900

Method of Shipment Hand Delivery
Shipment No. _____
Airbill No. _____
Cooler No. _____
Project Manager ~~Bruce Rucker~~ R. MAKDISI
Telephone No. (510) 644-3123
Fax No. (510) 644-3859
Samplers: (Signature) [signature]

Project Owner East Bay Regional Park District
Site Address 7867 Redwood Road
Oakland, California
Project Name Redwood Regional Park
Project Number 2006-16

	Field Sample Number	Location/ Depth	Date	Time	Sample Type	Type/Size of Container	Preservation: Cooler	Preservation: Chemical	Filtered	No. of Containers	Analysis Required: TVH-G (8015)	Analysis Required: BTEX + MTBE (8021)	Analysis Required: TEH-D (8015)	Remarks
-1	MW-2	1158	9/29/06		W	40ml VOA & 1L Amber	ice	3HCl/4°C		4	X	X	X	
-2	MW-7	1000								4	X	X	X	
-3	MW-8	1120								4	X	X	X	
-4	MW-9	1056								4	X	X	X	
-5	MW-10	934								4	X	X	X	
-6	MW-11	1150								4	X	X	X	
-7	MW-12	1028								4	X	X	X	

Relinquished by:	Date	Received by:	Date
Signature [signature]	9/29/06	Signature [signature]	9/29
Printed P. Cornish	Time 1235	Printed ANNE KATHAN	Time 12:35
Company BTS		Company CT	

Relinquished by:	Date	Received by:	Date
Signature		Signature	
Printed	Time	Printed	Time
Company		Company	

Relinquished by:	Date	Received by:	Date
Signature		Signature	
Printed	Time	Printed	Time
Company		Company	

Turnaround Time: 5 Day TAT

Comments: Please provide a GeoTracker EDD as well as hard copy of report.
Surface water samples collected by Stellar Environmental Solutions.
Groundwater samples collected by Blaine Tech Services.

2000-00-01

★ Stellar Environmental Solutions

2198 Sixth Street #201, Berkeley, CA 94710

APPENDIX D

Historical Groundwater and Surface Water Analytical Results

HISTORICAL GROUNDWATER MONITORING WELLS ANALYTICAL RESULTS

REDWOOD REGIONAL PARK SERVICE YARD, OAKLAND, CALIFORNIA

(all concentrations in ug/L, equivalent to parts per billion [ppb])

Well MW-2									
Event	**Date**	**TVHg**	**TEHd**	**Benzene**	**Toluene**	**Ethylbenzene**	**Total Xylenes**	**Total BTEX**	**MTBE**
1	Nov-94	**66**	*< 50*	**3.4**	*< 0.5*	*< 0.5*	**0.9**	**4.3**	*NA*
2	Feb-95	**89**	*< 50*	**18**	**2.4**	**1.7**	**7.5**	**30**	*NA*
3	May-95	*< 50*	*< 50*	**3.9**	*< 0.5*	**1.6**	**2.5**	**8.0**	*NA*
4	Aug-95	*< 50*	*< 50*	**5.7**	*< 0.5*	*< 0.5*	*< 0.5*	**5.7**	*NA*
5	May-96	*< 50*	*< 50*	*< 0.5*	*< 0.5*	*< 0.5*	*< 0.5*	—	*NA*
6	Aug-96	*< 50*	*< 50*	*< 0.5*	*< 0.5*	*< 0.5*	*< 0.5*	—	*NA*
7	Dec-96	*< 50*	*< 50*	**6.3**	*< 0.5*	**1.6**	*< 0.5*	**7.9**	*NA*
8	Feb-97	*< 50*	*< 50*	**0.69**	*< 0.5*	**0.55**	*< 0.5*	**1.2**	*NA*
9	May-97	**67**	*< 50*	**8.9**	*< 0.5*	**5.1**	*< 1.0*	**14**	*NA*
10	Aug-97	*< 50*	*< 50*	**4.5**	*< 0.5*	**1.1**	*< 0.5*	**5.6**	*NA*
11	Dec-97	**61**	*< 50*	**21**	*< 0.5*	**6.5**	**3.9**	**31**	*NA*
12	Feb-98	**2,000**	**200**	**270**	**92**	**150**	**600**	**1,112**	*NA*
13	Sep-98	*< 50*	*< 50*	*< 0.5*	*< 0.5*	*< 0.5*	*< 0.5*	—	**7.0**
14	Apr-99	**82**	**710**	**4.2**	*< 0.5*	**3.4**	**4.0**	**12**	**7.5**
15	Dec-99	**57**	*< 50*	**20**	**0.6**	**5.9**	*<0.5*	**27**	**4.5**
16	Sep-00	*< 50*	*< 50*	**0.72**	*< 0.5*	*< 0.5*	*< 0.5*	**0.7**	**7.9**
17	Jan-01	**51**	*< 50*	**8.3**	*< 0.5*	**1.5**	*< 0.5*	**9.8**	**8.0**
18	Apr-01	**110**	*< 50*	**10**	*< 0.5*	**11**	**6.4**	**27**	**10**
19	Aug-01	**260**	**120**	**30**	**6.7**	**1.6**	**6.4**	**45**	**27**
20	Dec-01	**74**	**69**	**14**	**0.8**	**3.7**	**3.5**	**22**	**6.6**

Well MW-2 (continued)									
Event	**Date**	**TVHg**	**TEHd**	**Benzene**	**Toluene**	**Ethylbenzene**	**Total Xylenes**	**Total BTEX**	**MTBE**
21	Mar-02	*< 50*	*< 50*	**2.3**	**0.51**	**1.9**	**1.3**	**8.3**	**8.2**
22	Jun-02	*< 50*	*< 50*	*< 0.5*	*< 0.5*	*< 0.5*	*< 0.5*	**—**	**7.7**
23	Sep-02	**98**	*< 50*	**5.0**	*< 0.5*	*< 0.5*	*< 0.5*	**—**	**13**
24	Dec-02	*< 50*	*< 50*	**4.3**	*< 0.5*	*< 0.5*	*< 0.5*	**—**	*< 2.0*
25	Mar-03	**130**	**82**	**39**	*< 0.5*	**20**	**4.1**	**63**	**16**
26	Jun-03	*< 50*	*< 50*	**1.9**	*< 0.5*	*< 0.5*	*< 0.5*	**1.9**	**8.7**
27	Sep-03	**120**	*< 50*	**8.6**	**0.51**	**0.53**	*< 0.5*	**9.6**	**23**
28	Dec-03	**282**	*<100*	**4.3**	**1.6**	**1.3**	**1.2**	**8.4**	**9.4**
29	Mar-04	**374**	*<100*	**81**	**1.2**	**36**	**7.3**	**126**	**18**
30	Jun-04	*< 50*	*< 50*	**0.75**	*< 0.5*	*< 0.5*	*< 0.5*	*< 0.5*	**15**
31	Sep-04	**200**	*< 50*	**23**	*< 0.5*	*< 0.5*	**0.70**	**24**	**16**
32	Dec-04	**80**	*< 50*	**14**	*< 0.5*	*2.9*	**0.72**	**18**	**20**
33	Mar-05	**190**	**68**	**27**	*<0.5*	**14**	**11**	**52**	**26**
34	Jun-05	**68**	*< 50*	**7.1**	*< 0.5*	**6.9**	**1.8**	**16**	**24**
35	Sep-05	*< 50*	*< 50*	**2.5**	*< 0.5*	*< 0.5*	*< 1.0*	**2.5**	**23**
36	Dec-05	*< 50*	*< 50*	**3.9**	*< 0.5*	*< 0.5*	*< 1.0*	**3.9**	**23**
37	Mar-06	**1300**	**300**	**77**	**4.4**	**91**	**250**	**422**	**18**
38	Jun-06	*< 50*	**60**	*< 0.5*	*< 0.5*	*< 0.5*	*< 1.0*	**—**	**17**
39	Sep-06	**270**	**52**	**31**	*< 0.5*	**15**	**6.69**	**53**	**17**

Well MW-4									
Event	**Date**	**TVHg**	**TEHd**	**Benzene**	**Toluene**	**Ethylbenzene**	**Total Xylenes**	**Total BTEX**	**MTBE**
1	Nov-94	**2,600**	**230**	**120**	**4.8**	**150**	**88**	**363**	*NA*
2	Feb-95	**11,000**	**330**	**420**	**17**	**440**	**460**	**1,337**	*NA*
3	May-95	**7,200**	**440**	**300**	**13**	**390**	**330**	**1,033**	*NA*
4	Aug-95	**1,800**	**240**	**65**	**6.8**	**89**	**67**	**227**	*NA*
5	May-96	**1,100**	**140**	**51**	*< 0.5*	*< 0.5*	**47**	**98**	*NA*
6	Aug-96	**3,700**	**120**	**63**	**2.0**	**200**	**144**	**409**	*NA*
7	Dec-96	**2,700**	**240**	**19**	*< 0.5*	**130**	**93**	**242**	*NA*
8	Feb-97	**3,300**	*< 50*	**120**	**1.0**	**150**	**103**	**374**	*NA*
9	May-97	**490**	*< 50*	**2.6**	**6.7**	**6.4**	**6.7**	**22**	*NA*
10	Aug-97	**1,900**	**150**	**8.6**	**3.5**	**78**	**53**	**143**	*NA*
11	Dec-97	**1,000**	**84**	**4.6**	**2.7**	**61**	**54**	**123**	*NA*
12	Feb-98	**5,300**	**340**	**110**	**24**	**320**	**402**	**856**	*NA*
13	Sep-98	**1,800**	*< 50*	**8.9**	*< 0.5*	**68**	**27**	**104**	**23**
14	Apr-99	**2,900**	**710**	**61**	**1.2**	**120**	**80**	**263**	**32**
15	Dec-99	**1,000**	**430**	**4.0**	**2.0**	**26**	**14**	**46**	*< 2.0*
16	Sep-00	**570**	**380**	*< 0.5*	*< 0.5*	**16**	**4.1**	**20**	**2.4**
17	Jan-01	**1,600**	**650**	**4.2**	**0.89**	**46**	**13.8**	**65**	**8.4**
18	Apr-01	**1,700**	**1,100**	**4.5**	**2.8**	**48**	**10.7**	**66**	**5.0**
19	Aug-01	**1,300**	**810**	**3.2**	**4.0**	**29**	**9.7**	**46**	*< 2.0*
20	Dec-01	*< 50*	**110**	*< 0.5*	*< 0.5*	*< 0.5*	**1.2**	**1.2**	*< 2.0*
21	Mar-02	*< 50*	*< 50*	*< 0.5*	*< 0.5*	*< 0.5*	*< 0.5*	—	*< 2.0*
22	Jun-02	*< 50*	*< 50*	*< 0.5*	*< 0.5*	*< 0.5*	*< 0.5*	—	*< 2.0*
23	Sep-02	*< 50*	*< 50*	*< 0.5*	*< 0.5*	*< 0.5*	*< 0.5*	—	*< 2.0*
24	Dec-02	*< 50*	*< 50*	*< 0.5*	*< 0.5*	*< 0.5*	*< 0.5*	—	*< 2.0*
25	Mar-03	*< 50*	*< 50*	*< 0.5*	*< 0.5*	*< 0.5*	*< 0.5*	—	*< 2.0*
26	Jun-03	*< 50*	*< 50*	*< 0.5*	*< 0.5*	*< 0.5*	*< 0.5*	—	*< 2.0*
27	Sep-03	*< 50*	*< 50*	*< 0.5*	*< 0.5*	*< 0.5*	*< 0.5*	—	*< 2.0*
28	Dec-03	*<50*	*<100*	*<0.3*	*<0.3*	*<0.3*	*<0.6*	—	*< 5.0*
29	Mar-04	*<50*	*<100*	*<0.3*	*<0.3*	*<0.3*	*<0.6*	—	*< 5.0*
30	Jun-04	*<50*	**2,500**	*<0.3*	*<0.3*	*<0.3*	*<0.6*	—	*< 5.0*
31	Sep-04	*<50*	*< 50*	*< 0.5*	*< 0.5*	*< 0.5*	*< 1.0*	—	*< 2.0*
32	Dec-04	*<50*	*< 50*	*< 0.5*	*< 0.5*	*< 0.5*	*< 1.0*	—	*< 2.0*
33	Mar-05	*<50*	*< 50*	*< 0.5*	*< 0.5*	*< 0.5*	*< 1.0*	—	*< 2.0*
34	Jun-05	*<50*	*< 50*	*< 0.5*	*< 0.5*	*< 0.5*	*< 1.0*	—	*< 2.0*
35	Sep-05	*<50*	*< 50*	*< 0.5*	*< 0.5*	*< 0.5*	*< 1.0*	—	*< 2.0*

Groundwater monitoring in this well discontinued with Alameda County Health Care Services Agency approval.

Well MW-5									
Event	**Date**	**TVHg**	**TEHd**	**Benzene**	**Toluene**	**Ethylbenzene**	**Total Xylenes**	**Total BTEX**	**MTBE**
1	Nov-94	**50**	*< 50*	*< 0.5*	*< 0.5*	*< 0.5*	*< 0.5*	—	*NA*
2	Feb-95	**70**	*< 50*	**0.6**	*< 0.5*	*< 0.5*	*< 0.5*	**0.6**	*NA*
3	May-95	*< 50*	*< 50*	*< 0.5*	*< 0.5*	*< 0.5*	*< 0.5*	—	*NA*
4	Aug-95	*< 50*	*< 50*	*< 0.5*	*< 0.5*	*< 0.5*	*< 0.5*	—	*NA*
5	May-96	*< 50*	*< 50*	*< 0.5*	*< 0.5*	*< 0.5*	*< 0.5*	—	*NA*
6	Aug-96	**80**	*< 50*	*< 0.5*	*< 0.5*	*< 0.5*	*< 0.5*	—	*NA*
7	Dec-96	*< 50*	*< 50*	*< 0.5*	*< 0.5*	*< 0.5*	*< 0.5*	—	*NA*
8	Feb-97	*< 50*	*< 50*	*< 0.5*	*< 0.5*	*< 0.5*	*< 0.5*	—	*NA*
9	May-97	*< 50*	*< 50*	*< 0.5*	*< 0.5*	*< 0.5*	*< 0.5*	—	*NA*
10	Aug-97	*< 50*	*< 50*	*< 0.5*	*< 0.5*	*< 0.5*	*< 0.5*	—	*NA*
11	Dec-97	*< 50*	*< 50*	*< 0.5*	*< 0.5*	*< 0.5*	*< 0.5*	—	*NA*
12	Feb-98	*< 50*	*< 50*	*< 0.5*	*< 0.5*	*< 0.5*	*< 0.5*	—	*NA*
13	Sep-98	*< 50*	*<50*	*< 0.5*	*< 0.5*	*< 0.5*	*< 0.5*	—	*< 2*
Groundwater monitoring in this well discontinued in 1998 with Alameda County Health Care Services Agency approval. Subsequent groundwater monitoring conducted to confirm plume's southern limit									
14	Jun-04	*< 50*	*<50*	*< 0.5*	*< 0.5*	*< 0.5*	*< 0.5*	—	**5.9**
15	Sep-04	*<50*	*< 50*	*< 0.5*	*< 0.5*	*< 0.5*	*< 1.0*	—	*< 2.0*

Well MW-7									
Event	**Date**	**TVHg**	**TEHd**	**Benzene**	**Toluene**	**Ethylbenzene**	**Total Xylenes**	**Total BTEX**	**MTBE**
1	Jan-01	**13,000**	**3,100**	**95**	**4**	**500**	**289**	**888**	**95**
2	Apr-01	**13,000**	**3,900**	**140**	*< 0.5*	**530**	**278**	**948**	**52**
3	Aug-01	**12,000**	**5,000**	**55**	**25**	**440**	**198**	**718**	**19**
4	Dec-01	**9,100**	**4,600**	**89**	*< 2.5*	**460**	**228**	**777**	*< 10*
5	Mar-02	**8,700**	**3,900**	**220**	**6.2**	**450**	**191**	**867**	**200**
6	Jun-02	**9,300**	**3,500**	**210**	**6.3**	**380**	**155**	**751**	**18**
7	Sep-02	**9,600**	**3,900**	**180**	*< 0.5*	**380**	**160**	**720**	*< 2.0*
8	Dec-02	**9,600**	**3,700**	**110**	*< 0.5*	**400**	**189**	**699**	*< 2.0*
9	Mar-03	**10,000**	**3,600**	**210**	**12**	**360**	**143**	**725**	**45**
10	Jun-03	**9,300**	**4,200**	**190**	*< 10*	**250**	**130**	**570**	**200**
11	Sep-03	**10,000**	**3,300**	**150**	**11**	**300**	**136**	**597**	*< 2.0*
12	Dec-03	**9,140**	**1,100**	**62**	**45**	**295**	**184**	**586**	**89**
13	Mar-04	**8,170**	**600**	**104**	**41**	**306**	**129**	**580**	**84**
14	Jun-04	**9,200**	**2,700**	**150**	*< 0.5*	**290**	**91**	**531**	*< 2.0*
15	Sep-04	**9,700**	**3,400**	**98**	*< 0.5*	**300**	**125**	**523**	*< 2.0*
16	Dec-04	**8200**	**4,000**	**95**	*< 0.5*	**290**	**124**	**509**	*< 2.0*
17	Mar-05	**10,000**	**4,300**	**150**	*<0.5*	**370**	**71**	**591**	*<2.0*
18	Jun-05	**10,000**	**3,300**	**210**	*<1.0*	**410**	**56**	**676**	*<4.0*
19	Sep-05	**7,600**	**2,700**	**110**	*<1.0*	**310**	**54**	**474**	*<4.0*
20	Dec-05	**2,900**	**3,300**	**31**	*<1.0*	**140**	**41**	**212**	*<4.0*
21	Mar-06	**6,800**	**3,000**	**110**	*< 1.0*	**280**	**42**	**432**	**110**
22	Jun-06	**6,900**	**3,600**	**63**	*< 2.5*	**290**	**43**	**396**	*< 10*
23	Sep-06	**7,900**	**3,600**	**64**	*< 0.5*	**260**	**58**	**382**	49

Well MW-8									
Event	**Date**	**TVHg**	**TEHd**	**Benzene**	**Toluene**	**Ethylbenzene**	**Total Xylenes**	**Total BTEX**	**MTBE**
1	Jan-01	**14,000**	**1,800**	**430**	**17**	**360**	**1230**	**2,037**	**96**
2	Apr-01	**11,000**	**3,200**	**320**	**13**	**560**	**1,163**	**2,056**	**42**
3	Aug-01	**9,600**	**3,200**	**130**	**14**	**470**	**463**	**1,077**	**14**
4	Dec-01	**3,500**	**950**	**69**	**2.4**	**310**	**431**	**812**	*< 4.0*
5	Mar-02	**14,000**	**3,800**	**650**	**17**	**1,200**	**1,510**	**3,377**	**240**
6	Jun-02	**2,900**	**1,100**	**70**	**2.0**	**170**	**148**	**390**	**19**
7	Sep-02	**1,000**	**420**	**22**	*< 0.5*	**64**	**50**	**136**	*< 2.0*
8	Dec-02	**3,300**	**290**	**67**	*< 0.5*	**190**	**203**	**460**	*< 2.0*
9	Mar-03	**13,000**	**3,500**	**610**	**12**	**1,100**	**958**	**2,680**	*< 10*
10	Jun-03	**7,900**	**2,200**	**370**	**7.4**	**620**	**562**	**1,559**	*< 4.0*
11	Sep-03	**3,600**	**400**	**120**	**3.3**	**300**	**221**	**644**	*< 2.0*
12	Dec-03	**485**	**100**	**19**	**1.5**	**26**	**36**	**83**	*< 5.0*
13	Mar-04	**16,000**	**900**	**592**	**24**	**1,060**	**1,870**	**3,546**	**90**
14	Jun-04	**5,900**	**990**	**260**	**9.9**	**460**	**390**	**1,120**	*< 10*
15	Sep-04	**2,000**	**360**	**100**	*< 2.5*	**180**	**102**	**382**	*< 10*
16	Dec-04	**15,000**	**4,000**	**840**	**21**	**1,200**	**1,520**	**3,581**	*< 10*
17	Mar-05	**24,000**	**7,100**	**840**	**51**	**1,800**	**2,410**	**5,101**	*<10*
18	Jun-05	**33,000**	**5,700**	**930**	**39**	**2,500**	**3,860**	**7,329**	*<20*
19	Sep-05	**5,600**	**1,200**	**270**	**6.6**	**400**	**390**	**1,067**	*<20*
20	Dec-05	**3,700**	**1,300**	**110**	*< 5.0*	**320**	**356**	**786**	*<20*
21	Mar-06	**22,000**	**4,300**	**550**	**30**	**1,800**	**2,380**	**4,760**	*<20*
22	Jun-06	**19,000**	**5,000**	**500**	**28**	**1,800**	**1,897**	**4,225**	*<20*
23	Sep-06	**9,000**	**820**	**170**	**7.7**	**730**	**539**	**1,447**	*<10*

Well MW-9									
Event	**Date**	**TVHg**	**TEHd**	**Benzene**	**Toluene**	**Ethylbenzene**	**Total Xylenes**	**Total BTEX**	**MTBE**
1	Aug-01	**11,000**	**170**	**340**	**13**	**720**	**616**	**1,689**	**48**
2	Dec-01	**9,400**	**2,700**	**250**	**5.1**	**520**	**317**	**1,092**	*< 10*
3	Mar-02	**1,700**	**300**	**53**	**4.2**	**120**	**67**	**244**	**20**
4	Jun-02	**11,000**	**2,500**	**200**	**16**	**600**	**509**	**1,325**	**85**
5	Sep-02	**3,600**	**2,800**	**440**	**11**	**260**	**39**	**750**	*< 4.0*
6	Dec-02	**7,000**	**3,500**	**380**	**9.5**	**730**	**147**	**1,266**	*< 10*
7	Mar-03	**4,400**	**1,400**	**320**	**6.9**	**400**	**93**	**820**	*< 2.0*
8	Jun-03	**7,600**	**1,600**	**490**	**10**	**620**	**167**	**1,287**	*< 4.0*
9	Sep-03	**8,300**	**2,900**	**420**	**14**	**870**	**200**	**1,504**	*< 10*
10	Dec-03	**7,080**	**700**	**287**	**31**	**901**	**255**	**1,474**	*< 10*
11	Mar-04	**3,550**	**600**	**122**	**15**	**313**	**84**	**534**	**35**
12	Jun-04	**6,800**	**1,700**	**350**	*< 2.5*	**620**	**99**	**1,069**	*< 10*
13	Sep-04	**7,100**	**1,900**	**160**	*8.1*	**600**	**406**	**1,174**	*< 10*
14	Dec-04	**4,700**	**2,800**	**160**	*< 2.5*	**470**	*< 0.5*	**630**	*< 10*
15	Mar-05	**4,200**	**1,600**	**97**	*<2.5*	**310**	**42**	**449**	*< 10*
16	Jun-05	**9,900**	**2,000**	**170**	*<2.5*	**590**	**359**	**1,119**	*< 10*
17	Sep-05	**3,600**	**1,200**	**250**	*<0.5*	**330**	**36**	**616**	*< 2.0*
18	Dec-05	**8,700**	**1,500**	**150**	**4**	**650**	**551**	**1,355**	*< 4.0*
19	Mar-06	**3,600**	**880**	**37**	*<1.0*	**210**	**165**	**412**	*< 4.0*
20	Jun-06	**3,200**	**1,300**	**39**	*<1.0*	**220**	**144**	**403**	**4.2**
21	Sep-06	**12,000**	**3,300**	**130**	**8**	**850**	**604**	**1,592**	*<1.0*

Well MW-10									
Event	**Date**	**TVHg**	**TEHd**	**Benzene**	**Toluene**	**Ethylbenzene**	**Total Xylenes**	**Total BTEX**	**MTBE**
1	Aug-01	**550**	**2,100**	**17**	*< 0.5*	**31**	**44**	**92**	**40**
2	Dec-01	*< 50*	**81**	*< 0.5*	*< 0.5*	*< 0.5*	*< 0.5*	—	**25**
3	Mar-02	*< 50*	*< 50*	**0.61**	*< 0.5*	*< 0.5*	*< 0.5*	**0.61**	**6.0**
4	Jun-02	*< 50*	*< 50*	**0.59**	*< 0.5*	**0.58**	*< 0.5*	**1.2**	**9.0**
5	Sep-02	**160**	**120**	**10**	*< 0.5*	**6.7**	**3.6**	**20**	**26**
6	Dec-02	*< 50*	*< 50*	*< 0.5*	*< 0.5*	*< 0.5*	*< 0.5*	—	**16**
7	Mar-03	**110**	*< 50*	**11**	*< 0.5*	**12**	**1.3**	**24**	**15**
8	Jun-03	**110**	*< 50*	**9.6**	*< 0.5*	**6.8**	*< 0.5*	**16**	**9.0**
9	Sep-03	*< 50*	*< 50*	**1.1**	*< 0.5*	**1.5**	*< 0.5*	**2.6**	**7.0**
10	Dec-03	**162**	*<100*	**6.9**	*<0.3*	**8.0**	*<0.6*	**15**	**9.9**
11	Mar-04	**94**	*<100*	**2.8**	*<0.3*	**5.7**	**7.0**	**16**	*<5.0*
12	Jun-04	**150**	**56**	**11**	*< 0.5*	**12**	*< 0.5*	**23**	**15**
13	Sep-04	*< 50*	*< 50*	**1.6**	*< 0.5*	**1.9**	*< 1.0*	**3.5**	**5.8**
14	Dec-04	**64**	*< 50*	**3.7**	*< 0.5*	**3.7**	**0.7**	**8.1**	**10**
15	Mar-05	**95**	**98**	**8.3**	*<0.5*	**7.7**	**0.77**	**17**	**13**
16	Jun-05	**150**	**57**	**14**	*<0.5*	**10**	**1.0**	**25**	*<2.0*
17	Sep-05	**87**	*< 50*	**5.0**	*<0.5*	**3.6**	*<1.0*	**8.6**	*<2.0*
18	Dec-05	*< 50*	*< 50*	**1.2**	*<0.5*	*<0.5*	*<1.0*	**1.2**	**7.8**
19	Mar-06	**58**	**71**	**3.2**	*<0.5*	**2.2**	*<1.0*	**5.4**	**8.8**
20	Jun-06	**73**	**140**	**4.9**	*<0.5*	**2.5**	*<1.0*	**7.4**	**5.3**
21	Jun-06	**88**	**51**	*<0.5*	*<0.5*	*<0.5*	*<0.5*	—	**9.6**

Well MW-11									
Event	**Date**	**TVHg**	**TEHd**	**Benzene**	**Toluene**	**Ethylbenzene**	**Total Xylenes**	**Total BTEX**	**MTBE**
1	Aug-01	**17,000**	**7,800**	**390**	**17**	**820**	**344**	**1,571**	*< 10*
2	Dec-01	**5,800**	**2,800**	**280**	**7.8**	**500**	**213**	**1,001**	*< 10*
3	Mar-02	**100**	**94**	*< 0.5*	*< 0.5*	**0.64**	*< 0.5*	**0.64**	**2.4**
4	Jun-02	**8,200**	**2,600**	**570**	**13**	**560**	**170**	**1,313**	*< 4*
5	Sep-02	**12,000**	**4,400**	**330**	**13**	**880**	**654**	**1,877**	*< 10*
6	Dec-02	**18,000**	**4,500**	**420**	*< 2.5*	**1,100**	**912**	**2,432**	*< 10*
7	Mar-03	**7,800**	**2,600**	**170**	**4.7**	**530**	**337**	**1,042**	**53**
8	Jun-03	**14,000**	**3,800**	**250**	*< 2.5*	**870**	**693**	**1,813**	*< 10*
9	Sep-03	**10,000**	**3,000**	**250**	**9.9**	**700**	**527**	**1,487**	*< 4*
10	Dec-03	**15,000**	**1,100**	**314**	**60**	**1,070**	**802**	**2,246**	**173**
11	Mar-04	**4,900**	**400**	**72**	**17**	**342**	**233**	**664**	**61**
12	Jun-04	**10,000**	**2,300**	**210**	**2.8**	**690**	**514**	**1,417**	*< 10*
13	Sep-04	**7,200**	**2,300**	**340**	*< 2.5*	**840**	**75**	**1,255**	*< 10*
14	Dec-04	**11,000**	**3,900**	**180**	**5.1**	**780**	**695**	**1,660**	*< 10*
15	Mar-05	**4,600**	**1,900**	**69**	*<2.5*	**300**	**206**	**575**	*< 10*
16	Jun-05	**1,400**	**590**	**85**	*<0.5*	**110**	**8.2**	**203**	*< 2.0*
17	Sep-05	**12,000**	**3,100**	**220**	*< 1.0*	**840**	**762**	**1,822**	*< 4.0*
18	Dec-05	**2,500**	**2,100**	**120**	*< 2.5*	**260**	**16**	**396**	*< 10*
19	Mar-06	**2,200**	**1,300**	**27**	*<2.5*	**130**	**5.2**	**162**	*< 10*
20	Jun-06	**3,700**	**1,900**	**170**	*<1.0*	**230**	**14**	**414**	*< 4.0*
21	Sep-06	**3,600**	**2,100**	**80**	*<0.5*	**230**	**8.8**	**319**	*< 2.0*

Well MW-12									
Event	**Date**	**TVHg**	**TEHd**	**Benzene**	**Toluene**	**Ethylbenzene**	**Total Xylenes**	**Total BTEX**	**MTBE**
1	Dec-05	**1,300**	**700**	*< 0.5*	*< 0.5*	**33**	**5.6**	**39**	*< 2.0*
2	Mar-06	**1,100**	**540**	*<0.5*	*<0.5*	**8.5**	**1.5**	**10**	**49**
3	Jun-06	**680**	**400**	*<0.5*	*<0.5*	**5.8**	**1.4**	**7.2**	*< 2.0*
4	Sep-06	**910**	**480**	*<0.5*	*<0.5*	**9.9**	**1.5**	**11.4**	**21**

HISTORICAL SURFACE WATER ANALYTICAL RESULTS

REDWOOD REGIONAL PARK SERVICE YARD, OAKLAND, CALIFORNIA

(all concentrations in ug/L, equivalent to parts per billion [ppb])

Sampling Location SW-1 (Upstream of Contaminated Groundwater Discharge Location SW-2)									
Event	**Date**	**TVHg**	**TEHd**	**Benzene**	**Toluene**	**Ethylbenzene**	**Total Xylenes**	**Total BTEX**	**MTBE**
1	Feb-94	**50**	*< 50*	*< 0.5*	*< 0.5*	*< 0.5*	*< 0.5*	—	*NA*
2	May-95	*< 50*	*< 50*	*< 0.5*	*< 0.5*	*< 0.5*	*< 0.5*	—	*NA*
3	May-96	*< 50*	*< 50*	*< 0.5*	*< 0.5*	*< 0.5*	*< 0.5*	—	*NA*
4	Aug-96	*< 50*	*< 50*	*< 0.5*	*< 0.5*	*< 0.5*	*< 0.5*	—	*NA*
5	Dec-96	*< 50*	*< 50*	*< 0.5*	*< 0.5*	*< 0.5*	*< 0.5*	—	*NA*
6	Feb-97	*< 50*	*< 50*	*< 0.5*	*< 0.5*	*< 0.5*	*< 0.5*	—	*NA*
7	Aug-97	*< 50*	*< 50*	*< 0.5*	*< 0.5*	*< 0.5*	*< 0.5*	—	*NA*
8	Dec-97	*< 50*	*< 50*	*< 0.5*	*< 0.5*	*< 0.5*	*< 0.5*	—	*NA*
9	Feb-98	*< 50*	*< 50*	*< 0.5*	*< 0.5*	*< 0.5*	*< 0.5*	—	*NA*
10	Sep-98	*< 50*	*<50*	*< 0.5*	*< 0.5*	*< 0.5*	*< 0.5*	—	*< 2.0*
11	Apr-99	*< 50*	*<50*	*< 0.5*	*< 0.5*	*< 0.5*	*< 0.5*	—	*< 2.0*
Sampling at this location discontinued after April 1999 with Alameda County Health Services Agency approval.									

Sampling Location SW-2 (Area of Historical Contaminated Groundwater Discharge)									
Event	**Date**	**TVHg**	**TEHd**	**Benzene**	**Toluene**	**Ethylbenzene**	**Total Xylenes**	**Total BTEX**	**MTBE**
1	Feb-94	**130**	*< 50*	**1.9**	*< 0.5*	**4.4**	**3.2**	**9.5**	*NA*
2	May-95	*< 50*	*< 50*	*< 0.5*	*< 0.5*	*< 0.5*	*< 0.5*	—	*NA*
3	Aug-95	*< 50*	*< 50*	*< 0.5*	*< 0.5*	*< 0.5*	*< 0.5*	—	*NA*
4	May-96	*< 50*	*< 50*	*< 0.5*	*< 0.5*	*< 0.5*	*< 0.5*	—	*NA*
5	Aug-96	**200**	*< 50*	**7.5**	*< 0.5*	**5.4**	*< 0.5*	**13**	*NA*
6	Dec-96	*< 50*	*< 50*	*< 0.5*	*< 0.5*	*< 0.5*	*< 0.5*	—	*NA*
7	Feb-97	*< 50*	*< 50*	*< 0.5*	*< 0.5*	*< 0.5*	*< 0.5*	—	*NA*
8	Aug-97	**350**	**130**	**13**	**0.89**	**19**	**11**	**44**	*NA*
9	Dec-97	*< 50*	*< 50*	*< 0.5*	*< 0.5*	*< 0.5*	*< 0.5*	—	*NA*
10	Feb-98	*< 50*	*< 50*	*< 0.5*	*< 0.5*	*< 0.5*	*< 0.5*	—	*NA*
11	Sep-98	*< 50*	*<50*	*< 0.5*	*< 0.5*	*< 0.5*	*< 0.5*	—	*< 2.0*
12	Apr-99	**81**	*<50*	**2.0**	*< 0.5*	**2.5**	**1.3**	**5.8**	**2.3**
13	Dec-99	**1,300**	**250**	**10**	**1.0**	**47**	**27**	**85**	**2.2**
14	Sep-00	**160**	**100**	**2.1**	*< 0.5*	**5.2**	**1.9**	**9.2**	**3.4**
15	Jan-01	*< 50*	*< 50*	*< 0.5*	*< 0.5*	**0.53**	*< 0.5*	**0.5**	*< 2.0*
16	Apr-01	*< 50*	*< 50*	*< 0.5*	*< 0.5*	*< 0.5*	*< 0.5*	—	*< 2.0*
17	Sep-01	**440**	**200**	**2.1**	*< 0.5*	**17**	**1.3**	**20**	**10**
18	Dec-01	*< 50*	*< 50*	*< 0.5*	*< 0.5*	*< 0.5*	*< 0.5*	**—**	*< 2.0*
19	Mar-02	*< 50*	*< 50*	*< 0.5*	*< 0.5*	*< 0.5*	*< 0.5*	**—**	*< 2.0*
20	Jun-02	*< 50*	*< 50*	*< 0.5*	*< 0.5*	*< 0.5*	*< 0.5*	**—**	*< 2.0*
21	Sep-02	**220**	**590**	**10**	*< 0.5*	**13**	*< 0.5*	**23**	*< 2.0*
22	Dec-02	*< 50*	*< 50*	*< 0.5*	*< 0.5*	*< 0.5*	*< 0.5*	**—**	*< 2.0*
23	Mar-03	*< 50*	*< 50*	*< 0.5*	*< 0.5*	**0.56**	*< 0.5*	**0.56**	**2.8**
24	Jun-03	*< 50*	*< 50*	*< 0.5*	*< 0.5*	*< 0.5*	*< 0.5*	**—**	*< 2.0*
25	Sep-03	**190**	**92**	**2.1**	*< 0.5*	**4.2**	*< 0.5*	**6.3**	*< 2.0*
26	Dec-03	**86**	*< 100*	*< 0.3*	*< 0.3*	*< 0.3*	*< 0.6*	**—**	*< 5.0*
27	Mar-04	*<50*	*<100*	*<0.3*	*<0.3*	**1.1**	*<0.6*	**1.1**	*< 5.0*
28	Jun-04	*<50*	*<50*	*<0.5*	*<0.5*	**0.83**	*<0.5*	**0.83**	*< 2.0*
29	Sep-04	**260**	**370**	**4.4**	*<0.5*	**6.3**	*< 1.0*	**11**	*< 2.0*
30	Dec-04	*<50*	*<50*	*<0.5*	*<0.5*	*<0.5*	*< 1.0*	**—**	*< 2.0*
31	Mar-05	*<50*	*<50*	*<0.5*	*<0.5*	*<0.5*	*< 1.0*	**—**	*< 2.0*
32	Jun-05	*<50*	*<50*	*<0.5*	*<0.5*	*<0.5*	*< 1.0*	**—**	*< 2.0*
33	Sep-05	*<50*	*<50*	*<0.5*	*<0.5*	*<0.5*	*< 1.0*	**—**	*< 2.0*
34	Dec-05	*<50*	*<50*	*<0.5*	*<0.5*	*<0.5*	*< 1.0*	**—**	*< 2.0*
35	Mar-06	*<50*	**62**	*<0.5*	*<0.5*	*<0.5*	*< 1.0*	**—**	*< 2.0*
36	Jun-06	*<50*	**110**	*<0.5*	*<0.5*	*<0.5*	*< 1.0*	**—**	*< 2.0*
37	Sep-06	**62**	**94**	*<0.5*	*<0.5*	**0.81**	*<0.5*	**0.8**	*< 2.0*

Sampling Location SW-3 (Downstream of Contaminated Groundwater Discharge Location SW-2)									
Event	**Date**	**TVHg**	**TEHd**	**Benzene**	**Toluene**	**Ethylbenzene**	**Total Xylenes**	**Total BTEX**	**MTBE**
1	May-95	*< 50*	*< 50*	*< 0.5*	*< 0.5*	*< 0.5*	*< 0.5*	—	*NA*
2	Aug-95	*< 50*	*< 50*	*< 0.5*	*< 0.5*	*< 0.5*	*< 0.5*	—	*NA*
3	May-96	*< 50*	**74**	*< 0.5*	*< 0.5*	*< 0.5*	*< 0.5*	—	*NA*
4	Aug-96	**69**	*< 50*	*< 0.5*	*< 0.5*	*< 0.5*	*< 0.5*	—	*NA*
5	Dec-96	*< 50*	*< 50*	*< 0.5*	*< 0.5*	*< 0.5*	*< 0.5*	—	*NA*
6	Feb-97	*< 50*	*< 50*	*< 0.5*	*< 0.5*	*< 0.5*	*< 0.5*	—	*NA*
7	Aug-97	*< 50*	*< 50*	*< 0.5*	*< 0.5*	*< 0.5*	*< 0.5*	—	*NA*
8	Dec-97	*< 50*	*< 50*	*< 0.5*	*< 0.5*	*< 0.5*	*< 0.5*	—	*NA*
9	Feb-98	*< 50*	*< 50*	*< 0.5*	*< 0.5*	*< 0.5*	*< 0.5*	—	*NA*
10	Sep-98	*< 50*	*<50*	*< 0.5*	*< 0.5*	*< 0.5*	*< 0.5*	—	*< 2.0*
11	Apr-99	*< 50*	*<50*	*< 0.5*	*< 0.5*	*< 0.5*	*< 0.5*	—	*< 2.0*
12	Dec-99	*< 50*	*<50*	*< 0.5*	*< 0.5*	*< 0.5*	*< 0.5*	—	*< 2.0*
13	Sep-00	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	—	*NS*
14	Jan-01	*< 50*	*<50*	*< 0.5*	*< 0.5*	*< 0.5*	*< 0.5*	—	*< 2.0*
15	Apr-01	*< 50*	*<50*	*< 0.5*	*< 0.5*	*< 0.5*	*< 0.5*	—	*< 2.0*
16	Sep-01	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	—	*NS*
17	Dec-01	*< 50*	*< 50*	*< 0.5*	*< 0.5*	*< 0.5*	*< 0.5*	—	*< 2.0*
18	Mar-02	*< 50*	*< 50*	*< 0.5*	*< 0.5*	*< 0.5*	*< 0.5*	—	*< 2.0*
19	Jun-02	*< 50*	*< 50*	*< 0.5*	*< 0.5*	*< 0.5*	*< 0.5*	—	**2.4**
20	Sep-02	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	—	*NS*
21	Dec-02	*< 50*	*< 50*	*< 0.5*	*< 0.5*	*< 0.5*	*< 0.5*	—	*< 2.0*
22	Mar-03	*< 50*	*< 50*	*< 0.5*	*< 0.5*	*< 0.5*	*< 0.5*	—	*< 2.0*
23	Jun-03	*< 50*	*< 50*	*< 0.5*	*< 0.5*	*< 0.5*	*< 0.5*	—	*< 2.0*
24	Sep-03	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	—	*NS*
25	Dec-03	**60**	*< 100*	*< 0.3*	*< 0.3*	*< 0.3*	*< 0.6*	—	*< 5.0*
26	Mar-04	*<50*	*<100*	*<0.3*	*<0.3*	*<0.6*	*<0.6*	—	*< 5.0*
27	Jun-04	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	—	*NS*
28	Sep-04	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	—	*NS*
29	Dec-04	*<50*	*<50*	*<0.5*	*<0.5*	*<0.5*	*< 1.0*	—	*< 2.0*
30	Mar-05	*<50*	*<50*	*<0.5*	*<0.5*	*<0.5*	*< 1.0*	—	*< 2.0*
31	Jun-05	*<50*	*<50*	*<0.5*	*<0.5*	*<0.5*	*< 1.0*	—	*< 2.0*
32	Sep-05	*<50*	*<50*	*<0.5*	*<0.5*	*<0.5*	*< 1.0*	—	*< 2.0*
33	Dec-05	*<50*	*<50*	*<0.5*	*<0.5*	*<0.5*	*< 1.0*	—	*< 2.0*
34	Mar-06	*<50*	*<50*	*<0.5*	*<0.5*	*<0.5*	*< 1.0*	—	*< 2.0*
35	Jun-06	*<50*	**120**	*<0.5*	*<0.5*	*<0.5*	*< 1.0*	—	*< 2.0*
36	Sep-06	*<50*	**120**	*<0.5*	*<0.5*	*<0.5*	*<0.5*	—	**7.8**