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OFFICE OF ENVIRONMENT, HEALTH AND SAFETY
UNIVERSITY HALL, 3rd FLOOR

BERKELEY, CALIFORNIA 94720-1150

February 1, 2012

Lynn Nakashima
Project Manager
Department of Toxic Substances Control
700 Heinz Avenue
Berkeley, CA 94710

Subject: **University of California, Berkeley, Richmond Field Station**
Response to DTSC Comments on the Phase I April 2011 Groundwater Sampling Results Technical Memorandum, DTSC Site Investigation and Remediation Order I/SE-RAO 07/07-004 Section 5.16

Dear Ms Nakashima:

Please find enclosed the February 1, 2012 Final, Revision1 Phase I April 2011 Groundwater Sampling Results Technical Memorandum (two copes on paper and disc). This version updates the version submitted December 9, 2011 and incorporates all the edits requested by your January 11, 2012 letter. This submission includes the revised tables and a response to comments. Two copies of the revised tables and electronic copies of the entire report will be sent to your office.

If you have any questions or need further information regarding this submittal, please contact me (gjhaet@berkeley.edu, 510-642-4848) or Karl Hans (khans@berkely.edu, 510-643-9574).

Sincerely,

Greg Haet
EH&S Associate Director
Environmental Protection

Enclosure

cc:
Bill Marsh, Edgcomb Law Group
Anthony Garvin, UC Office of the General Counsel
Doug Mosteller, CSV

FINAL, Revision 1

Phase I April 2011 Groundwater Sampling Results Technical Memorandum

University of California, Berkeley
Richmond Field Station, Richmond, California

Prepared for
Office of Environment, Health and Safety
University of California, Berkeley
317 University Hall, No. 1150
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February 1, 2012

Prepared by

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CONTENTS

Table

ACRONYMS AND ABBREVIATIONS

CSV	Cherokee Simeon Venture I, LLC
DQO	Data quality objective
DTSC	Department of Toxic Substances Control
EPA	Environmental Protection Agency
FSW	Field Sampling Workplan
ft bgs	Feet below ground surface
IDW	Investigation derived waste
J	Estimated value
LCS	Laboratory control sample
MCL	Maximum contaminant level
MDL	Method detection level
MS	Matrix spike
MSD	Matrix spike supplicate
Order	DTSC Site Investigation and Remediation Order No. IS/E-RAO 06/07-004
PAH	Polyaromatic hydrocarbons
PCB	Polychlorinated biphenyl
PCE	Tetrachloroethlyene
QA	Quality assurance
QC	Quality control
QL	Quantination limit
R	Invalid data
RFS	Richmond Field Station
SVOC	Semi volatile organic compounds
TCE	Tricloroethlyene
TDS	Total dissolved solids
Tetra Tech	Tetra Tech EM Inc.
TPH-E	Total extractable petroleum hydrocarbons
TPH-P	Total purgeable petroleum hydrocarbons
U	Not detected
UC Berkeley	University of California, Berkeley
ug/L	Micrograms per liter
UJ	Not detected at an estimated value
VOC	Volatile organic compound

1.0 INTRODUCTION

This technical memorandum has been prepared on behalf of The Regents of the University of California (UC) in accordance with California Environmental Protection Agency, Department of Toxic Substances Control (DTSC), Site Investigation and Remediation Order No. IS/E-RAO 06/07-004 (Order), dated September 15, 2006. This memorandum presents the results of the wet season groundwater sampling as described in the Proposed Continued Groundwater Monitoring Locations sampling letter, dated March 25, 2011 (Tetra Tech EM Inc [Tetra Tech] 2011a). This sampling event was conducted in accordance with the Field Sampling Workplan (FSW) Phase I Groundwater Sampling Plan, dated June 2, 2010 (Tetra Tech 2010). The objective of the FSW was to address data gaps identified in the Current Conditions Report (Tetra Tech 2008) and identify immediate or potential risks to public health and the environment. The first phase of the FSW consisted of a site-wide groundwater sampling investigation to determine overall groundwater characteristics and confirm or deny the presence of any unknown groundwater contamination conditions, which included a dry season (November 2010, results were presented in the Phase I Groundwater Sampling Results, Technical Memorandum [Tetra Tech 2011b]) and a wet season sampling, results of which are presented in this report.

This memorandum presents a summary of field activities, site hydrology, data quality assessment, and data evaluation associated with the April 2011 groundwater sampling event. The report attachments provide field documentation forms as well as complete analytical results.

1.1 PHYSICAL SETTING

The Richmond Field Station (RFS) is located at 1301 South 46th Street, Richmond, California, along the southeastern shoreline of the City of Richmond on the San Francisco Bay and northwest of Point Isabel (see Figure 1). It consists of upland areas developed for academic teaching and research activities, an upland remnant coastal terrace prairie, a tidal salt marsh, and a transition zone between the upland areas and marsh. Between the late 1800s and 1948, several companies, including the California Cap Company, manufactured explosives at the RFS. In 1950, The UC Regents purchased the property from the California Cap Company. UC Berkeley initially used the RFS for research for the College of Engineering; later, it was also used by other campus departments.

Three habitat type areas have been identified at RFS: (1) the Upland Area, (2) the Transition Area, and (3) the Western Stege Marsh (see Figure 2). The Upland area consists of 96 acres of land bounded by Meade Street to the north, South 46th Street to the east, the Transition Area to the south, and Meeker Slough and Regatta Boulevard to the west. The Transition Area occupies approximately 5.5 acres and is bounded to the north by the Upland Area at the location of a buried, former seawall that is believed to have been the edge of the historic mudflats, and to the south by Western Stege Marsh at the 5-foot elevation upper extent of the marsh (National Geodetic Vertical Datum 29). The Transition Area is believed to consist entirely of artificial fill placed on historic mudflats. Western Stege Marsh occupies approximately 7.5 acres and is bounded by the Transition Area to the north, the RFS connector trail to the East Bay Regional Park District Trail and Eastern Stege Marsh to the east, the Bay Trail to the south, and Meeker Slough and Marina Bay housing development to the west (see Figure 2).

1.2 INVESTIGATION PURPOSE

The possible presence of contaminants in groundwater at RFS was identified as a data gap in the Current Conditions Report (Tetra Tech 2008). Potential sources include contamination from off-site sources as well as previous site activities that may have leached from soil or underground utilities to groundwater. The Phase I FSW field effort was conducted to address these data gaps through the installation of 51 piezometers throughout the RFS; 47 in the shallow groundwater zone and four in a deeper zone (see Figure 3). Data collected from the installed and developed piezometers included groundwater samples, geology, and depth to water measurements, and was used to develop a hydrogeologic model of the site and improve the understanding of overall site-wide groundwater quality.

As a follow up to the initial groundwater investigation, the 50 shallow zone previously sampled piezometers were sampled for depth to water measurements and chemical analysis in April 2011. These 50 piezometers include the 47 shallow piezometers installed by UC Berkeley during 2010, and three piezometers (PZ8, PZ9, and PZ11) previously installed by the owner of the adjacent property, Cherokee Simeon Venture I, LLC (CSV). The four deeper groundwater zone piezometers were not sampled for chemical analysis. The purpose of the continued monitoring is to evaluate chemical concentrations and groundwater elevations during wet season conditions.

2.0 FIELD ACTIVITIES

The sampling strategy for the Phase I continued groundwater monitoring consisted of sampling 50 completed piezometers throughout the RFS, including the 47 piezometers installed as part of the Phase I field effort and the three piezometers previously installed by CSV. Groundwater samples were analyzed for dissolved metals (lab-filtered), semi-volatile organic compounds (SVOC), total extractable petroleum hydrocarbons (TPH-e), total purgeable petroleum hydrocarbons (TPH-p), polycyclic aromatic hydrocarbons (PAH), and volatile organic compounds (VOC). Unfiltered metals analysis was conducted at piezometers FG, B474, EERC, PZ11, B195, B450, CCC2, WTA, B163, ETA, Bulb1, and Bulb2 to confirm unfiltered concentrations identified during the first round of groundwater sampling, in November 2010. No samples were analyzed for pesticides or polychlorinated biphenyls (PCB) because these analytes were not detected in any samples collected during the November 2010 sampling event.

In addition, the depth to groundwater and water quality parameters such as total dissolved solids (TDS), dissolved oxygen, pH, oxidation-reduction potential, specific conductance, and temperature, were measured at each location. Groundwater sampling locations, depths, and analyses are presented in Table 1.

2.1 GROUNDWATER SAMPLING

Groundwater sampling was conducted from April 12 through April 20, 2011. The groundwater from each sampled piezometer was collected through sterile Teflon and silicone tubing using a low-flow, peristaltic pump. The discharge from the pump ran through a flow cell which measured turbidity, dissolved oxygen content, pH, temperature, and electrical conductance. Groundwater samples were collected from each piezometer after the parameters stabilized to within the acceptable ranges as shown on the groundwater sample collection sheets included in Attachment 1. Groundwater results are discussed in Section 6.

Ample sample volume was collected from the shallow piezometers to submit samples for laboratory analysis of dissolved metals, PAHs, SVOCs, TPH-e, TPH-p, TDS, and VOCs. Additional sample volume was collected at 12 locations for unfiltered metals analysis. Samples were immediately placed in coolers containing ice. At the end of each day, the samples were delivered to Curtis and Tompkins laboratory located in Berkeley, CA.

2.2 WATER LEVEL MEASUREMENTS

A comprehensive set of depth to water measurements for all piezometers were recorded on April 11, 2011 to coincide with a similar field event occurring on the adjacent Campus Bay property. The depth to water in all 51 of the Phase I piezometers, including the 4 deeper piezometers, was measured from the top of the PVC casing to 0.01 foot accuracy using a water level meter; the data is presented in Table 2. Additionally, depth to water measurements were recorded in the CSV piezometers, PZ8, PZ9, and PZ11 that are located on the RFS property. If the piezometers were found to be pressurized, then the well cap was removed for a minimum of 10 minutes prior to the depth to water measurement to allow for the water level to adjust. These groundwater measurements, as well as those collected in November 2010 and February 2011 were mapped to assess seasonal variation in groundwater elevations and contours. The depths to water

measurements were recorded in the field notebook and are included on Figure 4, Figure 5, and Figure 6.

2.3 WASTE CHARACTERIZATION AND DISPOSAL

All investigation derived waste (IDW) created during the field effort was drummed, labeled, and moved to a fenced storage location west of Building 110. The IDW produced from this sampling investigation consisted of 3 drums containing water purged from piezometers during the sampling processes. This waste water was characterized through the samples collected and analyzed as part of the field sampling effort.

These drums were emptied into the sanitary sewer cleanout behind Building 102 on June 22, as described in the Sampling Results for Waste Characterization Sampling from the Phase I Field Sampling Workplan Groundwater Investigation, dated June 20, 2011. A handheld sump pump operated at a low speed, so as to not overflow the sanitary sewer system, and sat inside a fine mesh paint strainer bag to prevent any soil fines from discharging to the sewer. City of Richmond staff were on hand to oversee the discharge to the sanitary line.

3.0 HYDROGEOLOGY

The geologic materials at the site include clays, silts, sands, and gravels. Generally, the coarser-grained materials are expected to transmit or yield more groundwater; however, most of the gravels and sands contained a silt/clay fraction which may severely inhibit groundwater flow or yield. A few exceptions were encountered where cleaner sand lenses occurred, which were classified in the field as well-graded and poorly-graded sands. In the upper 20 feet below ground surface (ft bgs), these sand lenses only occurred over short lateral distances. Based on the limited number of deeper borings, a more continuous thin layer of sand may be present between depths of 35 and 40 ft bgs.

As presented in Section 2.0, 51 piezometers were installed throughout the site as part of the FSW investigation. Because of the somewhat uniform spacing and broad coverage of the piezometer locations, comprehensive groundwater flow directions were determined. Figure 4, Figure 5, and Figure 6 show the shallow groundwater elevations measured on November 1, 2010, February 10, 2011, and April 11, 2011, respectively, and the resulting contours from the shallow piezometers. The November 2010 groundwater elevations are likely representative of the dry season since no major rainfall had occurred 6 months prior to their measurement. The February 2011 measurements represent the mid-point of the wet season and the April 2011 measurements are towards the end of the wet season. Groundwater generally flows onto the site from the northeast and across the site to the southwest. Minor seasonal variation in groundwater flow direction and gradients were observed as would be expected from wet to dry seasons. Groundwater elevations will continue to be collected quarterly and a more thorough assessment of seasonal variation in groundwater flow will be presented once a complete seasonal dataset has been collected.

The horizontal groundwater gradient or slope is estimated from the groundwater contours. In November 2010 the gradient within the northeast portion of the site was approximately 0.008 ft/ft. The gradient within the central portion of the site was slightly flatter at 0.002 ft/ft. The gradient in the southern portion of the site was approximately 0.004 ft/ft. In April 2011 the gradients were slightly steeper in the southern portion of the site (.008 ft/ft) and slightly shallower in the northeast portion of the site (.004 ft/ft). The variation in gradients is likely influenced by seasonal and local areas of recharge due to varying surface cover and features and the variation in hydraulic conductivity of the soil. A localized variation in the groundwater gradient was encountered near location B175W, where the groundwater elevations were higher than nearby piezometers. This variation is likely due to discharge from a broken freshwater pipe that was identified and repaired in the fall of 2010. The water levels in this area are expected to dissipate over time. The RFS is predominately made of clayey soil with inherently low permeability; therefore the dissipation of this area could take several months to over a year.

Vertical groundwater gradients were also estimated from the contours at the shallow/deep well pairs. In November 2010 two of the well pairs had a calculated an upward gradient (B480 at 0.25 ft/ft and B38 at 0.015 ft/ft) and two of the well pairs had a calculated downward gradient (CTP at 0.038 ft/ft and B128 at 0.031 ft/ft). The upward gradient at location B480 was significantly higher than the other three calculated vertical gradients. In February and April 2011 the vertical gradients reversed in B38 (from up to down) and in B128 (from down to up). In April 2011 wells CTP and B480 still had downward and upward vertical gradients respectively. Changes in the vertical gradients are likely due to seasonal variations in stormwater infiltration and recharge.

4.0 DATA QUALITY ASSESSMENT

4.1 DATA QUALITY OBJECTIVES

Data quality objectives (DQO) were developed during the FSW planning process to help ensure the collection of data appropriate for support of defensible decisions. The DQOs stated the need for additional groundwater data collection at the RFS to develop a hydrogeologic model of the site and to improve overall understanding of groundwater quality. The implementation of this objective was achieved through the strategic placement of the 51 groundwater monitoring piezometers that spanned the RFS from fenceline to fenceline and also targeted specific locations defined as data gaps in the Current Conditions Report. The data collected during the dry season (November 2010) was adequate to create a hydraulic gradient map and help gain a better understanding of the general hydrology at the RFS. Additionally, the chemical data collected improved site knowledge of areas identified as data gaps as well as areas previously uncharacterized. Additional chemical and hydraulic data collected in April 2011, which represents the end of the wet season and helped to indentify seasonal variation at the RFS. All locations were sampled according to the sampling plan and quality assurance project plan in the FSW (Tetra Tech 2010). The analytical data achieved appropriate method detection levels (MDL) to be compared to relevant State and Federal groundwater criteria and are presented below, along with comparisons to the first round of data.

4.2 LABORATORY DATA REVIEW

Assignment of data qualification flags for analytical data from Curtis and Tompkins conformed to Environmental Protection Agency (EPA) Contract Laboratory Program National Functional Guidelines for Organic Data Review (EPA 2008) and Inorganic Data Review (EPA 2010). Data review specifications require that various data qualifiers be assigned when a deficiency is detected or when a result is less than its detection limit. If no qualifier is assigned to a result that has been reviewed, the data user is assured that no technical deficiencies were identified during validation. The qualification flags used are defined as follows:

- U – Indicates that the chemical was not detected at the numerical detection limit (sample-specific detection limit) noted. Non-detected results from the laboratory are reported in this manner.

- UJ – Indicates that the chemical was not detected; however, the detection limit (sample-specific detection limit) is considered to be estimated based on problems encountered during laboratory analysis. The associated numerical detection limit is regarded as inaccurate or imprecise. This qualifier is also added to a positive result (reported by the laboratory) if the detected concentration is determined to be attributable to contamination introduced during field sampling or laboratory analysis.

- J – Indicates that the chemical was detected; however, the associated numerical result is not a precise representation of the concentration that is actually present in the sample. The laboratory reported concentration is considered to be an estimate of the true concentration.

- R – Indicates that the chemical may or may not be present. The non-detected analytical result reported by the laboratory is considered to be unreliable and unusable. This qualifier is applied in cases of gross technical deficiencies (for example, a holding time missed by a factor of two times the specified time limit, severe calibration non-compliance, or extremely low analyte recovery in quality control [QC] spike samples).

- Y – Indicates the sample chromatogram does not match the chromatogram for the TPH standard. This flag does not denote a quality issue or QC violation.

- Z – Indicates the sample contains a single peak or peaks, not a hydrocarbon pattern. This flag does not denote a quality issue or QC violation.

The preceding data qualifiers may be categorized as indicating major or minor problems. Major problems are defined as issues that result in the rejection of data and qualification with R qualifiers. These data are considered invalid and are not used for decision-making unless they are used in a qualitative way and the use is justified and documented. Minor problems are defined as issues resulting in the estimation of data and qualification with U, J, and UJ qualifiers. Estimated analytical results are considered suitable for decision-making unless the data use requirements are stringent and the qualifier indicates a deficiency that is incompatible with the intended data use. A U qualifier does not indicate that a data deficiency exists because all non-detect values are flagged with the U qualifier regardless of whether a quality deficiency has been detected. Y and Z are identifiers for TPH, and do not denote quality issues or QC violations, or cause the data to be estimated; they identify the pattern in the chromatogram.

4.3 DATA QUALITY REVIEW FINDINGS

A review of the inorganic data quality determined that quality assurance (QA)/QC objectives for bias and precision were met for most analytical results with the following exceptions:

- Matrix spike (MS) recoveries resulted in qualification of results as "estimated" ("J") for dissolved cobalt, magnesium, and nickel in one sample, dissolved zinc in two samples, total cobalt in one sample, and total mercury in 2 samples.

- MS/Matrix spike supplicate (MSD) recoveries and relative percent difference percentages between the MS and MSD resulted in qualification of results as estimated ("J") for one total dissolved solids result in one sample.

- Seven inorganic results were "J" qualified as estimated due to calibration QC violations in multiple samples. Approximately 5 percent of all the inorganic groundwater data was qualified due to these criteria violations.

- Due to laboratory blank contamination, dissolved aluminum results in 6 samples, dissolved iron results in 15 samples, dissolved mercury results in 3 samples, dissolved molybdenum results in 24 samples, dissolved selenium results in 8 sample, dissolved vanadium results in 5 samples, total iron results in 9 samples, total mercury result in 1

sample, total molybdenum results in 5 samples, and total zinc results in 4 samples are considered nondetect and "UJ" qualified. No results were qualified nondetect due to field blank contamination. Less than 5 percent of the inorganic groundwater data was qualified due to laboratory blank contamination problems.

- Several inorganic sample results were estimated because they were reported at concentrations between the MDL and the laboratory quantitation limit (QL). The analytical instrument can make reliable qualitative identification of analytes' MDL but below the QL, however, detected results below the QL are considered quantitatively uncertain. Approximately 19.5 percent of the inorganic groundwater data was affected, however, these results are considered usable as qualified.

A review of the organic data quality determined that QA/QC objectives for bias and precision were met for most analytical results with the following exceptions:

- MS/MSD and Laboratory Control Sample (LCS) spike recoveries resulted in qualification of results as estimated ("J") for three SVOCs in a few samples (2,4-dinitrophenol in one sample, 4-chloroaniline in four samples, and 4-nitraniline in two samples) as well 2 VOCs (acetone and trichloroethene) in one sample.

- Four volatile organic results were "J" qualified as estimated due to calibration QC violations in multiple samples. Approximately 1 percent of all the organic groundwater data was qualified due to these criteria violations.

- Due to laboratory blank contamination, bis(2-ethylhexyl)phthalate results in 8 samples, pyrene results in 4 sample, methylene chloride results in 7 samples, diesel results in 14 samples, 2,2-dichloropropane result in 1 sample, bromomethane result in 1 sample, and gasoline results in 38 samples are considered nondetect and "UJ" qualified. In addition, one gasoline result was qualified nondetect and "UJ" qualified due to field blank contamination. Less than 1 percent of the organic groundwater data was qualified due to laboratory and field blank contamination problems.

- The results for several organic compounds in a few samples were estimated because they were reported at a concentration between the MDL and the QL. The analytical instrument can make reliable qualitative identification of analytes' MDL but below the QL, however, detected results below the QL are considered quantitatively uncertain. Less than two percent of the organic groundwater data was affected.

Although some qualifiers were added to the data, a final review of the data set against the EPA data quality parameters indicated that the data are of high overall quality. The data meet all the requirements of the precision, accuracy, representativeness, completeness, and comparability described in EPA guidance for quality assurance project plans and the RFS Quality Assurance Project Plan (EPA 2002, Tetra Tech 2010) and are usable for meeting the project data quality objectives and future risk assessments. The overall assessment of the sampling program, quality assurance and quality control data, and data review, indicate the data from this investigation are of acceptable precision, accuracy, representativeness, completeness, and comparability.

4.4 DEVIATIONS

There were no deviations from the sampling plan.

5.0 DATA EVALUATION

This section provides an overview of the compounds detected during the groundwater sampling conducted between April 12 and April 20, 2011. State and Federal water quality criteria consistent with the groundwater data evaluation at the adjacent Campus Bay site were identified to help evaluate the groundwater data, as presented in Table 5. The comparisons are solely intended to provide a baseline and are not intended to represent remedial or cleanup criteria or triggers for further sampling. Tables 6 though 9 provide summaries of the detected data. Complete analytical results are included in Attachment 2.

5.1 VOLATILE ORGANIC COMPOUNDS

Groundwater samples were submitted to Curtis and Tompkins for analysis of VOCs by EPA Method 8260. While VOCs were detected at many sampling locations, only 16 of the 70 target analytes analyzed by this method were detected at the RFS. These results are presented in Table 6. Of the VOCs detected, four compounds, 1,2-dichloroethane, carbon tetrachloride, tetrachloroethlyene (PCE), and tricloroethlyene (TCE), exceeded their respective maximum contaminant level (MCL). 1,2-Dichloroethane was detected at five of the 50 sampling locations with concentrations ranging from 0.1 to 1 micrograms per liter (µg/L), and one location, B163, which exceeded the MCL of 5 µg/L at a concentration of 9 µg/L. Carbon tetrachloride was also detected at six locations across the RFS. Five locations had concentrations ranging from 0.3 to 4.7 µg/L; and at one location, CTP, carbon tetrachloride was detected at concentrations of 16 µg/L, which exceed the MCL of 5 µg/L. PCE was detected at 12 locations with concentrations ranging from 0.1 to 4.1 µg/L. At one location, B163, PCE was detected at a concentration of 9.5 µg/L, which exceeds the MCL (5 µg/L). TCE was detected at 25 locations, 15 of which exceeded the MCL of 5 µg/L. Reported concentrations exceeding the MCL ranged from 6 to 170 µg/L. The concentrations of TCE that exceeded the MCL were predominantly found along the eastern RFS property boundary.

5.2 SEMI-VOLATILE ORGANIC COMPOUNDS

Groundwater samples were submitted to Curtis and Tompkins for analysis of SVOCs by EPA Method 8270. PAHs are a subset of SVOCs, analyzed by EPA Method 8270-SIM (selective ion monitoring) to obtain a lower QL and MDL. SVOCs were detected infrequently across the RFS with only 3 of the 73 target analytes analyzed by this method were detected, 1,4-dioxane, acenapthylene, and pyrene. There are no MCLs for the detected analytes. The detected results are presented in Table 7. The compound 1,4-dioxane was detected at concentrations ranging from 0.03 µg/L to 8.1 µg/L at 20 locations. Acenaphthylene and pyrene were detected in one location each.

5.3 METALS

With the exception of silver, metals were detected in all samples submitted for analysis. A summary of all detected metals are presented in Table 8.

Aluminum. Aluminum was detected at 11 of the 12 unfiltered sampling locations, ranging in concentrations from 17 to 1200 µg/L. Additionally, aluminum was detected in 5 of the 50 filtrate samples, ranging in concentrations from 9.9 to 1200 µg/L. There is no MCL for aluminum.

Antimony. Antimony was detected at 10 of the 12 unfiltered sampling locations, ranging in concentrations from 0.17 to 1.2 µg/L. Additionally, antimony was detected in 33 of the 50 filtrate samples, ranging in concentrations from 0.17 to 2.6 µg/L. No detection exceeded the MCL of 6 µg/L.

Arsenic. Arsenic was detected in all 12 unfiltered samples with concentrations ranging from 0.74 to 17 µg/L, with the two values at locations ETA and Bulb1 exceeding the MCL of 10 µg/L. Additionally, arsenic was detected in all 50 filtrates samples with concentrations ranging from 0.48 to 12 µg/L. Only the sample collected at location Bulb1exceeded the MCL concentration.

Barium. Barium was detected in all unfiltered and filtrate samples with concentrations ranging from 6.4 to 250 µg/L. No detection exceeded the MCL of 2,000 µg/L.

Beryllium. Beryllium was detected at 2 of the 12 unfiltered sampling locations, with concentrations of 0.31 and 1.8 µg/L. Additionally, beryllium was detected in 5 of the 50 filtrate samples, ranging in concentrations from 0.14 to 2.1 µg/L. No detection exceeded the MCL of 4 µg/L.

Cadmium. Cadmium was detected in 8 of the 12 unfiltered samples with concentrations ranging from 0.29 to 35 µg/L, with the two values at locations B163 and PZ11 exceeding the MCL of 5 µg/L. Additionally, cadmium was detected in 12 of the 50 filtrate samples with concentrations ranging from 0.28 to 30 µg/L. Only the sample collected at location PZ11 exceeded the MCL concentration.

Chromium. Chromium was detected at 10 of the 12 unfiltered sampling locations, with concentrations of 0.74 and 6 µg/L. Additionally, chromium was detected in 36 of the 50 filtrate samples, ranging in concentrations from 0.093 to 6 µg/L. No detection exceeded the MCL of 50 µg/L.

Cobalt. Cobalt was detected at 9 of the 12 unfiltered sampling locations, with concentrations of 0.13 and 4.8 µg/L. Cobalt was also detected in 17 of the 50 filtrate samples, ranging in concentrations from 0.14 to 4.6 µg/L. There is no MCL for cobalt.

Copper. Copper was detected in 6 of the 12 unfiltered samples with concentrations ranging from 0.96 to 1,300 µg/L. The detected value at location PZ11 was equal to the MCL of 1,300 µg/L, no other samples exceeded the MCL. Additionally, copper was detected in 47 of the 50 filtrate samples with concentrations ranging from 0.35 to 1,200 µg/L. No filtrate sample detection exceeded the MCL.

Lead. Lead was detected at 5 of the 12 unfiltered sampling locations, with concentrations ranging from 0.47 to4.1 µg/L. Additionally, lead was detected in 39 of the 50 filtrate samples, ranging in concentration from 0.16 to 4.6 µg/L. No detection exceeded the MCL of 15 µg/L.

Manganese. Manganese was detected at all unfiltered and filtrate samples ranging in concentrations from 1,900 to 420,000 µg/L. There is no MCL for manganese.

Mercury. Mercury was detected at 8 of the 12 unfiltered sampling locations, with concentrations of 0.041 and 2.4 µg/L; only the sample collected at location B195 exceeded the MCL of 2 µg/L. Mercury was detected in 18 of the 50 filtrate samples, ranging in concentrations from 0.038 to 1.2 µg/L. No filtrate sample detection exceeded the MCL of 2 µg/L.

Nickel. Nickel was detected in 10 of the 12 unfiltered samples with concentrations ranging from 1.1 to 2,400 µg/L, with the two values at locations B163 and PZ11 exceeding the California Department of Public Health MCL of 100 µg/L at 200 and 2,400 µg/L, respectively. Additionally, nickel was detected in 33 of the 50 filtrates samples collected with concentrations ranging from 0.53 to 1,700 µg/L. Only the samples collected at locations B163 and PZ11 exceeded the California MCL with concentrations of 180 and 1,700 µg/L, respectively.

Selenium. Selenium Lead was detected at 6 of the 12 unfiltered sampling locations, with concentrations of 0.15 and 6.1 µg/L. Selenium was also detected in 13 of the 50 filtrate samples, ranging in concentrations from 0.21 to 37 µg/L. No detection exceeded the MCL of 50 µg/L.

Thallium. Thallium was detected at 8 of the 12 unfiltered sampling locations, with concentrations from 0.057 to 0.48 µg/L. Additionally, thallium was detected in 14 of the 50 filtrate samples, ranging in concentration from 0.062 to 0.36 µg/L. No detection exceeded the MCL of 2 µg/L.

Vanadium. Vanadium was detected at 11 of the 12 unfiltered sampling locations, with concentrations ranging from 1.3 to 5.8 µg/L. Vanadium was detected in 44 of the 50 filtrate samples, ranging in concentration from 0.55 to 6.2 µg/L. There is no MCL for vanadium.

Zinc. Zinc was detected at 5 of the 12 unfiltered sampling locations, with concentrations ranging from 27 to 13,000 µg/L. Zinc was also detected in 43 of the 50 filtrate samples, ranging in concentration from 2.7 to 10,000 µg/L. There is no MCL for zinc.

5.4 TOTAL PETROLEUM HYDROCARBONS

All samples were submitted for TPH analysis. A summary of detected TPH results are provided in Table 9. There were no detections of motor oil-range organics in any of the samples. There were four detections of diesel-range organics, with concentrations ranging from 7.8 to 14 µg/L. TPH as gasoline was detected in nine samples, with concentrations ranging from 13 to 86 µg/L. There are no established MCLs for TPH.

6.0 REFERENCES

Tetra Tech EM Inc. (Tetra Tech). 2008. Current Conditions Report, University of California, Berkeley, Richmond Field Station, Richmond, California. November 21.

Tetra Tech. 2010. Phase I Groundwater Sampling, Field Sampling Workplan, University of California, Berkeley, Richmond Field Station, Richmond, California. June 2.

Tetra Tech, 2011a. Proposed Continued Groundwater Monitoring Locations, University of California, Berkeley, Richmond Field Station, Richmond, California. March 25.

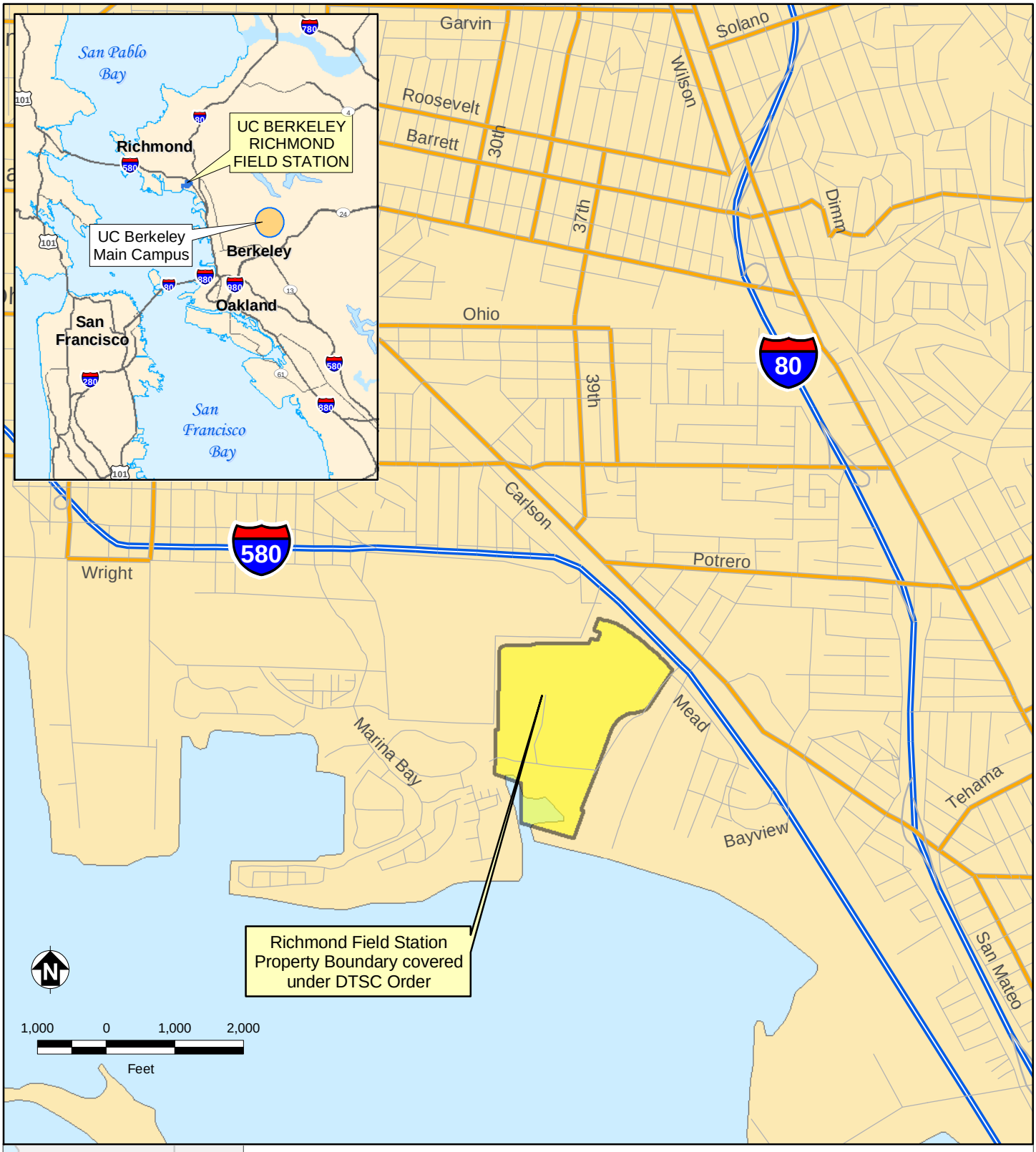
Tetra Tech, 2011b. Phase I Groundwater Sampling Results, Technical Memorandum, University of California, Berkeley, Richmond Field Station, Richmond, California. May 11.

U.S. Environmental Protection Agency (EPA). 2002. Guidance for Quality Assurance Project Plans. Document Number EPA QA/G-5. December.

EPA. 2008. USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review." Document Number EPA-540-R-08-01. June.

EPA. 2010. USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review." Document Number EPA-540-R-10-011. January.

FIGURES



TETRA TECH

Richmond Field Station
University of California, Berkeley

FIGURE 1
SITE LOCATION MAP

Phase I April 2011 Groundwater Sampling Results

Bay Trail
Meeker Slough
Western Stege Marsh
Transition Area (Including Bulb)
Upland

Property Boundary
Approximate Property Boundary

TETRA TECH

Richmond Field Station
University of California, Berkeley

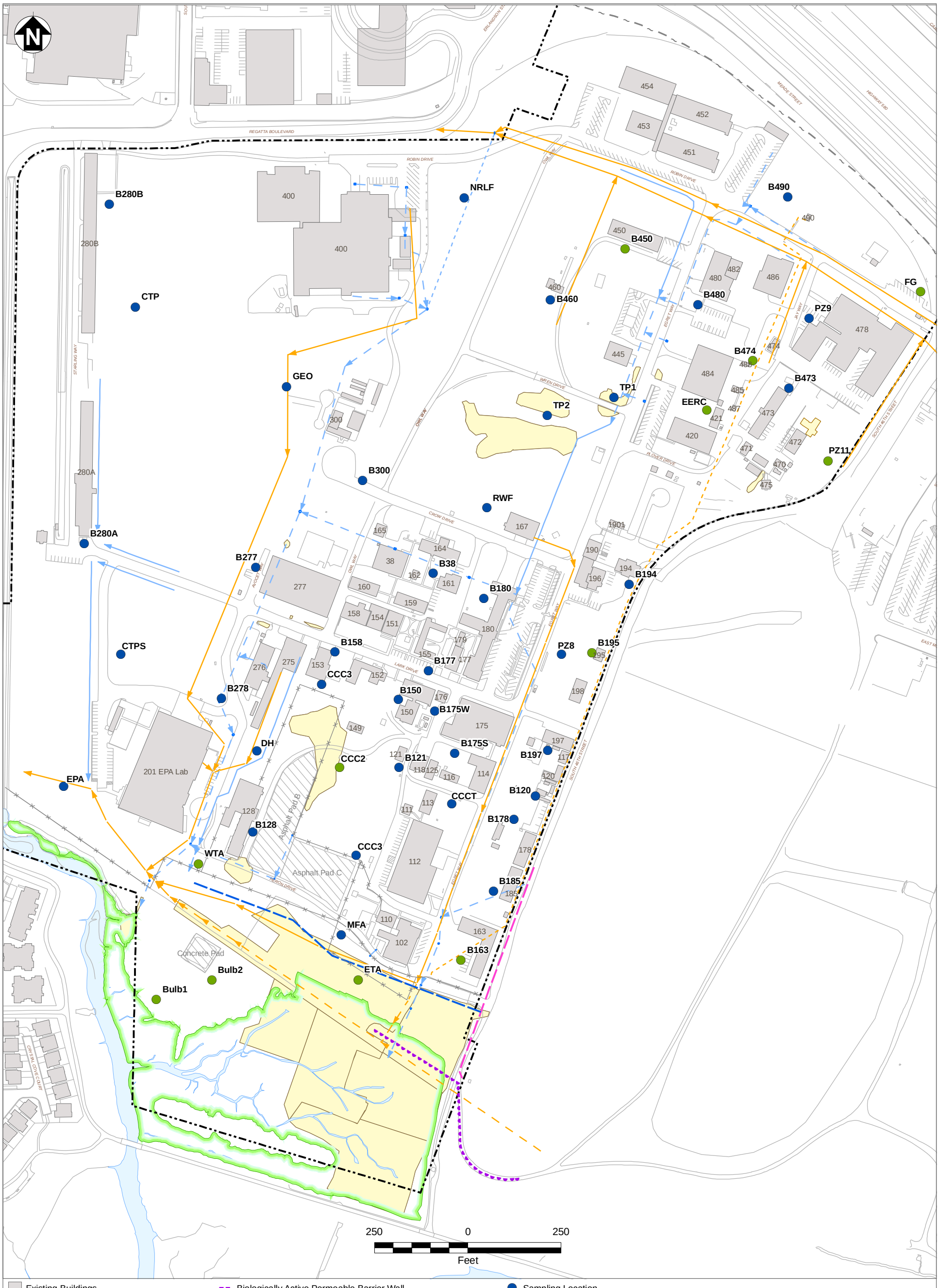
Notes:

EBRPD	East Bay Regional Parks District
EERC	Earthquake Engineering Reseach Center
EPA	Environmental Protection Agency
NRLF	Northern Regional Library Facility
RFS	Richmond Field Station

FIGURE 2
SITE MAP

Phase I April 2011 Groundwater Sampling Results

2010-03-19 V:\Misc_GIS\Richmond_Field_Station\Projects\Field_Sampling_Workplan\Site_Boundaries.mxd TtEMI-OAK CF



250 0 250

Feet

- Existing Buildings
- Asphalt/Concrete Pads
- Remediated Areas
- Surface Water
- Marsh Boundary
- Property Boundary
- Approximate Property Boundary
- Roads and Other Landscape Features
- Fenceline
- Biologically Active Permeable Barrier Wall
- Former Seawall (Approximate)
- Slurry Wall

Storm Drain Lines:

- Open Swale
- Underground Culvert
- Underground Culvert, Abandoned (Grouted at Manholes)

Sanitary Sewer Lines:

- Existing Sewer Line
- Removed Sewer Line
- Abandoned Sewer Line

- Sampling Location
- Sampling Location (including total metals)

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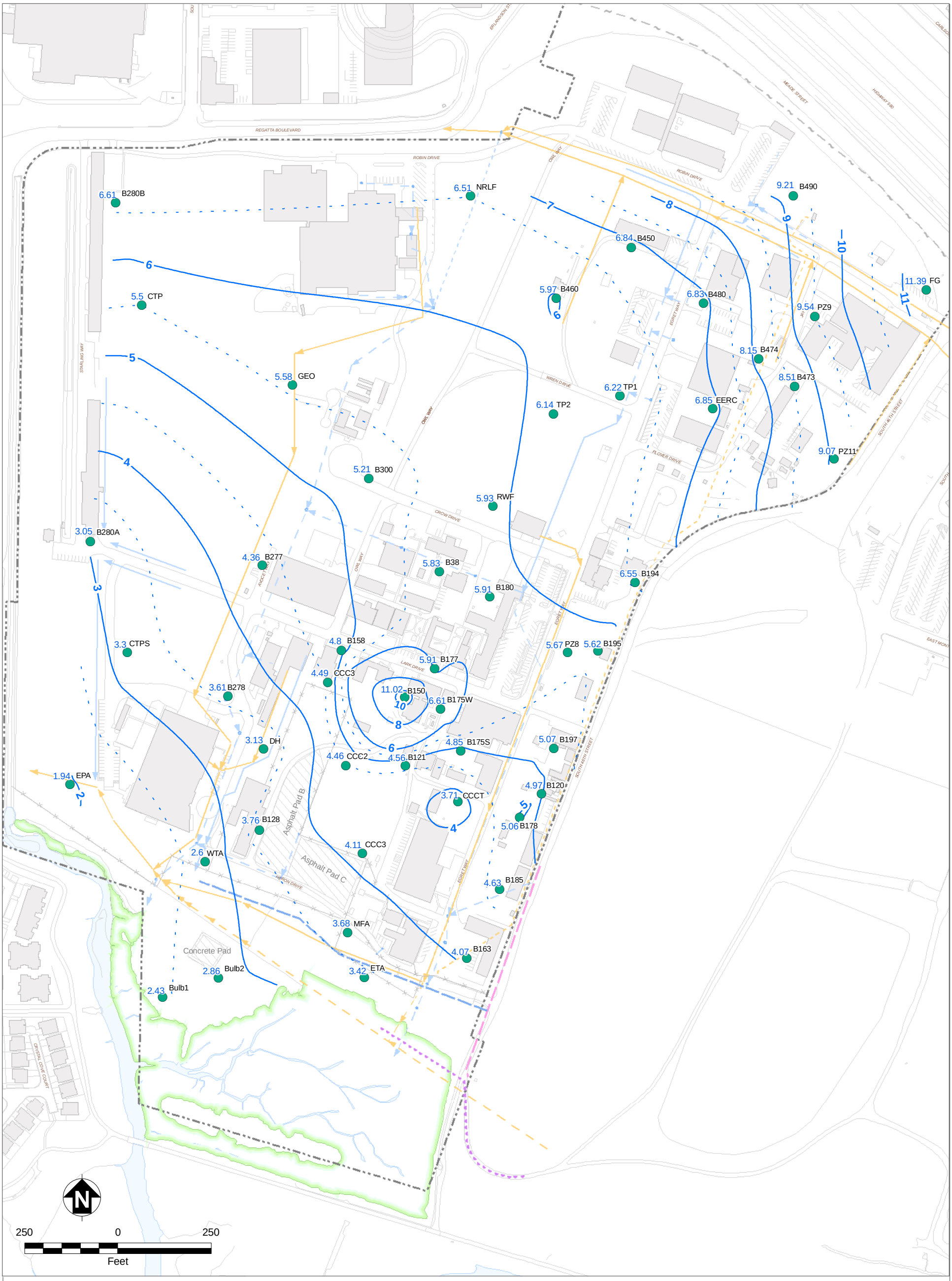
FIGURE 3
GROUNDWATER SAMPLING LOCATIONS

Phase I April 2011 Groundwater Sampling Results



- Piezometer Location
- Groundwater Contour, 1-Foot Interval
- Groundwater Contour, .5-Foot Interval
- Existing Building
- Asphalt/Concrete Pad
- Surface Water
- Marsh Boundary
- Property Boundary
- Approximate Property Boundary
- Roads and Other Landscape Features
- Fenceline
- Biologically Active Permeable Barrier Wall
- Former Seawall (Approximate)
- Slurry Wall

Storm Drain Lines:
- Open Swale
- Underground Culvert
- Underground Culvert, Abandoned (Grouted at Manholes)

Sanitary Sewer Lines:
- Existing Sewer Line
- Removed Sewer Line
- Abandoned Sewer Line

Note:
bgs below ground surface
ft feet
Groundwater elevations given in feet about mean sea level

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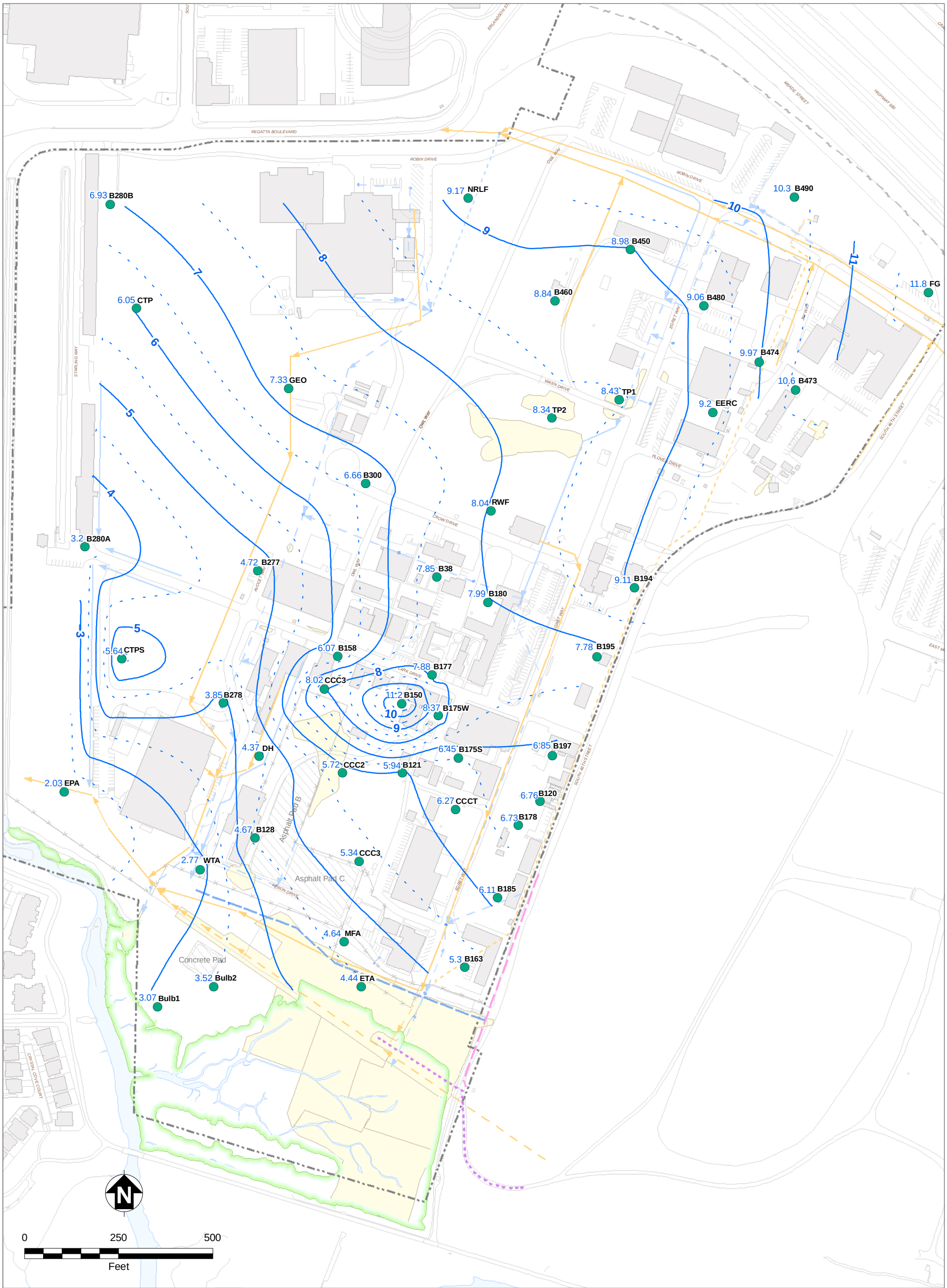
FIGURE 4
SHALLOW GROUNDWATER ELEVATION CONTOURS, NOVEMBER 1, 2010

Phase I April 2011 Groundwater Sampling Results



- Piezometer Location
- Groundwater Contour, 1-Foot Interval
- Groundwater Contour, .5-Foot Interval
- Existing Building
- Asphalt/Concrete Pad
- Remediated Area
- Surface Water
- Marsh Boundary
- Property Boundary
- Approximate Property Boundary
- Roads and Other Landscape Features
- Fenceline
- Biologically Active Permeable Barrier Wall
- Former Seawall (Approximate)
- Slurry Wall

Storm Drain Lines:

- Open Swale
- Underground Culvert
- Underground Culvert, Abandoned (Grouted at Manholes)

Sanitary Sewer Lines:

- Existing Sewer Line
- Removed Sewer Line
- Abandoned Sewer Line

Note:
bgs below ground surface
ft feet
Groundwater elevations given in ft above mean sea level

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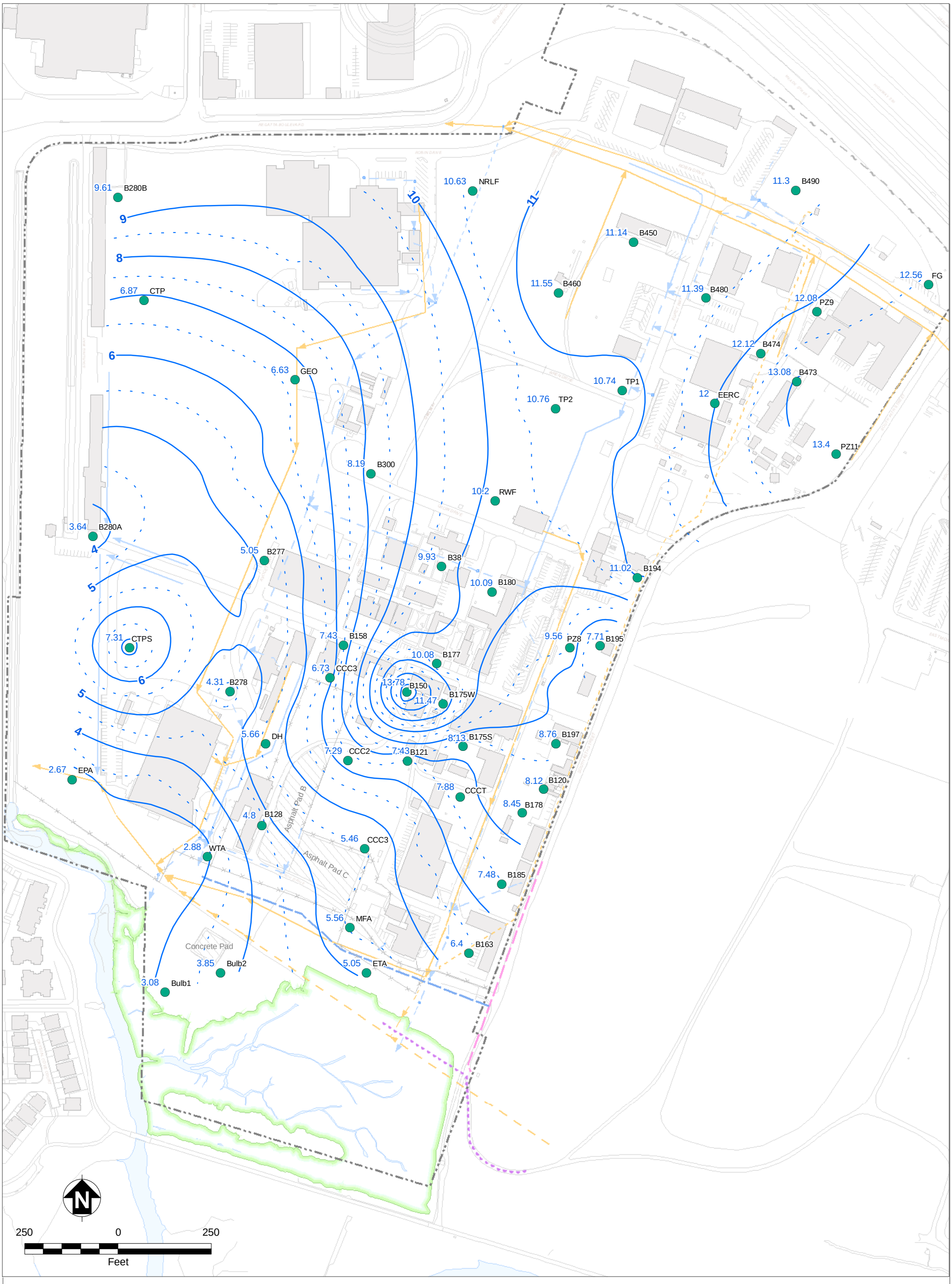
University of California, Berkeley

FIGURE 5
SHALLOW GROUNDWATER ELEVATION CONTOURS, FEBRUARY 10, 2011

Phase I April 2011 Groundwater Sampling Results

2012-01-9 V:\Misc_GIS\Richmond_Field_Station\Projects\Field_Sampling_Workplan\GW_cont_monitoring\Tech_Memo\gw_levels_2011_02.mxd TtEMI-OAK CF



- Existing Building
- Asphalt/Concrete Pad
- Surface Water
- Marsh Boundary
- Property Boundary
- Approximate Property Boundary
- Roads and Other Landscape Features
- Fenceline
- Biologically Active Permeable Barrier Wall
- Former Seawall (Approximate)
- Slurry Wall

Storm Drain Lines:
- Open Swale
- Underground Culvert
- Underground Culvert, Abandoned (Grouted at Manholes)

Sanitary Sewer Lines:
- Existing Sewer Line
- Removed Sewer Line
- Abandoned Sewer Line

Note:
bgs below ground surface
ft feet
Groundwater elevations given in feet about mean sea level

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Richmond Field Station
University of California, Berkeley

FIGURE 6
SHALLOW GROUNDWATER ELEVATION CONTOURS, APRIL 11, 2011

Phase I April 2011 Groundwater Sampling Results

2012-1-3 V:\Misc_GIS\Richmond_Field_Station\Projects\Field_Sampling_Workplan\GW_cont_monitoring\Tech_Memo\gw_levels_2011_04.mxd TtEMI-OAK CF

TABLES

Table 1: Groundwater Sampling Registry
Phase I April 2011 Groundwater Sampling Results, Technical Memorandum
University of California, Berkeley, Richmond Field Station, Richmond, California

Groundwater Samples										
			Analysis	TPH-P (EPA Method 8015B modified)	VOCs (EPA Method 8260B)	TPH-E (EPA Method 8015B modified)	SVOCs (EPA Method 8270C)	Metals (EPA Method 6020A/7400 series)	PAH (EPA Method 8270-SIM)	TDS (EPA Method 160.1)
			Sample Container	2 40mL Amber VOA vials with HCl	2 40mL Amber VOA vials with HCl	1 Liter Amber	1 Liter Amber	500mL Poly with HNO3	1 Liter Amber	250mL poly
			Holding Time	14 Days	14 Days	14 Days	7/40 days	Metals – 6 Months (except Mercury – 28 Days)	7/40 days	7 days
Sample ID	Point Location ID	Sampling Date	Depth (feet bgs)							
RFSGWB12002	B120	4/15/2011	4-14	X	X	X	X	X	X	X
RFSGWB12102	B121	4/13/2011	8-18	X	X	X	X	X	X	X
RFSGWB12802	B128	4/18/2011	6-16	X	X	X	X	X	X	X
--	B128deep	--	30-40							
RFSGWB15002	B150	4/13/2011	5.5-15.5	X	X	X	X	X	X	X
RFSGWB15802	B158	4/15/2011	5-15	X	X	X	X	X	X	X
RFSGWB16302	B163	4/12/2011	7-17	X	X	X	X	X	X	X
RFSGWB175S02	B175S	4/13/2011	5-15	X	X	X	X	X	X	X
RFSGWB175W02	B175W	4/13/2011	5-15	X	X	X	X	X	X	X
RFSGWB17702	B177	4/18/2011	9-19	X	X	X	X	X	X	X
RFSGWB17802	B178	4/15/2011	4.5-14.5	X	X	X	X	X	X	X
RFSGWB18002	B180	4/13/2011	6-16	X	X	X	X	X	X	X
RFSGWB18502	B185	4/15/2011	4-14	X	X	X	X	X	X	X
RFSGWB18502D	B185	4/15/2011	4-14	X	X	X	X	X	X	X
RFSGWB19402	B194	4/13/2011	7-17	X	X	X	X	X	X	X
RFSGWB19502	B195	4/13/2011	6-16	X	X	X	X	X	X	X
RFSGWB19502D	B195	4/13/2011	6-16	X	X	X	X	X	X	X
RFSGWB19702	B197	4/13/2011	4-14	X	X	X	X	X	X	X
RFSGWB27702	B277	4/18/2011	7-17	X	X	X	X	X	X	X
RFSGWB27802	B278	4/19/2011	6-16	X	X	X	X	X	X	X
RFSGWB280A02	B280A	4/14/2011	4-14	X	X	X	X	X	X	X
RFSGWB280B02	B280B	4/14/2011	6-16	X	X	X	X	X	X	X
RFSGWB30002	B300	4/15/2011	7-17	X	X	X	X	X	X	X
RFSGWB3802	B38	4/19/2011	7-17	X	X	X	X	X	X	X
RFSGWB3802D	B38	4/19/2011	7-17	X	X	X	X	X	X	X
--	B38deep	--	31-41							
RFSGWB45002	B450	4/19/2011	6-16	X	X	X	X	X	X	X
RFSGWB46002	B460	4/20/2011	8-18	X	X	X	X	X	X	X
RFSGWB47302	B473	4/20/2011	7-17	X	X	X	X	X	X	X
RFSGWB47402	B474	4/20/2011	6-16	X	X	X	X	X	X	X
RFSGWB48002	B480	4/19/2011	6-16	X	X	X	X	X	X	X
--	B480deep	--	35-40							
RFSGWB49002	B490	4/20/2011	8-18	X	X	X	X	X	X	X
RFSGWBULB102	Bulb1	4/12/2011	8-18	X	X	X	X	X	X	X
RFSGWBULB202	Bulb2	4/12/2011	9-19	X	X	X	X	X	X	X
RFSGWCCC102	CCC1	4/14/2011	3.5-13.5	X	X	X	X	X	X	X
RFSGWCCC202	CCC2	4/14/2011	4-14	X	X	X	X	X	X	X
RFSGWCCC302	CCC3	9/3/2010	4-14	X	X	X	X	X	X	X
RFSGWCCCT02	CCCT	4/18/2011	5.5-15.5	X	X	X	X	X	X	X
RFSGWCTP02	CTP	4/14/2011	7-17	X	X	X	X	X	X	X
--	CTPdeep	--	30-40							
RFSGWCTPS02	CTPS	4/19/2011	4-14	X	X	X	X	X	X	X
RFSGWDH02	DH	4/14/2011	3.5-13.5	X	X	X	X	X	X	X
RFSGWEERC02	EERC	4/20/2011	7-17	X	X	X	X	X	X	X
RFSGWEPA02	EPA	4/19/2011	4-14	X	X	X	X	X	X	X
RFSGWETA02	ETA	4/12/2011	3.5-13.5	X	X	X	X	X	X	X
RFSGWFG02	FG	4/19/2011	6-16	X	X	X	X	X	X	X
RFSGWFG02D	FG	4/19/2011	6-16	X	X	X	X	X	X	X
RFSGWGEO02	GEO	4/20/2011	6.5-16.5	X	X	X	X	X	X	X
RFSGWMFA02	MFA	4/12/2011	3.5-13.5	X	X	X	X	X	X	X
RFSGWNRLF02	NRLF	4/20/2011	9-19	X	X	X	X	X	X	X
RFSGWPZ1102	PZ11	4/20/2011	9-19	X	X	X	X	X	X	X
RFSGWPZ802	PZ8	4/18/2011	8-21	X	X	X	X	X	X	X
RFSGWPZ902	PZ9	4/20/2011	9-20	X	X	X	X	X	X	X
RFSGWRWF02	RWF	4/18/2011	8-18	X	X	X	X	X	X	X
RFSGWTP102	TP1	4/18/2011	7-17	X	X	X	X	X	X	X
RFSGWTP202	TP2	4/18/2011	6-16	X	X	X	X	X	X	X
RFSGWWTA02	WTA	4/14/2011	4-14	X	X	X	X	X	X	X
RFSGWWTA02D	WTA	4/14/2011	4-14	X	X	X	X	X	X	X

Notes:

bgs	below ground surface	ml	millileters	THP-E	Total extractable petroleum hydrocarbons
EPA	U.S. Environmental Protection Agency	PAH	Polyaromatic hydrocarbons	TPH-P	Total purgeable petroleum hydrocarbons
HCl	Hydrocloric acid	PCB	Polychlorinated biphenyl	VOC	Volatile organic compound
HNO3	Nitric Acid	SVOC	Semivolatile organic compound		
ID	Identification	TDS	Total dissolved solids		

Table 2: Groundwater Elevation Data

Phase I April 2011 Groundwater Sampling Results , Technical Memorandum
University of California, Berkeley, Richmond Field Station, Richmond, California

Piezometer Name	Sample Date	TOC Elevation (feet NGVD)	Depth to Water (feet below top of casing)	Groundwater Elevation (feet NGVD)
B120	11/1/10	11.72	6.75	4.97
B120	2/10/11	11.72	4.96	6.76
B120	4/11/11	11.72	3.60	8.12
B121	11/1/10	14.77	10.21	4.56
B121	2/10/11	14.77	8.83	5.94
B121	4/11/11	14.77	7.34	7.43
B128	11/1/10	11.62	7.86	3.76
B128	2/10/11	11.62	6.95	4.67
B128	4/11/11	11.62	6.82	4.80
B128deep	11/1/10	12.15	8.82	3.33
B128deep	2/10/11	12.15	7.33	4.82
B128deep	4/11/11	12.15	6.71	5.44
B150	11/1/10	17.24	6.22	11.02
B150	2/10/11	17.24	6.04	11.20
B150	4/11/11	17.24	3.46	13.78
B158	11/1/10	15.88	11.08	4.80
B158	2/10/11	15.88	9.81	6.07
B158	4/11/11	15.88	8.45	7.43
B163	11/1/10	10.37	6.30	4.07
B163	2/10/11	10.37	5.07	5.30
B163	4/11/11	10.37	3.97	6.40
B175S	11/1/10	15.16	10.31	4.85
B175S	2/10/11	15.16	8.71	6.45
B175S	4/11/11	15.16	7.03	8.13
B175W	11/1/10	16.57	9.96	6.61
B175W	2/10/11	16.57	8.20	8.37
B175W	4/11/11	16.57	5.10	11.47
B177	11/1/10	17.57	11.66	5.91
B177	2/10/11	17.57	9.69	7.88
B177	4/11/11	17.57	7.49	10.08
B178	11/1/10	10.67	5.61	5.06
B178	2/10/11	10.67	3.94	6.73
B178	4/11/11	10.67	2.22	8.45
B180	11/1/10	15.02	9.11	5.91
B180	2/10/11	15.02	7.03	7.99
B180	4/11/11	15.02	4.93	10.09
B185	11/1/10	10.01	5.38	4.63
B185	2/10/11	10.01	3.90	6.11
B185	4/11/11	10.01	2.53	7.48

Table 2: Groundwater Elevation Data
Phase I April 2011 Groundwater Sampling Results , Technical Memorandum
University of California, Berkeley, Richmond Field Station, Richmond, California

Piezometer Name	Sample Date	TOC Elevation (feet NGVD)	Depth to Water (feet below top of casing)	Groundwater Elevation (feet NGVD)
B194	11/1/10	18.30	11.75	6.55
B194	2/10/11	18.30	9.19	9.11
B194	4/11/11	18.30	7.28	11.02
B195	11/1/10	14.28	8.66	5.62
B195	2/10/11	14.28	6.50	7.78
B195	4/11/11	14.28	6.57	7.71
B197	11/1/10	13.01	7.94	5.07
B197	2/10/11	13.01	6.16	6.85
B197	4/11/11	13.01	4.25	8.76
B277	11/1/10	14.82	10.46	4.36
B277	2/10/11	14.82	10.10	4.72
B277	4/11/11	14.82	9.77	5.05
B278	11/1/10	12.75	9.14	3.61
B278	2/10/11	12.75	8.90	3.85
B278	4/11/11	12.75	8.44	4.31
B280A	11/1/10	14.04	10.99	3.05
B280A	2/10/11	14.04	10.84	3.20
B280A	4/11/11	14.04	10.40	3.64
B280B	11/1/10	19.59	12.98	6.61
B280B	2/10/11	19.59	12.66	6.93
B280B	4/11/11	19.59	9.98	9.61
B300	11/1/10	18.16	12.95	5.21
B300	2/10/11	18.16	11.50	6.66
B300	4/11/11	18.16	9.97	8.19
B38	11/1/10	15.78	9.95	5.83
B38	2/10/11	15.78	7.93	7.85
B38	4/11/11	15.78	5.85	9.93
B38deep	11/1/10	15.84	9.81	6.03
B38deep	2/10/11	15.84	8.10	7.74
B38deep	4/11/11	15.84	6.50	9.34
B450	11/1/10	21.34	14.50	6.84
B450	2/10/11	21.34	12.36	8.98
B450	4/11/11	21.34	10.20	11.14
B460	11/1/10	21.42	15.45	5.97
B460	2/10/11	21.42	12.58	8.84
B460	4/11/11	21.42	9.87	11.55
B473	11/1/10	22.29	13.78	8.51
B473	2/10/11	22.29	11.65	10.64
B473	4/11/11	22.29	9.21	13.08

Table 2: Groundwater Elevation Data

Phase I April 2011 Groundwater Sampling Results , Technical Memorandum
University of California, Berkeley, Richmond Field Station, Richmond, California

Piezometer Name	Sample Date	TOC Elevation (feet NGVD)	Depth to Water (feet below top of casing)	Groundwater Elevation (feet NGVD)
B474	11/1/10	23.67	15.52	8.15
B474	2/10/11	23.67	13.70	9.97
B474	4/11/11	23.67	11.55	12.12
B480	11/1/10	20.84	14.01	6.83
B480	2/10/11	20.84	11.78	9.06
B480	4/11/11	20.84	9.45	11.39
B480deep	11/1/10	21.07	9.55	11.52
B480deep	2/10/11	21.07	8.60	12.47
B480deep	4/11/11	21.07	7.16	13.91
B490	11/1/10	24.41	15.20	9.21
B490	2/10/11	24.41	14.08	10.33
B490	4/11/11	24.41	13.11	11.30
Bulb1	11/1/10	7.19	4.76	2.43
Bulb1	2/10/11	7.19	4.12	3.07
Bulb1	4/11/11	7.19	4.11	3.08
Bulb2	11/1/10	7.46	4.60	2.86
Bulb2	2/10/11	7.46	3.94	3.52
Bulb2	4/11/11	7.46	3.61	3.85
CCC1	11/1/10	15.38	10.89	4.49
CCC1	2/10/11	15.38	7.36	8.02
CCC1	4/11/11	15.38	8.65	6.73
CCC2	11/1/10	14.60	10.14	4.46
CCC2	2/10/11	14.60	8.88	5.72
CCC2	4/11/11	14.60	7.31	7.29
CCC3	11/1/10	11.67	7.56	4.11
CCC3	2/10/11	11.67	6.33	5.34
CCC3	4/11/11	11.67	6.21	5.46
CCCT	11/1/10	12.13	8.42	3.71
CCCT	2/10/11	12.13	5.86	6.27
CCCT	4/11/11	12.13	4.25	7.88
CTP	11/1/10	17.27	11.95	5.32
CTP	2/10/11	17.27	9.61	7.66
CTP	4/11/11	17.27	7.94	9.33
CTPdeep	11/1/10	17.67	11.77	5.90
CTPdeep	2/10/11	17.67	11.22	6.45
CTPdeep	4/11/11	17.67	10.40	7.27
CTPS	11/1/10	15.25	12.67	2.58
CTPS	2/10/11	15.25	11.46	3.79
CTPS	4/11/11	15.25	11.68	3.57

Table 2: Groundwater Elevation Data
Phase I April 2011 Groundwater Sampling Results , Technical Memorandum
University of California, Berkeley, Richmond Field Station, Richmond, California

Piezometer Name	Sample Date	TOC Elevation (feet NGVD)	Depth to Water (feet below top of casing)	Groundwater Elevation (feet NGVD)
DH	11/1/10	13.25	14.99	-1.74
DH	2/10/11	13.25	12.64	0.61
DH	4/11/11	13.25	9.84	3.41
EERC	11/1/10	21.84	8.65	13.19
EERC	2/10/11	21.84	8.56	13.28
EERC	4/11/11	21.84	7.92	13.92
EPA	11/1/10	10.59	4.12	6.47
EPA	2/10/11	10.59	3.10	7.49
EPA	4/11/11	10.59	2.49	8.10
ETA	11/1/10	7.54	13.92	-6.38
ETA	2/10/11	7.54	13.48	-5.94
ETA	4/11/11	7.54	12.75	-5.21
FG	11/1/10	25.31	10.79	14.52
FG	2/10/11	25.31	9.04	16.27
FG	4/11/11	25.31	9.74	15.57
GEO	11/1/10	16.37	4.55	11.82
GEO	2/10/11	16.37	3.59	12.78
GEO	4/11/11	16.37	2.67	13.70
MFA	11/1/10	8.23	16.11	-7.88
MFA	2/10/11	8.23	13.45	-5.22
MFA	4/11/11	8.23	11.99	-3.76
NRLF	11/1/10	22.62	10.53	12.09
NRLF	2/10/11	22.62	8.42	14.20
NRLF	4/11/11	22.62	6.26	16.36
PZ11	11/1/10	21.48	12.41	9.07
PZ11	2/10/11	21.48	NA	NA
PZ11	4/11/11	21.48	8.08	13.40
PZ8	11/1/10	14.12	8.45	5.67
PZ8	2/10/11	14.12	NA	NA
PZ8	4/11/11	14.12	4.56	9.56
PZ9	11/1/10	23.29	13.75	9.54
PZ9	2/10/11	23.29	NA	NA
PZ9	4/11/11	23.29	11.21	12.08
RWF	11/1/10	16.46	10.12	6.34
RWF	2/10/11	16.46	8.88	7.58
RWF	4/11/11	16.46	7.59	8.87
TP1	11/1/10	19.33	13.11	6.22
TP1	2/10/11	19.33	10.90	8.43
TP1	4/11/11	19.33	8.59	10.74

Table 2: Groundwater Elevation Data

Phase I April 2011 Groundwater Sampling Results , Technical Memorandum
University of California, Berkeley, Richmond Field Station, Richmond, California

Piezometer Name	Sample Date	TOC Elevation (feet NGVD)	Depth to Water (feet below top of casing)	Groundwater Elevation (feet NGVD)
TP2	11/1/10	18.91	12.77	6.14
TP2	2/10/11	18.91	10.57	8.34
TP2	4/11/11	18.91	8.15	10.76
WTA	11/1/10	8.61	6.01	2.60
WTA	2/10/11	8.61	5.84	2.77
WTA	4/11/11	8.61	5.73	2.88

Notes:

NA	Not available
NGVD	National Geodetic Vertical Datum of 1929
TOC	Top of casing

Table 3: Piezometer Completion Summary
Phase I April 2011 Groundwater Sampling Results , Technical Memorandum
University of California, Berkeley, Richmond Field Station, Richmond, California

Piezometer Name	Well Installation Date	Total Depth (ft bgs)	Casing Diameter (inches)	Screen Interval (ft bgs)	Development Date	Development Gallons Purged	Round 1 Sampling Date	Round 2 Sampling Date	TOC (a)	Approximate Ground Surface Elevation (a)
B120	8/2/10	14	2.0 PVC	4-14	8/19/10	26	9/9/10	4/15/11	11.72	12.12
B121	8/3/10	18	2.0 PVC	8-18	8/16/10	53	9/8/10	4/13/11	14.77	15.55
B128	8/12/10	16	2.0 PVC	6-16	8/31/10	33	9/23/10	4/18/11	11.62	12.21
B128deep	8/12/10	40	2.0 PVC	30-40	9/1/10	65	10/15/10	--	12.15	12.26
B150	8/3/10	15.5	2.0 PVC	5.5-15.5	8/17/10	28	9/8/10	4/13/11	17.24	17.51
B158	8/11/10	15	2.0 PVC	5-15	8/18/10	19	9/8/10	4/15/11	15.88	16.33
B163	7/26/10	17.5	2.0 PVC	7-17	8/16/10	53	9/2/10	4/12/11	10.37	10.60
B175S	8/3/10	15	2.0 PVC	5-15	8/17/10	22	9/3/10	4/13/11	15.16	15.45
B175W	8/3/10	15	2.0 PVC	5-15	8/17/10	32	9/8/10	4/13/11	16.57	17.21
B177	8/11/10	19	2.0 PVC	9-19	8/31/10	32	9/23/10	4/18/11	17.57	17.81
B178	8/2/10	14.5	2.0 PVC	4.5-14.5	8/19/10	32	9/2/10	4/15/11	10.67	11.33
B180	8/11/10	16	2.0 PVC	6-16	8/24/10	24	9/15/10	4/13/11	15.02	15.30
B185	8/2/10	14	2.0 PVC	4-14	8/20/10	31	9/2/10	4/15/11	10.01	10.08
B194	7/30/10	17	2.0 PVC	7-17	8/23/10	34	9/9/10	4/13/11	18.30	18.84
B195	7/30/10	16	2.0 PVC	6-16	8/20/10	29	9/9/10	4/13/11	14.28	14.91
B197	7/30/10	14	2.0 PVC	4-14	8/19/10	25	9/9/10	4/13/11	13.01	13.37
B277	7/29/10	17.5	2.0 PVC	7-17	8/19/10	25	9/15/10	4/18/11	14.82	15.69
B278	7/29/10	16.5	2.0 PVC	6-16	8/18/10	26	9/16/10	4/19/11	12.75	13.17
B280A	7/29/10	14.5	2.0 PVC	4-14	8/19/10	13	9/16/10	4/14/11	14.04	14.21
B280B	8/6/10	16	2.0 PVC	6-16	8/26/10	6	10/1/10	4/14/11	19.59	19.89
B300	7/29/10	17	2.0 PVC	7-17	8/24/10	21	9/9/10	4/15/11	18.16	18.72
B38	8/10/10	17	2.0 PVC	7-17	8/24/10	24	9/15/10	4/19/11	15.78	16.08
B38deep	8/10/10	41	2.0 PVC	31-41	8/24/10	47	10/18/10	--	15.84	16.09
B450	8/5/10	16	2.0 PVC	6-16	8/25/10	10	NS	4/19/11	21.34	21.76
B460	8/5/10	18	2.0 PVC	8-18	8/25/10	12	9/15/10	4/20/11	21.42	21.96
B473	8/9/10	17	2.0 PVC	7-17	8/31/10	12.5	9/24/10	4/20/11	22.29	22.50
B474	8/9/10	16	2.0 PVC	6-16	8/27/10	17.5	9/23/10	4/20/11	23.67	21.85
B480	8/5/10	16	2.0 PVC	6-16	8/27/10	10	9/24/10	4/19/11	20.84	21.04
B480deep	8/12/10	40	2.0 PVC	35-40	8/27/10	52	10/15/10	--	21.07	21.19
B490	8/6/10	18	2.0 PVC	8-18	8/30/10	27	9/16/10	4/20/11	24.41	24.95
Bulb1	9/29/10	18	2.0 PVC	8-18	10/19/10	30	10/19/10	4/12/11	7.19	7.83
Bulb2	9/29/10	19	2.0 PVC	9-19	10/19/10	35	10/19/10	4/12/11	7.46	7.91
CCC1	7/27/10	14	2.0 PVC	3.5-13.5	8/18/10	11.5	9/8/10	4/14/11	15.38	15.67
CCC2	7/27/10	14	2.0 PVC	4-14	8/16/10	19	9/8/10	4/14/11	14.60	14.75
CCC3	7/27/10	15	2.0 PVC	4-14	8/16/10	27	9/3/10	9/3/10	11.67	12.13
CCCT	8/2/10	15.5	2.0 PVC	5.5-15.5	8/20/10	31	9/3/10	4/18/11	12.13	13.19
CTP	7/30/10	17	2.0 PVC	7-17	8/26/10	20	9/30/10	4/14/11	17.27	18.26
CTPdeep	8/12/10	40	2.0 PVC	30-40	8/26/10	47	10/15/10	--	17.67	18.16
CTPS	7/28/10	14	2.0 PVC	4-14	8/19/10	7	9/30/2010, 10/1/10 and 10/18/10	4/19/11	15.25	15.43

Table 3: Piezometer Completion Summary
Phase I April 2011 Groundwater Sampling Results , Technical Memorandum
University of California, Berkeley, Richmond Field Station, Richmond, California

Piezometer Name	Well Installation Date	Total Depth (ft bgs)	Casing Diameter (inches)	Screen Interval (ft bgs)	Development Date	Development Gallons Purged	Round 1 Sampling Date	Round 2 Sampling Date	TOC (a)	Approximate Ground Surface Elevation (a)
DH	7/27/10	13.5	2.0 PVC	3.5-13.5	8/18/10	13	9/30/10	4/14/11	13.25	13.55
EERC	8/9/10	17	2.0 PVC	7-17	8/31/10	7.5	10/1/2010 and 10/15/10	4/20/11	21.84	22.01
EPA	7/28/10	14	2.0 PVC	4-14	8/19/10	13.5	9/16/10	4/19/11	10.59	11.20
ETA	7/28/10	14	2.0 PVC	3.5-13.5	9/2/10	32	9/24/10	4/12/11	7.54	7.72
FG	8/6/10	16	2.0 PVC	6-16	8/30/10	7	9/23/10	4/19/11	25.31	25.79
GEO	7/26/10	17.5	2.0 PVC	6.5-16.5	9/1/10	20	9/3/10	4/20/11	16.37	16.73
MFA	7/28/10	13.5	2.0 PVC	3.5-13.5	9/2/10	37	9/24/10	4/12/11	8.23	8.51
NRLF	7/26/10	19.5	2.0 PVC	9-19	8/26/10	10	9/16/10	4/20/11	22.62	22.99
PZ-11	10/6/09	19	2.0 PVC	9-19	unk	unk	10/15/10	4/20/11	21.48	21.73
PZ-8	4/12/07	21	2.0 PVC	8-21	unk	unk	10/1/10	4/18/11	14.12	14.52
PZ-9	4/12/07	20	2.0 PVC	9-20	unk	unk	9/24/10	4/20/11	23.29	23.72
RWF	8/4/10	18	2.0 PVC	8-18	8/23/10	30	9/15/10	4/18/11	16.46	16.78
TP1	8/5/10	17	2.0 PVC	7-17	8/23/10	13	9/29/10	4/18/11	19.33	19.91
TP2	8/4/10	16	2.0 PVC	6-16	8/23/10	20	9/29/10	4/18/11	18.91	19.24
WTA	7/27/10	14	2.0 PVC	4-14	8/18/10	28	9/30/10	4/14/11	8.61	8.93

Notes:
Total depth of boring assumed to be bottom of screen unless otherwise specified on boring log or well completion form.
(a) Ground surface elevation and TOC given in feet above mean sea level

ft bgs	Feet below ground surface
NS	Not Sampled
PVC	Polyvinyl chloride
TOC	Top of casing
unk	Unknown

Table 4: Groundwater Sampling Parameters Summary
Phase I April 2011 Groundwater Sampling Results, Technical Memorandum
University of California, Berkeley, Richmond Field Station, Richmond, California

Sample ID	Total Dissolved Solids (mg/L)	pH	Temperature (C)	Specific Conductance (umhos/cm)	Turbidity (NTU)	DO (mg/L)	ORP (mV)
RFSGWB12002	2510	7.58	14.86	3.32	12.3	0.14	90
RFSGWB12102	520	7.43	15.92	0.819	13.3	5.1	110
RFSGWB12802	500	6.85	15.6	0.737	7.6	0.18	29
RFSGWB15002	220	7.33	14.21	0.357	11.1	3.85	95
RFSGWB15802	180	7.72	15.05	0.236	15.5	3.65	101
RFSGWB16302	2820	6.39	17.02	3.12	57.5	0.34	105
RFSGWB175S02	580	7.32	15.8	0.846	19	2.87	91
RFSGWB175W02	270	7.86	16.15	0.409	17.3	0.8	17
RFSGWB17702	250	6.74	15.25	0.397	8.5	1.94	80
RFSGWB17802	2050	7.53	15.94	2.79	19.6	0.2	90
RFSGWB18002	330	8.02	15.16	0.481	24.5	7.91	82
RFSGWB18502	1630	7.31	14.85	1.96	15.9	0.3	112
RFSGWB18502D	1610	--	--	--	--	--	--
RFSGWB19402	660	7.48	16.03	1.028	26.6	1.44	95
RFSGWB19502	570	7.66	14.75	0.803	22.3	2.71	96
RFSGWB19502D	550	--	--	--	--	--	--
RFSGWB19702	2170	7.52	15.92	3.03	12.4	0.24	-136
RFSGWB27702	450	7.84	15.74	0.74	16	0.22	70
RFSGWB27802	2050 J	7.49	15.57	3.35	18.6	0.77	101
RFSGWB280A02	430	7.75	16.36	0.699	7.2	0.36	71
RFSGWB280B02	580	8.32	15.37	1.03	9.6	4.55	79
RFSGWB30002	2480	6.96	15.5	4.04	8.5	0.34	-106
RFSGWB3802	350	7.33	14.5	0.49	24.7	0.56	95
RFSGWB3802D	350	--	--	--	--	--	--
RFSGWB45002	610	7.61	16.28	1.059	18.3	2.34	111
RFSGWB46002	320	7.91	14.89	0.531	16	0.43	17
RFSGWB47302	590	7.77	15.55	0.845	9.8	2.82	71
RFSGWB47402	420	7.94	15.38	0.68	10.3	0.24	-106
RFSGWB48002	620	7.7	16.19	1.067	12.2	0.84	91
RFSGWB49002	560	7.73	15.93	0.873	12.9	3.31	74
RFSGWBULB102	22800	7.27	15.42	35.4	9.1	0.59	19
RFSGWBULB202	1530	8.19	15.69	2.53	57.5	0.24	-87
RFSGWCCC102	520	7.74	14.87	0.805	10.1	0.44	105
RFSGWCCC202	1990	7.02	14.84	3.34	10.2	4.8	123
RFSGWCCC302	720	7.62	15.13	1.06	45.8	2.67	76
RFSGWCCCT02	1110	7.54	14.35	1.63	12.3	0.31	-156
RFSGWCTP02	480	7.96	15.45	0.809	11.5	1.46	40
RFSGWCTPS02	520	7.55	14.98	0.814	13.7	2.8	96
RFSGWDH02	5350	7.12	14.98	9.08	9.5	1.83	115
RFSGWEERC02	4260	7.39	14.85	5.75	8.2	0.13	51
RFSGWEPA02	950	8.19	14.88	1.76	20.5	1.43	73
RFSGWETA02	1410	7.57	14.98	1.85	167	0.51	50
RFSGWFG02	590	7.04	16.87	0.824	71.2	0.84	114
RFSGWFG02D	580	--	--	--	--	--	--
RFSGWGEO02	560	7.76	14.65	0.915	13.6	0.28	80
RFSGWMFA02	640	7.82	14.98	0.951	84.5	0.29	19
RFSGWNRLF02	560	7.66	15.5	0.952	12.4	0.16	-58
RFSGWPZ1102	2930	5.33	14.9	3.66	17.6	0.38	183
RFSGWPZ802	480	7.33	15.76	0.749	18.4	0.27	105
RFSGWPZ902	370	7.22	16.93	0.606	9.4	0.18	86
RFSGWRWF02	780	7.42	15.5	1.241	53.7	0.43	99
RFSGWTP102	1770	7.48	16.53	2.21	7.3	0.21	-151
RFSGWTP202	810	7.37	16.3	1.234	13.8	0.66	103
RFSGWWTA02	1020	7.75	14.82	1.77	15.5	0.23	88
RFSGWWTA02D	1010	--	--	--	--	--	--

Notes:

C	Celsius
ID	Identification
mg/L	Milligrams per liter
mV	Millivolts
NTU	Nephelometric Turbidity Units
umhos/cm	Micromhms per cemtimeter

Table 5: State and Federal Water Quality Criteria in ug/L
Phase I April 2011 Groundwater Sampling Results, Technical Memorandum
University of California, Berkeley, Richmond Field Station, Richmond, California

	Human Health Risk-Based SSGs (1)			Aquatic Criteria (2)				MCL (4)			SWRCB			EPA 2004 PRG		EPA 2011 RSL	
	Upland			Near BAPB	Uplands	Lower hoizon											
Chemical	On-Site Residential	On-Site Commerical /Industrial Worker	On-Site Groundskeeper /Maintenance Worker	5x Aquatic Criteria	40x Aquatic Criteria	160x Aquatic Criteria	Drinking Water Standard (3)	California	EPA	Secondary	Drinking Water Criteria (5)	Non-Drinking Water Criteria (6)	Surface Water Screening Levels, Estuary Habitats (7)	Cancer (8)	Non-cancer (8)	Tapwater (Cancer) (9)	Tapwater (Non-cancer) (9)
VOCs																	
1,1,1-Trichloroethane								200	200		62	62	3,100				9,300
1,1-Dichloroethene	1,900	8900	630,000	160	1,300	5,100		6	7		6	25	3				340
1,2-Dichloroethane	120	360	2,900	5,000	40,000	160,000		0.5	5		0.5	200	99			0.15	
1,2-Dichloropropane	120	370	1,900	2,000	16,000	62,000		5	5		5	100	10			0.39	
2-Butanone (MEK)	2,800,000	13,000,000	140,000,000								4,200	14,000	8,400				
Acetone	7,900,000	37,000,000	220,000,000								1,500	1,500	1,500				22,000
Benzene	20	61	440	3,600	28,000	110,000		1	5		1	46	71			0.41	
Bromomethane											9.8	160	3,200				9
Carbon tetrachloride	2.8	8.5	160	220	1,800	7,000		0.5	5		0.5	9.3	4			0.44	
Chlorobenzene	250,000	1,100,000	140,000	1,100,000	8,400,000	34,000,000			100		25	25	50				91
Chloroform	130	400	2,500	24,000	190,000	750,000					70	330	470			0.91	
cis-1,2-Dichloroethene	7,200	34,000	270,000					6	70		6	590	22,000				73
Dichloromethane								5	5								
Methyl tert butyl ether								13		5						12	
Naphthalene	210	640	90								17	24	21			0.14	
p-Isopropyltoluene																	
Tetrachloroethene	38	110	22	440	3,500	14,000		5	5		5	120	9			0.11	
Toluene	3,500	160,000	570,000	10,000,000	80,000,000	320,000,000		150	1,000		40	130	40				2,300
trans-1,2-Dichloroethene	6,700	31,000	510,000	7,000,000	56,000,000	220,000,000		10	100		10	590	260				110
Trichloroethene	180	540	2,700	4,100	32,000	130,000		5	5		5	360	81			2	
Vinyl chloride	1.2	3.6	300	26,000	210,000	840,000		0.5	2		0.5	3.8	530			0.016	
SVOCs																	
1-Methylnaphthalene																2.3	
1,4-Dioxane											3	5000	5000			0.67	
Acenaphthene																	2,200
Bis(2-ethylhexyl) phthalate									6		4	32	5.9			4.8	
Fluoranthene											8	8	8				1,500
Fluorene											3.9	3.9	30				1,500
Naphthalene											17	24	21			0.14	
Pyrene											2	2	2		180		1,100
Metals																	
Aluminum								1,000		200							37,000
Antimony			150,000	220,000	1,700,000	6,900,000	6	6	6		6	30	500				15
Arsenic			110	180	1,400	5,800	10	10	10		36	36	0.14	0.071		0.045	
Barium			75,000,000				1,000	1,000	2,000		1,000	1,000	1,000				7,300
Beryllium								4	4		0.53	0.53	0.53				73
Boron											1.6	1.6	1.6				7,300
Cadmium			190,000	47	370	1,500	5	5	5		0.25	0.25	9.3				18
Calcium																	
Chromium			560,000,000				50	50	100		50	180	180				
Cobalt											3	3	3				11
Copper			15,000,000	16	120	500	1,300	1,300	1,300	1,000	3.1	3.1	3.1				1,500
Iron										300							26,000
Lead				41	320	1300	15	15	15		2.5	2.5	5.6				
Magnesium																	
Manganese										50							880
Mercury			110,000	11	84	340	2	2	2		0.025	0.025	0.025				.63
Molybdenum											35	240	240				180
Nickel			93,000,000	41	330	1,300	100	100			8.2	8.2	8.2				180
Potassium																	
Selenium			1,900,000	25	200	800	50	50	50		5	5	71				180
Silver			3,100,000	9.5	76	300	100			100	0.19	0.19	0.19				180
Sodium																	
Thallium			25,000	320	2,500	10,000	2	2	2		2	4	4				
Vanadium			370,000								15	19	19				180
Zinc			180,000,000	410	3,200	13,000	5,000			5,000	81	81	81				11,000
TPH																	
TPH as Gasoline											100	210					
TPH - Diesel Range Organics																	
TPH - Oil Range Organics																	
Explosive Residue																	
RDX																	

(1) Groundwater SSGs are developed in Appendix G of the Campus Bay Revised HHRA (EKI 2008a). The formulas used to calculate the SSGs are presented in Appedix H of the Revised HHRA.
(2) The aquatic criteria are the more stringent of the 10x Human Consumption of Aquatic organisms value and the Salt Water Aquatic Criteria Value, presented in the Quarterly Groundwater and Surface Water Monitoring Report (Arcadis 2010)
The dilution factors of 5, 40, and 160 for groundwater are developed and presented in Appendix I of the Draft Feasibilty Study and Remedial Action Plans for Lots 1, 2, and 3 (EKI 2008b)
(3) The drinking water criteria are the more stringent of the federal (US EPA 2005) and California (CDHS) primary and secondary maximum contaminant levels (MCLs)
http://www.cdph.ca.gov/certlic/drinkingwater/Documents/DWdocuments/EPAandCDPH-11-28-2008.pdf
(4) http://water.epa.gov/drink/contaminants/index.cfm
Values taken from the California Regional Water Quality Control Board 2008 Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater, Table F-1a.
(5) (http://www.swrcb.ca.gov/sanfranciscobay/water_issues/available_documents/ESL_May_2008.pdf)
Values taken from the California Regional Water Quality Control Board 2008 Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater, Table F-1b.
(6) (http://www.swrcb.ca.gov/sanfranciscobay/water_issues/available_documents/ESL_May_2008.pdf)
Values taken from the California Regional Water Quality Control Board 2008 Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater, Table F-2c.
(7) (http://www.swrcb.ca.gov/sanfranciscobay/water_issues/available_documents/ESL_May_2008.pdf)
(8) EPA 2004 Regional Screening Levels (formerly Preliminary Remediation Goals) (http://www.epa.gov/region9/superfund/prg/)
(9) EPA 2011 Regional Screening Levles for tap water (http://www.epa.gov/reg3hwmd/risk/human/)

BAPB	Biologically active permeable barrier
EPA	U.S. Environmental Protection Agency
MCL	Maximum contaminant level
PRG	Preliminary remediation goals
RSL	Regional screening levels
SSG	Site specific goal
SWRCB	State Water Resources Control Board
SVOC	Semivolatile organic compounds
TPH	Total petroleum hydrocarbons
VOC	Volatile organic compounds

Table 6: VOC Dectected Results Summary in ug/L
Phase I April 2011 Groundwater Sampling Results, Technical Memorandum
University of California, Berkeley, Richmond Field Station, Richmond, California

Sample ID	1,1,1-Trichloroethane	1,1-Dichloroethene	1,2-Dichloroethane	1,2-Dichloropropane	Benzene	Bromomethane	Carbon tetrachloride	Chlorobenzene	Chloroform	cis-1,2-Dichloroethene	Methyl tert butyl ether	p-Isopropyltoluene	Tetrachloroethene	trans-1,2-Dichloroethene	Trichloroethene	Vinyl chloride
On site Residential		1900	120	120	20		2.8	250000	130	7200			38	6700	180	1.2
On site comm/indestrial		8900	360	370	61		8.5	1100000	400	34000			110	31000	540	3.6
On site groundskeeper/maintenance		630000	2900	1900	440		160	140000	2500	270000			22	510000	2700	300
5x aquatic criteria		160	5000	2000	3600		220	1100000	24000				440	7000000	4100	26000
Federal EPA MCL	200	7	5	5	5		5	100		70			5	100	5	2
California MCL	200	6	0.5	5	1		0.5			6	13		5	10	5	0.5
SWRCB GW (drinking water source)	62	25	200	100	46	9.8	9.3	25	70	6			5	10	5	0.5
SWRCB GW (not drinking water source)	3100	3.2	99	10	71	160	4.4	25	330	590			120	590	360	3.8
EPA 2011 RSL tapwater (cancer)			0.15	0.39	0.41		0.44		0.91		12		0.11		2	0.02
EPA 2011 RSL tapwater (non-cancer)	9,300	340				9		91		73				110		
RFSGWB12002	0.5 U	0.6	**9**	0.5 U	0.3 J	1 U	0.5 U	8.4	2.3	3.2	0.5 U	0.5 U	**9.5**	0.4 J	**77 J**	1.2
RFSGWB12102	1.3 U	1.3 U	0.5 J	1.3 U	1.3 U	2.5 U	1.3 U	1.3 U	0.3 J	3.6	1.3 U	1.3 U	1.3 U	1.3 U	**170**	1.3 U
RFSGWB12802	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 J	0.5 U	1.1	0.5 U
RFSGWB15002	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
RFSGWB15802	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
RFSGWB16302	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	1.6	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
RFSGWB175S02	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	**5.3**	0.5 U
RFSGWB175W02	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.2 J	0.5 U	0.5 U	0.5 U	1.7	0.5 U	0.5 U	0.5 U
RFSGWB17702	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	2.7	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
RFSGWB17802	1.3 U	1.3 U	0.4 J	1.3 U	1.3 U	2.5 U	1.3 U	1.3 U	0.4 J	2.7	1.3 U	1.3 U	0.3 J	1.3 U	**160**	1.3 U
RFSGWB18002	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.3 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
RFSGWB18502	0.7 U	0.7 U	1	0.7 U	0.7 U	1.4 U	3.5	1	0.8	1	0.2 J	0.7 U	0.3 J	0.7 U	**77**	0.2 J
RFSGWB18502D	0.5 U	0.2 J	1.3	0.5 U	0.1 J	1 U	4.7	1.1	1.2	1.5	0.3 J	0.5 U	0.3 J	0.2 J	**93**	0.1 J
RFSGWB19402	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
RFSGWB19502	0.5 U	0.5 U	0.3 J	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	1.4	0.5 U	0.5 U	2.2	0.2 J	**68**	0.5 U
RFSGWB19502D	0.7 U	0.7 U	0.2 J	0.7 U	0.7 U	1.4 U	0.7 U	0.7 U	0.7 U	1	0.7 U	0.7 U	1.7	0.7 U	**65**	0.7 U
RFSGWB19702	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	3.3 U	1.7 U	1.7 U	1.7 U	2.2	1.7 U	1.7 U	1.7 U	1.7 U	**150**	1.7 U
RFSGWB27702	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1	0.5 U	0.3 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
RFSGWB27802	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.3 J	0.5 U	2.1	0.5 U	0.5 U	0.5 U	0.1 J	0.5 U	**15**	0.5 U
RFSGWB280A02	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1.1	0.5 U	0.2 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
RFSGWB280B02	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.1 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
RFSGWB30002	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 J	0.5 U	0.5 U	0.5 U	0.5 U
RFSGWB3802	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
RFSGWB3802D	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.1 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
RFSGWB45002	0.2 J	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.2 J	0.5 U	0.5 U	0.5 U	0.2 J	0.5 U	**5**	0.5 U
RFSGWB46002	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
RFSGWB47302	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3.4	0.5 U
RFSGWB47402	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 J	0.5 U
RFSGWB48002	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.1 J	0.5 U	**9.1**	0.5 U
RFSGWB49002	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
RFSGWBULB102	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
RFSGWBULB202	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.9	0.5 U	0.5 U	0.5 U	0.4 J	0.5 U
RFSGWCCC102	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.4 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
RFSGWCCC202	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 J	0.5 U	0.5 U	0.5 U
RFSGWCCC302	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7	0.5 U
RFSGWCCCT02	0.5 U	0.5 U	0.2 J	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	1.1	0.5 U	0.5 U	0.5 U	0.5 U	**84**	0.5 U
RFSGWCTP02	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	**16**	0.5 U	5.5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 J	0.5 U
RFSGWCTPS02	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
RFSGWDH02	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
RFSGWEERC02	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
RFSGWEPA02	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.2 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
RFSGWETA02	0.5 U	0.3 J	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.7	0.5 U	0.5 U	0.5 U	0.5 U	**7.3**	0.5 U
RFSGWFG02	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
RFSGWFG02D	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
RFSGWGEO02	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1.2	0.5 U	0.7	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
RFSGWMFA02	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5	0.5 U	0.5 U	0.5 U	0.5 U	3.1	0.5 U
RFSGWNRLF02	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
RFSGWPZ1102	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.2	0.5 U	**8.1**	0.5 U
RFSGWPZ802	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.1 J	0.5 U	0.5 U	0.4 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
RFSGWPZ902	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.3 J	0.5 U	0.5 U	0.2 J	0.5 U	**11**	0.5 U
RFSGWRWF02	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2.8	0.5 U
RFSGWTP102	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.8	0.5 U
RFSGWTP202	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 J	0.5 U	**12**	0.5 U
RFSGWWTA02	0.5 U	0.5 U	0.5 U	0.4 J	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3.8	0.5 U	0.4 J	0.5 U
RFSGWWTA02D	0.5 U	0.5 U	0.5 U	0.4 J	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4.1	0.5 U	0.4 J	0.5 U

Notes:

Indicates the value exceeds both th California and Federal MCL

Indicates the value exceeds the California MCL

EPA	U.S. Environmental Protection Agency
ID	Identification
J	Estimated value
MCL	Maximum contaminant level
RSL	Regional Screening Level
SWRCB	State Water Resources Control Board
U	Not detected
ug/L	Micrograms per liter
VOC	Volatile organic compound

Table 7: SVOC Dectected Results Summary in ug/L

Phase I April 2011 Groundwater Sampling Results, Technical Memorandum

University of California, Berkeley, Richmond Field Station, Richmond, California

Sample ID	1,4-Dioxane	Acenaphthylene	Pyrene
Federal EPA MCL			
SWRCB GW (drinking water source)	3		2
SWRCB GW (not drinking water source)	5000		2
EPA 2011 RSL tapwater (cancer)	0.67		
EPA 2011 RSL tapwater (non-cancer)		2,200	1,100
EPA 2004 PRGs (non-cancer)			180
RFSGWB12002	0.2 J	0.09 U	0.09 U
RFSGWB12102	0.03 J	0.09 U	0.09 U
RFSGWB12802	0.06 J	0.09 U	0.09 U
RFSGWB15002	0.9 U	0.09 U	0.09 U
RFSGWB15802	0.9 U	0.09 U	0.09 U
RFSGWB16302	0.9 U	0.09 U	0.09 U
RFSGWB175S02	0.9 U	0.09 U	0.09 U
RFSGWB175W02	0.9 U	0.09 U	0.09 U
RFSGWB17702	0.9 U	0.09 U	0.09 U
RFSGWB17802	0.04 J	0.09 U	0.09 U
RFSGWB18002	0.9 U	0.09 U	0.09 U
RFSGWB18502	6	0.09 U	0.02 J
RFSGWB18502D	6.8	0.09 U	0.09 U
RFSGWB19402	0.9 U	0.09 U	0.09 U
RFSGWB19502	0.9 U	0.09 U	0.09 U
RFSGWB19502D	0.9 U	0.09 U	0.09 U
RFSGWB19702	0.04 J	0.09 U	0.09 U
RFSGWB27702	0.2 J	0.09 U	0.09 U
RFSGWB27802	1.1	0.09 U	0.09 U
RFSGWB280A02	0.2 J	0.09 U	0.09 U
RFSGWB280B02	0.9 U	0.09 U	0.09 U
RFSGWB30002	0.1 J	0.08 J	0.09 U
RFSGWB3802	0.9 U	0.09 U	0.09 U
RFSGWB3802D	0.9 U	0.09 U	0.09 U
RFSGWB45002	0.9 U	0.09 U	0.09 U
RFSGWB46002	0.9 U	0.09 U	0.09 UJ
RFSGWB47302	0.06 J	0.09 U	0.09 U
RFSGWB47402	0.9 U	0.09 U	0.09 U
RFSGWB48002	0.2 J	0.09 U	0.09 U
RFSGWB49002	0.9 U	0.09 U	0.09 U
RFSGWBULB102	0.9 U	0.09 U	0.09 U
RFSGWBULB202	0.9 U	0.09 U	0.09 U
RFSGWCCC102	0.9 U	0.09 U	0.09 U
RFSGWCCC202	1 U	0.1 U	0.1 U
RFSGWCCC302	0.9 U	0.09 U	0.09 U
RFSGWCCCT02	0.1 J	0.1 U	0.1 U
RFSGWCTP02	0.9 U	0.09 U	0.09 U
RFSGWCTPS02	0.9 U	0.09 U	0.09 U
RFSGWDH02	0.04 J	0.09 U	0.09 U
RFSGWEERC02	0.9 U	0.09 U	0.09 U
RFSGWEPA02	0.9 U	0.09 U	0.09 U
RFSGWETA02	8.1	0.09 U	0.09 U
RFSGWFG02	0.9 U	0.09 U	0.09 U
RFSGWFG02D	0.9 U	0.09 U	0.09 U
RFSGWGEO02	0.9 U	0.09 U	0.09 UJ
RFSGWMFA02	1.1	0.09 U	0.09 U
RFSGWNRLF02	0.9 U	0.09 U	0.09 UJ
RFSGWPZ1102	0.9 U	0.09 U	0.09 U
RFSGWPZ802	0.9 U	0.09 U	0.09 U
RFSGWPZ902	0.9 J	0.09 U	0.09 UJ
RFSGWRWF02	0.06 J	0.09 U	0.09 U
RFSGWTP102	0.9 U	0.09 U	0.09 U
RFSGWTP202	0.7 J	0.09 U	0.09 U
RFSGWWTA02	0.06 J	0.09 U	0.09 U
RFSGWWTA02D	0.07 J	0.09 U	0.09 U

Notes:

EPA	U.S. Environmental Protection Agency
ID	Identification
J	Estimated value
MCL	Maximum contaminant level
PRG	Preliminary Remediation Goals
RSL	Regional Screening Level
SVOC	Semivolatile organic compound
SWRCB	State Water Resources Control Board
U	Not detected
ug/L	Micrograms per liter

Table 8: Metals Dectected Results Summary in ug/L
Phase I April 2011 Groundwater Sampling Results, Technical Memorandum
University of California, Berkeley, Richmond Field Station, Richmond, California

Sample ID	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Mercury	Molybdenum	Nickel	Potassium	Selenium	Silver	Sodium	Thallium	Vanadium	Zinc
On site groundskeeper/maintenance		150,000	110	7.50E+07		190,000		5.60E+08		1.50E+07					110,000		9.30E+07		1.90E+06	3.10E+06		25,000	370,000	1.80E+08
5x aquatic criteria		220,000	180			47				16		41			11		41		25	9.5		320		410
40x aquatic criteria		1.70E+06	1,400			370				120		320			84		330		200	76		2,500		3,200
160x aquatic criteria		6.90E+06	5,800			1,500				500		1,300			340		1,300		800	300		10,000		13,000
Federal EPA MCL		6	10	2000	4	5		50		1,300		15			2				50			2		
California MCL	1000	6	10	1000	4	5		50		1300		15			2		100		50			2		
SWRCB GW (drinking water source)		6	36	1,000	0.53	0.25		50	3	3.1		2.5			0.03	35	8.2		5	0.19		2	15	81
SWRCB GW (non drinking water source)		30	36	1,000	0.53	0.25		180	3	3.1		2.5			0.03	240	8.2		5	0.19		4	19	81
Cal-modified 2004 PRGs (cancer)			0.071																					
EPA 2011 RSL tapwater (cancer)			0.045																					
EPA 2011 RSL tapwater (non-cancer)	37,000	15		7,300	73	18			11	1,500	26,000			880	0.63	180	180		180	180			180	11,000
RFSGWB12002	75 UJ	1 U	1.6 J	20	1 UJ	2 U	210000	0.34 J	1 U	4.3	16 J	0.43 J	180000	140	0.2 U	2.2 UJ	1 U	1300	1 U	1.7 U	160000	1 U	5.2	3.3 J
RFSGWB12102	50 UJ	0.2 J	1.2	55	1 U	1 U	42000	1.3	0.14 J	0.5 J	50 U	0.31 J	34000	7.7	0.2 U	0.33 J	1.2	850	1 U	1 U	59000	1 U	4	20
RFSGWB12802	50 U	0.7 J	0.95 J	41	1 UJ	2 U	27000	1 U	1 U	8.4 J	50 UJ	0.71 J	16000	69	0.11 J	0.91 J	10	730	0.4 J	1.7 U	93000	0.11 J	1.5 UJ	9 U
RFSGWB15002	50 UJ	0.19 J	0.57 J	26	1 U	0.44 J	18000	0.73 J	1 U	4.2 J	50 U	0.46 J	14000	2.2	0.2 U	1 U	2.7	560	37	1 U	26000	1 U	1.4	18
RFSGWB15802	120 J	0.3 J	4.5	6	1 UJ	2 U	3600	1.3	1 U	6.8	66	0.47 J	1900	1.8	0.2 U	1.9 U	1 U	380	0.3 J	1.7 U	36000	0.068 J	5.9	9 U
RFSGWB16302	50 U	0.18 J	1.3	12	1 U	**5.5**	230000	0.14 J	4.6	0.35 J	50 U	0.38 J	180000	15000	0.2 UJ	0.23 J	180	1500	1 UJ	1 U	190000	0.08 J	1.9	27
RFSGWB16302 (TOTAL)	58	0.17 J	0.74 J	13	1 U	**6.2**	240000	0.23 J	4.8	1 U	89 UJ	1 U	190000	19000	0.19 J	1 UJ	200	1600	0.39 J	1 U	190000	0.063 J	2.2	27
RFSGWB17S02	50 U	1 U	0.69 J	33	1 U	0.43 J	38000	0.8 J	1 U	1 UJ	50 U	0.4 J	30000	12	0.2 U	0.23 J	2.3	740	0.86 J	1 U	67000	0.062 J	2.3	14
RFSGWB17W02	50 U	0.18 J	2.1	11	1 U	0.26 J	15000	0.43 J	1 U	4.7 J	50 U	0.54 J	9700	3.2	0.2 U	0.78 J	0.96 J	1600	1 UJ	1 U	45000	1 U	2.4	15
RFSGWB17702	9.9 J	0.41 J	0.48 J	63	1 UJ	2 U	15000	0.55 J	1 U	2.6 J	50 UJ	0.41 J	14000	0.95 J	0.038 J	0.52 J	1 U	280	1.8	1.7 U	34000	1 U	1.7 UJ	5 U
RFSGWB17802	75 UJ	1.1 U	1.6 J	20	3.2 UJ	2 U	170000	1.3 U	0.44 J	2.7	89 U	1.9 U	140000	430	0.2 U	2.4 UJ	1 U	1400	2.5 U	1.7 U	160000	1 U	4.7	3.4 J
RFSGWB18002	50 UJ	0.22 J	2.9	6.5	1 U	0.46 J	5500	2.9	1 U	36 J	50 U	2.7	4200	2.7	0.2 U	0.91 J	0.53 J	640	1 UJ	1 U	83000	1 U	6.2	54
RFSGWB18502	75 UJ	1.1 U	1.1 J	13	3.2 UJ	2 U	150000	0.39 J	1 U	6.4	16 J	1.9 U	120000	130	0.2 U	1.9 U	1 U	990	2.5 U	1.7 U	92000	1 U	3.4	8.3
RFSGWB18502D	75 UJ	1.1 U	0.8 J	14	3.2 UJ	2 U	160000	0.22 J	0.18 J	4.3	34 J	1.9 U	130000	120	0.2 U	1.9 U	1 U	1000	2.5 U	1.7 U	97000	1 U	3.6	5.8 J
RFSGWB19402	50 U	0.19 J	1.8	100	1 U	1.2	51000	0.99 J	1 U	1.5 J	50 U	0.41 J	35000	1.8	0.2 U	0.74 J	0.79 J	1100	1 UJ	1 U	99000	1 U	3.9	27
RFSGWB19502	50 U	0.21 J	1.5	18	1 U	0.28 J	51000	0.78 J	1 U	75 J	50 U	4.6	36000	5	1.2	0.36 J	1.1	570	1 UJ	1 U	57000	1 U	4	57
RFSGWB19502 (TOTAL)	64	0.19 J	0.77 J	20	1 U	0.28 J	55000	0.8 J	0.13 J	1 U	50 UJ	1 U	39000	11	**2.4**	1 UJ	1.1	660	0.43 J	1 U	59000	1 U	4.1	5 UJ
RFSGWB19502D	50 U	0.2 J	1.3	17	1 U	0.21 J	49000	0.62 J	1 U	7.5 J	50 U	0.83 J	35000	5.1	1.1	0.39 J	1	560	0.44 J	1 U	56000	1 U	3.6	27
RFSGWB19502D (TOTAL)	68	0.17 J	1.6 J	20	1 U	0.27 J	55000	0.82 J	1 U	1 U	50 UJ	1 U	40000	8.1	2.2	1 UJ	2.9 U	690	0.41 J	1 U	60000	1 U	3.9	8 UJ
RFSGWB19702	50 U	0.17 J	2	28	1 U	1 U	160000	1 U	1.6	1 UJ	50 U	0.31 J	150000	1300	0.2 U	1.3	8.4	1300	1 U	1 U	140000	1 U	2.4	10
RFSGWB27702	50 U	1 U	2.2	73	1 UJ	2 U	57000	1.8	1 U	3.3 J	50 UJ	0.54 J	22000	37	0.07 J	1.4	1 U	1200	0.53 J	1.7 U	45000	1 U	4.5	7.8 J
RFSGWB27802	50 U	0.78 J	1.5 J	59	1 U	2 U	230000	1.4	1 U	1.1 J	89 UJ	0.94 J	130000	35	0.15 J	1.9 UJ	2.3 J	2100	2.5 U	1.7 U	170000	1 U	3	38 J
RFSGWB280A02	75 U	1.1 U	1 J	84	1 UJ	2 U	50000	0.25 J	1 U	1.9 J	24 J	1.9 U	22000	8.3	0.2 U	1.9 UJ	1 U	570	2.5 U	1.7 U	48000	1 U	3.7	9 U
RFSGWB280B02	50 U	1.1 U	1.7 J	6.4	1 UJ	2 U	53000	2.1	1 U	5.8	23 J	1.9 U	20000	0.86 J	0.2 U	1.9 UJ	1 U	3900	2.5 U	1.7 U	87000	1 U	2.7	6.5 J
RFSGWB30002	50 UJ	1 U	1.4 J	250	1 UJ	2 U	280000	1 U	8.9	6	1200	0.5 J	160000	12000	0.2 U	1.9 UJ	0.8 J	9100 J	0.4 J	1.7 U	190000	1 U	0.73 J	9 U
RFSGWB3802	50 U	0.22 J	1 J	47	1 U	2 U	24000	0.93 J	1 U	2.2	89 U	0.57 J	18000	4.3	0.2 U	1 UJ	2.2 J	520	2.5 U	1.7 U	47000	1 U	2.6	11
RFSGWB3802D	50 U	0.3 J	1.3 J	51	1 U	2 U	26000	1.3	1 U	65	89 U	3.6	18000	4	0.089 J	1 UJ	2.6 J	590	2.5 U	1.7 U	51000	1 U	2.7	40
RFSGWB45002	50 U	2.6	1.7 J	50	0.4 J	2 U	59000	1 J	1 U	1.8 J	89 U	0.43 J	43000	5.1	0.055 J	1.4 UJ	2.9 U	1800	2.5 U	1.7 U	73000	0.36 J	3.2	3.3 J
RFSGWB45002 (TOTAL)	110	1.2	2.3	53	1 U	2 U	65000	2	1 U	2.2 U	180	1.9 U	51000	22	0.099 J	1.4 J	1 U	2200	2.5 U	1.7 U	84000	0.48 J	3.5	9 U
RFSGWB46002	75 U	0.38 J	2.4	8.8 J	3.2 U	2 U	43000	1.3 U	1 U	21	89 U	0.96 J	18000 J	7.2	0.08 J	1.9 UJ	1.3 J	2900	2.5 U	1.7 U	45000	1 U	1.7 J	23
RFSGWB47302	75 U	1.1 U	2.2	22 J	3.2 U	2 U	44000	1.6	1 U	9.1	89 UJ	0.8 J	44000 J	1.2 J	0.067 J	1.9 UJ	1.2 J	4000	2.5 U	1.7 U	99000	1 U	3.7	14
RFSGWB47402	75 U	1.1 U	3.9	6.2 J	3.2 U	2 U	35000	1.3 U	1 U	5.1	89 U	1.9 U	27000 J	42	0.066 J	2.5 UJ	1.5 J	3000	2.5 U	1.7 U	81000	1 U	4.2	36
RFSGWB47402 (TOTAL)	31 J	0.45 J	4.3	7.4	3.2 U	2 U	35000	1.3 U	1 U	4.7	89 UJ	1.9 U	26000	55	0.2 UJ	3.1	1.7 J	2900	2.5 U	1.7 U	78000	0.057 J	3.7	9 U
RFSGWB48002	32 J	1 J	3.1	42	1 U	2 U	51000	1.2 J	1 U	7.8	89 U	0.54 J	39000	37	0.1 J	1.9 UJ	1.3 J	2200	2.5 U	1.7 U	86000	0.082 J	4.1	11
RFSGWB49002	75 U	1.1 U	1.6 J	79 J	3.2 U	2 U	52000	4.4	1 U	11	89 U	1.5 J	52000	1.4 J	0.2 U	1.9 UJ	1.1 J	860	2.5 U	1.7 U	56000	1 U	5.2	16
RFSGWBULB102	50 UJ	1.4	**12**	110	1 U	1 U	330000	0.13 J	2.3	14 J	50 UJ	0.91 J	670000	1300	0.2 UJ	5.5	4	190000	1 UJ	1 U	5700000	0.1 J	0.9 J	18
RFSGWBULB102 (TOTAL)	140	0.24 J	**12 J**	140	1 U	0.99 J	420000	0.99 J	4.7 J	1 U	660	0.47 J	710000	2000	0.15 J	7.7	7.5	150000	0.6 J	1 U	6400000	0.39 J	1.3	38
RFSGWBULB202	50 UJ	2.5	3	55	1 U	0.55 J	19000	0.23 J	1.1	28 J	50 UJ	1.3	21000	460	0.2 U	6.6	3.2	10000	1 UJ	1 U	400000	0.22 J	2.1	48
RFSGWBULB202 (TOTAL)	240	1.8	5 J	230	1 U	1.4	75000	1.4	4.3	0.94 J	1500	0.71 J	85000	2800	0.2 J	8.1	16	17000	0.36 J	1 U	740000	0.18 J	3.2	61
RFSGWCCC102	75 U	1.2	2.4	6.4	3.2 UJ	2 U	34000	1.9	1 U	4.6	43 J	1.9 U	20000	18	0.047 J	2.4 UJ	1.4 J	1400	2.5 U	1.7 U	91000	0.11 J	3.6	9 UJ
RFSGWCCC202	75 U	0.51 J	0.85 J	36	3.2 UJ	2 U	210000	2.1	1 U	20	47 J	2.6	160000	69	0.2 U	1.9 U	38	2000	5.4	1.7 U	140000	0.62 J	0.82 J	55
RFSGWCCC202 (TOTAL)	17 J	1 U	0.96 J	39	1 U	0.66 J	210000	2.3	1 U	1 U	50 UJ	1 U	180000	100	0.2 U	1 U	40	2100	6.1	1 U	160000	1 U	1.2	5.7 UJ
RFSGWCCC302	50 U	0.19 J	2.9	9.6	1 U	1 U	45000	0.86 J	1 U	12 J	50 U	0.55 J	35000	31	0.2 U	1.1	1	2000	1 U	1 U	86000	1 U	3.1	13
RFSGWCCCT02	50 U	0.6 J	1.7 J	24	1 UJ	2 U	100000	1.3 U	1 U	12 J	50 UJ	0.69 J	68000	86	0.12 J	1.7	1 U	2300	0.47 J	1.7 U	120000	0.072 J	3.2 UJ	2.7 J
RFSGWCTP02	75 U	1.1 U	1.3 J	55	1 UJ	9.3	50000	0.47 J	0.61 J	5.4	44 J	1.9 U	28000	280	0.2 U	1.9 UJ	1 U	1500	2.5 U	1.7 U	52000	1 U	2.9	230
RFSGWCTPS02	50 U	0.39 J	0.96 J	13	0.14 J	2 U	47000	1.3 U	1 U	5	89 U	1.1	25000	6.8	0.2 U	1 UJ	1.7 J	1300	2.5 U	1.7 U	65000	1 U	0.94 J	11
RFSGWDH02	75 U	1.1 U	1.3 J	89	1 UJ	1.9 J	590000	0.28 J	0.33 J	3.5	89 U	1.9 U	420000	980	0.2 U	1.9 UJ	39	5100	2.5 U	1.7 U	480000	1 U	2.8	17
RFSGWEERC02	75 U	1.1 U	2.9	19 J	3.2 U	2 U	420000	1.3 U	0.54 J	6.2	89 U	1.9 U	330000 J	320	0.044 J	1.9 UJ	9.5 J	5000	2.5 U	1.7 U	520000	1 U	3.1	11
RFSGWEERC02 (TOTAL)	75 U	0.52 J	1.7 J	22	3.2 U	2 U	460000	1.3 U	0.37 J	0.96 J	89 UJ	1.9 U	330000	190	0.2 UJ	1.8 J	9.7	4300	2.5 U	1.7 U	570000	0.07 J	3.3	9 U
RFSGWEPA02	50 U	0.48 J	1.6 J	42	0.14 J	2 U	120000	1.4	1 U	2.1 J	89 U	0.57 J	39000	130	0.2 U	2 UJ	1.3 J	2700	2.5 U	1.7 U	150000	1 U	1.8	4.5 J
RFSGWETA02	50 U	0.26 J	7.4	18	1 U	0.37 J	120000	0.093 J	1.3	2.1 J	120	0.36 J	81000	4000	0.2 U	4.3	2.8	1300	1 U	1 U	130000	0.3 J	0.55 J	47
RFSGWETA02 (TOTAL)	870	0.56 J	**17 J**	34	1 U	2.4	120000	3.1	2.4	8.3	2100	4.1	89000	4300	1.6	4.9	6.3	1800	0.15 J	1 U	130000	1 U	3.9	95
RFSGWFG02	50 U	0.47 J	1.2 J	21	0.25 J	2 U	33000	1.3 U	1 U	24	89 U	2.8	33000	28	0.063 J	1 UJ	2.7 J	800	2.5 U	1.7 U	83000	1 U	1.9	29
RFSGWFG02 (TOTAL)	1500	0.63 J	2.2	33	0.31 J	2 U	34000	3.8	0.98 J	2.5	1600	0.87 J	35000	70	0.14 J	1.1 J	7.3	1200	2.5 U	1.7 U	91000	0.21 J	5.8	9 U
RFSGWFG02D	50 U	0.4 J	1.2 J	21	0.14 J	2 U	33000	0.61 J	1 U	35	89 U	2.2	31000	31	0.057 J	1 UJ	0.26 J	810	2.5 U	1.7 U	79000	1 U	1.8	29
RFSGWFG02D (TOTAL)	760	0.58 J	1.7 J	29	0.25 J	2 U	34000	2.2	1.7	2.4	1100	0.72 J	35000	84	0.1 J	1.9 U	6.7	1000	2.5 U	1.7 U	87000	0.15 J	4.2	9 U
RFSGWGE002	75 U	1.1 U	1.7 J	88 J	3.2 U	2 U	69000	1.3 U	0.63 J	27	89 UJ	1.7 J	31000 J	440	0.071 J	4.5 UJ	6.2 J	3700	2.5 U	1.7 U	69000	0.17 J	3.2	58
RFSGWMFA02	50 UJ	0.98 J	1.4	28	1 U	1 U	45000	0.28 J	0.81 J	9.5 J	50 U	0.62 J	37000	230	0.2 UJ	4.2	7.1	510	1 UJ	1 U	99000	1 U	4.6	39
RFSGWNRLF02	75 U	0.41 J	5.2	15 J	3.2 U	2 U	63000	1.3 U	0.86 J	82	150 UJ	4.1	30000 J	640	0.2 U	1.9 UJ	2.9 UJ	2700	2.5 U	1.7 U	81000	1 U	0.92 J	83
RFSGWPZ1102	1200	1.1 U	0.67 J	12 J	2.1 J	**30**	240000	1 J	3.7	1200	89 UJ	2.6	290000 J	11000	0.08 J	1.9 UJ	1700 J	350	2.5 U	1.7 U	180000	1 U	1.7 U	10000
RFSGWPZ1102 (TOTAL)	1200	0.56 J	0.82 J	13	1.8 J	**35**	260000	0.74 J	3.4	**1300**	95 UJ	0.67 J	290000	13000	0.23 UJ	1.9 U	2400	430	2.5 U	1.7 U	200000	0.1 J	1.7 U	13000
RFSGWPZ802	50 U	0.32 J	2	84	1 UJ	2 U	40000	1.1 J	1 U	3.7 J	50 UJ	0.45 J	31000	2.9	0.04 J	0.56 J	1 U	800	0.26 J	1.7 U	53000	1 U	4.1	5 U
RFSGWPZ902	75 U	1.1 U	1.9	84 J	3.2 U	2 U	37000	1.3 U	0.8 J	5.8	89 UJ	1.9 U	34000 J	1900	0.2 U	1.9 UJ	5.3 J	330	2.5 U	1.7 U	45000	1 U	2.1	10
RFSGWRWF02	10 J	0.26 J	0.63 J	79	1 UJ	2 U	72000	0.58 J	1 U	3.7 J	50 UJ	0.49 J	55000	3.1	0.2 U	1	1 U	1100	0.21 J	1.7 U	75000	1 U	2.6 UJ	9 U
RFSGWTP102	50 U	0.24 J	2.2	42	1 UJ	2 U	160000	1.3 U	1.3	7.8 J	310	0.55 J	94000	980	0.17 J	1.9	1 U	3900	0.21 J	1.7 U	210000	1 U	1.7 UJ	5.5 J
RFSGWTP202	50 U	0.22 J	0.74 J	97	1 UJ	2 U	75000	1.2 J	1 U	2.2 UJ	50 UJ	0.16 J	56000	3.3	0.2 U	0.82 J	1 U	2300	0.78 J	1.7 U	75000	1 U	3.9	4.2 J
RFSGWWTA02	75 U	0.51 J	1.3 J	36	3.2 UJ	2 U	99000	6	1 U	11	89 U	1.9 U	61000	21	0.2 U	1.9 UJ	0.97 J	1100	2.5 U	1.7 U	120000	0.093 J	3.8	4.3 J
RFSGWWTA02 (TOTAL)	86	1 U	1.5 J	39	1 U	0.34 J	100000	6	0.17 J	1 U	100 UJ	1 U	63000	31	0.041 J	1 UJ	2.9 U	1200	1 U	1 U	130000	1 U	4.1	5 UJ
RFSGWWTA02D	75 U	1.1 U	1.6 J	37	3.2 UJ	2 U	93000	6.1	1 U	3	89 U	1.9 U	61000	20	0.2 U	1.9 UJ	1 J	1100	2.5 U	1.7 U	120000	0.1 J	4.1	9 U
RFSGWWTA02D (TOTAL)	66	1 U	1.7 J	39	1 U	0.47 J	110000	6.1	0.16 J	1 U	80 UJ	1 U	64000	29	0.042 J	1 UJ	2.9 U	1200	1 U	1 U	130000	1 U	4.1	9 U

Notes:

Indicates the value exceeds both the California and Federal MCL

Indicates the value exceeds the California MCL

EPA	U.S. Environmental Protection Agency
ID	Identification
J	Estimated value
MCL	Maximum Contaminant Level
PRG	Preliminary Remediation Goals
RSL	Regional Screening Levels
SWRCB	State Water Resources Control Board
U	Not detected
ug/L	Micrograms per liter

Table 9: TPH Dectected Results Summary in ug/L
Phase I April 2011 Groundwater Sampling Results, Technical Memorandum
University of California, Berkeley, Richmond Field Station, Richmond, California

Sample ID	TPH as Gasoline	TPH - Diesel Range Organics	TPH - Oil Range Organics
SWRCB GW (drinking water source)	100		
SWRCB GW (not drinking water source)	210		
RFSGWB12002	86	50 U	300 U
RFSGWB12102	50 UJ	50 UJ	300 U
RFSGWB12802	50 UJ	50 U	300 U
RFSGWB15002	50 UJ	50 UJ	300 U
RFSGWB15802	50 U	50 U	300 U
RFSGWB16302	64 Y	50 U	300 U
RFSGWB175S02	50 UJ	53 UJ	300 U
RFSGWB175W02	12 UJ	52 UJ	300 U
RFSGWB17702	50 UJ	50 U	300 U
RFSGWB17802	73 UJ	50 U	300 U
RFSGWB18002	50 UJ	50 UJ	300 U
RFSGWB18502	50 UJ	50 U	300 U
RFSGWB18502D	62 UJ	50 U	300 U
RFSGWB19402	50 UJ	50 UJ	300 U
RFSGWB19502	50 UJ	50 UJ	300 U
RFSGWB19502D	51 Z	50 UJ	300 U
RFSGWB19702	100 YZ	50 UJ	300 U
RFSGWB27702	50 UJ	50 U	300 U
RFSGWB27802	19 J	50 U	300 U
RFSGWB280A02	50 UJ	50 U	300 U
RFSGWB280B02	50 U	50 U	300 U
RFSGWB30002	50 U	50 U	300 U
RFSGWB3802	50 U	50 U	300 U
RFSGWB3802D	50 U	50 U	300 U
RFSGWB45002	18 J	13 J	300 U
RFSGWB46002	50 UJ	50 U	300 U
RFSGWB47302	50 UJ	50 U	300 U
RFSGWB47402	50 U	50 U	300 U
RFSGWB48002	19 J	14 J	300 U
RFSGWB49002	50 U	50 U	300 U
RFSGWBULB102	50 UJ	50 U	300 U
RFSGWBULB202	50 UJ	7.8 J	300 U
RFSGWCCC102	50 U	50 UJ	300 U
RFSGWCCC202	50 U	50 UJ	300 U
RFSGWCCC302	50 UJ	50 U	300 U
RFSGWCCCT02	55 UJ	50 U	300 U
RFSGWCTP02	50 UJ	50 U	300 U
RFSGWCTPS02	13 J	50 U	300 U
RFSGWDH02	50 UJ	50 UJ	300 U
RFSGWEERC02	50 UJ	50 U	300 U
RFSGWEPA02	13 J	50 U	300 U
RFSGWETA02	50 UJ	14 J	300 U
RFSGWFG02	21 J	50 U	300 U
RFSGWFG02D	16 J	50 U	300 U
RFSGWGEO02	50 UJ	50 U	300 U
RFSGWMFA02	50 UJ	50 U	300 U
RFSGWNRLF02	50 UJ	50 U	300 U
RFSGWPZ1102	50 UJ	50 U	300 U
RFSGWPZ802	50 UJ	50 U	300 U
RFSGWPZ902	50 UJ	50 U	300 U
RFSGWRWF02	50 UJ	50 U	300 U
RFSGWTP102	50 UJ	50 U	300 U
RFSGWTP202	50 UJ	50 U	300 U
RFSGWWTA02	50 U	50 UJ	300 U
RFSGWWTA02D	50 UJ	50 UJ	300 U

Notes:

ID	Identification
J	Estimated value
SWRCB	State Water Resources Control Board
TPH	Total petroleum hydrocarbons
U	Not detected
ug/L	Micrograms per liter
Y	Sample exhibits chromatographic pattern which does not resemble the standard pattern
Z	Sample exhibits unknown single peak or peaks

ATTACHMENT 1

WELL SAMPLING FORMS

(electronic copy only)

FIGURE 1
LOW-FLOW GROUNDWATER SAMPLING DATA SHEET

Date/Time of Sample Collection: 4/12/2011 / 16:30 Project Site/Subsite: RFS
Sample ID: RFSGWBMLB1Q2
Field ID: BMLB1 Point Name:
Depth to Well Bottom: 18.2 ft. below top of casing (PVC cap)
Depth to Water Level: 4.65 ft. below PVC cap
Depth to Water Level: 8.52 ft below PVC cap prior to sampling
Method of Purging: Bladder Pump Submersible Pump
Peristaltic Pump
Minimum Purge Volume: Two-inch well _____ Liters
Four-inch well _____ Liters
Control Box Settings: Box #_____Refill=_____Discharge=_____
Throttle=_____psi
Total Purged 5L Liters Purge Rate goal = 0.5 Liters/Min.
Actual Purge Rate: .5 Liters/Min

Purge Calcs

PHYSIO-CHEMICAL PARAMETERS DURING PURGING

Measure in order listed	Initial reading									Stabilization Criteria	Final
Time	10:18	10:20	10:22	10:24	10:26						
PH	6.91	6.89	7.04	7.14	7.27					+/- 0.2	
Temperature (°C)	15.67	15.47	15.45	15.44	15.44					+/- 2.0 °C	
Specific Conductance (µmhos/cm)	35.7	35.6	35.5	35.5	35.4					+/- 3%	
Turbidity (NTU)	158	8.3	8.2	8.5	9.1					+/- 10%	
Dissolved Oxygen (mg/L)	1.55	1.02	.83	.69	.59					+/- 0.2	
ORP (mV)	19	28	25	21	19					+/- 10	
Each Volume Purged (L)	1L	1L	1L	1L	1L						
Total Liters Purged	1L	2L	3L	4L	5L						

Duplicate Sample Collected? (No) Yes (Sample ID of Duplicate) _____
MS/MSD Sample Collected? (No) Yes _____
Sample Remarks (odors, colors, sediment): slightly yellow,
Comments_____
Sample(s) Collected By: CFMS
Well Volume purge Calc: Length of tubing X 9.6 (ml/ft) + 130 (bladder volume) = Total required purge (liters) before collection of parameters.

FIGURE 1
LOW-FLOW GROUNDWATER SAMPLING DATA SHEET

Date/Time of Sample Collection: 4/12/2011 / 11:30 Project Site/Subsite: RFS

Sample ID: RFSGW BLLR202

Field ID: BLL B2 Point Name:

Depth to Well Bottom: 18.50 ft. below top of casing (PVC cap)

Depth to Water Level: 3.54 ft. below PVC cap

Depth to Water Level: Pump 3.60 ft below PVC cap prior to sampling

Method of Purging: Bladder Pump Submersible Pump Peristaltic Pump

Minimum Purge Volume: Two-inch well _____ Liters
Four-inch well _____ Liters

Control Box Settings: Box #_____ Refill=_____ Discharge=_____

Throttle=_____ psi

Total Purged _____ Liters Purge Rate goal = 0.5 Liters/Min.

Actual Purge Rate: .5 Liters/Min

Purge Calcs

PHYSIO-CHEMICAL PARAMETERS DURING PURGING

Measure in order listed	Initial reading									Stabilization Criteria	Final
Time	11:10	11:12	11:15	11:17	11:19	11:21	11:23	11:25			
PH	8.15	7.95	6.38	7.95	8.01	8.14	8.20	8.19		+/- 0.2	
Temperature (°C)	16.45	16.16	16.00	15.91	15.83	15.72	15.10	15.09		+/- 2.0 °C	
Specific Conductance (µmhos/cm)	11.34	6.33	6.23	5.84	4.35	3.11	2.63	2.53		+/- 3%	
Turbidity (NTU)	45.2	57.4	58.4	67.3	70.2	61.2	58.6	57.5		+/- 10%	
Dissolved Oxygen (mg/L)	1.28	0.61	0.44	.36	.31	.29	.25	.24		+/- 0.2	
ORP (mV)	-7	-46	-63	-79	-84	-84	-85	-87		+/- 10	
Each Volume Purged (L)	1L	1L	1.5L	1L	1L	1L	1L	1L			
Total Liters Purged	1L	2L	3.5L	4.5L	5.5L	6.5L	7.5L	8.5L			

Duplicate Sample Collected? (No) Yes (Sample ID of Duplicate) _____

MS/MSD Sample Collected? (No) Yes _____

Sample Remarks (odors, colors, sediment): _____

Comments _____

Sample(s) Collected By: _____

Well Volume purge Calc: Length of tubing X 9.6 (ml/ft) + 130 (bladder volume) = Total required purge (liters) before collection of parameters.

FIGURE 1
LOW-FLOW GROUNDWATER SAMPLING DATA SHEET

Date/Time of Sample Collection: 9/12/11 / 12:20 Project Site/Subsite: 12FS
Sample ID: 12FSGWMFA02
Field ID: MFA Point Name:
Depth to Well Bottom: 13.9 ft. below top of casing (PVC cap)
Depth to Water Level: 2.68 ft. below PVC cap
Depth to Water Level: 2.70 ft below PVC cap prior to sampling
Method of Purging: Bladder Pump Submersible Pump
Peristaltic Pump
Minimum Purge Volume: Two-inch well _____ Liters
Four-inch well _____ Liters
Control Box Settings: Box #_____Refill=_____Discharge=_____
Throttle=_____psi
Total Purged _____Liters Purge Rate goal = 0.5 Liters/Min.
Actual Purge Rate:_____Liters/Min

Purge Calcs

PHYSIO-CHEMICAL PARAMETERS DURING PURGING

Measure in order listed	Initial reading									Stabiliz-ation Criteria	Final
Time	12:09	12:11	12:13	12:15	12:17	12:19					
PH	8.36	8.07	8.00	7.91	7.87	7.82				+/- 0.2	
Temperature (°C)	15.06	14.95	14.93	14.97	14.97	14.98				+/- 2.0 °C	
Specific Conductance (µmhos/cm)	.942	.949	.947	.942	.947	.951				+/- 3%	
Turbidity (NTU)	16.1	10.1	85.1	84.4	82.5	84.5				+/- 10%	
Dissolved Oxygen (mg/L)	1.15	.58	.47	.37	.31	.29				+/- 0.2	
ORP (mV)	6	11	13	15	17	19				+/- 10	
Each Volume Purged (L)	1L	1L	1L	1L	1L						
Total Liters Purged	1L	2L	3L	4L	5L						

Duplicate Sample Collected? No Yes (Sample ID of Duplicate) _____
MS/MSD Sample Collected? No Yes _____
Sample Remarks (odors, colors, sediment): _____
Comments_____
Sample(s) Collected By: _____
Well Volume purge Calc: Length of tubing X 9.6 (ml/ft) + 130 (bladder volume) = Total required purge (liters) before collection of parameters.

FIGURE 1
LOW-FLOW GROUNDWATER SAMPLING DATA SHEET

Date/Time of Sample Collection: 4/12/2011 / 14:10 Project Site/Subsite: _____
Sample ID: RESGWETA02
Field ID: ETA Point Name:
Depth to Well Bottom: 13.42 ft. below top of casing (PVC cap)
Depth to Water Level: 2.60' ft. below PVC cap
Depth to Water Level: 4.05 ft below PVC cap prior to sampling
Method of Purging: Bladder Pump Submersible Pump
Peristaltic Pump
Minimum Purge Volume: Two-inch well _____ Liters
Four-inch well _____ Liters
Control Box Settings: Box #_____ Refill=_____ Discharge=_____
Throttle=_____ psi
Total Purged _____ Liters Purge Rate goal = 0.5 Liters/Min.
Actual Purge Rate:_____ Liters/Min

Purge Calcs

PHYSIO-CHEMICAL PARAMETERS DURING PURGING

Measure in order listed	Initial reading									Stabiliz-ation Criteria	Final
Time	13:55	13:59	14:01	14:03	14:05	14:07					
PH	7.65	7.61	7.59	7.58	7.51	7.57				+/- 0.2	
Temperature (°C)	15.43	15.13	15.04	15.01	14.98	14.98				+/- 2.0 °C	
Specific Conductance (µmhos/cm)	1.91	1.93	1.91	1.89	1.87	1.85				+/- 3%	
Turbidity (NTU)	156	148	151	156	161	167				+/- 10%	
Dissolved Oxygen (mg/L)	1.22	.81	.68	.61	.56	.51				+/- 0.2	
ORP (mV)	82	77	70	61	54	50				+/- 10	
Each Volume Purged (L)	1L	2L	1L	1L	1L	1L					
Total Liters Purged	1L	3L	4L	5L	6L	7L					

Duplicate Sample Collected? (No) Yes (Sample ID of Duplicate) _____
MS/MSD Sample Collected? (No) Yes _____
Sample Remarks (odors, colors, sediment): slightly turbid, yellow.
Comments _____
Sample(s) Collected By: CE+NS
Well Volume purge Calc: Length of tubing X 9.6 (ml/ft) + 130 (bladder volume) = Total required purge (liters) before collection of parameters.

FIGURE 1
LOW-FLOW GROUNDWATER SAMPLING DATA SHEET

Date/Time of Sample Collection: 4/12/11 / 15:05 Project Site/Subsite: RFS

Sample ID: RFSGWB1632Q2

Field ID: B163 Point Name:

Depth to Well Bottom: 16.02 ft. below top of casing (PVC cap)

Depth to Water Level: 1.80 ft. below PVC cap

Depth to Water Level: 4.09 ft below PVC cap prior to sampling

Method of Purging: Bladder Pump Submersible Pump
Peristaltic Pump

Minimum Purge Volume: Two-inch well _____ Liters
Four-inch well _____ Liters

Control Box Settings: Box #_____ Refill=_____ Discharge=_____

Throttle=_____ psi

Total Purged _____ Liters Purge Rate goal = 0.5 Liters/Min.

Actual Purge Rate:_____ Liters/Min

Purge Calcs

PHYSIO-CHEMICAL PARAMETERS DURING PURGING

Measure in order listed	Initial reading									Stabiliz-ation Criteria	Final
Time	14:55	14:57	14:59	15:01	15:03						
PH	7.02	6.62	6.50	6.43	6.39					+/- 0.2	
Temperature (°C)	17.13	17.05	17.03	17.02	17.02					+/- 2.0 °C	
Specific Conductance (µmhos/cm)	3.12	3.12	3.11	3.12	3.12					+/- 3%	
Turbidity (NTU)	54.8	52.5	51.8	54.1	57.5					+/- 10%	
Dissolved Oxygen (mg/L)	0.87	0.60	0.45	0.37	0.34					+/- 0.2	
ORP (mV)	95	98	101	103	105					+/- 10	
Each Volume Purged (L)	1.5L	1L	1L	1L	1L						
Total Liters Purged	1.5L	2.5L	3.5L	4.5L	5.5L						

Duplicate Sample Collected? (No) Yes (Sample ID of Duplicate) _____

MS/MSD Sample Collected? No (Yes) _____

Sample Remarks (odors, colors, sediment): _____

Comments _____

Sample(s) Collected By: _____

Well Volume purge Calc: Length of tubing X 9.6 (ml/ft) + 130 (bladder volume) = Total required purge (liters) before collection of parameters.

FIGURE 1
LOW-FLOW GROUNDWATER SAMPLING DATA SHEET

Date/Time of Sample Collection: 9/12/11 / 16:20 Project Site/Subsite: _____
Sample ID: NTSGWCCC3QZ
Field ID: CCCORE3 Point Name:
Depth to Well Bottom: 14.5 ft. below top of casing (PVC cap)
Depth to Water Level: 6.06 ft. below PVC cap
Depth to Water Level: 8.35 ft below PVC cap prior to sampling
Method of Purging: Bladder Pump Submersible Pump
Peristaltic Pump
Minimum Purge Volume: Two-inch well _____ Liters
Four-inch well _____ Liters
Control Box Settings: Box #_____ Refill=_____ Discharge=_____
Throttle=_____ psi
Total Purged _____ Liters Purge Rate goal = 0.5 Liters/Min.
Actual Purge Rate:_____ Liters/Min

Purge Calcs

PHYSIO-CHEMICAL PARAMETERS DURING PURGING

Measure in order listed	Initial reading									Stabiliz-ation Criteria	Final
Time	16:10	16:12	16:14	16:16	16:20						
PH	6.90	7.23	7.39	7.61	7.62					+/- 0.2	
Temperature (°C)	16.28	15.30	15.15	15.16	15.13					+/- 2.0 °C	
Specific Conductance (µmhos/cm)	1.171	1.058	1.055	1.069	1.060					+/- 3%	
Turbidity (NTU)	60.3	46.2	45.5	46.4	458					+/- 10%	
Dissolved Oxygen (mg/L)	2.71	2.82	2.80	2.45	2.67					+/- 0.2	
ORP (mV)	106	88	83	81	74.					+/- 10	
Each Volume Purged (L)	1L	1L	1L	1L	2L						
Total Liters Purged	1L	2L	3L	4L	6L						

Duplicate Sample Collected? (No) Yes (Sample ID of Duplicate) _____
MS/MSD Sample Collected? (No) Yes _____
Sample Remarks (odors, colors, sediment): _____
Comments_____
Sample(s) Collected By: _____
Well Volume purge Calc: Length of tubing X 9.6 (ml/ft) + 130 (bladder volume) = Total required purge (liters) before collection of parameters.

FIGURE 1
LOW-FLOW GROUNDWATER SAMPLING DATA SHEET

Date/Time of Sample Collection: 4/13/11 / 0840 Project Site/Subsite: RFS.
Sample ID: RFGWB12Q2
Field ID: _____ Point Name:
Depth to Well Bottom: 17.7 ft. below top of casing (PVC cap)
Depth to Water Level: 7.50' ft. below PVC cap
Depth to Water Level: 7.61' ft below PVC cap prior to sampling
Method of Purging: Bladder Pump Submersible Pump
Peristaltic Pump
Minimum Purge Volume: Two-inch well _____ Liters
Four-inch well _____ Liters
Control Box Settings: Box #_____ Refill=_____ Discharge=_____
Throttle=_____ psi
Total Purged _____ Liters Purge Rate goal = 0.5 Liters/Min.
Actual Purge Rate: .5 Liters/Min

Purge Calcs

PHYSIO-CHEMICAL PARAMETERS DURING PURGING

Measure in order listed	Initial reading									Stabilization Criteria	Final
Time	0820	0822	0824	0826	0828	0830	0832	0834	0836		
PH	7.25	7.32	7.36	7.39	7.40	7.40	7.41	7.44	7.43	+/- 0.2	
Temperature (°C)	15.61	15.65	15.76	15.87	15.85	15.83	15.90	15.94	15.92	+/- 2.0 °C	
Specific Conductance (µmhos/cm)	0.831	0.833	0.827	0.824	0.822	0.821	0.821	0.818	0.819	+/- 3%	
Turbidity (NTU)	37.4	35.3	24.8	22.6	19.3	17.1	15.0	13.8	13.3	+/- 10%	
Dissolved Oxygen (mg/L) %	11.2	9.4	7.1	6.6	6.0	5.7	5.6	5.4	5.1	+/- 0.2	
ORP (mV)	114	113	111	111	111	111	111	110	110	+/- 10	
Each Volume Purged (L)	1L	1L	1L	1L	1L	1L	1L	1L	1L		
Total Liters Purged	1L	2L	3L	4L	5L	6L	7L	8L	9L		

Duplicate Sample Collected? (No) Yes (Sample ID of Duplicate) _____
MS/MSD Sample Collected? (No) Yes _____
Sample Remarks (odors, colors, sediment): None
Comments _____
Sample(s) Collected By: KB+CF
Well Volume purge Calc: Length of tubing X 9.6 (ml/ft) + 130 (bladder volume) = Total required purge (liters) before collection of parameters.

FIGURE 1
LOW-FLOW GROUNDWATER SAMPLING DATA SHEET

Date/Time of Sample Collection: 4/13/2011 / 0950 Project Site/Subsite: _____
Sample ID: MPSGWB150902
Field ID: B150 Point Name:
Depth to Well Bottom: 15.5 ft. below top of casing (PVC cap)
Depth to Water Level: 5.10 ft. below PVC cap
Depth to Water Level: 15.1 ft below PVC cap prior to sampling CS
Method of Purging: Bladder Pump Submersible Pump
Peristaltic Pump
Minimum Purge Volume: Two-inch well _____ Liters
Four-inch well _____ Liters
Control Box Settings: Box #_____Refill=_____Discharge=_____
Throttle=_____psi
Total Purged _____Liters Purge Rate goal = 0.5 Liters/Min.
Actual Purge Rate:_____Liters/Min

Purge Calcs

PHYSIO-CHEMICAL PARAMETERS DURING PURGING

Measure in order listed	Initial reading									Stabiliz-ation Criteria	Final
Time	0932	0934	0936	0938	0940	0942	0944	0946	0948		
PH	7.99	8.03	8.05	8:05	8.04	8.04	8.02	8.02	8.02	+/- 0.2	
Temperature (°C)	15.43	15.41	15.29	15.28	15.26	15.20	15.17	15.17	15.16	+/- 2.0 °C	
Specific Conductance (µmhos/cm)	0.488	0.483	0.482	0.481	0.481	0.480	0.481	0.481	0.481	+/- 3%	
Turbidity (NTU)	65.9	73.3	71.8	65.1	59.9	41.4	32.1	26.5	24.5	+/- 10%	
Dissolved Oxygen (mg/L)	8.08	8.00	7.98	7.96	7.93	7.94	7.92	7.92	7.91	+/- 0.2	
ORP (mV)	77	77	78	79	79	80	81	82	82	+/- 10	
Each Volume Purged (L)	1L	1L	1L	1L	1L	1L	1L	1L	1L		
Total Liters Purged	1L	2L	3L	4L	5L	6L	7L	8L	9L		

Duplicate Sample Collected? (No) Yes (Sample ID of Duplicate) _____
MS/MSD Sample Collected? (No) Yes _____
Sample Remarks (odors, colors, sediment): None
Comments_____
Sample(s) Collected By: KB + DF
Well Volume purge Calc: Length of tubing X 9.6 (ml/ft) + 130 (bladder volume) = Total required purge (liters) before collection of parameters.

FIGURE 1
LOW-FLOW GROUNDWATER SAMPLING DATA SHEET

Date/Time of Sample Collection: 4/13/11 / 1050 Project Site/Subsite: KFS
Sample ID: KFSGWB194Ø2
Field ID: B194 Point Name:
Depth to Well Bottom: 17.1 ft. below top of casing (PVC cap)
Depth to Water Level: 7.30' ft. below PVC cap
Depth to Water Level: 8.00 ft below PVC cap ~~prior to~~ after sampling
Method of Purging: Bladder Pump Submersible Pump
Peristaltic Pump
Minimum Purge Volume: Two-inch well _____ Liters
Four-inch well _____ Liters
Control Box Settings: Box #_____Refill=_____Discharge=_____
Throttle=_____psi
Total Purged _____Liters Purge Rate goal = 0.5 Liters/Min.
Actual Purge Rate:_____Liters/Min

Purge Calcs

PHYSIO-CHEMICAL PARAMETERS DURING PURGING

Measure in order listed	Initial reading									Stabiliz-ation Criteria	Final
Time	1040	1042	1044	1046	1048						
PH	7.72	7.55	7.50	7.48	7.48					+/- 0.2	
Temperature (°C)	16.17	16.07	16.00	15.99	16.03					+/- 2.0 °C	
Specific Conductance (µmhos/cm)	1.014	1.021	1.022	1.025	1.028					+/- 3%	
Turbidity (NTU)	42.4	28.4	29.7	27.6	26.6					+/- 10%	
Dissolved Oxygen (mg/L)	3.39	1.80	1.58	1.51	1.44					+/- 0.2	
ORP (mV)	99	96	96	95	95					+/- 10	
Each Volume Purged (L)	1L	1L	1L	1L	1L						
Total Liters Purged	1L	2L	3L	4L	5L						

Duplicate Sample Collected? No Yes (Sample ID of Duplicate) _____
MS/MSD Sample Collected? No Yes _____
Sample Remarks (odors, colors, sediment): _____
Comments_____
Sample(s) Collected By: Keith Baker + Carolyn Ferlic
Well Volume purge Calc: Length of tubing X 9.6 (ml/ft) + 130 (bladder volume) = Total required purge (liters) before collection of parameters.

FIGURE 1
LOW-FLOW GROUNDWATER SAMPLING DATA SHEET

Date/Time of Sample Collection: 4/13/11 / 1150 Project Site/Subsite: _____
Sample ID: RFSGWB195Q2
Field ID: B195 Point Name:
Depth to Well Bottom: 11.20' ft. below top of casing (PVC cap)
Depth to Water Level: 4.74' ft. below PVC cap
Depth to Water Level: 4.78 ft below PVC cap prior to sampling
Method of Purging: Bladder Pump Submersible Pump
Peristaltic Pump
Minimum Purge Volume: Two-inch well _____ Liters
Four-inch well _____ Liters
Control Box Settings: Box #_____ Refill=_____ Discharge=_____
Throttle=_____ psi
Total Purged _____ Liters Purge Rate goal = 0.5 Liters/Min.
Actual Purge Rate:_____ Liters/Min

Purge Calcs

PHYSIO-CHEMICAL PARAMETERS DURING PURGING

Measure in order listed	Initial reading									Stabiliz-ation Criteria	Final
Time	1135	1137	1139	1141	1143	1145	1147	1149			
PH	7.60	7.61	7.69	7.71	7.69	7.69	7.68	7.66		+/- 0.2	
Temperature (°C)	15.41	15.17	14.94	14.77	14.75	14.77	14.77	14.75		+/- 2.0 °C	
Specific Conductance (µmhos/cm)	1.226	1.153	0.904	0.814	0.809	0.811	0.804	0.803		+/- 3%	
Turbidity (NTU)	90.0	62.8	64.9	46.2	32.3	28.0	21.6	22.3		+/- 10%	
Dissolved Oxygen (mg/L)	1.75	1.45	2.08	2.55	2.63	2.64	2.68	2.71		+/- 0.2	
ORP (mV)	108	104	98	97	97	97	96	96		+/- 10	
Each Volume Purged (L)	1L	1L	1L	1L	1L	1L	1L	1L			
Total Liters Purged (L)	1L	2L	3L	4L	5L	6L	7L	8L			

Duplicate Sample Collected? No (Yes) (Sample ID of Duplicate) RFSGWB195Q2-D (1200)
MS/MSD Sample Collected? (No) Yes _____
Sample Remarks (odors, colors, sediment): _____
Comments _____
Sample(s) Collected By: Keith Baker + Carolyn Fertig
Well Volume purge Calc: Length of tubing X 9.6 (ml/ft) + 130 (bladder volume) = Total required purge (liters) before collection of parameters.

FIGURE 1
LOW-FLOW GROUNDWATER SAMPLING DATA SHEET

Date/Time of Sample Collection: 4/13/11 / 1335 Project Site/Subsite: RFS
Sample ID: RFSGWB197Ø2
Field ID: B197 Point Name:
Depth to Well Bottom: 14.20 ft. below top of casing (PVC cap)
Depth to Water Level: 4.60 ft. below PVC cap
Depth to Water Level: 4.71' ft below PVC cap prior to sampling
Method of Purging: Bladder Pump Submersible Pump
Peristaltic Pump
Minimum Purge Volume: Two-inch well _____ Liters
Four-inch well _____ Liters
Control Box Settings: Box #_____Refill=_____Discharge=_____
Throttle=_____psi
Total Purged _____Liters Purge Rate goal = 0.5 Liters/Min.
Actual Purge Rate: 05 Liters/Min

Purge Calcs

PHYSIO-CHEMICAL PARAMETERS DURING PURGING

Measure in order listed	Initial reading									Stabiliz-ation Criteria	Final
Time	1322	1324	1326	1328	1330	1332					
PH	7.35	7.45	7.50	7.52	7.52	7.52				+/- 0.2	
Temperature (°C)	16.52	16.24	16.03	15.91	15.84	15.92				+/- 2.0 °C	
Specific Conductance (µmhos/cm)	3.23	3.28	3.21	3.14	3.10	3.03				+/- 3%	
Turbidity (NTU)	19.8	16.9	14.0	12.9	12.4	12.4				+/- 10%	
Dissolved Oxygen (mg/L)	2.53	1.21	0.65	0.37	0.32	0.27				+/- 0.2	
ORP (mV)	-187	-186	-155	-138	-133	-136				+/- 10	
Each Volume Purged (L)	1L	1L	1L	1L	1L	1L					
Total Liters Purged	1L	2L	3L	4L	5L	6L					

Duplicate Sample Collected? (No) Yes (Sample ID of Duplicate) _____
MS/MSD Sample Collected? (No) Yes _____
Sample Remarks (odors, colors, sediment): _____
Comments _____
Sample(s) Collected By: Keith Baker + Carolyn Ferlic
Well Volume purge Calc: Length of tubing X 9.6 (ml/ft) + 130 (bladder volume) = Total required purge (liters) before collection of parameters.

FIGURE 1
LOW-FLOW GROUNDWATER SAMPLING DATA SHEET

Date/Time of Sample Collection: 4/13/11 / 1415 Project Site/Subsite: _____
Sample ID: _____
Field ID: B175W Point Name:
Depth to Well Bottom: 14.8' ft. below top of casing (PVC cap)
Depth to Water Level: 5.35' ft. below PVC cap
Depth to Water Level: 6.32' ft below PVC cap prior to sampling
Method of Purging: Bladder Pump Submersible Pump
Peristaltic Pump
Minimum Purge Volume: Two-inch well _____ Liters
Four-inch well _____ Liters
Control Box Settings: Box #_____Refill=_____Discharge=_____
Throttle=_____psi
Total Purged _____Liters Purge Rate goal = 0.5 Liters/Min.
Actual Purge Rate:_____Liters/Min

Purge Calcs

PHYSIO-CHEMICAL PARAMETERS DURING PURGING

Measure in order listed	Initial reading									Stabiliz-ation Criteria	Final
Time	1402	1404	1406	1408	1410						
PH	7.83	8.02	7.95	7.91	7.86					+/- 0.2	
Temperature (°C)	17.71	16.29	16.13	16.18	16.15					+/- 2.0 °C	
Specific Conductance (µmhos/cm)	0.641	0.406	0.406	0.408	0.409					+/- 3%	
Turbidity (NTU)	16.6	19.2	22.2	21.7	17.3					+/- 10%	
Dissolved Oxygen (mg/L)	0.81	0.83	0.83	0.83	0.80					+/- 0.2	
ORP (mV)	-8	-3	7	9	17					+/- 10	
Each Volume Purged (L)	1L	1L	1L	1L	1L						
Total Liters Purged	1L	2L	3L	4L	5L						

Duplicate Sample Collected? (No) Yes (Sample ID of Duplicate) _____
MS/MSD Sample Collected? (No) Yes _____
Sample Remarks (odors, colors, sediment): _____
Comments_____
Sample(s) Collected By: Keith Baker + Carolyn Ferlic
Well Volume purge Calc: Length of tubing X 9.6 (ml/ft) + 130 (bladder volume) = Total required purge (liters) before collection of parameters.

FIGURE 1
LOW-FLOW GROUNDWATER SAMPLING DATA SHEET

Date/Time of Sample Collection: 4/13/11 / KB 1515 Project Site/Subsite: _____
Sample ID: _____
Field ID: B1755 Point Name:
Depth to Well Bottom: 14.80 ft. below top of casing (PVC cap)
Depth to Water Level: 7.22 ft. below PVC cap
Depth to Water Level: 7.32 ft below PVC cap prior to sampling
Method of Purging: Bladder Pump Submersible Pump Peristaltic Pump
Minimum Purge Volume: Two-inch well _____ Liters
Four-inch well _____ Liters
Control Box Settings: Box #_____ Refill=_____ Discharge=_____
Throttle=_____ psi
Total Purged _____ Liters Purge Rate goal = 0.5 Liters/Min.
Actual Purge Rate:_____ Liters/Min

Purge Calcs

PHYSIO-CHEMICAL PARAMETERS DURING PURGING

Measure in order listed	Initial reading									Stabiliz-ation Criteria	Final
Time	1457	1459	1501	1503	1505	1507	1509	1511	1513		
PH	7.46	7.41	7.35	7.36	7.34	7.34	7.35	7.33	7.32	+/- 0.2	
Temperature (°C)	16.19	15.71	15.79	15.81	15.77	15.82	15.81	15.80	15.80	+/- 2.0 °C	
Specific Conductance (µmhos/cm)	0.871	0.871	0.856	0.852	0.854	0.846	0.850	0.846	0.846	+/- 3%	
Turbidity (NTU)	49.4	48.8	64.6	54.2	43.8	33.6	26.2	21.6	19.0	+/- 10%	
Dissolved Oxygen (mg/L)	2.24	3.24	3.38	3.32	3.30	3.11	2.98	2.93	2.87	+/- 0.2	
ORP (mV)	96	90	90	91	91	91	91	91	91	+/- 10	
Each Volume Purged (L)	1L	1L	1L	1L	1L	1L	1L	1L	1L		
Total Liters Purged	1L	2L	3L	4L	5L	6L	7L	8L	9L		

Duplicate Sample Collected? (No) Yes (Sample ID of Duplicate) _____
MS/MSD Sample Collected? (No) Yes _____
Sample Remarks (odors, colors, sediment): _____
Comments _____
Sample(s) Collected By: Keith Baker + Carolyn Festic
Well Volume purge Calc: Length of tubing X 9.6 (ml/ft) + 130 (bladder volume) = Total required purge (liters) before collection of parameters.

FIGURE 1
LOW-FLOW GROUNDWATER SAMPLING DATA SHEET

Date/Time of Sample Collection: 4/13/11 / 1600 Project Site/Subsite: _____
Sample ID: _____
Field ID: B150 Point Name:
Depth to Well Bottom: 15.12 ft. below top of casing (PVC cap)
Depth to Water Level: 3.76 ft. below PVC cap
Depth to Water Level: 4.00 ft below PVC cap prior to sampling
Method of Purging: Bladder Pump Submersible Pump
Peristaltic Pump
Minimum Purge Volume: Two-inch well _____ Liters
Four-inch well _____ Liters
Control Box Settings: Box #_____ Refill=_____ Discharge=_____
Throttle=_____ psi
Total Purged _____ Liters Purge Rate goal = 0.5 Liters/Min.
Actual Purge Rate:_____ Liters/Min

Purge Calcs

PHYSIO-CHEMICAL PARAMETERS DURING PURGING

Measure in order listed	Initial reading									Stabiliz-ation Criteria	Final
Time	1545	1547	1549	1551	1553	1555					
PH	7.92	7.64	7.48	7.38	7.36	7.33				+/- 0.2	
Temperature (°C)	15.40	14.57	14.40	14.27	14.24	14.21				+/- 2.0 °C	
Specific Conductance (µmhos/cm)	0.405	0.364	0.364	0.360	0.358	0.357				+/- 3%	
Turbidity (NTU)	25.2	19.1	14.5	13.2	11.1	11.1				+/- 10%	
Dissolved Oxygen (mg/L)	5.07	3.95	3.92	3.89	3.87	3.85				+/- 0.2	
ORP (mV)	94	94	94	94	95	95				+/- 10	
Each Volume Purged (L)	1L	1L	1L	1L	1L	1L					
Total Liters Purged	1L	2L	3L	4L	5L	6L					

Duplicate Sample Collected? (No) Yes (Sample ID of Duplicate) _____
MS/MSD Sample Collected? (No) Yes _____
Sample Remarks (odors, colors, sediment): _____
Comments_____
Sample(s) Collected By: Keith Baker + Carolyn Ferlic
Well Volume purge Calc: Length of tubing X 9.6 (ml/ft) + 130 (bladder volume) = Total required purge (liters) before collection of parameters.

FIGURE 1
LOW-FLOW GROUNDWATER SAMPLING DATA SHEET

Date/Time of Sample Collection: 4/14/11 / 0850 Project Site/Subsite: _____
Sample ID: RFSGWCCC102
Field ID: _____ Point Name:
Depth to Well Bottom: 13.15 ft. below top of casing (PVC cap)
Depth to Water Level: 8.50 ft. below PVC cap
Depth to Water Level: 6.19 ft below PVC cap prior to sampling
Method of Purging: Bladder Pump Submersible Pump (Peristaltic Pump)
Minimum Purge Volume: Two-inch well _____ Liters
Four-inch well _____ Liters
Control Box Settings: Box #_____ Refill=_____ Discharge=_____
Throttle=_____ psi
Total Purged _____ Liters Purge Rate goal = 0.5 Liters/Min.
Actual Purge Rate: _____ Liters/Min

Purge Calcs

PHYSIO-CHEMICAL PARAMETERS DURING PURGING

Measure in order listed	Initial reading									Stabiliz-ation Criteria	Final
Time	0833	0835	0837	0839	0841	0843	0845	0847			
PH	7.31	7.42	7.54	7.58	7.62	7.67	7.68	7.74		+/- 0.2	
Temperature (°C)	14.67	14.74	14.77	14.83	14.81	14.85	14.86	14.87		+/- 2.0 °C	
Specific Conductance (µmhos/cm)	0.830	0.836	0.831	0.817	0.818	0.803	0.804	0.805		+/- 3%	
Turbidity (NTU)	11.4	11.1	11.0	11.0	9.9	9.6	9.9	10.1		+/- 10%	
Dissolved Oxygen (mg/L)	3.13	1.93	1.39	1.02	0.79	0.59	0.51	0.44		+/- 0.2	
ORP (mV)	122	118	113	111	109	107	106	105		+/- 10	
Each Volume Purged (L)	1L	1L	1L	1L	1L	1L	1L	1L			
Total Liters Purged	1L	2L	3L	4L	5L	6L	7L	8L			

Duplicate Sample Collected? (No) Yes (Sample ID of Duplicate) _____
MS/MSD Sample Collected? (No) Yes _____
Sample Remarks (odors, colors, sediment): _____
Comments _____
Sample(s) Collected By: Keith Baker + Sara Woolley
Well Volume purge Calc: Length of tubing X 9.6 (ml/ft) + 130 (bladder volume) = Total required purge (liters) before collection of parameters.

FIGURE 1
LOW-FLOW GROUNDWATER SAMPLING DATA SHEET

Date/Time of Sample Collection: 4/14/11 / 1005 Project Site/Subsite: _____
Sample ID: RFSGWCCC202
Field ID: CCC202-KB Point Name:
Depth to Well Bottom: 14.25 ft. below top of casing (PVC cap)
Depth to Water Level: 7.10 ft. below PVC cap
Depth to Water Level: 8.18 ft below PVC cap prior to sampling
Method of Purging: Bladder Pump Submersible Pump Peristaltic Pump
Minimum Purge Volume: Two-inch well _____ Liters
Four-inch well _____ Liters
Control Box Settings: Box #_____ Refill=_____ Discharge=_____
Throttle=_____ psi
Total Purged _____ Liters Purge Rate goal = 0.5 Liters/Min.
Actual Purge Rate:_____ Liters/Min

Purge Calcs

PHYSIO-CHEMICAL PARAMETERS DURING PURGING

Measure in order listed	Initial reading									Stabiliz-ation Criteria	Final
Time	0953	0955	0957	0959	1001	1003					
PH	7.82	7.41	7.29	7.16	7.09	7.02				+/- 0.2	
Temperature (°C)	14.73	14.70	14.70	14.77	14.76	14.84				+/- 2.0 °C	
Specific Conductance (µmhos/cm)	3.32	3.34	3.34	3.34	3.34	3.34				+/- 3%	
Turbidity (NTU)	16.7	16.1	16.4	13.6	10.7	10.2				+/- 10%	
Dissolved Oxygen (mg/L)	5.33	4.38	4.51	4.69	4.78	4.80				+/- 0.2	
ORP (mV)	118	121	122	123	123	123				+/- 10	
Each Volume Purged (L)	1L	1L	1L	1L	1L	1L					
Total Liters Purged	1L	2L	3L	4L	5L	6L					

Duplicate Sample Collected? (No) Yes (Sample ID of Duplicate) _____
MS/MSD Sample Collected? (No) Yes _____
Sample Remarks (odors, colors, sediment): _____
Comments _____
Sample(s) Collected By: Keith Baker + Sara Woolley
Well Volume purge Calc: Length of tubing X 9.6 (ml/ft) + 130 (bladder volume) = Total required purge (liters) before collection of parameters.

FIGURE 1
LOW-FLOW GROUNDWATER SAMPLING DATA SHEET

Date/Time of Sample Collection: 4/14/11 / 1120 Project Site/Subsite: _____
Sample ID: RFSGWWTA02
Field ID: RFS-GW-WTA Point Name:
Depth to Well Bottom: 14.1 ft. below top of casing (PVC cap)
Depth to Water Level: 5.5 ft. below PVC cap
Depth to Water Level: 5.75 ft below PVC cap prior to sampling
Method of Purging: Bladder Pump Submersible Pump
Peristaltic Pump
Minimum Purge Volume: Two-inch well _____ Liters
Four-inch well _____ Liters
Control Box Settings: Box #_____ Refill=_____ Discharge=_____
Throttle=_____ psi
Total Purged _____ Liters Purge Rate goal = 0.5 Liters/Min.
Actual Purge Rate:_____ Liters/Min

Purge Calcs

PHYSIO-CHEMICAL PARAMETERS DURING PURGING

Measure in order listed	Initial reading									Stabiliz-ation Criteria	Final
Time	1100	1102	1104	1106	1108	1110	1112	1114	1116		
PH	7.60	7.61	7.64	7.67	7.69	7.71	7.72	7.73	7.75	+/- 0.2	
Temperature (°C)	14.53	14.57	14.62	14.67	14.73	14.77	14.73	14.77	14.82	+/- 2.0 °C	
Specific Conductance (µmhos/cm)	1.99	1.95	1.92	1.88	1.85	1.82	1.83	1.80	1.77	+/- 3%	
Turbidity (NTU)	67.9	83.9	73.9	59.3	40.3	32.8	26.2	19.3	15.5	+/- 10%	
Dissolved Oxygen (mg/L)	1.54	0.95	0.68	0.47	0.39	0.32	0.27	0.25	0.23	+/- 0.2	
ORP (mV)	92	91	90	89	88	88	88	87	88	+/- 10	
Each Volume Purged (L)	1L	1L	1L	1L	1L	1L	1L	1L	1L		
Total Liters Purged	1L	2L	3L	4L	5L	6L	7L	8L	9L		

Duplicate Sample Collected? No (Yes) (Sample ID of Duplicate) RFSGWWTA02D (1125)
MS/MSD Sample Collected? (No) Yes
Sample Remarks (odors, colors, sediment): _____
Comments_____
Sample(s) Collected By: Keith Baker + Sara Woolley
Well Volume purge Calc: Length of tubing X 9.6 (ml/ft) + 130 (bladder volume) = Total required purge (liters) before collection of parameters.

FIGURE 1
LOW-FLOW GROUNDWATER SAMPLING DATA SHEET

Date/Time of Sample Collection: 4/14/11 / 1325 Project Site/Subsite: _____
Sample ID: RFSGWD4H02
Field ID: RFS-GW-D4H02 Point Name:
Depth to Well Bottom: 17.91 ft. below top of casing (PVC cap)
Depth to Water Level: 13.35 ft. below PVC cap
Depth to Water Level: 11.2 ft below PVC cap prior to sampling
Method of Purging: Bladder Pump Submersible Pump Peristaltic Pump
Minimum Purge Volume: Two-inch well _____ Liters
Four-inch well _____ Liters
Control Box Settings: Box #_____ Refill=_____ Discharge=_____
Throttle=_____ psi
Total Purged _____ Liters Purge Rate goal = 0.5 Liters/Min.
Actual Purge Rate:_____ Liters/Min

Purge Calcs

PHYSIO-CHEMICAL PARAMETERS DURING PURGING

Measure in order listed	Initial reading									Stabiliz-ation Criteria	Final
Time	1215	1217	1219	1221							
PH	7.26	7.17	7.15	7.12						+/- 0.2	
Temperature (°C)	15.35	15.13	15.01	14.98						+/- 2.0 °C	
Specific Conductance (µmhos/cm)	8.94	9.08	9.08	9.08						+/- 3%	
Turbidity (NTU)	14.4	11.5	9.8	9.5						+/- 10%	
Dissolved Oxygen (mg/L)	1.91	1.88	1.84	1.83						+/- 0.2	
ORP (mV)	119	117	116	115						+/- 10	
Each Volume Purged (L)	1L	1L	1L	1L							
Total Liters Purged	1L	2L	3L	4L							

Duplicate Sample Collected? (No) Yes (Sample ID of Duplicate) _____
MS/MSD Sample Collected? (No) Yes _____
Sample Remarks (odors, colors, sediment): _____
Comments _____
Sample(s) Collected By: Keith Baker + Sara Woolley
Well Volume purge Calc: Length of tubing X 9.6 (ml/ft) + 130 (bladder volume) = Total required purge (liters) before collection of parameters.

FIGURE 1
LOW-FLOW GROUNDWATER SAMPLING DATA SHEET

Date/Time of Sample Collection: 4/14/11, 1410 Project Site/Subsite: _____
Sample ID: RFS-GWB28DB03
Field ID: RFS-GWB28DB Point Name:
Depth to Well Bottom: 16.0 ft. below top of casing (PVC cap)
Depth to Water Level: 10.5 ft. below PVC cap
Depth to Water Level: 11.75 ft below PVC cap prior to sampling
Method of Purging: Bladder Pump Submersible Pump
(Peristaltic Pump)
Minimum Purge Volume: Two-inch well _____ Liters
Four-inch well _____ Liters
Control Box Settings: Box #_____ Refill=_____ Discharge=_____
Throttle=_____ psi
Total Purged _____ Liters Purge Rate goal = 0.5 Liters/Min.
Actual Purge Rate:_____ Liters/Min

Purge Calcs

PHYSIO-CHEMICAL PARAMETERS DURING PURGING

Measure in order listed	Initial reading									Stabiliz-ation Criteria	Final
Time	1400	1402	1404	1406	1408						
PH	8.35	8.29	8.29	8.32	8.32					+/- 0.2	
Temperature (°C)	15.73	15.42	15.39	15.37	15.37					+/- 2.0 °C	
Specific Conductance (µmhos/cm)	1.261	1.047	1.024	1.028	1.030					+/- 3%	
Turbidity (NTU)	13.6	12.4	10.6	9.5	9.6					+/- 10%	
Dissolved Oxygen (mg/L)	5.40	4.31	4.44	4.55	4.55					+/- 0.2	
ORP (mV)	84	81	79	79	79					+/- 10	
Each Volume Purged (L)	1L	1L	1L	1L	1L						
Total Liters Purged	1L	2L	3L	4L	5L						

Duplicate Sample Collected? (No) Yes (Sample ID of Duplicate) _____
MS/MSD Sample Collected? (No) Yes _____
Sample Remarks (odors, colors, sediment): _____
Comments Well went dry - Shoot one liter
Sample(s) Collected By: Keith Bakes + Sara Woolley
Well Volume purge Calc: Length of tubing X 9.6 (ml/ft) + 130 (bladder volume) = Total required purge (liters) before collection of parameters.

FIGURE 1
LOW-FLOW GROUNDWATER SAMPLING DATA SHEET

Date/Time of Sample Collection: 4/14/11 / 1515 Project Site/Subsite: _____
Sample ID: RFSGWCT1105
Field ID: RFS-GW-CT1 Point Name:
Depth to Well Bottom: 17.2 ft. below top of casing (PVC cap)
Depth to Water Level: 10.55 ft. below PVC cap
Depth to Water Level: 10.95 ft below PVC cap prior to sampling
Method of Purging: Bladder Pump Submersible Pump (Peristaltic Pump)
Minimum Purge Volume: Two-inch well _____ Liters
Four-inch well _____ Liters
Control Box Settings: Box #_____ Refill=_____ Discharge=_____
Throttle=_____ psi
Total Purged _____ Liters Purge Rate goal = 0.5 Liters/Min.
Actual Purge Rate:_____ Liters/Min

Purge Calcs

PHYSIO-CHEMICAL PARAMETERS DURING PURGING

Measure in order listed	Initial reading									Stabiliz-ation Criteria	Final
Time	1455	1457	1459	1501	1503	1505	1507	1509	1511		
PH	8.47	8.32	8.25	8.23	8.19	8.12	8.08	8.02	7.96	+/- 0.2	
Temperature (°C)	16.80	15.33	15.26	15.26	15.32	15.38	15.36	15.41	15.45	+/- 2.0 °C	
Specific Conductance (µmhos/cm)	0.833	0.814	0.814	0.813	0.814	0.809	0.810	0.809	0.809	+/- 3%	
Turbidity (NTU)	19.1	19.5	18.2	19.3	16.6	14.7	12.0	12.0	11.5	+/- 10%	
Dissolved Oxygen (mg/L)	4.45	0.98	0.71	0.58	0.54	0.78	0.92	1.30	1.46	+/- 0.2	
ORP (mV)	86	85	82	80	57	57	41	31	40	+/- 10	
Each Volume Purged (L)	1L	1L	1L	1L	1L	1L	1L	1L	1L		
Total Liters Purged	1L	2L	3L	4L	5L	6L	7L	8L	9L		

Duplicate Sample Collected? (No) Yes (Sample ID of Duplicate) _____
MS/MSD Sample Collected? (No) Yes _____
Sample Remarks (odors, colors, sediment): _____
Comments_____
Sample(s) Collected By: Keith Baker + Sara Woolley
Well Volume purge Calc: Length of tubing X 9.6 (ml/ft) + 130 (bladder volume) = Total required purge (liters) before collection of parameters.

FIGURE 1
LOW-FLOW GROUNDWATER SAMPLING DATA SHEET

Date/Time of Sample Collection: 4/14/11 / 1605 Project Site/Subsite: _____
Sample ID: RFSGWB28D A02
Field ID: RFS-GW-B28DA Point Name:
Depth to Well Bottom: 13.5 ft. below top of casing (PVC cap)
Depth to Water Level: 10.5 ft. below PVC cap
Depth to Water Level: 10.5 ft below PVC cap prior to sampling
Method of Purging: Bladder Pump Submersible Pump (Peristaltic Pump)

Minimum Purge Volume: Two-inch well _____ Liters
Four-inch well _____ Liters

Control Box Settings: Box #_____Refill=_____Discharge=_____
Throttle=_____psi
Total Purged _____Liters Purge Rate goal = 0.5 Liters/Min.
Actual Purge Rate:_____Liters/Min

Purge Calcs

PHYSIO-CHEMICAL PARAMETERS DURING PURGING

Measure in order listed	Initial reading									Stabilization Criteria	Final
Time	1552	1554	1556	1558	1600						
PH	7.95	7.84	7.79	7.78	7.75					+/- 0.2	
Temperature (°C)	16.75	16.46	16.42	16.37	16.36					+/- 2.0 °C	
Specific Conductance (µmhos/cm)	0.707	0.703	0.701	0.696	0.699					+/- 3%	
Turbidity (NTU)	22.7	13.4	10.1	8.2	7.2					+/- 10%	
Dissolved Oxygen (mg/L)	1.64	0.77	0.52	0.43	0.36					+/- 0.2	
ORP (mV)	69	70	70	70	71					+/- 10	
Each Volume Purged (L)	1L	1L	1L	1L	1L						
Total Liters Purged	1L	2L	3L	4L	5L						

Duplicate Sample Collected? (No) Yes (Sample ID of Duplicate) _____
MS/MSD Sample Collected? (No) Yes _____
Sample Remarks (odors, colors, sediment): _____
Comments_____
Sample(s) Collected By: Keith Baker + Sara Woolley
Well Volume purge Calc: Length of tubing X 9.6 (ml/ft) + 130 (bladder volume) = Total required purge (liters) before collection of parameters.

FIGURE 1
LOW-FLOW GROUNDWATER SAMPLING DATA SHEET

Date/Time of Sample Collection: 4/15/11 / 0840 Project Site/Subsite: _____
Sample ID: RFSGWB185D2
Field ID: B185 Point Name:
Depth to Well Bottom: 13.88 ft. below top of casing (PVC cap)
Depth to Water Level: 2.80 ft. below PVC cap
Depth to Water Level: ~~2.80 KB~~ 3.05 ft below PVC cap prior to sampling
Method of Purging: Bladder Pump Submersible Pump (Peristaltic Pump)

Minimum Purge Volume: Two-inch well _____ Liters
Four-inch well _____ Liters

Control Box Settings: Box #_____ Refill=_____ Discharge=_____
Throttle=_____ psi
Total Purged _____ Liters Purge Rate goal = 0.5 Liters/Min.
Actual Purge Rate:_____ Liters/Min

Purge Calcs

PHYSIO-CHEMICAL PARAMETERS DURING PURGING

Measure in order listed	Initial reading									Stabiliz-ation Criteria	Final
Time	0825	0827	0829	0831	0833	0835					
PH	7.48	7.39	7.38	7.34	7.29	7.31				+/- 0.2	
Temperature (°C)	14.70	14.73	14.79	14.78	14.82	14.85				+/- 2.0 °C	
Specific Conductance (µmhos/cm)	1.86	1.86	1.88	1.89	1.94	1.96				+/- 3%	
Turbidity (NTU)	38.1	32.8	23.3	23.1	17.0	15.9				+/- 10%	
Dissolved Oxygen (mg/L)	1.13	0.70	0.66	0.42	0.32	0.30				+/- 0.2	
ORP (mV)	122	120	116	115	113	112				+/- 10	
Each Volume Purged (L)	1L	1L	1L	1L	1L	1L					
Total Liters Purged	1L	2L	3L	4L	5L	6L					

Duplicate Sample Collected? No (Yes) (Sample ID of Duplicate) RFSGWB185D2D (0845)
MS/MSD Sample Collected? (No) Yes _____
Sample Remarks (odors, colors, sediment): _____
Comments _____
Sample(s) Collected By: Keith Baker + Nathan Steinzand
Well Volume purge Calc: Length of tubing X 9.6 (ml/ft) + 130 (bladder volume) = Total required purge (liters) before collection of parameters.

FIGURE 1
LOW-FLOW GROUNDWATER SAMPLING DATA SHEET

Date/Time of Sample Collection: 4/15/11 / 1000 Project Site/Subsite: _____
Sample ID: _____
Field ID: B178 Point Name:
Depth to Well Bottom: 13.49 ft. below top of casing (PVC cap)
Depth to Water Level: 2.52 ft. below PVC cap
Depth to Water Level: 2.55 ft below PVC cap prior to sampling
Method of Purging: Bladder Pump Submersible Pump
Peristaltic Pump
Minimum Purge Volume: Two-inch well _____ Liters
Four-inch well _____ Liters
Control Box Settings: Box #_____ Refill=_____ Discharge=_____
Throttle=_____ psi
Total Purged _____ Liters Purge Rate goal = 0.5 Liters/Min.
Actual Purge Rate:_____ Liters/Min

Purge Calcs

PHYSIO-CHEMICAL PARAMETERS DURING PURGING

Measure in order listed	Initial reading									Stabiliz-ation Criteria	Final
Time	0939	0941	0943	0945	0947	0949	0951	0953	0955		
PH	7.34	7.45	7.51	7.53	7.56	7.56	7.55	7.53	7.53	+/- 0.2	
Temperature (°C)	15.98	15.94	15.93	15.93	15.93	15.92	15.89	15.95	15.94	+/- 2.0 °C	
Specific Conductance (µmhos/cm)	3.33	3.35	3.35	3.33	3.13	2.92	2.88	2.90	2.79	+/- 3%	
Turbidity (NTU)	82.8	57.5	32.2	22.1	16.9	12.3	20.5	25.8	19.6	+/- 10%	
Dissolved Oxygen (mg/L)	0.55	0.37	0.29	0.28	0.24	0.22	0.21	0.20	0.20	+/- 0.2	
ORP (mV)	97	94	91	89	89	90	90	90	90	+/- 10	
Each Volume Purged (L)	1L	1L	1L	1L	1L	1L	1L	1L	1L		
Total Liters Purged	1L	2L	3L	4L	5L	6L	7L	8L	9L		

Duplicate Sample Collected? (No) Yes (Sample ID of Duplicate) _____
MS/MSD Sample Collected? (No) Yes _____
Sample Remarks (odors, colors, sediment): _____
Comments_____
Sample(s) Collected By: Keith Baker + Nathan Stornzand
Well Volume purge Calc: Length of tubing X 9.6 (ml/ft) + 130 (bladder volume) = Total required purge (liters) before collection of parameters.

FIGURE 1
LOW-FLOW GROUNDWATER SAMPLING DATA SHEET

Date/Time of Sample Collection: 4/15/11 / 1050 Project Site/Subsite: _____
Sample ID: RFSGWB120002
Field ID: B120 Point Name:
Depth to Well Bottom: 13.13 ft. below top of casing (PVC cap)
Depth to Water Level: 3.65 ft. below PVC cap
Depth to Water Level: _____ ft below PVC cap prior to sampling
Method of Purging: Bladder Pump Submersible Pump
Peristaltic Pump
Minimum Purge Volume: Two-inch well _____ Liters
Four-inch well _____ Liters
Control Box Settings: Box #_____ Refill=_____ Discharge=_____
Throttle=_____ psi
Total Purged _____ Liters Purge Rate goal = 0.5 Liters/Min.
Actual Purge Rate:_____ Liters/Min

Purge Calcs

PHYSIO-CHEMICAL PARAMETERS DURING PURGING

Measure in order listed	Initial reading									Stabiliz-ation Criteria	Final
Time	1033	1035	1037	1039	1041	1043	1045	1047	1049		
PH	7.54	7.63	7.66	7.66	7.65	7.64	7.61	7.59	7.58	+/- 0.2	
Temperature (°C)	14.98	14.84	14.85	14.85	14.84	14.85	14.84	14.86	14.86	+/- 2.0 °C	
Specific Conductance (µmhos/cm)	4.40	4.34	4.25	3.86	3.73	3.57	3.47	3.37	3.32	+/- 3%	
Turbidity (NTU)	54.5	39.5	26.7	18.9	17.2	15.9	13.9	13.1	12.3	+/- 10%	
Dissolved Oxygen (mg/L)	0.40	0.23	0.21	0.18	0.17	0.17	0.15	0.15	0.14	+/- 0.2	
ORP (mV)	98	94	93	92	92	92	92	91	90	+/- 10	
Each Volume Purged (L)	1L	1L	1L	1L	1L	1L	1L	1L	1L		
Total Liters Purged	1L	2L	3L	4L	5L	6L	7L	8L	9L		

Duplicate Sample Collected? (No) Yes (Sample ID of Duplicate) _____
MS/MSD Sample Collected? (No) Yes _____
Sample Remarks (odors, colors, sediment): _____
Comments _____
Sample(s) Collected By: Keith Baker + Nathan Stormzand
Well Volume purge Calc: Length of tubing X 9.6 (ml/ft) + 130 (bladder volume) = Total required purge (liters) before collection of parameters.

FIGURE 1
LOW-FLOW GROUNDWATER SAMPLING DATA SHEET

Date/Time of Sample Collection: 4/15/11 / 1400 Project Site/Subsite: _____
Sample ID: RFSGWB158802
Field ID: B158 Point Name:
Depth to Well Bottom: 14.95 ft. below top of casing (PVC cap)
Depth to Water Level: 8.65 ft. below PVC cap
Depth to Water Level: 9.00 ft below PVC cap prior to sampling
Method of Purging: Bladder Pump Submersible Pump (Peristaltic Pump)
Minimum Purge Volume: Two-inch well _____ Liters
Four-inch well _____ Liters
Control Box Settings: Box #_____ Refill=_____ Discharge=_____
Throttle=_____ psi
Total Purged _____ Liters Purge Rate goal = 0.5 Liters/Min.
Actual Purge Rate:_____ Liters/Min

Purge Calcs

PHYSIO-CHEMICAL PARAMETERS DURING PURGING

Measure in order listed	Initial reading									Stabiliz-ation Criteria	Final
Time	1343	1345	1347	1349	1351	1353					
PH	8.26	8.24	8.00	7.87	7.80	7.72				+/- 0.2	
Temperature (°C)	15.77	15.23	15.09	15.04	15.04	15.05				+/- 2.0 °C	
Specific Conductance (µmhos/cm)	0.337	0.240	0.263	0.238	0.239	0.236				+/- 3%	
Turbidity (NTU)	23.4	19.9	17.0	16.3	16.0	15.5				+/- 10%	
Dissolved Oxygen (mg/L)	3.55	3.61	3.66	3.63	3.64	3.65				+/- 0.2	
ORP (mV)	94	96	99	100	101	101				+/- 10	
Each Volume Purged (L)	1L	1L	1L	1L	1L	1L					
Total Liters Purged	1L	2L	3L	4L	5L	6L					

Duplicate Sample Collected? (No) Yes (Sample ID of Duplicate) _____
MS/MSD Sample Collected? (No) Yes _____
Sample Remarks (odors, colors, sediment): _____
Comments_____
Sample(s) Collected By: Keith Baker + Nathan Stormzand
Well Volume purge Calc: Length of tubing X 9.6 (ml/ft) + 130 (bladder volume) = Total required purge (liters) before collection of parameters.

FIGURE 1
LOW-FLOW GROUNDWATER SAMPLING DATA SHEET

Date/Time of Sample Collection: 4/15/11 / 1500 Project Site/Subsite: _____
Sample ID: RFSGWB30002
Field ID: B300 Point Name:
Depth to Well Bottom: 17.2 ft. below top of casing (PVC cap)
Depth to Water Level: 10.18 ft. below PVC cap
Depth to Water Level: 12.27 ft below PVC cap prior to sampling
Method of Purging: Bladder Pump Submersible Pump Peristaltic Pump
Minimum Purge Volume: Two-inch well _____ Liters
Four-inch well _____ Liters
Control Box Settings: Box #_____ Refill=_____ Discharge=_____
Throttle=_____psi
Total Purged _____Liters Purge Rate goal = 0.5 Liters/Min.
Actual Purge Rate:_____Liters/Min

Purge Calcs

PHYSIO-CHEMICAL PARAMETERS DURING PURGING

Measure in order listed	Initial reading									Stabiliz-ation Criteria	Final
Time	1441	1443	1445	1447	1449	1451	1453	1455			
PH	6.70	6.86	6.87	6.92	6.93	6.95	6.95	6.96		+/- 0.2	
Temperature (°C)	15.72	15.49	15.45	15.47	15.47	15.49	15.49	15.50		+/- 2.0 °C	
Specific Conductance (µmhos/cm)	3.90	3.93	3.93	3.94	3.97	4.00	4.01	4.04		+/- 3%	
Turbidity (NTU)	9.8	9.4	8.4	8.3	8.4	8.3	8.8	8.5		+/- 10%	
Dissolved Oxygen (mg/L)	2.28	1.31	1.18	0.73	0.59	0.44	0.39	0.34		+/- 0.2	
ORP (mV)	-82	-110	-111	-111	-108	-107	-106	-106		+/- 10	
Each Volume Purged (L)	1L	1L	1L	1L	1L	1L	1L	1L			
Total Liters Purged	1L	2L	3L	4L	5L	6L	7L	8L			

Duplicate Sample Collected? (No) Yes (Sample ID of Duplicate) _____
MS/MSD Sample Collected? (No) Yes _____
Sample Remarks (odors, colors, sediment): _____
Comments_____
Sample(s) Collected By: Keith Baker + Nathan Stolmzand
Well Volume purge Calc: Length of tubing X 9.6 (ml/ft) + 130 (bladder volume) = Total required purge (liters) before collection of parameters.

FIGURE 1
LOW-FLOW GROUNDWATER SAMPLING DATA SHEET

Date/Time of Sample Collection: 4/18/2011 / 9:15 Project Site/Subsite: RFS
Sample ID: RFSGWCCCT02
Field ID: CCCT Point Name:
Depth to Well Bottom: 15.13 ft. below top of casing (PVC cap)
Depth to Water Level: 4.55 ft. below PVC cap
Depth to Water Level: 4.64 ft below PVC cap prior to sampling
Method of Purging: Bladder Pump Submersible Pump
Peristaltic Pump
Minimum Purge Volume: Two-inch well _____ Liters
Four-inch well _____ Liters
Control Box Settings: Box #_____Refill=_____Discharge=_____
Throttle=_____psi
Total Purged _____Liters Purge Rate goal = 0.5 Liters/Min.
Actual Purge Rate:_____Liters/Min

Purge Calcs

PHYSIO-CHEMICAL PARAMETERS DURING PURGING

Measure in order listed	Initial reading									Stabiliz-ation Criteria	Final
Time	9:00	9:02	9:04	9:06	9:08	9:10	9:12				
PH	7.07	7.30	7.40	7.51	7.52	7.54	7.54			+/- 0.2	
Temperature (°C)	13.98	14.05	14.11	14.17	14.27	14.34	14.35			+/- 2.0 °C	
Specific Conductance (µmhos/cm)	1.77	1.76	1.73	1.69	1.65	1.63	1.63			+/- 3%	
Turbidity (NTU)	21.6	21.5	19.6	19.5	13.9	12.9	12.3			+/- 10%	
Dissolved Oxygen (mg/L)	1.09	0.71	0.59	0.47	0.36	0.33	0.31			+/- 0.2	
ORP (mV)	136	104	-108	-135	-146	-157	-156			+/- 10	
Each Volume Purged (L)	1L	1L	1L	1L	1L	1L	1L				
Total Liters Purged	1L	2L	3L	4L	5L	6L	7L				

Duplicate Sample Collected? (No) Yes (Sample ID of Duplicate) _____
MS/MSD Sample Collected? (No) Yes _____
Sample Remarks (odors, colors, sediment): —
Comments_____
Sample(s) Collected By: CF4NS
Well Volume purge Calc: Length of tubing X 9.6 (ml/ft) + 130 (bladder volume) = Total required purge (liters) before collection of parameters.

FIGURE 1
LOW-FLOW GROUNDWATER SAMPLING DATA SHEET

Date/Time of Sample Collection: 4/16/11 / 10:[illegible] Project Site/Subsite: RFS
Sample ID: _____
Field ID: B177 Point Name:
Depth to Well Bottom: 18.8 ft. below top of casing (PVC cap)
Depth to Water Level: 8.05 ft. below PVC cap (pressurized)
Depth to Water Level: 8.05 ft below PVC cap ~~prior to~~ after.
sampling
Method of Purging: Bladder Pump Submersible Pump
Peristaltic Pump
Minimum Purge Volume: Two-inch well _____ Liters
Four-inch well _____ Liters
Control Box Settings: Box #_____ Refill=_____ Discharge=_____
Throttle=_____ psi
Total Purged _____ Liters Purge Rate goal = 0.5 Liters/Min.
Actual Purge Rate:_____ Liters/Min

Purge Calcs

PHYSIO-CHEMICAL PARAMETERS DURING PURGING

Measure in order listed	Initial reading									Stabiliz-ation Criteria	Final
Time	9:50	9:52	9:54	9:56	9:58	10:00	10:02	10:04	10:06		
PH	8.04	7.53	7.24	7.10	6.97	6.87	6.88	6.84	6.74	+/- 0.2	
Temperature (°C)	15.19	15.22	15.23	15.23	15.23	15.23	15.24	15.24	15.25	+/- 2.0 °C	
Specific Conductance (µmhos/cm)	.396	.396	.396	.396	.397	.397	.400	.402	.397	+/- 3%	
Turbidity (NTU)	33.7	37.3	33.0	21.6	16.4	12.6	11.4	8.6	8.5	+/- 10%	
Dissolved Oxygen (mg/L)	2.51	2.38	2.13	2.06	2.00	2.00	1.98	1.95	1.94	+/- 0.2	
ORP (mV)	-72	-15	-4	25	42	55	65	74	80	+/- 10	
Each Volume Purged (L)	1L	1L	1L	1L	1L	1L	1L	1L	1L		
Total Liters Purged	1L	2L	3L	4L	5L	6L	7L	8L	9L		

Duplicate Sample Collected? No Yes (Sample ID of Duplicate) _____
MS/MSD Sample Collected? No Yes _____
Sample Remarks (odors, colors, sediment): _____
Comments _____
Sample(s) Collected By: _____
Well Volume purge Calc: Length of tubing X 9.6 (ml/ft) + 130 (bladder volume) = Total required purge (liters) before collection of parameters.

FIGURE 1
LOW-FLOW GROUNDWATER SAMPLING DATA SHEET

Date/Time of Sample Collection: 4/18/11 / 11:10 Project Site/Subsite: RFS
Sample ID: RFSGWPZ8Q2
Field ID: PZ8 Point Name:
Depth to Well Bottom: 20.85' ft. below top of casing (PVC cap)
Depth to Water Level: 4.56' ft. below PVC cap
Depth to Water Level: _____ ft below PVC cap prior to sampling
Method of Purging: Bladder Pump Submersible Pump
Peristaltic Pump
Minimum Purge Volume: Two-inch well _____ Liters
Four-inch well _____ Liters
Control Box Settings: Box #_____Refill=_____Discharge=_____
Throttle=_____psi
Total Purged _____Liters Purge Rate goal = 0.5 Liters/Min.
Actual Purge Rate:_____Liters/Min

Purge Calcs

PHYSIO-CHEMICAL PARAMETERS DURING PURGING

Measure in order listed	Initial reading									Stabiliz-ation Criteria	Final
Time	10:55	10:57	10:59	11:01	11:03	11:05	11:07	11:09			
PH	7.00	7.12	7.20	7.28	7.31	7.31	7.33	7.33		+/- 0.2	
Temperature (°C)	16.36	16.21	16.10	15.98	15.92	15.84	15.82	15.76		+/- 2.0 °C	
Specific Conductance (µmhos/cm)	.746	.749	.751	.749	.747	.748	.748	.749		+/- 3%	
Turbidity (NTU)	—	—	44.4	38.1	34.4	27.1	20.6	18.4		+/- 10%	
Dissolved Oxygen (mg/L)	.83	.51	.42	.35	.32	.29	.27	.27		+/- 0.2	
ORP (mV)	110	113	111	108	106	106	105	105		+/- 10	
Each Volume Purged (L)	1L	1L	1L	1L	1L	1L	1L	1L			
Total Liters Purged	1L	2L	3L	4L	5L	6L	7L	8L			

Duplicate Sample Collected? (No) Yes (Sample ID of Duplicate) _____
MS/MSD Sample Collected? (No) Yes _____
Sample Remarks (odors, colors, sediment): None
Comments_____
Sample(s) Collected By: CF & NS
Well Volume purge Calc: Length of tubing X 9.6 (ml/ft) + 130 (bladder volume) = Total required purge (liters) before collection of parameters.

FIGURE 1
LOW-FLOW GROUNDWATER SAMPLING DATA SHEET

Date/Time of Sample Collection: 4/18/11 / 11:45 Project Site/Subsite: _____
Sample ID: RFSGWRWFQ2
Field ID: RWF Point Name:
Depth to Well Bottom: 17.75' ft. below top of casing (PVC cap)
Depth to Water Level: 6.69' ft. below PVC cap
Depth to Water Level: _____ ft below PVC cap ~~prior~~ after sampling
Method of Purging: Bladder Pump Submersible Pump
Peristaltic Pump
Minimum Purge Volume: Two-inch well _____ Liters
Four-inch well _____ Liters
Control Box Settings: Box #_____ Refill=_____ Discharge=_____
Throttle=_____ psi
Total Purged _____ Liters Purge Rate goal = 0.5 Liters/Min.
Actual Purge Rate:_____ Liters/Min

Purge Calcs

PHYSIO-CHEMICAL PARAMETERS DURING PURGING

Measure in order listed	Initial reading									Stabiliz-ation Criteria	Final
Time	11:36	11:38	11:40	11:42							
PH	7.54	7.43	7.42	7.42						+/- 0.2	
Temperature (°C)	15.67	15.50	15.49	15.50						+/- 2.0 °C	
Specific Conductance (µmhos/cm)	1.199	1.238	1.241	1.241						+/- 3%	
Turbidity (NTU)	52.1	59.5	57.4	53.7						+/- 10%	
Dissolved Oxygen (mg/L)	1.09	0.56	0.48	0.43						+/- 0.2	
ORP (mV)	104	100	99	99						+/- 10	
Each Volume Purged (L)	1L	1L	1L	1L							
Total Liters Purged	1L	2L	3L	4L							

Duplicate Sample Collected? No Yes (Sample ID of Duplicate) _____
MS/MSD Sample Collected? No Yes _____
Sample Remarks (odors, colors, sediment): _____
Comments_____
Sample(s) Collected By: _____
Well Volume purge Calc: Length of tubing X 9.6 (ml/ft) + 130 (bladder volume) = Total required purge (liters) before collection of parameters.

FIGURE 1
LOW-FLOW GROUNDWATER SAMPLING DATA SHEET

Date/Time of Sample Collection: 4/18/11 / 13:30 Project Site/Subsite: RFS

Sample ID: RFSGWTP2Ø2

Field ID: TP2 Point Name:

Depth to Well Bottom: 17.2 ft. below top of casing (PVC cap)

Depth to Water Level: 8.69 ft. below PVC cap

Depth to Water Level: _____ ft below PVC cap prior to sampling

Method of Purging: Bladder Pump Submersible Pump Peristaltic Pump

Minimum Purge Volume: Two-inch well _____ Liters
Four-inch well _____ Liters

Control Box Settings: Box #_____ Refill=_____ Discharge=_____

Throttle=_____ psi

Total Purged _____ Liters Purge Rate goal = 0.5 Liters/Min.

Actual Purge Rate:_____ Liters/Min

Purge Calcs

PHYSIO-CHEMICAL PARAMETERS DURING PURGING

Measure in order listed	Initial reading									Stabiliz-ation Criteria	Final
Time	13:11	13:13	13:15	13:18	13:20	13:22	13:24	13:26			
PH	7.69	7.51	7.44	7.41	7.40	7.38	7.38	7.37		+/- 0.2	
Temperature (°C)	16.31	16.28	16.25	16.29	16.29	16.30	16.29	16.30		+/- 2.0 °C	
Specific Conductance (µmhos/cm)	1.234	1.228	1.227	1.224	1.232	1.228	1.231	1.234		+/- 3%	
Turbidity (NTU)	32.4	32.9	26.4	23.0	20.3	17.4	15.4	13.0		+/- 10%	
Dissolved Oxygen (mg/L)	2.50	1.45	1.06	0.87	0.83	0.68	0.68	0.66		+/- 0.2	
ORP (mV)	107	106	107	104	104	103	103	103		+/- 10	
Each Volume Purged (L)	1L	1L	1L	1.5L	1L	1L	1L	1L			
Total Liters Purged	1L	2L	3L	4.5L	5.5L	6.5L	7.5L	8.5L			

Duplicate Sample Collected? (No) Yes (Sample ID of Duplicate) _____

MS/MSD Sample Collected? (No) Yes _____

Sample Remarks (odors, colors, sediment): None

Comments none

Sample(s) Collected By: CT + NS.

Well Volume purge Calc: Length of tubing X 9.6 (ml/ft) + 130 (bladder volume) = Total required purge (liters) before collection of parameters.

FIGURE 1
LOW-FLOW GROUNDWATER SAMPLING DATA SHEET

Date/Time of Sample Collection: 4/18/11 / 1415 Project Site/Subsite: _____
Sample ID: LFSGWTP102
Field ID: TP1 Point Name:
Depth to Well Bottom: 16.1 ft. below top of casing (PVC cap)
Depth to Water Level: 9.02 ft. below PVC cap
Depth to Water Level: _____ ft below PVC cap prior to sampling
Method of Purging: Bladder Pump Submersible Pump
Peristaltic Pump
Minimum Purge Volume: Two-inch well _____ Liters
Four-inch well _____ Liters
Control Box Settings: Box #_____ Refill=_____ Discharge=_____
Throttle=_____ psi
Total Purged _____ Liters Purge Rate goal = 0.5 Liters/Min.
Actual Purge Rate:_____ Liters/Min

Purge Calcs

PHYSIO-CHEMICAL PARAMETERS DURING PURGING

Measure in order listed	Initial reading									Stabiliz-ation Criteria	Final
Time	14.03	14:05	14:07	14:09	14:11	1413					
PH	7.43	7.43	7.47	7.48	7.47	7.48				+/- 0.2	
Temperature (°C)	16.83	16.76	16.56	16.55	16.53	16.53				+/- 2.0 °C	
Specific Conductance (µmhos/cm)	2.61	2.44	2.20	2.19	2.20	2.21				+/- 3%	
Turbidity (NTU)	31.9	14.4	9.8	8.4	7.7	7.3				+/- 10%	
Dissolved Oxygen (mg/L)	0.75	0.40	.30	.26	.22	.21				+/- 0.2	
ORP (mV)	84	40	-49	-128	-147	-151				+/- 10	
Each Volume Purged (L)	1L	1L	1L	1L	1L	1L					
Total Liters Purged	1L	2L	3L	4L	5L	6L					

Duplicate Sample Collected? (No) Yes (Sample ID of Duplicate) _____
MS/MSD Sample Collected? (No) Yes _____
Sample Remarks (odors, colors, sediment): _____
Comments_____
Sample(s) Collected By: _____
Well Volume purge Calc: Length of tubing X 9.6 (ml/ft) + 130 (bladder volume) = Total required purge (liters) before collection of parameters.

FIGURE 1
LOW-FLOW GROUNDWATER SAMPLING DATA SHEET

Date/Time of Sample Collection: 4/18/11 / 1510 Project Site/Subsite: RFS
Sample ID: RFSGWB128002
Field ID: B128 Point Name:
Depth to Well Bottom: 16.0 ft. below top of casing (PVC cap)
Depth to Water Level: 4.60 ft. below PVC cap
Depth to Water Level: 10.94 ft below PVC cap prior to sampling
Method of Purging: Bladder Pump Submersible Pump
Peristaltic Pump
Minimum Purge Volume: Two-inch well _____ Liters
Four-inch well _____ Liters
Control Box Settings: Box #_____ Refill=_____ Discharge=_____
Throttle=_____ psi
Total Purged _____ Liters Purge Rate goal = 0.5 Liters/Min.
Actual Purge Rate:_____ Liters/Min

Purge Calcs

PHYSIO-CHEMICAL PARAMETERS DURING PURGING

Measure in order listed	Initial reading									Stabiliz-ation Criteria	Final
Time	1450	1452	1454	1456	1458	1500	1502	1504			
PH	7.65	7.30	7.16	7.03	6.97	6.92	6.88	6.85		+/- 0.2	
Temperature (°C)	15.74	15.69	15.64	15.59	15.62	15.60	15.59	15.60		+/- 2.0 °C	
Specific Conductance (µmhos/cm)	.751	.745	.746	.745	.742	.736	.735	.737		+/- 3%	
Turbidity (NTU)	11.8	11.7	11.2	10.6	9.5	8.6	8.3	7.6		+/- 10%	
Dissolved Oxygen (mg/L)	.47	.29	.28	.26	.24	.22	.20	.18		+/- 0.2	
ORP (mV)	67	40	-16	-4	8	22	31	29		+/- 10	
Each Volume Purged (L)	1L	1L	1L	1L	1L	1L	1L	1L			
Total Liters Purged	1L	2L	3L	4L	5L	6L	7L	8L			

Duplicate Sample Collected? No (Yes) (Sample ID of Duplicate) _____
MS/MSD Sample Collected? No (Yes) _____
Sample Remarks (odors, colors, sediment): NONE
Comments NONE.
Sample(s) Collected By: CF + NS
Well Volume purge Calc: Length of tubing X 9.6 (ml/ft) + 130 (bladder volume) = Total required purge (liters) before collection of parameters.

FIGURE 1
LOW-FLOW GROUNDWATER SAMPLING DATA SHEET

Date/Time of Sample Collection: 4/15/11 / 1610 Project Site/Subsite: 12FS
Sample ID: RFSGWB277Q2
Field ID: B277 Point Name:
Depth to Well Bottom: 17.60 ft. below top of casing (PVC cap)
Depth to Water Level: 9.89 ft. below PVC cap
Depth to Water Level: 9.91 ft below PVC cap prior to sampling
Method of Purging: Bladder Pump Submersible Pump
Peristaltic Pump
Minimum Purge Volume: Two-inch well _____ Liters
Four-inch well _____ Liters
Control Box Settings: Box #_____Refill=_____Discharge=_____
Throttle=_____psi
Total Purged _____Liters Purge Rate goal = 0.5 Liters/Min.
Actual Purge Rate: .05 Liters/Min

Purge Calcs

PHYSIO-CHEMICAL PARAMETERS DURING PURGING

Measure in order listed	Initial reading									Stabiliz-ation Criteria	Final
Time	1558	1600	1602	1604	1606	1608					
PH	7.46	7.58	7.63	7.77	7.80	7.84				+/- 0.2	
Temperature (°C)	15.71	15.71	15.65	15.69	15.70	15.74				+/- 2.0 °C	
Specific Conductance (µmhos/cm)	.740	.739	.742	.741	.740	.740				+/- 3%	
Turbidity (NTU)	22.8	21.5	18.5	18.0	16.5	16.0				+/- 10%	
Dissolved Oxygen (mg/L)	.81	.41	.32	.26	.24	.22				+/- 0.2	
ORP (mV)	85	76	74	72	71	70				+/- 10	
Each Volume Purged (L)	1L	1L	1L	1L	1L	1L					
Total Liters Purged	1L	2L	3L	4L	5L	6L					

Duplicate Sample Collected? (No) Yes (Sample ID of Duplicate) _____
MS/MSD Sample Collected? (No) Yes _____
Sample Remarks (odors, colors, sediment): none
Comments _____
Sample(s) Collected By: CF+NS
Well Volume purge Calc: Length of tubing X 9.6 (ml/ft) + 130 (bladder volume) = Total required purge (liters) before collection of parameters.

FIGURE 1
LOW-FLOW GROUNDWATER SAMPLING DATA SHEET

Date/Time of Sample Collection: 4/19/11 / 0855 Project Site/Subsite: _____
Sample ID: RFSGWB45002
Field ID: B45 Point Name:
Depth to Well Bottom: 15.65 ft. below top of casing (PVC cap)
Depth to Water Level: 10.6 ft. below PVC cap
Depth to Water Level: 10.64 ft below PVC cap prior to sampling
Method of Purging: Bladder Pump Submersible Pump Peristaltic Pump
Minimum Purge Volume: Two-inch well _____ Liters
Four-inch well _____ Liters
Control Box Settings: Box #_____ Refill=_____ Discharge=_____
Throttle=_____ psi
Total Purged _____ Liters Purge Rate goal = 0.5 Liters/Min.
Actual Purge Rate:_____ Liters/Min

Purge Calcs

PHYSIO-CHEMICAL PARAMETERS DURING PURGING

Measure in order listed	Initial reading									Stabiliz-ation Criteria	Final
Time	0840	0842	0844	0846	0848	0850					
PH	7.85	7.73	7.68	7.64	7.62	7.61				+/- 0.2	
Temperature (°C)	16.21	16.27	16.27	16.27	16.27	16.28				+/- 2.0 °C	
Specific Conductance (µmhos/cm)	1.032	1.045	1.045	1.061	1.060	1.059				+/- 3%	
Turbidity (NTU)	74.3	46.6	36.3	26.5	21.3	18.3				+/- 10%	
Dissolved Oxygen (mg/L)	2.30	2.27	2.23	2.25	2.29	2.34				+/- 0.2	
ORP (mV)	116	114	112	112	111	111				+/- 10	
Each Volume Purged (L)	1L	1L	1L	1L	1L	1L					
Total Liters Purged	FB 1L	2L	3L	4L	5L	6L					

Duplicate Sample Collected? (No) Yes (Sample ID of Duplicate) _____
MS/MSD Sample Collected? (No) Yes _____
Sample Remarks (odors, colors, sediment): _____
Comments_____
Sample(s) Collected By: Keith Baker + Carolyn Ferlic
Well Volume purge Calc: Length of tubing X 9.6 (ml/ft) + 130 (bladder volume) = Total required purge (liters) before collection of parameters.

FIGURE 1
LOW-FLOW GROUNDWATER SAMPLING DATA SHEET

Date/Time of Sample Collection: 4/19/11 / 1005 Project Site/Subsite: _____
Sample ID: RFSGWB480002
Field ID: B480 Point Name:
Depth to Well Bottom: 15.9 ft. below top of casing (PVC cap)
Depth to Water Level: 9.93 ft. below PVC cap
Depth to Water Level: 10.73 ft below PVC cap prior to sampling
Method of Purging: Bladder Pump Submersible Pump (Peristaltic Pump)

Minimum Purge Volume: Two-inch well _____ Liters
Four-inch well _____ Liters

Control Box Settings: Box #_____ Refill=_____ Discharge=_____
Throttle=_____ psi
Total Purged _____ Liters Purge Rate goal = 0.5 Liters/Min.
Actual Purge Rate:_____ Liters/Min

Purge Calcs

PHYSIO-CHEMICAL PARAMETERS DURING PURGING

Measure in order listed	Initial reading									Stabiliz-ation Criteria	Final
Time	0952	0954	0956	0958	1000	1002					
PH	7.73	7.70	7.70	7.70	7.70	7.70				+/- 0.2	
Temperature (°C)	16.09	16.06	16.09	16.09	16.16	16.19				+/- 2.0 °C	
Specific Conductance (µmhos/cm)	1.073	1069	1.075	1.077	1.071	1067				+/- 3%	
Turbidity (NTU)	24.1	20.2	17.5	14.1	13.7	12.2				+/- 10%	
Dissolved Oxygen (mg/L)	2.60	1.57	1.19	1.03	0.91	0.84				+/- 0.2	
ORP (mV)	99	95	93	92	91	91				+/- 10	
Each Volume Purged (L)	1L	1L	1L	1L	1L	1L					
Total Liters Purged	1L	2L	3L	4L	5L	6L					

Duplicate Sample Collected? (No) ~~Yes~~ KB (Sample ID of Duplicate) _____
MS/MSD Sample Collected? (No) Yes _____
Sample Remarks (odors, colors, sediment): _____
Comments _____
Sample(s) Collected By: Keith Baker + Carolyn Ferlic
Well Volume purge Calc: Length of tubing X 9.6 (ml/ft) + 130 (bladder volume) = Total required purge (liters) before collection of parameters.

FIGURE 1
LOW-FLOW GROUNDWATER SAMPLING DATA SHEET

Date/Time of Sample Collection: 4/19/11 / 1055 Project Site/Subsite: _____
Sample ID: RFSGWFG02
Field ID: FG Point Name:
Depth to Well Bottom: 16.49 ft. below top of casing (PVC cap)
Depth to Water Level: 13.13 ft. below PVC cap
Depth to Water Level: 15.13 ft below PVC cap prior to sampling
Method of Purging: Bladder Pump Submersible Pump (Peristaltic Pump)

Minimum Purge Volume: Two-inch well _____ Liters
Four-inch well _____ Liters

Control Box Settings: Box #_____ Refill=_____ Discharge=_____
Throttle=_____ psi
Total Purged _____ Liters Purge Rate goal = 0.5 Liters/Min.
Actual Purge Rate:_____ Liters/Min

Purge Calcs

PHYSIO-CHEMICAL PARAMETERS DURING PURGING

Measure in order listed	Initial reading									Stabiliz-ation Criteria	Final
Time	1035	1037	1039	1041	1043	1045	1047	1049	1051		
PH	7.59	7.39	7.31	7.20	7.13	7.08	7.07	7.08	7.04	+/- 0.2	
Temperature (°C)	16.72	16.65	16.65	16.69	16.73	16.74	16.77	16.82	16.87	+/- 2.0 °C	
Specific Conductance (µmhos/cm)	0.760	0.764	0.767	0.780	0.790	0.797	0.808	0.820	0.824	+/- 3%	
Turbidity (NTU)	34.1	28.1	28.1	28.6	30.7	44.2	50.2	59.9	71.2	+/- 10%	
Dissolved Oxygen (mg/L)	1.68	1.63	1.51	1.40	1.27	1.19	1.06	0.94	0.84	+/- 0.2	
ORP (mV)	114	114	114	114	114	115	114	114	114	+/- 10	
Each Volume Purged (L)	1L	1L	1L	1L	1L	1L	1L	1L	1L		
Total Liters Purged	1L	2L	3L	4L	5L	6L	7L	8L	9L		

Duplicate Sample Collected? No (Yes) (Sample ID of Duplicate) RFSGWFG02-D (1100)
MS/MSD Sample Collected? (No) Yes _____
Sample Remarks (odors, colors, sediment): _____
Comments_____
Sample(s) Collected By: Keith Baker + Carolyn Ferlic
Well Volume purge Calc: Length of tubing X 9.6 (ml/ft) + 130 (bladder volume) = Total required purge (liters) before collection of parameters.

FIGURE 1
LOW-FLOW GROUNDWATER SAMPLING DATA SHEET

Date/Time of Sample Collection: 4/19/11 / 1315 Project Site/Subsite: _____
Sample ID: RFSGWB27802
Field ID: B276 Point Name:
Depth to Well Bottom: 16.2 ft. below top of casing (PVC cap)
Depth to Water Level: 8.55' ft. below PVC cap
Depth to Water Level: 9.75 ft below PVC cap prior to sampling
Method of Purging: Bladder Pump Submersible Pump (Peristaltic Pump)
Minimum Purge Volume: Two-inch well _____ Liters
Four-inch well _____ Liters
Control Box Settings: Box #_____ Refill=_____ Discharge=_____
Throttle=_____psi
Total Purged _____Liters Purge Rate goal = 0.5 Liters/Min.
Actual Purge Rate:_____Liters/Min

Purge Calcs

PHYSIO-CHEMICAL PARAMETERS DURING PURGING

Measure in order listed	Initial reading									Stabiliz-ation Criteria	Final
Time	1300	1302	1304	1306	1308	1310					
PH	7.12	7.31	7.37	7.45	7.48	7.49				+/- 0.2	
Temperature (°C)	15.44	15.35	15.30	15.51	15.53	15.57				+/- 2.0 °C	
Specific Conductance (µmhos/cm)	3.36	3.36	3.37	3.36	3.35	3.35				+/- 3%	
Turbidity (NTU)	26.2	27.0	22.5	21.2	18.9	18.6				+/- 10%	
Dissolved Oxygen (mg/L)	1.50	1.16	1.12	0.94	0.93	0.77				+/- 0.2	
ORP (mV)	111	107	104	103	101	101				+/- 10	
Each Volume Purged (L)	1L	1L	1L	1L	1L	1L					
Total Liters Purged	1L	2L	3L	4L	5L	6L					

Duplicate Sample Collected? (No) Yes (Sample ID of Duplicate) _____
MS/MSD Sample Collected? No (Yes)
Sample Remarks (odors, colors, sediment): _____
Comments_____
Sample(s) Collected By: Keith Bulker + Carolyn Ferlic
Well Volume purge Calc: Length of tubing X 9.6 (ml/ft) + 130 (bladder volume) = Total required purge (liters) before collection of parameters.

FIGURE 1
LOW-FLOW GROUNDWATER SAMPLING DATA SHEET

Date/Time of Sample Collection: 4/19/11 / 1415 Project Site/Subsite: _____
Sample ID: RFSGWEPA02
Field ID: EPA Point Name:
Depth to Well Bottom: 14.23 ft. below top of casing (PVC cap)
Depth to Water Level: 8.20 ft. below PVC cap
Depth to Water Level: 13.00 ft below PVC cap prior to sampling
Method of Purging: Bladder Pump Submersible Pump (Peristaltic Pump)
Minimum Purge Volume: Two-inch well _____ Liters
Four-inch well _____ Liters
Control Box Settings: Box #_____ Refill=_____ Discharge=_____
Throttle=_____ psi
Total Purged _____ Liters Purge Rate goal = 0.5 Liters/Min.
Actual Purge Rate:_____ Liters/Min

Purge Calcs

PHYSIO-CHEMICAL PARAMETERS DURING PURGING

Measure in order listed	Initial reading									Stabiliz-ation Criteria	Final
Time	1355	1357	1359	1401	1403	1405	1407	1409			
PH	8.07	8.12	8.14	8.15	8.17	8.18	8.20	8.19		+/- 0.2	
Temperature (°C)	15.55	15.04	14.94	14.87	14.84	14.85	14.87	14.88		+/- 2.0 °C	
Specific Conductance (µmhos/cm)	1.73	1.71	1.72	1.72	1.73	1.73	1.75	1.76		+/- 3%	
Turbidity (NTU)	36.9	27.5	27.7	27.7	20.7	20.7	21.6	20.5		+/- 10%	
Dissolved Oxygen (mg/L)	0.99	0.46	0.53	0.78	1.21	1.35	1.48	1.43		+/- 0.2	
ORP (mV)	83	80	78	77	75	74	73	73		+/- 10	
Each Volume Purged (L)	1L	1L	1L	1L	1L	1L	1L	1L			
Total Liters Purged	1L	2L	3L	4L	5L	6L	7L	8L			

Duplicate Sample Collected? (No) Yes (Sample ID of Duplicate) _____
MS/MSD Sample Collected? (No) Yes _____
Sample Remarks (odors, colors, sediment): _____
Comments_____
Sample(s) Collected By: Keith Baker + Carolyn Feelie
Well Volume purge Calc: Length of tubing X 9.6 (ml/ft) + 130 (bladder volume) = Total required purge (liters) before collection of parameters.

FIGURE 1
LOW-FLOW GROUNDWATER SAMPLING DATA SHEET

Date/Time of Sample Collection: 4/19/11 / 1450 Project Site/Subsite: _____
Sample ID: RFSGWCTPS02
Field ID: CTPS Point Name:
Depth to Well Bottom: 14.0 ft. below top of casing (PVC cap)
Depth to Water Level: 8.45 ft. below PVC cap
Depth to Water Level: 11.42 ft below PVC cap prior to sampling
Method of Purging: Bladder Pump Submersible Pump (Peristaltic Pump)

Minimum Purge Volume: Two-inch well _____ Liters
Four-inch well _____ Liters
Control Box Settings: Box #_____Refill=_____Discharge=_____
Throttle=_____psi
Total Purged _____Liters Purge Rate goal = 0.5 Liters/Min.
Actual Purge Rate:_____Liters/Min

Purge Calcs

PHYSIO-CHEMICAL PARAMETERS DURING PURGING

Measure in order listed	Initial reading									Stabiliz-ation Criteria	Final
Time	1437	1439	1441	1443	1445						
PH	8.22	7.86	7.69	7.60	7.55					+/- 0.2	
Temperature (°C)	15.30	15.13	15.00	14.90	14.98					+/- 2.0 °C	
Specific Conductance (µmhos/cm)	0.777	0.788	0.815	0.821	0.819					+/- 3%	
Turbidity (NTU)	15.7	13.9	13.6	12.6	13.7					+/- 10%	
Dissolved Oxygen (mg/L)	2.42	2.43	2.70	2.79	2.80					+/- 0.2	
ORP (mV)	91	95	95	95	96					+/- 10	
Each Volume Purged (L)	1L	1L	1L	1L	1L						
Total Liters Purged	1L	2L	3L	4L	5L						

Duplicate Sample Collected? (No) Yes (Sample ID of Duplicate) _____
MS/MSD Sample Collected? (No) Yes _____
Sample Remarks (odors, colors, sediment): _____
Comments_____
Sample(s) Collected By: Keith Baker + Carolyn Ferlic
Well Volume purge Calc: Length of tubing X 9.6 (ml/ft) + 130 (bladder volume) = Total required purge (liters) before collection of parameters.

FIGURE 1
LOW-FLOW GROUNDWATER SAMPLING DATA SHEET

Date/Time of Sample Collection: 4/19/11 / 1540 Project Site/Subsite: _____
Sample ID: RFSGWB3802
Field ID: B38 Point Name:
Depth to Well Bottom: 15.91 ft. below top of casing (PVC cap)
Depth to Water Level: 6.29 ft. below PVC cap
Depth to Water Level: 6.37 ft below PVC cap prior to sampling
Method of Purging: Bladder Pump Submersible Pump
Peristaltic Pump
Minimum Purge Volume: Two-inch well _____ Liters
Four-inch well _____ Liters
Control Box Settings: Box #_____Refill=_____Discharge=_____
Throttle=_____psi
Total Purged _____Liters Purge Rate goal = 0.5 Liters/Min.
Actual Purge Rate:_____Liters/Min

Purge Calcs

PHYSIO-CHEMICAL PARAMETERS DURING PURGING

Measure in order listed	Initial reading									Stabiliz-ation Criteria	Final
Time	1523	1525	1527	1529	1531	1533	1535				
PH	7.82	7.55	7.45	7.39	7.37	7.35	7.33			+/- 0.2	
Temperature (°C)	14.94	14.57	14.54	14.53	14.52	18 14.55	14.50			+/- 2.0 °C	
Specific Conductance (µmhos/cm)	0.470	0.466	0.467	0.475	0.478	0.484	.490			+/- 3%	
Turbidity (NTU)	59.1	42.0	31.7	28.7	33.0	24.0	24.7			+/- 10%	
Dissolved Oxygen (mg/L)	1.89	0.79	0.58	0.52	0.53	0.53	0.56			+/- 0.2	
ORP (mV)	99	98	96	96	95	95	95			+/- 10	
Each Volume Purged (L)	1L	1L	1L	1L	1L	1L	1L				
Total Liters Purged	1L	2L	3L	4L	5L	6L	7L				

Duplicate Sample Collected? ~~No~~ (Yes) (Sample ID of Duplicate) RFSGWB3802-D (1545)
MS/MSD Sample Collected? (No) Yes _____
Sample Remarks (odors, colors, sediment): _____
Comments_____
Sample(s) Collected By: Keith Baker + Carolyn Ferlic
Well Volume purge Calc: Length of tubing X 9.6 (ml/ft) + 130 (bladder volume) = Total required purge (liters) before collection of parameters.

FIGURE 1
LOW-FLOW GROUNDWATER SAMPLING DATA SHEET

Date/Time of Sample Collection: 4/20/11 / 0800 Project Site/Subsite: _____
Sample ID: RFSGWGE0002
Field ID: ~~GWF~~ GE0 Point Name:
Depth to Well Bottom: 10.15 ft. below top of casing (PVC cap)
Depth to Water Level: 7.95' ft. below PVC cap
Depth to Water Level: 8.12 ft below PVC cap prior to sampling
Method of Purging: Bladder Pump Submersible Pump (Peristaltic Pump)

Minimum Purge Volume: Two-inch well _____ Liters
Four-inch well _____ Liters

Control Box Settings: Box #_____ Refill=_____ Discharge=_____
Throttle=_____ psi
Total Purged _____ Liters Purge Rate goal = 0.5 Liters/Min.
Actual Purge Rate:_____ Liters/Min

Purge Calcs

PHYSIO-CHEMICAL PARAMETERS DURING PURGING

Measure in order listed	Initial reading									Stabilization Criteria	Final
Time	0740	0742	0744	0746	0748	0750	0752	0754	0756		
PH	7.32	7.50	7.67	7.69	7.74	7.76	7.74	7.77	7.76	+/- 0.2	
Temperature (°C)	14.74	14.69	14.67	14.65	14.65	14.64	14.65	14.64	14.65	+/- 2.0 °C	
Specific Conductance (µmhos/cm)	0.918	0.916	0.916	0.918	0.918	0.918	0.915	0.917	0.915	+/- 3%	
Turbidity (NTU)	18.5	17.1	18.0	18.2	15.8	14.8	14.4	14.1	13.6	+/- 10%	
Dissolved Oxygen (mg/L)	1.92	1.08	0.68	0.42	0.33	0.28	0.27	0.26	0.28	+/- 0.2	
ORP (mV)	136	129	122	116	104	97	90	85	80	+/- 10	
Each Volume Purged (L)	1L	1L	1L	1L	1L	1L	1L	1L	1L		
Total Liters Purged	1L	2L	3L	4L	5L	6L	7L	8L	9L		

Duplicate Sample Collected? (No) Yes (Sample ID of Duplicate) _____
MS/MSD Sample Collected? (No) Yes _____
Sample Remarks (odors, colors, sediment): _____
Comments _____
Sample(s) Collected By: Keith Baker + Carolyn Ferlic
Well Volume purge Calc: Length of tubing X 9.6 (ml/ft) + 130 (bladder volume) = Total required purge (liters) before collection of parameters.

FIGURE 1
LOW-FLOW GROUNDWATER SAMPLING DATA SHEET

Date/Time of Sample Collection: 4/20/11 / 0845 Project Site/Subsite: _____
Sample ID: RFSGWNRLF02
Field ID: NRLF Point Name:
Depth to Well Bottom: 18.89' ft. below top of casing (PVC cap)
Depth to Water Level: 12.22' ft. below PVC cap
Depth to Water Level: 14.04' ft below PVC cap prior to sampling
Method of Purging: Bladder Pump Submersible Pump (Peristaltic Pump)
Minimum Purge Volume: Two-inch well _____ Liters
Four-inch well _____ Liters
Control Box Settings: Box #_____ Refill=_____ Discharge=_____
Throttle=_____ psi
Total Purged _____ Liters Purge Rate goal = 0.5 Liters/Min.
Actual Purge Rate:_____ Liters/Min

Purge Calcs

PHYSIO-CHEMICAL PARAMETERS DURING PURGING

Measure in order listed	Initial reading									Stabilization Criteria	Final
Time	0828	0830	0832	0834	0836	0838	0840	0842	0844		
PH	8.01	7.78	7.73	7.69	7.72	7.66	7.67	7.67	7.66	+/- 0.2	
Temperature (°C)	15.13	15.32	15.31	15.33	15.32	15.40	15.44	15.46	15.50	+/- 2.0 °C	
Specific Conductance (µmhos/cm)	.932	0.933	0.935	0.941	0.947	0.952	0.949	0.950	0.952	+/- 3%	
Turbidity (NTU)	25.7	17.5	14.9	13.1	13.3	13.3	12.9	12.8	12.4	+/- 10%	
Dissolved Oxygen (mg/L)	0.95	0.37	0.30	0.25	0.21	0.19	0.17	0.17	0.16	+/- 0.2	
ORP (mV)	61	42	31	18	-2	-11	-33	-47	-58	+/- 10	
Each Volume Purged (L)	1L	1L	1L	1L	1L	1L	1L	1L	1L		
Total Liters Purged	1L	2L	3L	4L	5L	6L	7L	8L	9L		

Duplicate Sample Collected? (No) Yes (Sample ID of Duplicate) _____
MS/MSD Sample Collected? (No) Yes _____
Sample Remarks (odors, colors, sediment): _____
Comments_____
Sample(s) Collected By: Keith Baker + Carolyn Ferlic
Well Volume purge Calc: Length of tubing X 9.6 (ml/ft) + 130 (bladder volume) = Total required purge (liters) before collection of parameters.

FIGURE 1
LOW-FLOW GROUNDWATER SAMPLING DATA SHEET

Date/Time of Sample Collection: 4/28/11 / 0930 Project Site/Subsite: _____
Sample ID: RFSGWB46002
Field ID: B460 Point Name:
Depth to Well Bottom: 18.23' ft. below top of casing (PVC cap)
Depth to Water Level: 10.45' ft. below PVC cap
Depth to Water Level: 12.35' ft below PVC cap prior to sampling
Method of Purging: Bladder Pump Submersible Pump (Peristaltic Pump)
Minimum Purge Volume: Two-inch well _____ Liters
Four-inch well _____ Liters
Control Box Settings: Box #_____Refill=_____Discharge=_____
Throttle=_____psi
Total Purged _____Liters Purge Rate goal = 0.5 Liters/Min.
Actual Purge Rate:_____Liters/Min

Purge Calcs

PHYSIO-CHEMICAL PARAMETERS DURING PURGING

Measure in order listed	Initial reading									Stabiliz-ation Criteria	Final
Time	0922	0924	0926	0928							
PH	7.99	7.93	7.91	7.91						+/- 0.2	
Temperature (°C)	15.08	15.05	14.94	14.89						+/- 2.0 °C	
Specific Conductance (µmhos/cm)	0.531	0.525	0.527	0.531						+/- 3%	
Turbidity (NTU)	19.2	18.4	17.7	16.0						+/- 10%	
Dissolved Oxygen (mg/L)	0.90	0.63	0.51	0.43						+/- 0.2	
ORP (mV)	3	7	12	17						+/- 10	
Each Volume Purged (L)	1L	1L	1L	1L							
Total Liters Purged	1L	2L	3L	4L							

Duplicate Sample Collected? (No) Yes (Sample ID of Duplicate) _____
MS/MSD Sample Collected? (No) Yes _____
Sample Remarks (odors, colors, sediment): _____
Comments_____
Sample(s) Collected By: Keith Baker + Carolyn Ferlic
Well Volume purge Calc: Length of tubing X 9.6 (ml/ft) + 130 (bladder volume) = Total required purge (liters) before collection of parameters.

FIGURE 1
LOW-FLOW GROUNDWATER SAMPLING DATA SHEET

Date/Time of Sample Collection: 4/24/11 / 1030 Project Site/Subsite: _____
Sample ID: RFSGWB49002
Field ID: B490 Point Name:
Depth to Well Bottom: 18.10' ft. below top of casing (PVC cap)
Depth to Water Level: 13.45' ft. below PVC cap
Depth to Water Level: 13.40' ft below PVC cap prior to sampling
Method of Purging: Bladder Pump Submersible Pump (Peristaltic Pump)

Minimum Purge Volume: Two-inch well _____ Liters
Four-inch well _____ Liters

Control Box Settings: Box #_____ Refill=_____ Discharge=_____
Throttle=_____ psi
Total Purged _____ Liters Purge Rate goal = 0.5 Liters/Min.
Actual Purge Rate:_____ Liters/Min

Purge Calcs

PHYSIO-CHEMICAL PARAMETERS DURING PURGING

Measure in order listed	Initial reading									Stabiliz-ation Criteria	Final
Time	1020	1022	1024	1026							
PH	7.95	7.81	7.80	7.73						+/- 0.2	
Temperature (°C)	16.35	16.12	15.96	15.93						+/- 2.0 °C	
Specific Conductance (µmhos/cm)	0.821	0.866	0.873	0.873						+/- 3%	
Turbidity (NTU)	15.7	16.9	13.5	12.9						+/- 10%	
Dissolved Oxygen (mg/L)	2.68	3.15	3.19	3.31						+/- 0.2	
ORP (mV)	72	73	73	74						+/- 10	
Each Volume Purged (L)	1L	1L	1L	1L							
Total Liters Purged	1L	2L	3L	4L							

Duplicate Sample Collected? (No) Yes (Sample ID of Duplicate) _____
MS/MSD Sample Collected? (No) Yes _____
Sample Remarks (odors, colors, sediment): _____
Comments_____
Sample(s) Collected By: Keith Baker + Carolyn Ferlic
Well Volume purge Calc: Length of tubing X 9.6 (ml/ft) + 130 (bladder volume) = Total required purge (liters) before collection of parameters.

FIGURE 1
LOW-FLOW GROUNDWATER SAMPLING DATA SHEET

Date/Time of Sample Collection: 4/20/11 / 1125 Project Site/Subsite: _____
Sample ID: RFSGWPZ1102
Field ID: PZ11 Point Name:
Depth to Well Bottom: 18.9' ft. below top of casing (PVC cap)
Depth to Water Level: 8.08' ft. below PVC cap
Depth to Water Level: 8.14' ft below PVC cap prior to sampling
Method of Purging: Bladder Pump Submersible Pump
Peristaltic Pump
Minimum Purge Volume: Two-inch well _____ Liters
Four-inch well _____ Liters
Control Box Settings: Box #_____Refill=_____Discharge=_____
Throttle=_____psi
Total Purged _____Liters Purge Rate goal = 0.5 Liters/Min.
Actual Purge Rate:_____Liters/Min

Purge Calcs

PHYSIO-CHEMICAL PARAMETERS DURING PURGING

Measure in order listed	Initial reading									Stabiliz-ation Criteria	Final
Time	1112	1114	1116	1118	1120	1122					
PH	6.89	5.99	5.72	5.53	5.44	5.33				+/- 0.2	
Temperature (°C)	15.02	14.90	14.88	14.89	14.90	14.90				+/- 2.0 °C	
Specific Conductance (µmhos/cm)	3.56	3.63	3.64	3.65	3.66	3.66				+/- 3%	
Turbidity (NTU)	26.2	24.5	22.4	18.3	18.2	17.6				+/- 10%	
Dissolved Oxygen (mg/L)	1.68	1.00	0.78	0.54	0.45	0.38				+/- 0.2	
ORP (mV)	165	172	177	183	182	183				+/- 10	
Each Volume Purged (L)	1L	1L	1L	1L	1L	1L					
Total Liters Purged	1L	2L	3L	4L	5L	6L					

Duplicate Sample Collected? (No) Yes (Sample ID of Duplicate) _____
MS/MSD Sample Collected? (No) Yes _____
Sample Remarks (odors, colors, sediment): _____
Comments_____
Sample(s) Collected By: Keith Baker + Carolyn Ferlic
Well Volume purge Calc: Length of tubing X 9.6 (ml/ft) + 130 (bladder volume) = Total required purge (liters) before collection of parameters.

FIGURE 1
LOW-FLOW GROUNDWATER SAMPLING DATA SHEET

Date/Time of Sample Collection: 4/20/11 / 1315 Project Site/Subsite: _____
Sample ID: RFSGWPZ902
Field ID: PZ9 Point Name:
Depth to Well Bottom: 19.6 ft. below top of casing (PVC cap)
Depth to Water Level: 11.21' ft. below PVC cap
Depth to Water Level: ~~19.6'~~ 11.65' ft below PVC cap prior to sampling
Method of Purging: Bladder Pump Submersible Pump (Peristaltic Pump)
Minimum Purge Volume: Two-inch well _____ Liters
Four-inch well _____ Liters
Control Box Settings: Box #_____ Refill=_____ Discharge=_____
Throttle=_____ psi
Total Purged _____ Liters Purge Rate goal = 0.5 Liters/Min.
Actual Purge Rate:_____ Liters/Min

Purge Calcs

PHYSIO-CHEMICAL PARAMETERS DURING PURGING

Measure in order listed	Initial reading									Stabiliz-ation Criteria	Final
Time	1300	1302	1304	1306	1308	1310	1312				
PH	6.97	7.13	7.14	7.18	7.18	7.20	7.22			+/- 0.2	
Temperature (°C)	16.99	16.80	16.83	16.85	16.86	16.89	16.93			+/- 2.0 °C	
Specific Conductance (µmhos/cm)	0.646	0.623	0.618	0.612	0.609	0.605	0.606			+/- 3%	
Turbidity (NTU)	33.7	18.3	13.7	12.5	12.3	9.2	9.4			+/- 10%	
Dissolved Oxygen (mg/L)	0.61	0.36	0.28	0.23	0.21	0.19	0.18			+/- 0.2	
ORP (mV)	116	112	106	101	94	90	86			+/- 10	
Each Volume Purged (L)	1L	1L	1L	1L	1L	1L	1L				
Total Liters Purged	1L	2L	3L	4L	5L	6L	7L				

Duplicate Sample Collected? (No) Yes (Sample ID of Duplicate) _____
MS/MSD Sample Collected? (No) Yes _____
Sample Remarks (odors, colors, sediment): _____
Comments_____
Sample(s) Collected By: Keith Baker + Carolyn Ferlic
Well Volume purge Calc: Length of tubing X 9.6 (ml/ft) + 130 (bladder volume) = Total required purge (liters) before collection of parameters.

FIGURE 1
LOW-FLOW GROUNDWATER SAMPLING DATA SHEET

Date/Time of Sample Collection: 4/20/11 / 1355 Project Site/Subsite: _____
Sample ID: RFSGWB47302
Field ID: B473 Point Name:
Depth to Well Bottom: 17.1' ft. below top of casing (PVC cap)
Depth to Water Level: 9.97' ft. below PVC cap
Depth to Water Level: 11.36' ft below PVC cap prior to sampling
Method of Purging: Bladder Pump Submersible Pump Peristaltic Pump
Minimum Purge Volume: Two-inch well _____ Liters
Four-inch well _____ Liters
Control Box Settings: Box #_____ Refill=_____ Discharge=_____
Throttle=_____ psi
Total Purged _____ Liters Purge Rate goal = 0.5 Liters/Min.
Actual Purge Rate:_____ Liters/Min

Purge Calcs

PHYSIO-CHEMICAL PARAMETERS DURING PURGING

Measure in order listed	Initial reading									Stabiliz-ation Criteria	Final
Time	1340	1342	1344	1346	1348	1350					
PH	7.74	7.71	7.77	7.78	7.79	7.77				+/- 0.2	
Temperature (°C)	15.98	15.83	15.63	15.54	15.55	15.55				+/- 2.0 °C	
Specific Conductance (µmhos/cm)	1.032	1.009	0.876	0.822	0.828	0.845				+/- 3%	
Turbidity (NTU)	16.0	16.2	12.1	10.9	10.4	9.8				+/- 10%	
Dissolved Oxygen (mg/L)	2.89	2.90	2.89	2.82	2.80	2.82				+/- 0.2	
ORP (mV)	72	71	71	71	71	71				+/- 10	
Each Volume Purged (L)	1L	1L	1L	1L	1L	1L					
Total Liters Purged	1L	2L	3L	4L	5L	6L					

Duplicate Sample Collected? (No) Yes (Sample ID of Duplicate) _____
MS/MSD Sample Collected? (No) Yes _____
Sample Remarks (odors, colors, sediment): _____
Comments _____
Sample(s) Collected By: Keith Baker + Carolyn Ferlic
Well Volume purge Calc: Length of tubing X 9.6 (ml/ft) + 130 (bladder volume) = Total required purge (liters) before collection of parameters.

FIGURE 1
LOW-FLOW GROUNDWATER SAMPLING DATA SHEET

Date/Time of Sample Collection: 4/20/11 / 1435 Project Site/Subsite: RFS.
Sample ID: RFSGWB47402
Field ID: B477 Point Name:
Depth to Well Bottom: 19.8 ft. below top of casing (PVC cap)
Depth to Water Level: 12.12 ft. below PVC cap
Depth to Water Level: 15.67 ft below PVC cap prior to sampling
Method of Purging: Bladder Pump Submersible Pump (Peristaltic Pump)
Minimum Purge Volume: Two-inch well _____ Liters
Four-inch well _____ Liters
Control Box Settings: Box #_____ Refill=_____ Discharge=_____
Throttle=_____ psi
Total Purged _____ Liters Purge Rate goal = 0.5 Liters/Min.
Actual Purge Rate:_____ Liters/Min

Purge Calcs

PHYSIO-CHEMICAL PARAMETERS DURING PURGING

Measure in order listed	Initial reading									Stabiliz-ation Criteria	Final
Time	1417	1419	1421	1423	1425	1427	1429	1431	1433		
PH	8.10	8.01	7.97	7.95	7.94	7.93	7.93	7.96	7.94	+/- 0.2	
Temperature (°C)	15.86	15.71	15.53	15.46	15.42	15.37	15.37	15.31	15.38	+/- 2.0 °C	
Specific Conductance (µmhos/cm)	0.664	0.662	0.663	0.666	0.667	0.670	0.696	0.678	0.680	+/- 3%	
Turbidity (NTU)	21.1	14.6	15.8	17.2	11.1	10.0	9.3	9.9	10.3	+/- 10%	
Dissolved Oxygen (mg/L)	1.39	0.61	0.42	0.31	0.25	0.20	0.20	0.22	0.24	+/- 0.2	
ORP (mV)	72	71	61	60	49	1	-32	-79	-106	+/- 10	
Each Volume Purged (L)	1L	1L	1L	1L	1L	1L	1L	1L	1L		
Total Liters Purged	1L	2L	3L	4L	5L	6L	7L	8L	9L		

Duplicate Sample Collected? (No) Yes (Sample ID of Duplicate) _____
MS/MSD Sample Collected? (No) Yes _____
Sample Remarks (odors, colors, sediment): _____
Comments_____
Sample(s) Collected By: Keith Baker + Carolyn Ferlic
Well Volume purge Calc: Length of tubing X 9.6 (ml/ft) + 130 (bladder volume) = Total required purge (liters) before collection of parameters.

FIGURE 1
LOW-FLOW GROUNDWATER SAMPLING DATA SHEET

Date/Time of Sample Collection: 4/20/11 / 1520 Project Site/Subsite: _____
Sample ID: RFSGWEERC02
Field ID: EERC Point Name:
Depth to Well Bottom: 17.2' ft. below top of casing (PVC cap)
Depth to Water Level: 10.12' ft. below PVC cap
Depth to Water Level: 12.45' ft below PVC cap prior to sampling
Method of Purging: Bladder Pump Submersible Pump Peristaltic Pump
Minimum Purge Volume: Two-inch well _____ Liters
Four-inch well _____ Liters
Control Box Settings: Box #_____ Refill=_____ Discharge=_____
Throttle=_____ psi
Total Purged _____ Liters Purge Rate goal = 0.5 Liters/Min.
Actual Purge Rate:_____ Liters/Min

Purge Calcs

PHYSIO-CHEMICAL PARAMETERS DURING PURGING

Measure in order listed	Initial reading									Stabiliz-ation Criteria	Final
Time	1502	1504	1506	1508	1510	1512	1514	1516			
PH	7.51	7.41	7.39	7.39	7.36	7.38	7.38	7.39		+/- 0.2	
Temperature (°C)	15.60	15.11	14.97	14.94	14.92	14.92	14.90	14.85		+/- 2.0 °C	
Specific Conductance (µmhos/cm) KD	6.15 ~~6.80~~	5.84	5.83	5.81	5.80	5.79	5.77	5.75		+/- 3%	
Turbidity (NTU)	9.5	8.5	8.6	7.9	7.8	8.0	7.9	8.2		+/- 10%	
Dissolved Oxygen (mg/L)	0.73	0.33	0.24	0.20	0.16	0.15	0.14	0.13		+/- 0.2	
ORP (mV)	-18	2	13	24	35	42	47	51		+/- 10	
Each Volume Purged (L)	1L	1L	1L	1L	1L	1L	1L	1L			
Total Liters Purged	1L	2L	3L	4L	5L	6L	7L	8L			

Duplicate Sample Collected? (No) Yes (Sample ID of Duplicate) _____
MS/MSD Sample Collected? (No) Yes _____
Sample Remarks (odors, colors, sediment): _____
Comments_____
Sample(s) Collected By: Keith Baker + Carolyn Ferlic
Well Volume purge Calc: Length of tubing X 9.6 (ml/ft) + 130 (bladder volume) = Total required purge (liters) before collection of parameters.

ATTACHMENT 2

COMPLETE ANALYTICAL RESULTS

(lab reports – electronic copy only)

ATTACHMENT 2: SUMMARY OF COMPLETE ANALYTICAL RESULTS FOR GROUNDWATER SAMPLES

Technical Memorandum: Sampling Results for Phase I Groundwater Sampling, Field Sampling Workplan
University of California, Berkeley, Richmond Field Station, Richmond, California

		METALS (ug/L)																		
Location ID	Date Collected	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead	Magnesium	Manganses	Mercury	Molybdenum	Nickel	Potassium	
CCCT	09/03/2010	55	1U	3.9	28	.5U	210	1U	100000	1U	2	1.8J	260	2U	81000	1400	.015J	2.5	6.6	5000	METAL
	04/18/2011	50U	.6J	1.7J	24	1UJ	NA	2U	100000	1.3U	1U	12J	50UJ	.69J	68000	86	.12J	1.7	1U	2300	DMETAL
B120	09/09/2010	33	1U	2.2	26	.5U	100	1U	170000	1.2	.4J	2.2	59J	2U	150000	92	.03U	2.7	7.1	1600J	METAL
	04/15/2011	75UJ	1U	1.6J	20	1UJ	NA	2U	210000	.34J	1U	4.3	16J	.43J	180000	140	.2U	2.2UJ	1U	1300	DMETAL
B121	09/08/2010	33	1U	1.8	57	.5U	86J	1U	49000	1.5	.31J	2U	100U	2U	39000	320	.02J	1.7	4.3	1600J	METAL
	04/13/2011	50UJ	.2J	1.2	55	1U	NA	1U	42000	1.3	.14J	.5J	50U	.31J	34000	7.7	.2U	.33J	1.2	850	DMETAL
B128	09/23/2010	55	1U	5.7	23	.5U	320	1U	69000	1.1	.58	1.3J	250	2U	46000	360	.048	2.8	2.7	6400	METAL
	09/23/2010	41	1U	3.5	24	.5U	280	1U	64000	1.1	.28J	1.6J	72J	2U	39000	56	.015J	1.7	2	7700	METAL
	04/18/2011	50U	.7J	.95J	41	1UJ	NA	2U	27000	1U	1U	8.4J	50UJ	.71J	16000	69	.11J	.91J	10	730	DMETAL
B150	09/08/2010	14J	1U	.89J	12	.5U	95J	1U	27000	1U	.5U	1.6J	100U	2U	19000	30	.03U	.36J	5.3	1300J	METAL
	04/13/2011	50UJ	.19J	.57J	26	1U	NA	.44J	18000	.73J	1U	4.2J	50U	.46J	14000	2.2	.2U	1U	2.7	560	DMETAL
B158	09/08/2010	590	1U	6.3	13	.5U	64J	1U	4200	2.8	.5U	1.4J	500	2U	2600	13	.03U	.87	1.8	1100J	METAL
	04/15/2011	120J	.3J	4.5	6	1UJ	NA	2U	3600	1.3	1U	6.8	66	.47J	1900	1.8	.2U	1.9U	1U	380	DMETAL
B163	09/02/2010	44	1U	1.6	17	.5U	240	5.2	260000	5U	6	2.5	70J	2U	200000	17000	.083	.95	170	2800	METAL
	04/12/2011	50U	.18J	1.3	12	1U	NA	5.5	230000	.14J	4.6	.35J	50U	.38J	180000	15000	.2UJ	.23J	180	1500	DMETAL
	04/12/2011	58	.17J	.74J	13	1U	NA	6.2	240000	.23J	4.8	1U	89UJ	1U	190000	19000	.19J	1UJ	200	1600	METAL
B175S	09/03/2010	17J	1U	1.6	56	.5U	97J	1U	53000	.81J	.36J	1.4J	100U	2U	43000	250	.072	1.3	3.3	2100	METAL
	04/13/2011	50U	1U	.69J	33	1U	NA	.43J	38000	.8J	1U	1UJ	50U	.4J	30000	12	.2U	.23J	2.3	740	DMETAL
B175W	09/08/2010	99	1U	1.7	26	.5U	130	1U	17000	1.3	.5U	1J	120	2U	12000	17	.03U	.54	2.5	2700	METAL
	04/13/2011	50U	.18J	2.1	11	1U	NA	.26J	15000	.43J	1U	4.7J	50U	.54J	9700	3.2	.2U	.78J	.96J	1600	DMETAL
B177	09/23/2010	22	1U	1.1	32	.5U	77J	1U	12000	.91J	.5U	1.7J	100U	2U	9900	3.9	.03U	.27J	1.8	2000U	METAL
	04/18/2011	9.9J	.41J	.48J	63	1UJ	NA	2U	15000	.55J	1U	2.6J	50UJ	.41J	14000	.95J	.038J	.52J	1U	280	DMETAL
B178	09/02/2010	20U	1U	1.8	25	.5U	130	1U	170000	1U	.87	2.2	100U	2U	140000	570	.03U	2.4	7.5	2800	METAL
	04/15/2011	75UJ	1.1U	1.6J	20	3.2UJ	NA	2U	170000	1.3U	.44J	2.7	89U	1.9U	140000	430	.2U	2.4UJ	1U	1400	DMETAL
B180	09/15/2010	380	1U	3.8	22	.5U	74J	1U	5600	2.9	.5	3.6	400	2U	5200	20	.03U	1.2	2.2	2000U	METAL
	04/13/2011	50UJ	.22J	2.9	6.5	1U	NA	.46J	5500	2.9	1U	36J	50U	2.7	4200	2.7	.2U	.91J	.53J	640	DMETAL

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University of California, Berkeley, Richmond Field Station, Richmond, California

		METALS (ug/L)																		
Location ID	Date Collected	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead	Magnesium	Manganses	Mercury	Molybdenum	Nickel	Potassium	
B185	09/02/2010	10J	1U	1.7	15	.5U	120	1U	160000	.57J	.63	1.6J	100U	2U	130000	330	.03U	1	7.1	2400	METAL
	04/15/2011	75UJ	1.1U	1.1J	13	3.2UJ	NA	2U	150000	.39J	1U	6.4	16J	1.9U	120000	130	.2U	1.9U	1U	990	DMETAL
B194	09/09/2010	64	1U	2.6	55	.5U	160	1U	55000	.97J	.42J	1.7J	84J	2U	39000	180	.03U	2.3	1.8	4400	METAL
	04/13/2011	50U	.19J	1.8	100	1U	NA	1.2	51000	.99J	1U	1.5J	50U	.41J	35000	1.8	.2U	.74J	.79J	1100	DMETAL
B195	09/09/2010	53	1U	2	34	.5U	110	1U	150000	.73J	.45J	1.8J	73J	2U	110000	63	10	1.1	3.1	2900	METAL
	04/13/2011	50U	.21J	1.5	18	1U	NA	.28J	51000	.78J	1U	75J	50U	4.6	36000	5	1.2	.36J	1.1	570	DMETAL
	04/13/2011	64	.19J	.77J	20	1U	NA	.28J	55000	.8J	.13J	1U	50UJ	1U	39000	11	2.4	1UJ	1.1	660	METAL
B197	09/09/2010	17J	1U	1.8	26	.5U	98J	1U	140000	1.1	.3J	1.7J	100U	2U	120000	36	.03U	1.5	2.8	2000	METAL
	09/09/2010	20U	1U	1.8	25	.5U	93J	1U	140000	1.2	.29J	1.6J	100U	2U	120000	34	.03U	1.4	2.6	1800J	METAL
	04/13/2011	50U	.17J	2	28	1U	NA	1U	160000	1U	1.6	1UJ	50U	.31J	150000	1300	.2U	1.3	8.4	1300	DMETAL
B277	09/15/2010	35	1U	1.9	34	.5U	110	1U	54000	1.8	.5U	2U	100U	2U	23000	9.9	.03U	1	1U	2000	METAL
	04/18/2011	50U	1U	2.2	73	1UJ	NA	2U	57000	1.8	1U	3.3J	50UJ	.54J	22000	37	.07J	1.4	1U	1200	DMETAL
B278	09/16/2010	23J	1U	2	56	.5U	140	1U	280000	1.6	.57	1.8J	100U	2U	150000	150	.015J	.62	2.7	3900	METAL
	04/19/2011	50U	.78J	1.5J	59	1U	NA	2U	230000	1.4	1U	1.1J	89UJ	.94J	130000	35	.15J	1.9UJ	2.3J	2100	DMETAL
B280A	09/16/2010	20U	1U	1.4	66	.5U	94J	1U	68000	.93J	.5U	1.1J	100U	2U	29000	15	.03U	1.6	.77J	1200J	METAL
	04/14/2011	75U	1.1U	1J	84	1UJ	NA	2U	50000	.25J	1U	1.9J	24J	1.9U	22000	8.3	.2U	1.9UJ	1U	570	DMETAL
B280B	10/01/2010	19J	1U	3.4	8	.5U	280	1U	51000	1.5	.5U	2U	100U	2U	25000	7.2	.03U	3.8	.62J	8900	METAL
	04/14/2011	50U	1.1U	1.7J	6.4	1UJ	NA	2U	53000	2.1	1U	5.8	23J	1.9U	20000	.86J	.2U	1.9UJ	1U	3900	DMETAL
B300	09/09/2010	23	1U	2	90	.5U	150	1U	150000	1.7	.48J	1.3J	100U	2U	82000	110	.03U	1	2.8	4100	METAL
	04/15/2011	50UJ	1U	1.4J	250	1UJ	NA	2U	280000	1U	8.9	6	1200	.5J	160000	12000	.2U	1.9UJ	.8J	9100J	DMETAL
B38	09/15/2010	44	1U	1.2	50	.5U	150	1U	31000	2.3	.5U	3.3	72J	2U	23000	37	.03U	.58	3.9	1600J	METAL
	04/19/2011	50U	.22J	1J	47	1U	NA	2U	24000	.93J	1U	2.2	89U	.57J	18000	4.3	.2U	1UJ	2.2J	520	DMETAL
B450	04/19/2011	50U	2.6	1.7J	50	.4J	NA	2U	59000	1J	1U	1.8J	89U	.43J	43000	5.1	.055J	1.4UJ	2.9U	1800	DMETAL
	04/19/2011	110	1.2	2.3	53	1U	NA	2U	65000	2	1U	2.2U	180	1.9U	51000	22	.099J	1.4J	1U	2200	METAL
B460	09/15/2010	160	1U	3.2	13	.5U	82J	1U	31000	.53J	1.2	1.9J	280	2U	17000	500	.03U	.65	2.8	3300	METAL
	04/20/2011	75U	.38J	2.4	8.8	3.2U	NA	2U	43000	1.3U	1U	21	89U	.96J	18000J	7.2	.08J	1.9UJ	1.3J	2900	DMETAL

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University of California, Berkeley, Richmond Field Station, Richmond, California

		METALS (ug/L)																		
Location ID	Date Collected	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead	Magnesium	Manganses	Mercury	Molybdenum	Nickel	Potassium	
B473	09/24/2010	180	1U	2	64	.5U	140	1U	25000	3.9	.31J	4.7	330	2U	26000	42	.03U	.95	2	1900J	METAL
	04/20/2011	75U	1.1U	2.2	22	3.2U	NA	2U	44000	1.6	1U	9.1	89UJ	.8J	44000J	1.2J	.067J	1.9UJ	1.2J	4000	DMETAL
B474	09/23/2010	450	1U	9.8	25	.5U	200	1U	24000	1.7	1.6	2	1400	2U	24000	540	.024J	2.1	5.3	3500	METAL
	04/20/2011	75U	1.1U	3.9	6.2	3.2U	NA	2U	35000	1.3U	1U	5.1	89U	1.9U	27000J	42	.066J	2.5UJ	1.5J	3000	DMETAL
	04/20/2011	31J	.45J	4.3	7.4	3.2U	NA	2U	35000	1.3U	1U	4.7	89UJ	1.9U	26000	55	.2UJ	3.1	1.7J	2900	METAL
B480	09/24/2010	22	1U	6.5	41	.5U	110	1U	53000	.68J	1.5	2U	420	2U	46000	480	.03U	1.5	2	3900	METAL
	04/19/2011	32J	1J	3.1	42	1U	NA	2U	51000	1.2J	1U	7.8	89U	.54J	39000	37	.1J	1.9UJ	1.3J	2200	DMETAL
B490	09/16/2010	21	1U	2.2	53	.5U	130	1U	52000	2.6	.5U	1.1J	100U	2U	54000	86	.03U	.66	2.1	1600J	METAL
	04/20/2011	75U	1.1U	1.6J	79	3.2U	NA	2U	52000	4.4	1U	11	89U	1.5J	52000	1.4J	.2U	1.9UJ	1.1J	860	DMETAL
BULB1	10/19/2010	70	10U	17	230	1U	1700	10U	370000	2.1	18	6.6	100	20U	850000	5600	.09	33	46	150000	METAL
	04/12/2011	50UJ	1.4	12	110	1U	NA	1U	330000	.13J	2.3	14J	50UJ	.91J	670000	1300	.2UJ	5.5	4	190000	DMETAL
	04/12/2011	140	.24J	12J	140	1U	NA	.99J	420000	.99J	4.7J	1U	660	.47J	710000	2000	.15J	7.7	7.5	150000	METAL
BULB2	10/19/2010	770	1U	8.9	540	.5U	850	1U	130000	3	8.1	5.6J	2800	3.9	190000	5600	2.5	7.9	25	40000	METAL
	04/12/2011	50UJ	2.5	3	55	1U	NA	.55J	19000	.23J	1.1	28J	50UJ	1.3	21000	460	.2U	6.6	3.2	10000	DMETAL
	04/12/2011	240	1.8	5J	230	1U	NA	1.4	75000	1.4	4.3	.94J	1500	.71J	85000	2800	.2J	8.1	16	17000	METAL
CCC1	09/08/2010	72	1U	3	6.3	.5U	91J	1U	27000	.84J	.5U	1.5J	88J	2U	17000	4.1	.03U	2.2	1.2	2500	METAL
	04/14/2011	75U	1.2	2.4	6.4	3.2UJ	NA	2U	34000	1.9	1U	4.6	43J	1.9U	20000	18	.047J	2.4UJ	1.4J	1400	DMETAL
CCC2	09/08/2010	20U	1U	2.3	24	.5U	140	1U	48000	32	.5U	1.5J	100U	2U	32000	42	.03U	2.4	1.6	3600	METAL
	04/14/2011	75U	.51J	.85J	36	3.2UJ	NA	2U	210000	2.1	1U	20	47J	2.6	160000	69	.2U	1.9U	38	2000	DMETAL
	04/14/2011	17J	1U	.96J	39	1U	NA	.66J	210000	2.3	1U	1U	50UJ	1U	180000	100	.2U	1U	40	2100	METAL
CCC3	09/03/2010	390	1U	5.9	27	.5U	190	1U	68000	2.8	2.1	2.4	550	2U	47000	940	.019J	4	6.5	4200	METAL
	09/03/2010	29	1U	4.6	22	.5U	130	1U	64000	1.1	1.8	1.3J	91J	2U	46000	1200	.03U	3.3	5.8	2800	METAL
	04/12/2011	50U	.19J	2.9	9.6	1U	NA	1U	45000	.86J	1U	12J	50U	.55J	35000	31	.2U	1.1	1	2000	DMETAL
CTP	09/30/2010	23	1U	2.6	38	.5U	120	1U	50000	1.1	.54	2U	150	2U	27000	400	.03U	1.2	2.1	2000	METAL
	09/30/2010	17J	1U	2.5	39	.5U	110	1U	50000	1.1	.52	2U	140	2U	28000	400	.03U	1.2	2.1	1700J	METAL
	04/14/2011	75U	1.1U	1.3J	55	1UJ	NA	9.3	50000	.47J	.61J	5.4	44J	1.9U	28000	280	.2U	1.9UJ	1U	1500	DMETAL

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		METALS (ug/L)																		
Location ID	Date Collected	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead	Magnesium	Manganses	Mercury	Molybdenum	Nickel	Potassium	
CTPS	09/30/2010	36	1U	3.6	82	.5U	260	1U	130000	1.4	1.6	1.8J	240	2U	69000	1000	.03U	1.3	4.4	7500	METAL
	04/19/2011	50U	.39J	.96J	13	.14J	NA	2U	47000	1.3U	1U	5	89U	1.1	25000	6.8	.2U	1UJ	1.7J	1300	DMETAL
DH	09/30/2010	20U	1U	3.5	41	.5U	320	.75J	530000	1U	1.2	2.8	100U	2U	340000	1300	.03U	2.2	37	6700	METAL
	04/14/2011	75U	1.1U	1.3J	89	1UJ	NA	1.9J	590000	.28J	.33J	3.5	89U	1.9U	420000	980	.2U	1.9UJ	39	5100	DMETAL
EERC	10/01/2010	10J	1U	11	39	.5U	480	1U	450000	1U	11	2.9	840	2U	350000	5500	.015J	2.9	18	9800	METAL
	04/20/2011	75U	1.1U	2.9	19	3.2U	NA	2U	420000	1.3U	.54J	6.2	89U	1.9U	330000J	320	.044J	1.9UJ	9.5J	5000	DMETAL
	04/20/2011	75U	.52J	1.7J	22	3.2U	NA	2U	460000	1.3U	.37J	.96J	89UJ	1.9U	330000	190	.2UJ	1.8J	9.7	4300	METAL
EPA	09/16/2010	130	1U	3.2	50	.5U	190	1U	88000	2.1	.74	2.7	230	2U	39000	700	.017J	2.5	2.1	5100	METAL
	04/19/2011	50U	.48J	1.6J	42	.14J	NA	2U	120000	1.4	1U	2.1J	89U	.57J	39000	130	.2U	2UJ	1.3J	2700	DMETAL
ETA	09/24/2010	1600	1U	22	39	.5U	150	.93J	110000	5.8	3.8	22	3300	9.8	86000	4600	2.3	2.7	10	1900J	METAL
	09/24/2010	630	1U	13	28	.5U	140	1U	110000	2.6	2.4	8	1800	3.2	86000	4600	1.3	2.9	4.9	1600J	METAL
	04/12/2011	50U	.26J	7.4	18	1U	NA	.37J	120000	.093J	1.3	2.1J	120	.36J	81000	4000	.2U	4.3	2.8	1300	DMETAL
	04/12/2011	870	.56J	17J	34	1U	NA	2.4	120000	3.1	2.4	8.3	2100	4.1	89000	4300	1.6	4.9	6.3	1800	METAL
FG	09/23/2010	30000	1U	9.7	190	2.6	120	1.9	120000	50	49	56	34000	33	130000	4200	.015J	.93	130	2700	METAL
	04/19/2011	50U	.47J	1.2J	21	.25J	NA	2U	33000	1.3U	1U	24	89U	2.8	33000	28	.063J	1UJ	2.7J	800	DMETAL
	04/19/2011	1500	.63J	2.2	33	.31J	NA	2U	34000	3.8	.98J	2.5	1600	.87J	35000	70	.14J	1.1J	7.3	1200	METAL
GEO	09/03/2010	12J	1U	1.8	56	.5U	120	1U	59000	1.6	.5U	1.1J	100U	2U	30000	43	.03U	2.6	1.5	2800	METAL
	04/20/2011	75U	1.1U	1.7J	88	3.2U	NA	2U	69000	1.3U	.63J	27	89UJ	1.7J	31000J	440	.071J	4.5UJ	6.2J	3700	DMETAL
MFA	09/24/2010	160	1U	2.3	33	.5U	140	1U	75000	.65J	1.1	1.8J	220	2U	61000	580	.18	5.2	7.9	1400J	METAL
	04/12/2011	50UJ	.98J	1.4	28	1U	NA	1U	45000	.28J	.81J	9.5J	50U	.62J	37000	230	.2UJ	4.2	7.1	510	DMETAL
NRLF	09/16/2010	25	1U	3.3	13	.5U	110	1U	50000	1U	.57	2U	300	2U	26000	440	.03U	1.1	1.9	2400	METAL
	04/20/2011	75U	.41J	5.2	15	3.2U	NA	2U	63000	1.3U	.86J	82	150UJ	4.1	30000J	640	.2U	1.9UJ	2.9UJ	2700	DMETAL
PZ11	10/01/2010	20U	1U	2.5	11	.5U	77J	2.7	200000	1U	1	22	100U	2U	210000	1700	.03U	3.8	140	1100J	METAL
	04/20/2011	1200	1.1U	.67J	12	2.1J	NA	30	240000	1J	3.7	1200	89UJ	2.6	290000J	11000	.08J	1.9UJ	1700J	350	DMETAL
	04/20/2011	1200	.56J	.82J	13	1.8J	NA	35	260000	.74J	3.4	1300	95UJ	.67J	290000	13000	.23UJ	1.9U	2400	430	METAL
PZ8	10/15/2010	68	1U	1.6	96	.5U	97J	1U	44000	1.3	.29J	1.5J	110	2U	40000	27	.03UJ	.49J	2.5	2000U	METAL
	04/18/2011	50U	.32J	2	84	1UJ	NA	2U	40000	1.1J	1U	3.7J	50UJ	.45J	31000	2.9	.04J	.56J	1U	800	DMETAL

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		METALS (ug/L)																		
Location ID	Date Collected	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead	Magnesium	Manganses	Mercury	Molybdenum	Nickel	Potassium	
PZ9	09/24/2010	20U	1U	2.7	79	.5U	62J	1U	36000	1U	.29J	2U	100U	2U	36000	260	.17	.95	3.5	2000U	METAL
	04/20/2011	75U	1.1U	1.9	84	3.2U	NA	2U	37000	1.3U	.8J	5.8	89UJ	1.9U	34000J	1900	.2U	1.9UJ	5.3J	330	DMETAL
RWF	09/15/2010	54	1U	1.3	120	.5U	100	1U	72000	1.6	.5U	1.6J	83J	2U	60000	88	.03U	.71	2.8	2000	METAL
	04/18/2011	10J	.26J	.63J	79	1UJ	NA	2U	72000	.58J	1U	3.7J	50UJ	.49J	55000	3.1	.2U	1	1U	1100	DMETAL
TP1	09/29/2010	22	1U	1.9	29	.5U	90J	1U	67000	1U	.28J	1.3J	100U	2U	60000	260	.33	1.3	5.8	2000	METAL
	04/18/2011	50U	.24J	2.2	42	1UJ	NA	2U	160000	1.3U	1.3	7.8J	310	.55J	94000	980	.17J	1.9	1U	3900	DMETAL
TP2	09/29/2010	90	1U	1.3	110	.5U	110	1U	87000	1.9	.39J	2U	150	2U	72000	120	.03U	1.1	8.6	1600J	METAL
	04/18/2011	50U	.22J	.74J	97	1UJ	NA	2U	75000	1.2J	1U	2.2UJ	50UJ	.16J	56000	3.3	.2U	.82J	1U	2300	DMETAL
WTA	09/30/2010	30	1U	2.2	36	.5U	150	1U	110000	9.5	.33J	2U	100U	2U	66000	48	.03U	1.4	1.5	2100	METAL
	04/14/2011	75U	.51J	1.3J	36	3.2UJ	NA	2U	99000	6	1U	11	89U	1.9U	61000	21	.2U	1.9UJ	.97J	1100	DMETAL
	04/14/2011	86	1U	1.5J	39	1U	NA	.34J	100000	6	.17J	1U	100UJ	1U	63000	31	.041J	1UJ	2.9U	1200	METAL

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		METALS (ug/L)						
Location ID	Date Collected	Selenium	Silver	Sodium	Thallium	Vanadium	Zinc	
CCCT	09/03/2010	2U	.5U	150000	2U	4U	3.3J	METAL
	04/18/2011	.47J	1.7U	120000	.072J	3.2UJ	2.7J	DMETAL
B120	09/09/2010	2U	.5U	170000	2U	4.6	15	METAL
	04/15/2011	1U	1.7U	160000	1U	5.2	3.3J	DMETAL
B121	09/08/2010	2U	.5U	75000	2U	2.5J	6.4	METAL
	04/13/2011	1U	1U	59000	1U	4	20	DMETAL
B128	09/23/2010	2U	.5U	180000	2U	4U	2.8J	METAL
	09/23/2010	2U	.5U	170000	2U	4U	6.9	METAL
	04/18/2011	.4J	1.7U	93000	.11J	1.5UJ	9U	DMETAL
B150	09/08/2010	3.2	.5U	36000	2U	4U	3.1J	METAL
	04/13/2011	37	1U	26000	1U	1.4	18	DMETAL
B158	09/08/2010	2U	.5U	52000	2U	6.4	3J	METAL
	04/15/2011	.3J	1.7U	36000	.068J	5.9	9U	DMETAL
B163	09/02/2010	2U	.5U	230000	2U	4U	9.2	METAL
	04/12/2011	1UJ	1U	190000	.08J	1.9	27	DMETAL
	04/12/2011	.39J	1U	190000	.063J	2.2	27	METAL
B175S	09/03/2010	2U	.5U	91000	2U	4U	2.5J	METAL
	04/13/2011	.86J	1U	67000	.062J	2.3	14	DMETAL
B175W	09/08/2010	2U	.5U	56000	2U	4U	3.8J	METAL
	04/13/2011	1UJ	1U	45000	1U	2.4	15	DMETAL
B177	09/23/2010	1.1J	.5U	32000	2U	4U	4J	METAL
	04/18/2011	1.8	1.7U	34000	1U	1.7UJ	5U	DMETAL
B178	09/02/2010	2U	.5U	150000	2U	2.9J	4.7J	METAL
	04/15/2011	2.5U	1.7U	160000	1U	4.7	3.4J	DMETAL
B180	09/15/2010	2U	.5U	92000	2U	9.6	4.2J	METAL
	04/13/2011	1UJ	1U	83000	1U	6.2	54	DMETAL

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		METALS (ug/L)						
Location ID	Date Collected	Selenium	Silver	Sodium	Thallium	Vanadium	Zinc	
B185	09/02/2010	2U	.5U	130000	2U	4U	3.6J	METAL
	04/15/2011	2.5U	1.7U	92000	1U	3.4	8.3	DMETAL
B194	09/09/2010	2U	.5U	120000	2U	2.4J	5U	METAL
	04/13/2011	1UJ	1U	99000	1U	3.9	27	DMETAL
B195	09/09/2010	2U	.5U	130000	2U	4U	4.3J	METAL
	04/13/2011	1UJ	1U	57000	1U	4	57	DMETAL
	04/13/2011	.43J	1U	59000	1U	4.1	5UJ	METAL
B197	09/09/2010	2U	.5U	130000	2U	2.7J	5.8	METAL
	09/09/2010	2U	.5U	130000	2U	2.8J	3.8J	METAL
	04/13/2011	1U	1U	140000	1U	2.4	10	DMETAL
B277	09/15/2010	2U	.5U	58000	2U	2.5J	5U	METAL
	04/18/2011	.53J	1.7U	45000	1U	4.5	7.8J	DMETAL
B278	09/16/2010	2U	.5U	190000	2U	4U	6.4	METAL
	04/19/2011	2.5U	1.7U	170000	1U	3	38J	DMETAL
B280A	09/16/2010	2U	.5U	66000	2U	2.4J	5U	METAL
	04/14/2011	2.5U	1.7U	48000	1U	3.7	9U	DMETAL
B280B	10/01/2010	2U	.5U	130000	2U	4U	3.2J	METAL
	04/14/2011	2.5U	1.7U	87000	1U	2.7	6.5J	DMETAL
B300	09/09/2010	2U	.5U	110000	2U	4U	5U	METAL
	04/15/2011	.4J	1.7U	190000	1U	.73J	9U	DMETAL
B38	09/15/2010	2U	.5U	57000	2U	4U	3.6J	METAL
	04/19/2011	2.5U	1.7U	47000	1U	2.6	11	DMETAL
B450	04/19/2011	2.5U	1.7U	73000	.36J	3.2	3.3J	DMETAL
	04/19/2011	2.5U	1.7U	84000	.48J	3.5	9U	METAL
B460	09/15/2010	2U	.5U	44000	2U	4U	8.2	METAL
	04/20/2011	2.5U	1.7U	45000	1U	1.7J	23	DMETAL

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		METALS (ug/L)						
Location ID	Date Collected	Selenium	Silver	Sodium	Thallium	Vanadium	Zinc	
B473	09/24/2010	2U	.5U	100000	2U	4.1	23	METAL
	04/20/2011	2.5U	1.7U	99000	1U	3.7	14	DMETAL
B474	09/23/2010	2U	.5U	120000	2U	2.4J	6.4	METAL
	04/20/2011	2.5U	1.7U	81000	1U	4.2	36	DMETAL
	04/20/2011	2.5U	1.7U	78000	.057J	3.7	9U	METAL
B480	09/24/2010	2U	.5U	110000	2U	2J	3.3J	METAL
	04/19/2011	2.5U	1.7U	86000	.082J	4.1	11	DMETAL
B490	09/16/2010	2U	.5U	55000	2U	3.2J	5U	METAL
	04/20/2011	2.5U	1.7U	56000	1U	5.2	16	DMETAL
BULB1	10/19/2010	8.6	5U	7700000	20U	10U	20	METAL
	04/12/2011	1UJ	1U	5700000	.1J	.9J	18	DMETAL
	04/12/2011	.6J	1U	6400000	.39J	1.3	38	METAL
BULB2	10/19/2010	3	.5U	1900000	2U	2.8J	22	METAL
	04/12/2011	1UJ	1U	400000	.22J	2.1	48	DMETAL
	04/12/2011	.36J	1U	740000	.18J	3.2	61	METAL
CCC1	09/08/2010	2U	.5U	98000	2U	3.3J	3.5J	METAL
	04/14/2011	2.5U	1.7U	91000	.11J	3.6	9UJ	DMETAL
CCC2	09/08/2010	6.6	.5U	120000	2U	2J	3.4J	METAL
	04/14/2011	5.4	1.7U	140000	.62J	.82J	55	DMETAL
	04/14/2011	6.1	1U	160000	1U	1.2	5.7UJ	METAL
CCC3	09/03/2010	2U	.5U	110000	2U	3.5J	3.9J	METAL
	09/03/2010	2U	.5U	99000	2U	4U	5U	METAL
	04/12/2011	1U	1U	86000	1U	3.1	13	DMETAL
CTP	09/30/2010	2U	.5U	76000	2U	4U	5U	METAL
	09/30/2010	2U	.5U	76000	2U	4U	5U	METAL
	04/14/2011	2.5U	1.7U	52000	1U	2.9	230	DMETAL

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		METALS (ug/L)						
Location ID	Date Collected	Selenium	Silver	Sodium	Thallium	Vanadium	Zinc	
CTPS	09/30/2010	2U	.5U	150000	2U	4U	2.7J	METAL
	04/19/2011	2.5U	1.7U	65000	1U	.94J	11	DMETAL
DH	09/30/2010	2U	.5U	520000	2U	4U	5	METAL
	04/14/2011	2.5U	1.7U	480000	1U	2.8	17	DMETAL
EERC	10/01/2010	2U	.5U	480000	2U	4U	7.5	METAL
	04/20/2011	2.5U	1.7U	520000	1U	3.1	11	DMETAL
	04/20/2011	2.5U	1.7U	570000	.07J	3.3	9U	METAL
EPA	09/16/2010	2U	.5U	130000	2U	4U	6.2	METAL
	04/19/2011	2.5U	1.7U	150000	1U	1.8	4.5J	DMETAL
ETA	09/24/2010	2U	.5U	150000	2U	5.4	110	METAL
	09/24/2010	2U	.5U	150000	2U	4U	50	METAL
	04/12/2011	1U	1U	130000	.3J	.55J	47	DMETAL
	04/12/2011	.15J	1U	130000	1U	3.9	95	METAL
FG	09/23/2010	8U	.5U	130000	2U	91	170	METAL
	04/19/2011	2.5U	1.7U	83000	1U	1.9	29	DMETAL
	04/19/2011	2.5U	1.7U	91000	.21J	5.8	9U	METAL
GEO	09/03/2010	2U	.5U	85000	2U	2.5J	5U	METAL
	04/20/2011	2.5U	1.7U	69000	.17J	3.2	58	DMETAL
MFA	09/24/2010	2U	.5U	150000	2U	3.9J	4.4J	METAL
	04/12/2011	1UJ	1U	99000	1U	4.6	39	DMETAL
NRLF	09/16/2010	2U	.5U	57000	2U	4U	5U	METAL
	04/20/2011	2.5U	1.7U	81000	1U	.92J	83	DMETAL
PZ11	10/01/2010	2U	.5U	170000	2U	3.8J	430	METAL
	04/20/2011	2.5U	1.7U	180000	1U	1.7U	10000	DMETAL
	04/20/2011	2.5U	1.7U	200000	.1J	1.7U	13000	METAL
PZ8	10/15/2010	2U	.5U	66000	2U	3.5J	3.4J	METAL
	04/18/2011	.26J	1.7U	53000	1U	4.1	5U	DMETAL

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		METALS (ug/L)						
Location ID	Date Collected	Selenium	Silver	Sodium	Thallium	Vanadium	Zinc	
PZ9	09/24/2010	2U	.5U	54000	2U	2.3J	4.9J	METAL
	04/20/2011	2.5U	1.7U	45000	1U	2.1	10	DMETAL
RWF	09/15/2010	2U	.5U	77000	2U	2.1J	3.8J	METAL
	04/18/2011	.21J	1.7U	75000	1U	2.6UJ	9U	DMETAL
TP1	09/29/2010	2U	.5U	92000	2U	2.3J	7.2	METAL
	04/18/2011	.21J	1.7U	210000	1U	1.7UJ	5.5J	DMETAL
TP2	09/29/2010	2U	.5U	88000	2U	2.9J	5U	METAL
	04/18/2011	.78J	1.7U	75000	1U	3.9	4.2J	DMETAL
WTA	09/30/2010	2U	.5U	150000	2U	3J	5U	METAL
	04/14/2011	2.5U	1.7U	120000	.093J	3.8	4.3J	DMETAL
	04/14/2011	1U	1U	130000	1U	4.1	5UJ	METAL

ATTACHMENT 2: SUMMARY OF COMPLETE ANALYTICAL RESULTS FOR GROUNDWATER SAMPLES

Technical Memorandum: Sampling Results for Phase I Groundwater Sampling, Field Sampling Workplan
University of California, Berkeley, Richmond Field Station, Richmond, California

VOLATILE ORGANIC COMPOUNDS (ug/L)

Location ID	Date Collected	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloropropene	1,2,3-Trichlorobenzene	1,2,3-Trichloropropane	1,2,4-Trichlorobenzene	1,2,4-Trimethylbenzene	1,2-Dibromo-3-Chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,3,5-Trimethylbenzene	1,3-Dichlorobenzene	1,3-Dichloropropane	1,4-Dichlorobenzene
CCCT	09/03/2010	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	2U	.5U	.5U	.2J	.5U	.5U	.5U	.5U	.5U
	04/18/2011	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	2U	.5U	.5U	.2J	.5U	.5U	.5U	.5U	.5U
B120	09/09/2010	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	2U	.5U	.5U	.6	.5U	.5U	.5U	.5U	.5U
	04/15/2011	1.3U	1.3U	1.3U	1.3U	1.3U	1.3U	1.3U	1.3U	1.3U	1.3U	1.3U	5U	1.3U	1.3U	.5J	1.3U	1.3U	1.3U	1.3U	1.3U
B121	09/08/2010	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
	04/13/2011	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
B128	09/23/2010	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
	09/23/2010	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
	04/18/2011	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
B150	09/08/2010	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
	04/13/2011	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
B158	09/08/2010	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
	04/15/2011	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
B163	09/02/2010	.5U	.5U	.5U	.5U	.5U	.3J	.5U	.5U	.5U	.5U	.5U	2U	.5U	.5U	8.5	.5U	.5U	.5U	.5U	.5U
	04/12/2011	.5U	.5U	.5U	.5U	.5U	.6	.5U	.5U	.5U	.5U	.5U	2U	.5U	.5U	9	.5U	.5U	.5U	.5U	.5U
B175S	09/03/2010	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
	04/13/2011	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
B175W	09/08/2010	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
	04/13/2011	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
B177	09/23/2010	.5U	.5U	.5U	.5U	.5U	.5UJ	.5U	.5U	.5U	.5U	.5U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
	04/18/2011	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
B178	09/02/2010	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	2U	.5U	.5U	.5	.5U	.5U	.5U	.5U	.5U
	04/15/2011	1.3U	1.3U	1.3U	1.3U	1.3U	1.3U	1.3U	1.3U	1.3U	1.3U	1.3U	5U	1.3U	1.3U	.4J	1.3U	1.3U	1.3U	1.3U	1.3U
B180	09/15/2010	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
	04/13/2011	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
B185	09/02/2010	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	2U	.5U	.5U	1.4	.5U	.5U	.5U	.5U	.5U

ATTACHMENT 2: SUMMARY OF COMPLETE ANALYTICAL RESULTS FOR GROUNDWATER SAMPLES

Technical Memorandum: Sampling Results for Phase I Groundwater Sampling, Field Sampling Workplan
University of California, Berkeley, Richmond Field Station, Richmond, California

		VOLATILE ORGANIC COMPOUNDS (ug/L)																		
Location ID	Date Collected	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloropropene	1,2,3-Trichlorobenzene	1,2,3-Trichloropropane	1,2,4-Trichlorobenzene	1,2,4-Trimethylbenzene	1,2-Dibromo-3-Chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,3,5-Trimethylbenzene	1,3-Dichlorobenzene	1,3-Dichloropropane	1,4-Dichlorobenzene
B185	04/15/2011	.7U	.7U	.7U	.7U	.7U	.7U	.7U	.7U	.7U	.7U	.7U	2.9U	.7U	.7U	1	.7U	.7U	.7U	.7U	.7U
B194	09/09/2010	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
	04/13/2011	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
B195	09/09/2010	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	2U	.5U	.5U	1	.5U	.5U	.5U	.5U	.5U
	04/13/2011	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	2U	.5U	.5U	.3J	.5U	.5U	.5U	.5U	.5U
B197	09/09/2010	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	2U	.5U	.5U	.5	.5U	.5U	.5U	.5U	.5U
	09/09/2010	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	2U	.5U	.5U	.5	.5U	.5U	.5U	.5U	.5U
	04/13/2011	1.7U	1.7U	1.7U	1.7U	1.7U	1.7U	1.7U	1.7U	1.7U	1.7U	1.7U	6.7U	1.7U	1.7U	1.7U	1.7U	1.7U	1.7U	1.7U	1.7U
B277	09/15/2010	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
	04/18/2011	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
B278	09/16/2010	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
	04/19/2011	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
B280A	09/16/2010	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
	04/14/2011	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
B280B	10/01/2010	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
	04/14/2011	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
B300	09/09/2010	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
	04/15/2011	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
B38	09/15/2010	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
	04/19/2011	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
B450	04/19/2011	.5U	.2J	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
B460	09/15/2010	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
	04/20/2011	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
B473	09/24/2010	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
	04/20/2011	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U

ATTACHMENT 2: SUMMARY OF COMPLETE ANALYTICAL RESULTS FOR GROUNDWATER SAMPLES

Technical Memorandum: Sampling Results for Phase I Groundwater Sampling, Field Sampling Workplan
University of California, Berkeley, Richmond Field Station, Richmond, California

VOLATILE ORGANIC COMPOUNDS (ug/L)

Location ID	Date Collected	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloropropene	1,2,3-Trichlorobenzene	1,2,3-Trichloropropane	1,2,4-Trichlorobenzene	1,2,4-Trimethylbenzene	1,2-Dibromo-3-Chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,3,5-Trimethylbenzene	1,3-Dichlorobenzene	1,3-Dichloropropane	1,4-Dichlorobenzene
B474	09/23/2010	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
	04/20/2011	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
B480	09/24/2010	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
	04/19/2011	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
B490	09/16/2010	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
	04/20/2011	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
BULB1	10/19/2010	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
	04/12/2011	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
BULB2	10/19/2010	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
	04/12/2011	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
CCC1	09/08/2010	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
	04/14/2011	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
CCC2	09/08/2010	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
	04/14/2011	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
CCC3	09/03/2010	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
	09/03/2010	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
	04/12/2011	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
CTP	09/30/2010	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
	09/30/2010	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
	04/14/2011	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
CTPS	09/30/2010	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
	04/19/2011	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
DH	09/30/2010	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
	04/14/2011	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
EERC	10/01/2010	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
	04/20/2011	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U

ATTACHMENT 2: SUMMARY OF COMPLETE ANALYTICAL RESULTS FOR GROUNDWATER SAMPLES

Technical Memorandum: Sampling Results for Phase I Groundwater Sampling, Field Sampling Workplan
University of California, Berkeley, Richmond Field Station, Richmond, California

VOLATILE ORGANIC COMPOUNDS (ug/L)

Location ID	Date Collected	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloropropene	1,2,3-Trichlorobenzene	1,2,3-Trichloropropane	1,2,4-Trichlorobenzene	1,2,4-Trimethylbenzene	1,2-Dibromo-3-Chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,3,5-Trimethylbenzene	1,3-Dichlorobenzene	1,3-Dichloropropane	1,4-Dichlorobenzene
EPA	09/16/2010	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
	04/19/2011	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
ETA	09/24/2010	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
	09/24/2010	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
	04/12/2011	.5U	.5U	.5U	.5U	.5U	.3J	.5U	.5U	.5U	.5U	.5U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
FG	09/23/2010	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
	04/19/2011	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
GEO	09/03/2010	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
	04/20/2011	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
MFA	09/24/2010	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
	04/12/2011	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
NRLF	09/16/2010	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
	04/20/2011	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
PZ11	10/01/2010	.5U	.5U	.5U	.5U	.5U	1.5	.5U	.5U	.5U	.5U	.5U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
	04/20/2011	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
PZ8	10/15/2010	.5U	.5U	.5U	.5U	.5U	.5UJ	.5U	.5U	.5U	.5U	.5U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
	04/18/2011	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
PZ9	09/24/2010	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
	04/20/2011	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
RWF	09/15/2010	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
	04/18/2011	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
TP1	09/29/2010	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
	04/18/2011	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
TP2	09/29/2010	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
	04/18/2011	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U

ATTACHMENT 2: SUMMARY OF COMPLETE ANALYTICAL RESULTS FOR GROUNDWATER SAMPLES

Technical Memorandum: Sampling Results for Phase I Groundwater Sampling, Field Sampling Workplan
University of California, Berkeley, Richmond Field Station, Richmond, California

		VOLATILE ORGANIC COMPOUNDS (ug/L)																			
Location ID	**Date Collected**	**1,1,1,2-Tetrachloroethane**	**1,1,1-Trichloroethane**	**1,1,2,2-Tetrachloroethane**	**1,1,2-Trichloroethane**	**1,1-Dichloroethane**	**1,1-Dichloroethene**	**1,1-Dichloropropene**	**1,2,3-Trichlorobenzene**	**1,2,3-Trichloropropane**	**1,2,4-Trichlorobenzene**	**1,2,4-Trimethylbenzene**	**1,2-Dibromo-3-Chloropropane**	**1,2-Dibromoethane**	**1,2-Dichlorobenzene**	**1,2-Dichloroethane**	**1,2-Dichloropropane**	**1,3,5-Trimethylbenzene**	**1,3-Dichlorobenzene**	**1,3-Dichloropropane**	**1,4-Dichlorobenzene**
WTA	09/30/2010	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	2U	.5U	.5U	.5U	.5	.5U	.5U	.5U	.5U
	04/14/2011	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	2U	.5U	.5U	.5U	.4J	.5U	.5U	.5U	.5U

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University of California, Berkeley, Richmond Field Station, Richmond, California

		VOLATILE ORGANIC COMPOUNDS (ug/L)																		
Location ID	Date Collected	2,2-Dichloropropane	2-Butanone	2-Chlorotoluene	4-Chlorotoluene	Acetone	Benzene	Bromobenzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	Cis-1,2-Dichloroethene	Cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane
CCCT	09/03/2010	.5UJ	3.2J	.5U	.5U	4U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	1	.5U	.5U	.5U
	04/18/2011	.5U	10U	.5U	.5U	10U	.5U	.5U	.5U	.5U	1U	1U	.5U	.5U	1U	.5U	1U	1.1	.5U	.5U	.5U
B120	09/09/2010	.5U	4U	.5U	.5U	4U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	3.1	.5U	.5U	.5U
	04/15/2011	1.3U	25U	1.3U	1.3U	25U	1.3U	1.3U	1.3U	1.3U	2.5U	2.5U	1.3U	1.3U	2.5U	.3J	2.5U	3.6	1.3U	1.3U	1.3U
B121	09/08/2010	.5U	4U	.5U	.5U	2J	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5UJ	.5U	.5UJ	.5U	.5U	.5U	.5U
	04/13/2011	.5U	10U	.5U	.5U	10U	.5U	.5U	.5U	.5U	1U	1U	.5U	.5U	1U	.5U	1UJ	.5U	.5U	.5U	.5U
B128	09/23/2010	.5U	43	.5U	.5U	11J	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.3J	.5U	.5U	.5U	.5U	.5U
	09/23/2010	.5U	49	.5U	.5U	14J	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5	.5U	.5U	.5U	.5U	.5U
	04/18/2011	.5U	10U	.5U	.5U	10UJ	.5U	.5U	.5U	.5U	1U	1U	.5U	.5U	1U	.5U	1U	.5U	.5U	.5U	.5U
B150	09/08/2010	.5U	4U	.5U	.5U	4U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5UJ	1.4	.5UJ	.5U	.5U	.5U	.5U
	04/13/2011	.5U	10U	.5U	.5U	10U	.5U	.5U	.5U	.5U	1U	1U	.5U	.5U	1U	.5U	1UJ	.5U	.5U	.5U	.5U
B158	09/08/2010	.5U	4U	.5U	.5U	4U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5UJ	4	.5UJ	.5U	.5U	.5U	.5U
	04/15/2011	.5U	10U	.5U	.5U	10U	.5U	.5U	.5U	.5U	1U	1U	.5U	.5U	1U	1.6	1U	.5U	.5U	.5U	.5U
B163	09/02/2010	.5UJ	4U	.5U	.5U	2.7UJ	.2J	.5U	.5U	.5U	.5U	.5U	.5U	6.5	.5U	2.1	.5U	3	.5U	.5U	.5U
	04/12/2011	.5UJ	10U	.5U	.5U	10U	.3J	.5U	.5U	.5U	1U	1U	.5U	8.4	1U	2.3	1U	3.2	.5U	.5U	.5U
B175S	09/03/2010	.5UJ	4U	.5U	.5U	2.5UJ	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
	04/13/2011	.5U	10U	.5U	.5U	10U	.5U	.5U	.5U	.5U	1U	1U	.5U	.5U	1U	.5U	1U	.5U	.5U	.5U	.5U
B175W	09/08/2010	.5U	4U	.5U	.5U	4U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5UJ	.4J	.5UJ	.5U	.5U	.5U	.5U
	04/13/2011	.5U	10U	.5U	.5U	10U	.5U	.5U	.5U	.5U	1U	1U	.5U	.5U	1U	.2J	1UJ	.5U	.5U	.5U	.5U
B177	09/23/2010	.5U	4U	.5U	.5U	4UJ	.5U	.5U	.5U	.5U	.5U	.5UJ	.5U	.5U	.5U	9.5	.5U	.5U	.5U	.5U	.5U
	04/18/2011	.5U	10U	.5U	.5U	10U	.5U	.5U	.5U	.5U	1U	1U	.5U	.5U	1U	2.7	1U	.5U	.5U	.5U	.5U
B178	09/02/2010	.5UJ	4U	.5U	.5U	4U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.2J	.5U	2.5	.5U	.5U	.5U
	04/15/2011	1.3U	25U	1.3U	1.3U	25U	1.3U	1.3U	1.3U	1.3U	2.5U	2.5U	1.3U	1.3U	2.5U	.4J	2.5U	2.7	1.3U	1.3U	1.3U
B180	09/15/2010	.5U	4U	.5U	.5U	4U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	1.8	.5U	.5U	.5U	.5U	.5U
	04/13/2011	.5U	10U	.5U	.5U	10U	.5U	.5U	.5U	.5U	1U	1U	.5U	.5U	1U	.3J	1UJ	.5U	.5U	.5U	.5U
B185	09/02/2010	.5UJ	4U	.5U	.5U	4U	.5U	.5U	.5U	.5U	.5U	.5U	4.3	1.2	.5U	1.3	.5U	1	.5U	.5U	.5U

ATTACHMENT 2: SUMMARY OF COMPLETE ANALYTICAL RESULTS FOR GROUNDWATER SAMPLES

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University of California, Berkeley, Richmond Field Station, Richmond, California

		VOLATILE ORGANIC COMPOUNDS (ug/L)																		
Location ID	Date Collected	2,2-Dichloropropane	2-Butanone	2-Chlorotoluene	4-Chlorotoluene	Acetone	Benzene	Bromobenzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	Cis-1,2-Dichloroethene	Cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane
B185	04/15/2011	.7U	14U	.7U	.7U	14U	.7U	.7U	.7U	.7U	1.4U	1.4U	3.5	1	1.4U	.8	1.4U	1	.7U	.7U	.7U
B194	09/09/2010	.5U	2.1J	.5U	.5U	4U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5UJ	.5U	.5UJ	.5U	.5U	.5U	.5U
	04/13/2011	.5U	10U	.5U	.5U	10U	.5U	.5U	.5U	.5U	1U	1U	.5U	.5U	1U	.5U	1UJ	.5U	.5U	.5U	.5U
B195	09/09/2010	.5U	4U	.5U	.5U	4U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5UJ	.5U	.5UJ	3.7	.5U	.5U	.5U
	04/13/2011	.5U	10U	.5U	.5U	10U	.5U	.5U	.5U	.5U	1U	1U	.5U	.5U	1U	.5U	1U	1.4	.5U	.5U	.5U
B197	09/09/2010	.5U	4U	.5U	.5U	4U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	2.8	.5U	.5U	.5U
	09/09/2010	.5U	4U	.5U	.5U	4U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	2.9	.5U	.5U	.5U
	04/13/2011	1.7U	33U	1.7U	1.7U	33U	1.7U	1.7U	1.7U	1.7U	3.3U	3.3U	1.7U	1.7U	3.3U	1.7U	3.3UJ	2.2	1.7U	1.7U	1.7U
B277	09/15/2010	.5U	4U	.5U	.5U	4U	.5U	.5U	.5U	.5U	.5U	.5U	.5	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
	04/18/2011	.5U	10U	.5U	.5U	10U	.5U	.5U	.5U	.5U	1U	1U	1	.5U	1U	.3J	1U	.5U	.5U	.5U	.5U
B278	09/16/2010	.5U	12	.5U	.5U	4U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	1.7	.5UJ	.5U	.5U	.5U	.5U
	04/19/2011	.5U	10U	.5U	.5U	10U	.5U	.5U	.5U	.5U	1U	1U	.3J	.5U	1U	2.1	1U	.5U	.5U	.5U	.5U
B280A	09/16/2010	.5U	4U	.5U	.5U	4U	.5U	.5U	.5U	.5U	.5U	.5U	.9	.5U	.5U	.5U	.5UJ	.5U	.5U	.5U	.5U
	04/14/2011	.5U	10U	.5U	.5U	10U	.5U	.5U	.5U	.5U	1U	1U	1.1	.5U	1U	.2J	1U	.5U	.5U	.5U	.5U
B280B	10/01/2010	.5U	4U	.5U	.5U	4U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5	.5U	.5U	.5U	.5U	.5U
	04/14/2011	.5U	10U	.5U	.5U	10U	.5U	.5U	.5U	.5U	1U	1U	.5U	.5U	1U	.1J	1U	.5U	.5U	.5U	.5U
B300	09/09/2010	.5U	4U	.5U	.5U	4U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5UJ	.5U	.5UJ	.5U	.5U	.5U	.5U
	04/15/2011	.5U	10U	.5U	.5U	10U	.5U	.5U	.5U	.5U	1U	1U	.5U	.5U	1U	.5U	1U	.5U	.5U	.5U	.5U
B38	09/15/2010	.5U	4U	.5U	.5U	4U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
	04/19/2011	.5U	10U	.5U	.5U	10U	.5U	.5U	.5U	.5U	1U	1U	.5U	.5U	1U	.5U	1U	.5U	.5U	.5U	.5U
B450	04/19/2011	.5U	10U	.5U	.5U	10U	.5U	.5U	.5U	.5U	1U	1U	.5U	.5U	1U	.2J	1U	.5U	.5U	.5U	.5U
B460	09/15/2010	.5U	27	.5U	.5U	22	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
	04/20/2011	.5UJ	10U	.5U	.5U	10U	.5U	.5U	.5U	.5U	1U	1U	.5U	.5U	1U	.5U	1U	.5U	.5U	.5U	.5U
B473	09/24/2010	.5U	4U	.5U	.5U	4UJ	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
	04/20/2011	.5UJ	10U	.5U	.5U	10U	.5U	.5U	.5U	.5U	1U	1U	.5U	.5U	1U	.5U	1U	.5U	.5U	.5U	.5U

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University of California, Berkeley, Richmond Field Station, Richmond, California

		VOLATILE ORGANIC COMPOUNDS (ug/L)																			
Location ID	Date Collected	2,2-Dichloropropane	2-Butanone	2-Chlorotoluene	4-Chlorotoluene	Acetone	Benzene	Bromobenzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	Cis-1,2-Dichloroethene	Cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane
B474	09/23/2010	.5U	180	.5U	.5U	40J	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
	04/20/2011	.5UJ	10U	.5U	.5U	10U	.5U	.5U	.5U	.5U	1U	1U	.5U	.5U	1U	.5U	1U	.5U	.5U	.5U	.5U
B480	09/24/2010	.5U	4U	.5U	.5U	3.2UJ	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
	04/19/2011	.5U	10U	.5U	.5U	10U	.5U	.5U	.5U	.5U	1U	1U	.5U	.5U	1U	.5U	1U	.5U	.5U	.5U	.5U
B490	09/16/2010	.5U	4U	.5U	.5U	4U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5UJ	.5U	.5U	.5U	.5U
	04/20/2011	.5UJ	10U	.5U	.5U	10U	.5U	.5U	.5U	.5U	1U	1U	.5U	.5U	1U	.5U	1U	.5U	.5U	.5U	.5U
BULB1	10/19/2010	.5U	4U	.5U	.5U	2.3J	2.3	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
	04/12/2011	.5UJ	10U	.5U	.5U	10U	.5U	.5U	.5U	.5U	1U	1U	.5U	.5U	1U	.5U	1U	.5U	.5U	.5U	.5U
BULB2	10/19/2010	.5U	4U	.5U	.5U	3.3J	4.1	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
	04/12/2011	.5UJ	10U	.5U	.5U	10U	.5U	.5U	.5U	.5U	1U	1U	.5U	.5U	1U	.5U	1U	.5U	.5U	.5U	.5U
CCC1	09/08/2010	.5U	4U	.5U	.5U	2.3J	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5UJ	1.2	.5UJ	.5U	.5U	.5U	.5U
	04/14/2011	.5U	10U	.5U	.5U	10U	.5U	.5U	.5U	.5U	1U	1U	.5U	.5U	1U	.4J	1U	.5U	.5U	.5U	.5U
CCC2	09/08/2010	.5U	4U	.5U	.5U	4U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5UJ	.5U	.5UJ	.5U	.5U	.5U	.5U
	04/14/2011	.5U	10U	.5U	.5U	10U	.5U	.5U	.5U	.5U	1U	1U	.5U	.5U	1U	.5U	1U	.5U	.5U	.5U	.5U
CCC3	09/03/2010	.5UJ	30	.5U	.5U	4U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
	09/03/2010	.5UJ	32	.5U	.5U	4U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
	04/12/2011	.5UJ	10U	.5U	.5U	10U	.5U	.5U	.5U	.5U	1U	1U	.5U	.5U	1U	.5U	1U	.5U	.5U	.5U	.5U
CTP	09/30/2010	.5U	35J	.5U	.5U	7UJ	.5U	.5U	.5U	.5U	.5U	.5U	19	.5U	.5U	8.6	.5U	.5U	.5U	.5U	.5U
	09/30/2010	.5U	17J	.5U	.5U	4.4UJ	.5U	.5U	.5U	.5U	.5U	.5U	20	.5U	.5U	8.7	.5U	.5U	.5U	.5U	.5U
	04/14/2011	.5U	10U	.5U	.5U	10U	.5U	.5U	.5U	.5U	1U	1U	16	.5U	1U	5.5	1U	.5U	.5U	.5U	.5U
CTPS	09/30/2010	.5U	4U	.5U	.5U	4U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	6.1	.5U	.5U	.5U	.5U	.5U
	04/19/2011	.5U	10U	.5U	.5U	10U	.5U	.5U	.5U	.5U	1U	1U	.5U	.5U	1U	.5U	1U	.5U	.5U	.5U	.5U
DH	09/30/2010	.5U	4U	.5U	.5U	2.4UJ	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
	04/14/2011	.5U	10U	.5U	.5U	10U	.5U	.5U	.5U	.5U	1U	1U	.5U	.5U	1U	.5U	1U	.5U	.5U	.5U	.5U
EERC	10/01/2010	.5U	4U	.5U	.5U	4U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5UJ	.5U	.5U	.5U	.5U
	04/20/2011	.5U	10U	.5U	.5U	10U	.5U	.5U	.5U	.5U	1U	1UJ	.5U	.5U	1U	.5U	1U	.5U	.5U	.5U	.5U

ATTACHMENT 2: SUMMARY OF COMPLETE ANALYTICAL RESULTS FOR GROUNDWATER SAMPLES

Technical Memorandum: Sampling Results for Phase I Groundwater Sampling, Field Sampling Workplan
University of California, Berkeley, Richmond Field Station, Richmond, California

		VOLATILE ORGANIC COMPOUNDS (ug/L)																			
Location ID	Date Collected	2,2-Dichloropropane	2-Butanone	2-Chlorotoluene	4-Chlorotoluene	Acetone	Benzene	Bromobenzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	Cis-1,2-Dichloroethene	Cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane
EPA	09/16/2010	.5U	4U	.5U	.5U	4U	.5U	.5U	.5U	.5U	.5U	.5U	1.8	.5U	.5U	2.3	.5UJ	.5U	.5U	.5U	.5U
	04/19/2011	.5U	10U	.5U	.5U	10U	.5U	.5U	.5U	.5U	1U	1U	.5U	.5U	1U	.2J	1U	.5U	.5U	.5U	.5U
ETA	09/24/2010	.5U	4U	.5U	.5U	4UJ	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.9	.5U	.5U	.5U
	09/24/2010	.5U	4U	.5U	.5U	4UJ	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.9	.5U	.5U	.5U
	04/12/2011	.5UJ	10U	.5U	.5U	10U	.5U	.5U	.5U	.5U	1U	1U	.5U	.5U	1U	.5U	1U	.7	.5U	.5U	.5U
FG	09/23/2010	.5U	4U	.5U	.5U	2.7J	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5	.5U	.5U	.5U	.5U	.5U
	04/19/2011	.5U	10U	.5U	.5U	10U	.5U	.5U	.5U	.5U	1U	1U	.5U	.5U	1U	.5U	1U	.5U	.5U	.5U	.5U
GEO	09/03/2010	.5UJ	4U	.5U	.5U	4U	.5U	.5U	.5U	.5U	.5U	.5U	1.1	.5U	.5U	1	.5U	.5U	.5U	.5U	.5U
	04/20/2011	.5UJ	10U	.5U	.5U	10U	.5U	.5U	.5U	.5U	1U	1U	1.2	.5U	1U	.7	1U	.5U	.5U	.5U	.5U
MFA	09/24/2010	.5U	4U	.5U	.5U	4UJ	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.9	.5U	.5U	.5U
	04/12/2011	.5UJ	10U	.5U	.5U	10U	.5U	.5U	.5U	.5U	1U	1U	.5U	.5U	1U	.5U	1U	.5	.5U	.5U	.5U
NRLF	09/16/2010	.5U	200	.5U	.5U	4U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5UJ	.5U	.5U	.5U	.5U
	04/20/2011	.5UJ	10U	.5U	.5U	10U	.5U	.5U	.5U	.5U	1U	1U	.5U	.5U	1U	.5U	1U	.5U	.5U	.5U	.5U
PZ11	10/01/2010	.5U	4U	.5U	.5U	4U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	20	.5U	.5U	.5U
	04/20/2011	.5UJ	10U	.5U	.5U	10U	.5U	.5U	.5U	.5U	1U	1U	.5U	.5U	1U	.5U	1U	.5U	.5U	.5U	.5U
PZ8	10/15/2010	.5U	4U	.5U	.5U	4U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5	.5U	.5U	.5U	.5U	.5U
	04/18/2011	.5U	10U	.5U	.5U	10U	.5U	.5U	.5U	.5U	1U	.1J	.5U	.5U	1U	.4J	1U	.5U	.5U	.5U	.5U
PZ9	09/24/2010	.5U	4U	.5U	.5U	4UJ	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.4J	.5U	.5U	.5U
	04/20/2011	.5UJ	10U	.5U	.5U	10U	.5U	.5U	.5U	.5U	1U	1U	.5U	.5U	1U	.5U	1U	.3J	.5U	.5U	.5U
RWF	09/15/2010	.5U	4U	.5U	.5U	4U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
	04/18/2011	.5U	10U	.5U	.5U	10U	.5U	.5U	.5U	.5U	1U	1U	.5U	.5U	1U	.5U	1U	.5U	.5U	.5U	.5U
TP1	09/29/2010	.5U	4U	.5U	.5U	4UJ	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
	04/18/2011	.5U	10U	.5U	.5U	10U	.5U	.5U	.5U	.5U	1U	1U	.5U	.5U	1U	.5U	1U	.5U	.5U	.5U	.5U
TP2	09/29/2010	.5U	4U	.5U	.5U	4UJ	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
	04/18/2011	.5U	10U	.5U	.5U	10U	.5U	.5U	.5U	.5U	1U	1U	.5U	.5U	1U	.5U	1U	.5U	.5U	.5U	.5U

ATTACHMENT 2: SUMMARY OF COMPLETE ANALYTICAL RESULTS FOR GROUNDWATER SAMPLES

Technical Memorandum: Sampling Results for Phase I Groundwater Sampling, Field Sampling Workplan
University of California, Berkeley, Richmond Field Station, Richmond, California

		VOLATILE ORGANIC COMPOUNDS (ug/L)																			
Location ID	Date Collected	2,2-Dichloropropane	2-Butanone	2-Chlorotoluene	4-Chlorotoluene	Acetone	Benzene	Bromobenzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	Cis-1,2-Dichloroethene	Cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane
WTA	09/30/2010	.5U	4U	.5U	.5U	2UJ	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
	04/14/2011	.5U	10U	.5U	.5U	10U	.5U	.5U	.5U	.5U	1U	1U	.5U	.5U	1U	.5U	1U	.5U	.5U	.5U	.5U

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University of California, Berkeley, Richmond Field Station, Richmond, California

		VOLATILE ORGANIC COMPOUNDS (ug/L)																		
Location ID	**Date Collected**	**Dichlorodifluoromethane**	**Ethylbenzene**	**Freon 113**	**Hexachlorobutadiene**	**Isopropylbenzene**	**M,P-Xylene**	**Methyl Tert-Butyl Ether**	**Methylene Chloride**	**N-Butylbenzene**	**N-Propylbenzene**	**Naphthalene**	**O-Xylene**	**P-Isopropyltoluene**	**Sec-Butylbenzene**	**Styrene**	**Tert-Butylbenzene**	**Tetrachloroethene**	**Toluene**	**Trans-1,2-Dichloroethene**	**Trans-1,3-Dichloropropene**
CCCT	09/03/2010	.5U	.5U	.5U	.5U	.5U	1U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
	04/18/2011	NA	.5U	2U	2U	.5U	.5U	.5U	10U	.5U	.5U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
B120	09/09/2010	.5U	.5U	.5U	.5U	.5U	1U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.4J	.5U	.5U	.5U
	04/15/2011	NA	1.3U	5U	5U	1.3U	1.3U	1.3U	25U	1.3U	1.3U	5U	1.3U	1.3U	1.3U	1.3U	1.3U	1.3U	1.3U	1.3U	1.3U
B121	09/08/2010	.5UJ	.5U	.5U	.5U	.5U	1U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.3J	.5U	.5U	.5U
	04/13/2011	NA	.5U	2U	2U	.5U	.5U	.5U	10U	.5U	.5U	2U	.5U	.5U	.5U	.5U	.5U	.4J	.5U	.5U	.5U
B128	09/23/2010	.5UJ	.5U	.5U	.5U	.5U	1U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.3J	.5U	.5U	.5U
	09/23/2010	.5UJ	.5U	.5U	.5U	.5U	1U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.6	.5U	.5U	.5U
	04/18/2011	NA	.5U	2U	2U	.5U	.5U	.5U	10U	.5U	.5U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
B150	09/08/2010	.5UJ	.5U	.5U	.5U	.5U	1U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
	04/13/2011	NA	.5U	2U	2U	.5U	.5U	.5U	10U	.5U	.5U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
B158	09/08/2010	.5UJ	.5U	.5U	.5U	.5U	1U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
	04/15/2011	NA	.5U	2U	2U	.5U	.5U	.5U	10U	.5U	.5U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
B163	09/02/2010	.5U	.5U	.5U	.5U	.5U	1U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	8.4	.5U	.3J	.5U
	04/12/2011	NA	.5U	2U	2U	.5U	.5U	.5U	10U	.5U	.5U	2U	.5U	.5U	.5U	.5U	.5U	9.5	.5U	.4J	.5U
B175S	09/03/2010	.5U	.5U	.5U	.5U	.5U	1U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.2J	.5U	.5U	.5U
	04/13/2011	NA	.5U	2U	2U	.5U	.5U	.5U	10U	.5U	.5U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
B175W	09/08/2010	.5UJ	.5U	.5U	.5U	.5U	1U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	1.4	.5U	.5U	.5U
	04/13/2011	NA	.5U	2U	2U	.5U	.5U	.5U	10U	.5U	.5U	2U	.5U	.5U	.5U	.5U	.5U	1.7	.5U	.5U	.5U
B177	09/23/2010	.5UJ	.5U	.5UJ	.5U	.5U	1U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
	04/18/2011	NA	.5U	2U	2U	.5U	.5U	.5U	10U	.5U	.5U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
B178	09/02/2010	.5U	.5U	.5U	.5U	.5U	1U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.2J	.5U	.4J	.5U
	04/15/2011	NA	1.3U	5U	5U	1.3U	1.3U	1.3U	25U	1.3U	1.3U	5U	1.3U	1.3U	1.3U	1.3U	1.3U	.3J	1.3U	1.3U	1.3U
B180	09/15/2010	.5U	.5U	.5U	.5U	.5U	1U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
	04/13/2011	NA	.5U	2U	2U	.5U	.5U	.5U	10U	.5U	.5U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
B185	09/02/2010	.5U	.5U	.5U	.5U	.5U	1U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.4J	.5U	.5U	.5U

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		VOLATILE ORGANIC COMPOUNDS (ug/L)																		
Location ID	Date Collected	Dichlorodifluoromethane	Ethylbenzene	Freon 113	Hexachlorobutadiene	Isopropylbenzene	M,P-Xylene	Methyl Tert-Butyl Ether	Methylene Chloride	N-Butylbenzene	N-Propylbenzene	Naphthalene	O-Xylene	P-Isopropyltoluene	Sec-Butylbenzene	Styrene	Tert-Butylbenzene	Tetrachloroethene	Toluene	Trans-1,2-Dichloroethene	Trans-1,3-Dichloropropene
B185	04/15/2011	NA	.7U	2.9U	2.9U	.7U	.7U	.2J	14U	.7U	.7U	2.9U	.7U	.7U	.7U	.7U	.7U	.3J	.7U	.7U	.7U
B194	09/09/2010	.5UJ	.5U	.5U	.5U	.5U	1U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
	04/13/2011	NA	.5U	2U	2U	.5U	.5U	.5U	10U	.5U	.5U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
B195	09/09/2010	.5UJ	.5U	.5U	.5U	.5U	1U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	3.1	.5U	.4J	.5U
	04/13/2011	NA	.5U	2U	2UJ	.5U	.5U	.5U	10UJ	.5U	.5U	2U	.5U	.5U	.5U	.5U	.5U	2.2	.5U	.2J	.5U
B197	09/09/2010	.5U	.5U	.5U	.5U	.5U	1U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	1	.5U	.4J	.5U
	09/09/2010	.5U	.5U	.5U	.5U	.5U	1U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	1	.5U	.4J	.5U
	04/13/2011	NA	1.7U	6.7U	6.7U	1.7U	1.7U	1.7U	33U	1.7U	1.7U	6.7U	1.7U	1.7U	1.7U	1.7U	1.7U	1.7U	1.7U	1.7U	1.7U
B277	09/15/2010	.5U	.5U	.5U	.5U	.5U	1U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
	04/18/2011	NA	.5U	2U	2U	.5U	.5U	.5U	10U	.5U	.5U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
B278	09/16/2010	.5U	.5U	.5U	.5U	.5U	1U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
	04/19/2011	NA	.5U	2U	2U	.5U	.5U	.5U	10U	.5U	.5U	2U	.5U	.5U	.5U	.5U	.5U	.1J	.5U	.5U	.5U
B280A	09/16/2010	.5U	.5U	.5U	.5U	.5U	1U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
	04/14/2011	NA	.5U	2U	2U	.5U	.5U	.5U	10U	.5U	.5U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
B280B	10/01/2010	.5U	.5U	.5U	.5U	.5U	1U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5UJ
	04/14/2011	NA	.5U	2U	2U	.5U	.5U	.5U	10U	.5U	.5U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
B300	09/09/2010	.5UJ	.5U	.5U	.5U	.5U	1U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
	04/15/2011	NA	.5U	2U	2U	.5U	.5U	.5U	10U	.5U	.5U	2U	.5U	.2J	.5U	.5U	.5U	.5U	.5U	.5U	.5U
B38	09/15/2010	.5U	.5U	.5U	.5U	.5U	1U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
	04/19/2011	NA	.5U	2U	2U	.5U	.5U	.5U	10U	.5U	.5U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
B450	04/19/2011	NA	.5U	2U	2U	.5U	.5U	.5U	10U	.5U	.5U	2U	.5U	.5U	.5U	.5U	.5U	.2J	.5U	.5U	.5U
B460	09/15/2010	.5U	.5U	.5U	.5U	.5U	1U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
	04/20/2011	NA	.5U	2U	2U	.5U	.5U	.5U	10U	.5U	.5U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
B473	09/24/2010	.5UJ	.5U	.5U	.5U	.5U	1U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
	04/20/2011	NA	.5U	2U	2U	.5U	.5U	.5U	10U	.5U	.5U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U

ATTACHMENT 2: SUMMARY OF COMPLETE ANALYTICAL RESULTS FOR GROUNDWATER SAMPLES

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University of California, Berkeley, Richmond Field Station, Richmond, California

VOLATILE ORGANIC COMPOUNDS (ug/L)

Location ID	Date Collected	Dichlorodifluoromethane	Ethylbenzene	Freon 113	Hexachlorobutadiene	Isopropylbenzene	M,P-Xylene	Methyl Tert-Butyl Ether	Methylene Chloride	N-Butylbenzene	N-Propylbenzene	Naphthalene	O-Xylene	P-Isopropyltoluene	Sec-Butylbenzene	Styrene	Tert-Butylbenzene	Tetrachloroethene	Toluene	Trans-1,2-Dichloroethene	Trans-1,3-Dichloropropene
B474	09/23/2010	.5UJ	.5U	.5U	.5U	.5U	1U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
	04/20/2011	NA	.5U	2U	2U	.5U	.5U	.5U	10UJ	.5U	.5U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
B480	09/24/2010	.5UJ	.5U	.5U	.5U	.5U	1U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
	04/19/2011	NA	.5U	2U	2U	.5U	.5U	.5U	10U	.5U	.5U	2U	.5U	.5U	.5U	.5U	.5U	.1J	.5U	.5U	.5U
B490	09/16/2010	.5U	.5U	.5U	.5U	.5U	1U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
	04/20/2011	NA	.5U	2U	2U	.5U	.5U	.5U	10U	.5U	.5U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
BULB1	10/19/2010	.5U	.5U	.5U	.5U	.5U	1U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	3.4	.5U	.5U
	04/12/2011	NA	.5U	2U	2U	.5U	.5U	.5U	10U	.5U	.5U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
BULB2	10/19/2010	.5U	.5U	.5U	.5U	.5U	1U	2U	.5U	.5U	.5U	.2J	.5U	.5U	.5U	.5U	.5U	.5U	6.8	.5U	.5U
	04/12/2011	NA	.5U	2U	2U	.5U	.5U	.9	10U	.5U	.5U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
CCC1	09/08/2010	.5UJ	.5U	.5U	.5U	.5U	1U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
	04/14/2011	NA	.5U	2U	2U	.5U	.5U	.5U	10U	.5U	.5U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
CCC2	09/08/2010	.5UJ	.5U	.5U	.5U	.5U	1U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	2.6	.5U	.5U	.5U
	04/14/2011	NA	.5U	2U	2U	.5U	.5U	.5U	10U	.5U	.5U	2U	.5U	.5U	.5U	.5U	.5U	.2J	.5U	.5U	.5U
CCC3	09/03/2010	.5U	.5U	.5U	.5U	.5U	1U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
	09/03/2010	.5U	.5U	.5U	.5U	.5U	1U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
	04/12/2011	NA	.5U	2U	2U	.5U	.5U	.5U	10U	.5U	.5U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
CTP	09/30/2010	.5U	.5U	.5U	.5U	.5U	1U	2U	.4J	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5UJ
	09/30/2010	.5U	.5U	.5U	.5U	.5U	1U	2U	.3J	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5UJ
	04/14/2011	NA	.5U	2U	2U	.5U	.5U	.5U	10U	.5U	.5U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
CTPS	09/30/2010	.5U	.5U	.5U	.5U	.5U	1U	2U	.5J	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5UJ
	04/19/2011	NA	.5U	2U	2U	.5U	.5U	.5U	10U	.5U	.5U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
DH	09/30/2010	.5U	.5U	.5U	.5U	.5U	1U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5UJ
	04/14/2011	NA	.5U	2U	2U	.5U	.5U	.5U	10U	.5U	.5U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
EERC	10/01/2010	.5UJ	.5U	.5U	.5U	.5U	1U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.3J	.5U	.5U	.5U
	04/20/2011	NA	.5U	2U	2U	.5U	.5U	.5U	10UJ	.5U	.5U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U

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VOLATILE ORGANIC COMPOUNDS (ug/L)

Location ID	Date Collected	Dichlorodifluoromethane	Ethylbenzene	Freon 113	Hexachlorobutadiene	Isopropylbenzene	M,P-Xylene	Methyl Tert-Butyl Ether	Methylene Chloride	N-Butylbenzene	N-Propylbenzene	Naphthalene	O-Xylene	P-Isopropyltoluene	Sec-Butylbenzene	Styrene	Tert-Butylbenzene	Tetrachloroethene	Toluene	Trans-1,2-Dichloroethene	Trans-1,3-Dichloropropene
EPA	09/16/2010	.5U	.5U	.5U	.5U	.5U	1U	2U	.6	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
	04/19/2011	NA	.5U	2U	2U	.5U	.5U	.5U	10U	.5U	.5U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
ETA	09/24/2010	.5UJ	.5U	.5U	.5U	.5U	1U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
	09/24/2010	.5UJ	.5U	.5U	.5U	.5U	1U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
	04/12/2011	NA	.5U	2U	2U	.5U	.5U	.5U	10U	.5U	.5U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
FG	09/23/2010	.5UJ	.5U	.5U	.5U	.5U	1U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
	04/19/2011	NA	.5U	2U	2U	.5U	.5U	.5U	10U	.5U	.5U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
GEO	09/03/2010	.5UJ	.5U	.5U	.5U	.5U	1U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
	04/20/2011	NA	.5U	2U	2U	.5U	.5U	.5U	10U	.5U	.5U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
MFA	09/24/2010	.5UJ	.5U	.5U	.5U	.5U	1U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
	04/12/2011	NA	.5U	2U	2U	.5U	.5U	.5U	10U	.5U	.5U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
NRLF	09/16/2010	.5U	.5U	.5U	.5U	.5U	1U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
	04/20/2011	NA	.5U	2U	2U	.5U	.5U	.5U	10U	.5U	.5U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
PZ11	10/01/2010	.5U	.5U	.5U	.5U	.5U	1U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	67	.5U	2.4	.5UJ
	04/20/2011	NA	.5U	2U	2U	.5U	.5U	.5U	10U	.5U	.5U	2U	.5U	.5U	.5U	.5U	.5U	1.2	.5U	.5U	.5U
PZ8	10/15/2010	.5U	.5U	.5U	.5U	.5U	1U	2U	.5U	.5U	.5U	.5UJ	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
	04/18/2011	NA	.5U	2U	2U	.5U	.5U	.5U	10U	.5U	.5U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
PZ9	09/24/2010	.5UJ	.5U	.5U	.5U	.5U	1U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
	04/20/2011	NA	.5U	2U	2U	.5U	.5U	.5U	10U	.5U	.5U	2U	.5U	.5U	.5U	.5U	.5U	.2J	.5U	.5U	.5U
RWF	09/15/2010	.5U	.5U	.5U	.5U	.5U	1U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
	04/18/2011	NA	.5U	2U	2U	.5U	.5U	.5U	10U	.5U	.5U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
TP1	09/29/2010	.5UJ	.5U	.5U	.5U	.5U	1U	2UJ	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5UJ	.5U
	04/18/2011	NA	.5U	2U	2U	.5U	.5U	.5U	10U	.5U	.5U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U
TP2	09/29/2010	.5UJ	.5U	.5U	.5U	.5U	1U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.2J	.5U	.5U	.5U
	04/18/2011	NA	.5U	2U	2U	.5U	.5U	.5U	10U	.5U	.5U	2U	.5U	.5U	.5U	.5U	.5U	.3J	.5U	.5U	.5U

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		VOLATILE ORGANIC COMPOUNDS (ug/L)																		
Location ID	Date Collected	Dichlorodifluoromethane	Ethylbenzene	Freon 113	Hexachlorobutadiene	Isopropylbenzene	M,P-Xylene	Methyl Tert-Butyl Ether	Methylene Chloride	N-Butylbenzene	N-Propylbenzene	Naphthalene	O-Xylene	P-Isopropyltoluene	Sec-Butylbenzene	Styrene	Tert-Butylbenzene	Tetrachloroethene	Toluene	Trans-1,2-Dichloroethene	Trans-1,3-Dichloropropene
WTA	09/30/2010	.5U	.5U	.5U	.5U	.5U	1U	2U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	.5U	3.2	.5U	.5U	.5UJ
	04/14/2011	NA	.5U	2U	2U	.5U	.5U	.5U	10U	.5U	.5U	2U	.5U	.5U	.5U	.5U	.5U	3.8	.5U	.5U	.5U

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		VOC (ug/L)			SEMIVOLATILE ORGANIC COMPOUNDS (ug/L)															
Location ID	Date Collected	Trichloroethene	Trichlorofluoromethane	Vinyl Chloride	1,2,4-Trichlorobenzene	1,2-Dichlorobenzene	1,3-Dichlorobenzene	1,4-Dichlorobenzene	1,4-Dioxane	2,2'-Oxybis(1-Chloropropane)	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	2,4-Dichlorophenol	2,4-Dimethylphenol	2,4-Dinitrophenol	2,4-Dinitrotoluene	2,6-Dinitrotoluene	2-Chloronaphthalene	2-Chlorophenol	2-Methylnaphthalene	2-Methylphenol
CCCT	09/03/2010	120	.5U	.5U	.9U	.9U	.9U	.9U	.9U	.9UJ	4.7U	4.7U	4.7U	4.7U	19U	.9U	.9U	.9U	4.7U	.9U	4.7U
	04/18/2011	84	1U	.5U	9.5U	9.5U	9.5U	9.5U	NA	9.5U	9.5U	9.5U	9.5U	9.5U	19U	9.5U	9.5U	9.5U	9.5U	9.5U	9.5U
B120	09/09/2010	210	.5U	.5U	.9U	.9U	.9U	.9U	.9U	.9U	4.7U	4.7U	4.7U	4.7U	19U	.9UJ	.9U	.9U	4.7U	.9U	4.7U
	04/15/2011	170	2.5U	1.3U	9.4U	9.4U	9.4U	9.4U	NA	9.4U	9.4U	9.4U	9.4U	9.4U	19U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U
B121	09/08/2010	.8	.5U	.5UJ	.9U	.9U	.9U	.9U	.9U	.9U	4.7U	4.7U	4.7U	4.7U	19U	.9U	.9U	.9U	4.7U	.9U	4.7U
	04/13/2011	1.1	1U	.5U	9.4U	9.4U	9.4U	9.4U	NA	9.4U	9.4U	9.4U	9.4U	9.4U	19U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U
B128	09/23/2010	.5U	.5U	.5U	1U	1U	1U	1U	1U	1U	5U	5U	5U	5U	20U	1U	1U	1U	5U	1U	5UJ
	09/23/2010	.5U	.5U	.5U	1U	1U	1U	1U	1U	1U	5U	5U	5U	5U	20U	1U	1U	1U	5U	1U	5UJ
	04/18/2011	.5U	1U	.5U	9.4U	9.4U	9.4U	9.4U	NA	9.4U	9.4U	9.4U	9.4U	9.4U	19U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U
B150	09/08/2010	.5U	.5U	.5UJ	1U	1U	1U	1U	1U	1U	4.8U	4.8U	4.8U	4.8U	19U	1U	1U	1U	4.8U	1U	4.8U
	04/13/2011	.5U	1U	.5U	9.4U	9.4U	9.4U	9.4U	NA	9.4U	9.4U	9.4U	9.4U	9.4U	19U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U
B158	09/08/2010	.5U	.5U	.5UJ	1U	1U	1U	1U	1U	1U	5U	5U	5U	5U	20U	1U	1U	1U	5U	1U	5U
	04/15/2011	.5U	1U	.5U	9.4U	9.4U	9.4U	9.4U	NA	9.4U	9.4U	9.4U	9.4U	9.4U	19U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U
B163	09/02/2010	100	.5U	.7	1U	1U	1U	1U	.5J	1UJ	5U	5U	5U	5U	20U	1U	1U	1U	5U	1U	5U
	04/12/2011	77J	1U	1.2	9.4U	9.4U	9.4U	9.4U	NA	9.4U	9.4U	9.4U	9.4U	9.4U	19UJ	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U
B175S	09/03/2010	7.9	.5U	.5U	.9U	.9U	.9U	.9U	.9U	.9UJ	4.7U	4.7U	4.7U	4.7U	19U	.9U	.9U	.9U	4.7U	.9U	4.7U
	04/13/2011	5.3	1U	.5U	9.4U	9.4U	9.4U	9.4U	NA	9.4U	9.4U	9.4U	9.4U	9.4U	19U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U
B175W	09/08/2010	.5U	.5U	.5UJ	1U	1U	1U	1U	1U	1U	5U	5U	5U	5U	20U	1U	1U	1U	5U	1U	5U
	04/13/2011	.5U	1U	.5U	9.4U	9.4U	9.4U	9.4U	NA	9.4U	9.4U	9.4U	9.4U	9.4U	19U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U
B177	09/23/2010	.5U	.5U	.5U	.9U	.9U	.9U	.9UJ	.9U	.9U	4.7U	4.7U	4.7U	4.7U	19U	.9U	.9U	.9U	4.7U	.9U	4.7UJ
	04/18/2011	.5U	1U	.5U	9.4U	9.4U	9.4U	9.4U	NA	9.4U	9.4U	9.4U	9.4U	9.4U	19U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U
B178	09/02/2010	360	.5U	.5U	1U	1U	1U	1U	1U	1UJ	5U	5U	5U	5U	20U	1U	1U	1U	5U	1U	5U
	04/15/2011	160	2.5U	1.3U	9.4U	9.4U	9.4U	9.4U	NA	9.4U	9.4U	9.4U	9.4U	9.4U	19U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U
B180	09/15/2010	.5U	.5U	.5U	1U	1U	1U	1U	1U	1U	4.8U	4.8U	4.8U	4.8U	19U	1UJ	1U	1U	4.8U	1U	4.8U
	04/13/2011	.5U	1U	.5U	9.4U	9.4U	9.4U	9.4U	NA	9.4U	9.4U	9.4U	9.4U	9.4U	19U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U
B185	09/02/2010	150	.5U	.2J	.9U	.9U	.9U	.9U	10	.9UJ	4.7U	4.7U	4.7U	4.7U	19U	.9U	.9U	.9U	4.7U	.9U	4.7U
	04/15/2011	77	1.4U	.2J	9.4U	9.4U	9.4U	9.4U	NA	9.4U	9.4U	9.4U	9.4U	9.4U	19U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U

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		VOC (ug/L)			SEMIVOLATILE ORGANIC COMPOUNDS (ug/L)																
Location ID	Date Collected	Trichloroethene	Trichlorofluoromethane	Vinyl Chloride	1,2,4-Trichlorobenzene	1,2-Dichlorobenzene	1,3-Dichlorobenzene	1,4-Dichlorobenzene	1,4-Dioxane	2,2'-Oxybis(1-Chloropropane)	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	2,4-Dichlorophenol	2,4-Dimethylphenol	2,4-Dinitrophenol	2,4-Dinitrotoluene	2,6-Dinitrotoluene	2-Chloronaphthalene	2-Chlorophenol	2-Methylnaphthalene	2-Methylphenol
B194	09/09/2010	2	.5U	.5UJ	.9U	.9U	.9U	.9U	.9U	.9U	4.7U	4.7U	4.7U	4.7U	19U	.9UJ	.9U	.9U	4.7U	.9U	4.7U
	04/13/2011	.5U	1U	.5U	9.4U	9.4U	9.4U	9.4U	NA	9.4U	9.4U	9.4U	9.4U	9.4U	19U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U
B195	09/09/2010	140	.5U	.5UJ	.9U	.9U	.9U	.9U	.9U	.9U	4.7U	4.7U	4.7U	4.7U	19U	.9UJ	.9U	.9U	4.7U	.9U	4.7U
	04/13/2011	68	1U	.5U	9.4U	9.4U	9.4U	9.4U	NA	9.4U	9.4U	9.4U	9.4U	9.4U	19U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U
B197	09/09/2010	200	.5U	.5U	.9U	.9U	.9U	.9U	.9U	.9U	4.7U	4.7U	4.7U	4.7U	19U	.9UJ	.9U	.9U	4.7U	.9U	4.7U
	09/09/2010	170	.5U	.5U	1U	1U	1U	1U	1U	1U	4.8U	4.8U	4.8U	4.8U	19U	1UJ	1U	1U	4.8U	1U	4.8U
	04/13/2011	150	3.3U	1.7U	9.4U	9.4U	9.4U	9.4U	NA	9.4U	9.4U	9.4U	9.4U	9.4U	19U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U
B277	09/15/2010	.5U	.5U	.5U	1U	1U	1U	1U	1U	1U	5U	5U	5U	5U	20U	1UJ	1U	1U	5U	1U	5U
	04/18/2011	.5U	1U	.5U	9.4U	9.4U	9.4U	9.4U	NA	9.4U	9.4U	9.4U	9.4U	9.4U	19U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U
B278	09/16/2010	13J	.5U	.5U	1U	1U	1U	1U	1.4	1U	5U	5U	5U	5U	20U	1UJ	1U	1U	5U	1U	5U
	04/19/2011	15	1U	.5U	9.4U	9.4U	9.4U	9.4U	NA	9.4U	9.4U	9.4U	9.4U	9.4U	19U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U
B280A	09/16/2010	.5U	.5U	.5U	1U	1U	1U	1U	1U	1U	5U	5U	5U	5U	20U	1UJ	1U	1U	5U	1U	5U
	04/14/2011	.5U	1U	.5U	9.4U	9.4U	9.4U	9.4U	NA	9.4U	9.4U	9.4U	9.4U	9.4U	19U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U
B280B	10/01/2010	1.8	.5U	.5U	1U	1U	1U	1U	1U	1U	5U	5U	5U	5U	20U	1U	1U	1U	5U	1UJ	5UJ
	04/14/2011	.5U	1U	.5U	10U	10U	10U	10U	NA	10U	10U	10U	10U	10U	20U	10U	10U	10U	10U	10U	10U
B300	09/09/2010	.7	.5U	.5UJ	.9U	.9U	.9U	.9U	1.4	.9U	4.7U	4.7U	4.7U	4.7U	19U	.9UJ	.9U	.9U	4.7U	.9U	4.7U
	04/15/2011	.5U	1U	.5U	9.4U	9.4U	9.4U	9.4U	NA	9.4U	9.4U	9.4U	9.4U	9.4U	19U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U
B38	09/15/2010	.5U	.5U	.5U	1U	1U	1U	1U	1U	1U	5U	5U	5U	5U	20U	1UJ	1U	1U	5U	1U	5U
	04/19/2011	.5U	1U	.5U	9.4U	9.4U	9.4U	9.4U	NA	9.4U	9.4U	9.4U	9.4U	9.4U	19U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U
B450	04/19/2011	5	1U	.5U	9.4U	9.4U	9.4U	9.4U	NA	9.4U	9.4U	9.4U	9.4U	9.4U	19U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U
B460	09/15/2010	.5U	.5U	.5U	1U	1U	1U	1U	1U	1U	5U	5U	5U	5U	20U	1UJ	1U	1U	5U	1U	5U
	04/20/2011	.5U	1U	.5U	9.4U	9.4U	9.4U	9.4U	NA	9.4U	9.4U	9.4U	9.4U	9.4U	19U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U
B473	09/24/2010	12	.5U	.5U	1U	1U	1U	1U	.5J	1U	5U	5U	5U	5U	20U	1U	1U	1U	5U	1U	5UJ
	04/20/2011	3.4	1U	.5U	9.4U	9.4U	9.4U	9.4U	NA	9.4U	9.4U	9.4U	9.4U	9.4U	19U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U
B474	09/23/2010	.5U	.5U	.5U	1U	1U	1U	1U	1U	1U	5U	5U	5U	5U	20U	1U	1U	1U	5U	1U	5UJ
	04/20/2011	.4J	1U	.5U	9.4U	9.4U	9.4U	9.4U	NA	9.4U	9.4U	9.4U	9.4U	9.4U	19U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U

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University of California, Berkeley, Richmond Field Station, Richmond, California

		VOC (ug/L)			SEMIVOLATILE ORGANIC COMPOUNDS (ug/L)															
Location ID	Date Collected	Trichloroethene	Trichlorofluoromethane	Vinyl Chloride	1,2,4-Trichlorobenzene	1,2-Dichlorobenzene	1,3-Dichlorobenzene	1,4-Dichlorobenzene	1,4-Dioxane	2,2'-Oxybis(1-Chloropropane)	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	2,4-Dichlorophenol	2,4-Dimethylphenol	2,4-Dinitrophenol	2,4-Dinitrotoluene	2,6-Dinitrotoluene	2-Chloronaphthalene	2-Chlorophenol	2-Methylnaphthalene	2-Methylphenol
B480	09/24/2010	10	.5U	.5U	1U	1U	1U	1U	1U	1U	5U	5U	5U	5U	20U	1U	1U	1U	5U	1U	5UJ
	04/19/2011	9.1	1U	.5U	9.4U	9.4U	9.4U	9.4U	NA	9.4U	9.4U	9.4U	9.4U	9.4U	19U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U
B490	09/16/2010	.5U	.5U	.5U	1U	1U	1U	1U	1U	1U	5U	5U	5U	5U	20U	1UJ	1U	1U	5U	1U	5U
	04/20/2011	.5U	1U	.5U	9.4U	9.4U	9.4U	9.4U	NA	9.4U	9.4U	9.4U	9.4U	9.4U	19U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U
BULB1	10/19/2010	.5U	.5U	.5U	.9U	.9U	.9U	.9U	.9U	.9U	4.7U	4.7U	4.7U	4.7U	19UJ	.9U	.9U	.9U	4.7U	.9U	4.7U
	04/12/2011	.5U	1U	.5U	9.4U	9.4U	9.4U	9.4U	NA	9.4U	9.4U	9.4U	9.4U	9.4U	19U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U
BULB2	10/19/2010	.5U	.5U	.5U	1U	1U	1U	1U	1.3	1U	5U	5U	5U	5U	20UJ	1U	1U	1U	5U	1U	5U
	04/12/2011	.4J	1U	.5U	9.4U	9.4U	9.4U	9.4U	NA	9.4U	9.4U	9.4U	9.4U	9.4U	19U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U
CCC1	09/08/2010	.5U	.5U	.5UJ	.9U	.9U	.9U	.9U	.9U	.9U	4.7U	4.7U	4.7U	4.7U	19U	.9U	.9U	.9U	4.7U	.9U	4.7U
	04/14/2011	.5U	1U	.5U	9.4U	9.4U	9.4U	9.4U	NA	9.4U	9.4U	9.4U	9.4U	9.4U	19U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U
CCC2	09/08/2010	.5U	.5U	.5UJ	1U	1U	1U	1U	1U	1U	4.8U	4.8U	4.8U	4.8U	19U	1U	1U	1U	4.8U	1U	4.8U
	04/14/2011	.5U	1U	.5U	9.4U	9.4U	9.4U	9.4U	NA	9.4U	9.4U	9.4U	9.4U	9.4U	19U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U
CCC3	09/03/2010	6	.5U	.5U	.9U	.9U	.9U	.9U	.9U	.9UJ	4.7U	4.7U	4.7U	4.7U	19U	.9U	.9U	.9U	4.7U	.9U	4.7U
	09/03/2010	6.2	.5U	.5U	.9U	.9U	.9U	.9U	.9U	.9UJ	4.7U	4.7U	4.7U	4.7U	19U	.9U	.9U	.9U	4.7U	.9U	4.7U
	04/12/2011	.7	1U	.5U	9.4U	9.4U	9.4U	9.4U	NA	9.4U	9.4U	9.4U	9.4U	9.4U	19U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U
CTP	09/30/2010	.5U	.5U	.5U	1U	1U	1U	1U	1U	1U	5U	5U	5U	5U	20U	1U	1U	1U	5U	1UJ	5UJ
	09/30/2010	.5U	.5U	.5U	1U	1U	1U	1U	1U	1U	5U	5U	5U	5U	20U	1U	1U	1U	5U	1UJ	5UJ
	04/14/2011	.2J	1U	.5U	9.4U	9.4U	9.4U	9.4U	NA	9.4U	9.4U	9.4U	9.4U	9.4U	19U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U
CTPS	09/30/2010	.5U	.5U	.5U	.5U	.5U	.5U	.5U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	10/01/2010	NA	NA	NA	1.2U	1.2U	1.2U	1.2U	1.2U	1.2U	6U	6U	6U	6U	24U	1.2U	1.2U	1.2U	6U	1.2UJ	6UJ
	04/19/2011	.5U	1U	.5U	9.4U	9.4U	9.4U	9.4U	NA	9.4U	9.4U	9.4U	9.4U	9.4U	19U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U
DH	09/30/2010	.5U	.5U	.5U	1U	1U	1U	1U	1U	1U	5U	5U	5U	5U	20U	1U	1U	1U	5U	1UJ	5UJ
	04/14/2011	.5U	1U	.5U	9.4U	9.4U	9.4U	9.4U	NA	9.4U	9.4U	9.4U	9.4U	9.4U	19U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U
EERC	10/01/2010	6.8	.5U	.5UJ	1U	1U	1U	1U	1U	1U	5U	5U	5U	5U	20U	1U	1U	1U	5U	1UJ	5UJ
	04/20/2011	.5U	1U	.5U	9.4U	9.4U	9.4U	9.4U	NA	9.4U	9.4U	9.4U	9.4U	9.4U	19U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U
EPA	09/16/2010	.6	.5U	.5U	1U	1U	1U	1U	1U	1U	5U	5U	5U	5U	20U	1UJ	1U	1U	5U	1U	5U
	04/19/2011	.5U	1U	.5U	9.4U	9.4U	9.4U	9.4U	NA	9.4U	9.4U	9.4U	9.4U	9.4U	19U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U

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		VOC (ug/L)			SEMIVOLATILE ORGANIC COMPOUNDS (ug/L)															
Location ID	Date Collected	Trichloroethene	Trichlorofluoromethane	Vinyl Chloride	1,2,4-Trichlorobenzene	1,2-Dichlorobenzene	1,3-Dichlorobenzene	1,4-Dichlorobenzene	1,4-Dioxane	2,2'-Oxybis(1-Chloropropane)	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	2,4-Dichlorophenol	2,4-Dimethylphenol	2,4-Dinitrophenol	2,4-Dinitrotoluene	2,6-Dinitrotoluene	2-Chloronaphthalene	2-Chlorophenol	2-Methylnaphthalene	2-Methylphenol
ETA	09/24/2010	12	.5U	.5U	.9U	.9U	.9U	.9U	12	.9U	4.7U	4.7U	4.7U	4.7U	19U	.9U	.9U	.9U	4.7U	.9U	4.7UJ
	09/24/2010	14	.5U	.5U	1U	1U	1U	1U	12	1U	5U	5U	5U	5U	20U	1U	1U	1U	5U	1U	5UJ
	04/12/2011	7.3	1U	.5U	9.4U	9.4U	9.4U	9.4U	NA	9.4U	9.4U	9.4U	9.4U	9.4U	19U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U
FG	09/23/2010	.5U	.5U	.5U	1U	1U	1U	1U	1U	1U	5U	5U	5U	5U	20U	1U	1U	1U	5U	1U	5UJ
	04/19/2011	.5U	1U	.5U	9.4U	9.4U	9.4U	9.4U	NA	9.4U	9.4U	9.4U	9.4U	9.4U	19U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U
GEO	09/03/2010	.4J	.5U	.5U	.9U	.9U	.9U	.9U	.9U	.9UJ	4.7U	4.7U	4.7U	4.7U	19U	.9U	.9U	.9U	4.7U	.9U	4.7U
	04/20/2011	.5U	1U	.5U	9.4U	9.4U	9.4U	9.4U	NA	9.4U	9.4U	9.4U	9.4U	9.4U	19U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U
MFA	09/24/2010	5.7	.5U	.5U	1U	1U	1U	1U	2.3	1U	5U	5U	5U	5U	20U	1U	1U	1U	5U	1U	5UJ
	04/12/2011	3.1	1U	.5U	9.4U	9.4U	9.4U	9.4U	NA	9.4U	9.4U	9.4U	9.4U	9.4U	19U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U
NRLF	09/16/2010	.5U	.5U	.5U	1U	1U	1U	1U	1U	1U	4.8U	4.8U	4.8U	4.8U	19U	1UJ	1U	1U	4.8U	1U	4.8U
	04/20/2011	.5U	1U	.5U	9.4U	9.4U	9.4U	9.4U	NA	9.4U	9.4U	9.4U	9.4U	9.4U	19U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U
PZ11	10/01/2010	690	.5U	.6	1U	1U	1U	1U	.7J	1U	5U	5U	5U	5U	20U	1U	1U	1U	5U	1UJ	5UJ
	04/20/2011	8.1	1U	.5U	9.4U	9.4U	9.4U	9.4U	NA	9.4U	9.4U	9.4U	9.4U	9.4U	19U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U
PZ8	10/15/2010	.5U	.5U	.5U	1U	1U	1U	1U	1U	1U	5U	5U	5U	5U	20UJ	1U	1U	1U	5U	1U	5U
	04/18/2011	.5U	1U	.5U	9.4U	9.4U	9.4U	9.4U	NA	9.4U	9.4U	9.4U	9.4U	9.4U	19U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U
PZ9	09/24/2010	16	.5U	.5U	1U	1U	1U	1U	1.6	1U	5U	5U	5U	5U	20U	1U	1U	1U	5U	1U	5UJ
	04/20/2011	11	1U	.5U	9.4U	9.4U	9.4U	9.4U	NA	9.4U	9.4U	9.4U	9.4U	9.4U	19U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U
RWF	09/15/2010	4.4	.5U	.5U	1U	1U	1U	1U	.7J	1U	5U	5U	5U	5U	20U	1UJ	1U	1U	5U	1U	5U
	04/18/2011	2.8	1U	.5U	9.4U	9.4U	9.4U	9.4U	NA	9.4U	9.4U	9.4U	9.4U	9.4U	19U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U
TP1	09/29/2010	13	.5U	.5U	1U	1U	1U	1U	1U	1U	5U	5U	5U	5U	20U	1U	1U	1U	5U	1UJ	5UJ
	04/18/2011	1.8	1U	.5U	9.4U	9.4U	9.4U	9.4U	NA	9.4U	9.4U	9.4U	9.4U	9.4U	19U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U
TP2	09/29/2010	15	.5U	.5U	1U	1U	1U	1U	1.1	1U	5U	5U	5U	5U	20U	1U	1U	1U	5U	1UJ	5UJ
	04/18/2011	12	1U	.5U	9.4U	9.4U	9.4U	9.4U	NA	9.4U	9.4U	9.4U	9.4U	9.4U	19U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U
WTA	09/30/2010	.4J	.5U	.5U	1U	1U	1U	1U	1U	1U	5U	5U	5U	5U	20UJ	1U	1U	1U	5U	1UJ	5UJ
	04/14/2011	.4J	1U	.5U	9.4U	9.4U	9.4U	9.4U	NA	9.4U	9.4U	9.4U	9.4U	9.4U	19U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U

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Location ID	Date Collected	2-Nitroaniline	2-Nitrophenol	3,3'-Dichlorobenzidine	3-Nitroaniline	3/4-Methylphenol	4,6-Dinitro-2-Methylphenol	4-Bromophenyl-Phenylether	4-Chloro-3-Methylphenol	4-Chloroaniline	4-Chlorophenyl-Phenylether	4-Methylphenol	4-Nitroaniline	4-Nitrophenol	Acenaphthene	Acenaphthylene	Anthracene	Benzo(A)Anthracene	Benzo(A)Pyrene	Benzo(B)Fluoranthene	Benzo(G,H,I)Perylene
CCCT	09/03/2010	4.7U	4.7U	4.7U	4.7U	NA	4.7UJ	.9U	4.7U	4.7U	.9U	4.7U	4.7U	4.7U	.9U	.9U	.9U	.9U	.9U	.9U	.9U
	04/18/2011	19U	19U	19U	19U	NA	19U	9.5U	9.5U	9.5U	9.5U	9.5U	19U	19U	9.5U	9.5U	9.5U	9.5U	9.5U	9.5U	9.5U
B120	09/09/2010	4.7U	4.7U	4.7UJ	4.7U	4.7U	4.7UJ	.9U	4.7U	4.7U	.9U	NA	4.7U	4.7UJ	.9U	.9U	.9U	.9U	.9U	.9U	.9U
	04/15/2011	19U	19U	19U	19U	NA	19U	9.4U	9.4U	9.4U	9.4U	9.4U	19U	19U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U
B121	09/08/2010	4.7U	4.7U	4.7UJ	4.7U	4.7U	4.7UJ	.9U	4.7U	4.7U	.9U	NA	4.7U	4.7U	.9U	.9U	.9U	.9U	.9U	.9U	.9U
	04/13/2011	19U	19U	19U	19U	NA	19U	9.4U	9.4U	9.4U	9.4U	9.4U	19U	19U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U
B128	09/23/2010	5U	5U	5UJ	5U	5U	5UJ	1U	5U	5U	1U	NA	5U	5U	1U	1U	1U	1U	1U	1U	1U
	09/23/2010	5U	5U	5UJ	5U	5U	5UJ	1U	5U	5U	1U	NA	5U	5U	1U	1U	1U	1U	1U	1U	1U
	04/18/2011	19U	19U	19U	19U	NA	19U	9.4U	9.4U	9.4U	9.4U	9.4U	19U	19U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U
B150	09/08/2010	4.8U	4.8U	4.8U	4.8U	4.8U	4.8UJ	1U	4.8U	4.8U	1U	NA	4.8U	4.8U	1U	1U	1U	1U	1U	1U	1U
	04/13/2011	19U	19U	19U	19U	NA	19U	9.4U	9.4U	9.4U	9.4U	9.4U	19U	19U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U
B158	09/08/2010	5U	5U	5U	5U	5U	5UJ	1U	5U	5U	1U	NA	5U	5U	1U	1U	1U	1U	1U	1U	1U
	04/15/2011	19U	19U	19U	19U	NA	19U	9.4U	9.4U	9.4U	9.4U	9.4U	19U	19U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U
B163	09/02/2010	5U	5U	5UJ	5U	NA	5UJ	1U	5U	5U	1U	5U	5U	5U	1U	1U	1U	1U	1U	1U	1U
	04/12/2011	19U	19U	19U	19U	NA	19U	9.4U	9.4U	9.4UJ	9.4U	9.4U	19U	19U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U
B175S	09/03/2010	4.7U	4.7U	4.7UJ	4.7U	NA	4.7UJ	.9U	4.7U	4.7U	.9U	4.7U	4.7U	4.7U	.9U	.9U	.9U	.9U	.9U	.9U	.9U
	04/13/2011	19U	19U	19U	19U	NA	19U	9.4U	9.4U	9.4U	9.4U	9.4U	19U	19U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U
B175W	09/08/2010	5U	5U	5U	5U	5U	5UJ	1U	5U	5U	1U	NA	5U	5U	1U	1U	1U	1U	1U	1U	1U
	04/13/2011	19U	19U	19U	19U	NA	19U	9.4U	9.4U	9.4U	9.4U	9.4U	19U	19U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U
B177	09/23/2010	4.7U	4.7U	4.7UJ	4.7U	4.7U	4.7UJ	.9U	4.7U	4.7U	.9U	NA	4.7U	4.7U	.9U	.9U	.9U	.9U	.9U	.9U	.9U
	04/18/2011	19U	19U	19U	19U	NA	19U	9.4U	9.4U	9.4U	9.4U	9.4U	19U	19U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U
B178	09/02/2010	5U	5U	5UJ	5U	NA	5UJ	1U	5U	5U	1U	5U	5U	5U	1U	1U	1U	1U	1U	1U	1U
	04/15/2011	19U	19U	19U	19U	NA	19U	9.4U	9.4U	9.4U	9.4U	9.4U	19U	19U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U
B180	09/15/2010	4.8U	4.8U	4.8UJ	4.8U	4.8U	4.8UJ	1U	4.8U	4.8U	1U	NA	4.8U	4.8UJ	1U	1U	1U	1U	1U	1U	1U
	04/13/2011	19U	19U	19U	19U	NA	19U	9.4U	9.4U	9.4U	9.4U	9.4U	19U	19U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U
B185	09/02/2010	4.7U	4.7U	4.7UJ	4.7U	NA	4.7UJ	.9U	4.7U	4.7UJ	.9U	4.7U	4.7U	4.7U	.9U	.9U	.9U	.9U	.9U	.9U	.9U
	04/15/2011	19U	19U	19U	19U	NA	19U	9.4U	9.4U	9.4U	9.4U	9.4U	19U	19U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U

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B194	09/09/2010	4.7U	4.7U	4.7UJ	4.7U	4.7U	4.7UJ	.9U	4.7U	4.7U	.9U	NA	4.7U	4.7UJ	.9U	.9U	.9U	.9U	.9U	.9U	.9U
	04/13/2011	19U	19U	19U	19U	NA	19U	9.4U	9.4U	9.4U	9.4U	9.4U	19U	19U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U
B195	09/09/2010	4.7U	4.7U	4.7UJ	4.7U	4.7U	4.7UJ	.9U	4.7U	4.7U	.9U	NA	4.7U	4.7UJ	.9U	.9U	.9U	.9U	.9U	.9U	.9U
	04/13/2011	19U	19U	19U	19U	NA	19U	9.4U	9.4U	9.4U	9.4U	9.4U	19U	19U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U
B197	09/09/2010	4.7U	4.7U	4.7UJ	4.7U	4.7U	4.7UJ	.9U	4.7U	4.7U	.9U	NA	4.7U	4.7UJ	.9U	.9U	.9U	.9U	.9U	.9U	.9U
	09/09/2010	4.8U	4.8U	4.8UJ	4.8U	4.8U	4.8UJ	1U	4.8U	4.8U	1U	NA	4.8U	4.8UJ	1U	1U	1U	1U	1U	1U	1U
	04/13/2011	19U	19U	19U	19U	NA	19U	9.4U	9.4U	9.4U	9.4U	9.4U	19U	19U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U
B277	09/15/2010	5U	5U	5UJ	5U	5U	5UJ	1U	5U	5U	1U	NA	5U	5UJ	1U	1U	1U	1U	1U	1U	1U
	04/18/2011	19U	19U	19U	19U	NA	19U	9.4U	9.4U	9.4U	9.4U	9.4U	19U	19U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U
B278	09/16/2010	5U	5U	5UJ	5U	5U	5UJ	1U	5U	5U	1U	NA	5U	5UJ	1U	1U	1U	1U	1U	1U	1U
	04/19/2011	19U	19U	19U	19U	NA	19U	9.4U	9.4U	9.4U	9.4U	9.4U	19U	19U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U
B280A	09/16/2010	5U	5U	5UJ	5U	5U	5UJ	1U	5U	5U	1U	NA	5U	5UJ	1U	1U	1U	1U	1U	1U	1U
	04/14/2011	19U	19U	19U	19U	NA	19U	9.4U	9.4U	9.4U	9.4U	9.4U	19U	19U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U
B280B	10/01/2010	5U	5U	5UJ	5U	5U	5UJ	1U	5U	5U	1U	NA	5U	5U	1U	1U	1U	1U	1U	1U	1U
	04/14/2011	20U	20U	20U	20U	NA	20U	10U	10U	10U	10U	10U	20U	20U	10U	10U	10U	10U	10U	10U	10U
B300	09/09/2010	4.7U	4.7U	4.7UJ	4.7U	4.7U	4.7UJ	.9U	4.7U	4.7U	.9U	NA	4.7U	4.7UJ	.9U	.9U	.9U	.9U	.9U	.9U	.9U
	04/15/2011	19U	19U	19U	19U	NA	19U	9.4U	9.4U	9.4U	9.4U	9.4U	19U	19U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U
B38	09/15/2010	5U	5U	5UJ	5U	5U	5UJ	1U	5U	5U	1U	NA	5U	5UJ	1U	1U	1U	1U	1U	1U	1U
	04/19/2011	19U	19U	19U	19U	NA	19U	9.4U	9.4U	9.4U	9.4U	9.4U	19U	19U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U
B450	04/19/2011	19U	19U	19U	19U	NA	19U	9.4U	9.4U	9.4U	9.4U	9.4U	19U	19U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U
B460	09/15/2010	5U	5U	5UJ	5U	5U	5UJ	1U	5U	5U	1U	NA	5U	5UJ	1U	1U	1U	1U	1U	1U	1U
	04/20/2011	19U	19U	19U	19U	NA	19U	9.4U	9.4U	9.4U	9.4U	9.4U	19U	19U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U
B473	09/24/2010	5U	5U	5UJ	5U	5U	5UJ	1U	5U	5U	1U	NA	5U	5U	1U	1U	1U	1U	1U	1U	1U
	04/20/2011	19U	19U	19U	19U	NA	19U	9.4U	9.4U	9.4U	9.4U	9.4U	19U	19U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U
B474	09/23/2010	5U	5U	5UJ	5U	5U	5UJ	1U	5U	5U	1U	NA	5U	5U	1U	1U	1U	1U	1U	1U	1U
	04/20/2011	19U	19U	19U	19U	NA	19U	9.4U	9.4U	9.4U	9.4U	9.4U	19U	19U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U

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B480	09/24/2010	5U	5U	5UJ	5U	5U	5UJ	1U	5U	5U	1U	NA	5U	5U	1U	1U	1U	1U	1U	1U	1U
	04/19/2011	19U	19U	19U	19U	NA	19U	9.4U	9.4U	9.4U	9.4U	9.4U	19U	19U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U
B490	09/16/2010	5U	5U	5UJ	5U	5U	5UJ	1U	5U	5U	1U	NA	5U	5UJ	1U	1U	1U	1U	1U	1U	1U
	04/20/2011	19U	19U	19U	19U	NA	19U	9.4U	9.4U	9.4U	9.4U	9.4U	19U	19U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U
BULB1	10/19/2010	4.7U	4.7U	4.7UJ	4.7U	4.7U	4.7UJ	.9U	4.7U	4.7U	.9U	NA	4.7U	4.7U	.9U	.9U	.9U	.9U	.9U	.9U	.9U
	04/12/2011	19U	19U	19U	19U	NA	19U	9.4U	9.4U	9.4U	9.4U	9.4U	19UJ	19U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U
BULB2	10/19/2010	5U	5U	5UJ	5U	5U	5UJ	1U	5U	5U	1U	NA	5U	5U	1U	1U	1U	1U	1U	1U	1U
	04/12/2011	19U	19U	19U	19U	NA	19U	9.4U	9.4U	9.4U	9.4U	9.4U	19UJ	19U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U
CCC1	09/08/2010	4.7U	4.7U	4.7U	4.7U	4.7U	4.7UJ	.9U	4.7U	4.7U	.9U	NA	4.7U	4.7U	.9U	.9U	.9U	.9U	.9U	.9U	.9U
	04/14/2011	19U	19U	19U	19U	NA	19U	9.4U	9.4U	9.4U	9.4U	9.4U	19U	19U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U
CCC2	09/08/2010	4.8U	4.8U	4.8U	4.8U	4.8U	4.8UJ	1U	4.8U	4.8U	1U	NA	4.8U	4.8U	1U	1U	1U	1U	1U	1U	1U
	04/14/2011	19U	19U	19U	19U	NA	19U	9.4U	9.4U	9.4U	9.4U	9.4U	19U	19U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U
CCC3	09/03/2010	4.7U	4.7U	4.7U	4.7U	NA	4.7UJ	.9U	4.7U	4.7U	.9U	4.7U	4.7U	4.7U	.9U	.9U	.9U	.9U	.9U	.9U	.9U
	04/12/2011	19U	19U	19U	19U	NA	19U	9.4U	9.4U	9.4UJ	9.4U	9.4U	19U	19U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U
CTP	09/30/2010	5U	5U	5UJ	5UJ	13	5UJ	1U	5U	5UJ	1U	NA	5U	5U	1U	1U	1U	1U	1U	1U	1U
	09/30/2010	5U	5U	5UJ	5UJ	9	5UJ	1U	5U	5UJ	1U	NA	5U	5U	1U	1U	1U	1U	1U	1U	1U
	04/14/2011	19U	19U	19U	19U	NA	19U	9.4U	9.4U	9.4U	9.4U	9.4U	19U	19U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U
CTPS	09/30/2010	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	10/01/2010	6U	6U	6UJ	6U	6U	6UJ	1.2U	6U	6U	1.2U	NA	6U	6U	1.2U	1.2U	1.2U	1.2U	1.2U	1.2U	1.2U
	04/19/2011	19U	19U	19U	19U	NA	19U	9.4U	9.4U	9.4U	9.4U	9.4U	19U	19U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U
DH	09/30/2010	5U	5U	5UJ	5UJ	5U	5UJ	1U	5U	5UJ	1U	NA	5U	5U	1U	1U	1U	1U	1U	1U	1U
	04/14/2011	19U	19U	19U	19U	NA	19U	9.4U	9.4U	9.4U	9.4U	9.4U	19U	19U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U
EERC	10/01/2010	5U	5U	5UJ	5U	5U	5UJ	1U	5U	5U	1U	NA	5U	5U	1U	1U	1U	1U	1U	1U	1U
	04/20/2011	19U	19U	19U	19U	NA	19U	9.4U	9.4U	9.4U	9.4U	9.4U	19U	19U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U
EPA	09/16/2010	5U	5U	5UJ	5U	5U	5UJ	1U	5U	5U	1U	NA	5U	5UJ	1U	1U	1U	1U	1U	1U	1U
	04/19/2011	19U	19U	19U	19U	NA	19U	9.4U	9.4U	9.4U	9.4U	9.4U	19U	19U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U

ATTACHMENT 2: SUMMARY OF COMPLETE ANALYTICAL RESULTS FOR GROUNDWATER SAMPLES

Technical Memorandum: Sampling Results for Phase I Groundwater Sampling, Field Sampling Workplan
University of California, Berkeley, Richmond Field Station, Richmond, California

		SEMIVOLATILE ORGANIC COMPOUNDS (ug/L)																		
Location ID	Date Collected	2-Nitroaniline	2-Nitrophenol	3,3'-Dichlorobenzidine	3-Nitroaniline	3/4-Methylphenol	4,6-Dinitro-2-Methylphenol	4-Bromophenyl-Phenylether	4-Chloro-3-Methylphenol	4-Chloroaniline	4-Chlorophenyl-Phenylether	4-Methylphenol	4-Nitroaniline	4-Nitrophenol	Acenaphthene	Acenaphthylene	Anthracene	Benzo(A)Anthracene	Benzo(A)Pyrene	Benzo(B)Fluoranthene	Benzo(G,H,I)Perylene
ETA	09/24/2010	4.7U	4.7U	4.7UJ	4.7U	4.7U	4.7UJ	.9U	4.7U	4.7U	.9U	NA	4.7U	4.7U	.9U	.9U	.9U	.9U	.9U	.9U	.9U
	09/24/2010	5U	5U	5UJ	5U	5U	5UJ	1U	5U	5U	1U	NA	5U	5U	1U	1U	1U	1U	1U	1U	1U
	04/12/2011	19U	19U	19U	19U	NA	19U	9.4U	9.4U	9.4UJ	9.4U	9.4U	19U	19U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U
FG	09/23/2010	5U	5U	5UJ	5U	5U	5UJ	1U	5U	5U	1U	NA	5U	5U	1U	1U	1U	1U	1U	1U	1U
	04/19/2011	19U	19U	19U	19U	NA	19U	9.4U	9.4U	9.4U	9.4U	9.4U	19U	19U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U
GEO	09/03/2010	4.7U	4.7U	4.7U	4.7U	NA	4.7UJ	.9U	4.7U	4.7U	.9U	4.7U	4.7U	4.7U	.9U	.9U	.9U	.9U	.9U	.9U	.9U
	04/20/2011	19U	19U	19U	19U	NA	19U	9.4U	9.4U	9.4U	9.4U	9.4U	19U	19U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U
MFA	09/24/2010	5U	5U	5UJ	5U	5U	5UJ	1U	5U	5U	1U	NA	5U	5U	1U	1U	1U	1U	1U	1U	1U
	04/12/2011	19U	19U	19U	19U	NA	19U	9.4U	9.4U	9.4UJ	9.4U	9.4U	19U	19U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U
NRLF	09/16/2010	4.8U	4.8U	4.8UJ	4.8U	4.8U	4.8UJ	1U	4.8U	4.8U	1U	NA	4.8U	4.8UJ	1U	1U	1U	1U	1U	1U	1U
	04/20/2011	19U	19U	19U	19U	NA	19U	9.4U	9.4U	9.4U	9.4U	9.4U	19U	19U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U
PZ11	10/01/2010	5U	5U	5UJ	5U	5U	5UJ	1U	5U	5U	1U	NA	5U	5U	1U	1U	1U	1U	1U	1U	1U
	04/20/2011	19U	19U	19U	19U	NA	19U	9.4U	9.4U	9.4U	9.4U	9.4U	19U	19U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U
PZ8	10/15/2010	5U	5U	5UJ	5U	5U	5UJ	1U	5U	5U	1U	NA	5U	5U	1U	1U	1U	1U	1U	1U	1U
	04/18/2011	19U	19U	19U	19U	NA	19U	9.4U	9.4U	9.4U	9.4U	9.4U	19U	19U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U
PZ9	09/24/2010	5U	5U	5UJ	5U	5U	5UJ	1U	5U	5U	1U	NA	5U	5U	1U	1U	1U	1U	1U	1U	1U
	04/20/2011	19U	19U	19U	19U	NA	19U	9.4U	9.4U	9.4U	9.4U	9.4U	19U	19U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U
RWF	09/15/2010	5U	5U	5UJ	5U	5U	5UJ	1U	5U	5U	1U	NA	5U	5UJ	1U	1U	1U	1U	1U	1U	1U
	04/18/2011	19U	19U	19U	19U	NA	19U	9.4U	9.4U	9.4U	9.4U	9.4U	19U	19U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U
TP1	09/29/2010	5U	5U	5UJ	5UJ	5U	5UJ	1U	5U	5UJ	1U	NA	5U	5U	1U	1U	1U	1U	1U	1U	1U
	04/18/2011	19U	19U	19U	19U	NA	19U	9.4U	9.4U	9.4U	9.4U	9.4U	19U	19U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U
TP2	09/29/2010	5U	5U	5UJ	5UJ	5U	5UJ	1U	5U	5UJ	1U	NA	5U	5U	1U	1U	1U	1U	1U	1U	1U
	04/18/2011	19U	19U	19U	19U	NA	19U	9.4U	9.4U	9.4U	9.4U	9.4U	19U	19U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U
WTA	09/30/2010	5U	5U	5UJ	5UJ	5U	5UJ	1U	5U	5UJ	1U	NA	5U	5U	1U	1U	1U	1U	1U	1U	1U
	04/14/2011	19U	19U	19U	19U	NA	19U	9.4U	9.4U	9.4U	9.4U	9.4U	19U	19U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U

ATTACHMENT 2: SUMMARY OF COMPLETE ANALYTICAL RESULTS FOR GROUNDWATER SAMPLES

Technical Memorandum: Sampling Results for Phase I Groundwater Sampling, Field Sampling Workplan
University of California, Berkeley, Richmond Field Station, Richmond, California

SEMIVOLATILE ORGANIC COMPOUNDS (ug/L)

Location ID	Date Collected	Benzo(K)Fluoranthene	Benzyl Alcohol	Bis(2-Chloroethoxy)Methane	Bis(2-Chloroethyl)Ether	Bis(2-Ethylhexyl)Phthalate	Butylbenzylphthalate	Carbazole	Chrysene	Di-N-Butylphthalate	Di-N-Octylphthalate	Dibenz(A,H)Anthracene	Dibenzofuran	Diethylphthalate	Dimethylphthalate	Diphenyl Amine	Fluoranthene	Fluorene	Hexachlorobenzene	Hexachlorobutadiene	Hexachlorocyclopentadiene
CCCT	09/03/2010	.9UJ	4.7U	.9U	.9U	.9U	.9U	.9U	.9U	.9U	.9UJ	.9U	.9U	.9U	.9U	.9U	.9U	.9U	.9U	.9U	4.7U
	04/18/2011	9.5U	9.5U	9.5U	9.5U	9.5U	9.5U	9.5U	9.5U	9.5U	9.5U	9.5U	9.5U	9.5U	9.5U	NA	9.5U	9.5U	9.5U	9.5U	19U
B120	09/09/2010	.9U	4.7U	.9U	.9U	.9UJ	.9UJ	.9U	.9U	.9U	.9UJ	.9U	.9U	.9U	.9U	.9U	.9U	.9U	.9U	.9U	4.7UJ
	04/15/2011	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	NA	9.4U	9.4U	9.4U	9.4U	19U
B121	09/08/2010	.9UJ	4.7U	.9U	.9U	.9UJ	.9U	.9U	.9U	.9U	.9UJ	.9U	.9U	.9U	.9U	.9U	.9U	.9U	.9U	.9U	4.7U
	04/13/2011	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	NA	9.4U	9.4U	9.4U	9.4U	19U
B128	09/23/2010	1U	5U	1U	1U	6.2	1UJ	1U	1U	1U	1UJ	1U	1U	1U	1U	1U	1U	1U	1U	1U	5UJ
	09/23/2010	1U	5U	1U	1U	1U	1UJ	1U	1U	1U	1UJ	1U	1U	1U	1U	1U	1U	1U	1U	1U	5UJ
	04/18/2011	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	NA	9.4U	9.4U	9.4U	9.4U	19U
B150	09/08/2010	1UJ	4.8U	1U	1U	1UJ	1U	1U	1U	1U	1UJ	1U	1U	1U	1U	1U	1U	1U	1U	1U	4.8U
	04/13/2011	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	NA	9.4U	9.4U	9.4U	9.4U	19U
B158	09/08/2010	1UJ	5U	1U	1U	1UJ	1U	1U	1U	1U	1UJ	1U	1U	1U	1U	1U	1U	1U	1U	1U	5U
	04/15/2011	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	NA	9.4U	9.4U	9.4U	9.4U	19U
B163	09/02/2010	1UJ	5U	1U	1U	5.7	1U	1U	1U	1U	1UJ	1U	1U	1U	1U	1U	1U	1U	1U	1U	5U
	04/12/2011	9.4U	9.4U	9.4U	9.4U	9.4UJ	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	NA	9.4U	9.4U	9.4U	9.4U	19U
B175S	09/03/2010	.9UJ	4.7U	.9U	.9U	.9U	.9U	.9U	.9U	.9U	.9UJ	.9U	.9U	.9U	.9U	.9U	.9U	.9U	.9U	.9U	4.7U
	04/13/2011	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	NA	9.4U	9.4U	9.4U	9.4U	19U
B175W	09/08/2010	1UJ	5U	1U	1U	1UJ	1U	1U	1U	1U	1UJ	1U	1U	1U	1U	1U	1U	1U	1U	1U	5U
	04/13/2011	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	NA	9.4U	9.4U	9.4U	9.4U	19U
B177	09/23/2010	.9U	4.7U	.9U	.9U	.9U	.9UJ	.9U	.9U	.9U	.9UJ	.9U	.9U	.9U	.9U	.9UJ	.9U	.9U	.9U	.9U	4.7UJ
	04/18/2011	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	NA	9.4U	9.4U	9.4U	9.4U	19U
B178	09/02/2010	1UJ	5U	1U	1U	1U	1U	1U	1U	1U	1UJ	1U	1U	1U	1U	1U	1U	1U	1U	1U	5U
	04/15/2011	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	NA	9.4U	9.4U	9.4U	9.4U	19U
B180	09/15/2010	1U	4.8U	1U	1U	1UJ	1UJ	1U	1U	1U	1UJ	1U	1U	1U	1U	1U	1U	1U	1U	1U	4.8UJ
	04/13/2011	9.4U	9.4U	9.4U	9.4U	9.4UJ	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	NA	9.4U	9.4U	9.4U	9.4U	19U
B185	09/02/2010	.9UJ	4.7U	.9U	.9U	.5UJ	.9U	.9U	.9U	.9U	.9UJ	.9U	.9U	.9U	.9U	.9U	.9U	.9U	.9U	.9U	4.7U
	04/15/2011	9.4U	9.4U	9.4U	9.4U	20UJ	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	NA	9.4U	9.4U	9.4U	9.4U	19U

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		SEMIVOLATILE ORGANIC COMPOUNDS (ug/L)																		
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B194	09/09/2010	.9U	4.7U	.9U	.9U	.9UJ	.9UJ	.9U	.9U	.9U	.9UJ	.9U	.9U	.9U	.9U	.9U	.9U	.9U	.9U	.9U	4.7UJ
	04/13/2011	9.4U	9.4U	9.4U	9.4U	9.4UJ	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	NA	9.4U	9.4U	9.4U	9.4U	19U
B195	09/09/2010	.9U	4.7U	.9U	.9U	.9UJ	.9UJ	.9U	.9U	.9U	.9UJ	.9U	.9U	.9U	.9U	.9U	.9U	.9U	.9U	.9U	4.7UJ
	04/13/2011	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	NA	9.4U	9.4U	9.4U	9.4UJ	19U
B197	09/09/2010	.9U	4.7U	.9U	.9U	.9UJ	.9UJ	.9U	.9U	.9U	.9UJ	.9U	.9U	.9U	.9U	.9U	.9U	.9U	.9U	.9U	4.7UJ
	09/09/2010	1U	4.8U	1U	1U	1UJ	1UJ	1U	1U	1U	1UJ	1U	1U	1U	1U	1U	1U	1U	1U	1U	4.8UJ
	04/13/2011	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	NA	9.4U	9.4U	9.4U	9.4U	19U
B277	09/15/2010	1U	5U	1U	1U	1UJ	1UJ	1U	1U	1U	1UJ	1U	1U	1U	1U	1U	1U	1U	1U	1U	5UJ
	04/18/2011	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	NA	9.4U	9.4U	9.4U	9.4U	19U
B278	09/16/2010	1U	5U	1U	1U	1UJ	1UJ	1U	1U	1U	1UJ	1U	1U	1U	1U	1U	1U	1U	1U	1U	5UJ
	04/19/2011	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	NA	9.4U	9.4U	9.4U	9.4U	19U
B280A	09/16/2010	1U	5U	1U	1U	1UJ	1UJ	1U	1U	1U	1UJ	1U	1U	1U	1U	1U	1U	1U	1U	1U	5UJ
	04/14/2011	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	NA	9.4U	9.4U	9.4U	9.4U	19U
B280B	10/01/2010	1U	5U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	5UJ
	04/14/2011	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	NA	10U	10U	10U	10U	20U
B300	09/09/2010	.9U	4.7U	.9U	.9U	.9UJ	.9UJ	.9U	.9U	.9U	.9UJ	.9U	.9U	.9U	.9U	.9U	.9U	.9U	.9U	.9U	4.7UJ
	04/15/2011	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	NA	9.4U	9.4U	9.4U	9.4U	19U
B38	09/15/2010	1U	5U	1U	1U	1UJ	1UJ	1U	1U	1U	1UJ	1U	1U	1U	1U	1U	1U	1U	1U	1U	5UJ
	04/19/2011	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	NA	9.4U	9.4U	9.4U	9.4U	19U
B450	04/19/2011	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	NA	9.4U	9.4U	9.4U	9.4U	19U
B460	09/15/2010	1U	5U	1U	1U	1UJ	1UJ	1U	1U	1U	1UJ	1U	1U	1U	1U	1U	1U	1U	1U	1U	5UJ
	04/20/2011	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	NA	9.4U	9.4U	9.4U	9.4U	19U
B473	09/24/2010	1U	5U	1U	1U	.5J	1UJ	1U	1U	1U	1UJ	1U	1U	1U	1U	1U	1U	1U	1U	1U	5UJ
	04/20/2011	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	NA	9.4U	9.4U	9.4U	9.4U	19U
B474	09/23/2010	1U	5U	1U	1U	1U	1UJ	1U	1U	1U	1UJ	1U	1U	1U	1U	1U	1U	1U	1U	1U	5UJ
	04/20/2011	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	NA	9.4U	9.4U	9.4U	9.4U	19U

ATTACHMENT 2: SUMMARY OF COMPLETE ANALYTICAL RESULTS FOR GROUNDWATER SAMPLES

Technical Memorandum: Sampling Results for Phase I Groundwater Sampling, Field Sampling Workplan
University of California, Berkeley, Richmond Field Station, Richmond, California

SEMIVOLATILE ORGANIC COMPOUNDS (ug/L)

Location ID	Date Collected	Benzo(K)Fluoranthene	Benzyl Alcohol	Bis(2-Chloroethoxy)Methane	Bis(2-Chloroethyl)Ether	Bis(2-Ethylhexyl)Phthalate	Butylbenzylphthalate	Carbazole	Chrysene	Di-N-Butylphthalate	Di-N-Octylphthalate	Dibenz(A,H)Anthracene	Dibenzofuran	Diethylphthalate	Dimethylphthalate	Diphenyl Amine	Fluoranthene	Fluorene	Hexachlorobenzene	Hexachlorobutadiene	Hexachlorocyclopentadiene
B480	09/24/2010	1U	5U	1U	1U	.8J	1UJ	1U	1U	1U	1UJ	1U	1U	1U	1U	1U	1U	1U	1U	1U	5UJ
	04/19/2011	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	NA	9.4U	9.4U	9.4U	9.4U	19U
B490	09/16/2010	1U	5U	1U	1U	1UJ	1UJ	1U	1U	1U	1UJ	1U	1U	1U	1U	1U	1U	1U	1U	1U	5UJ
	04/20/2011	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	NA	9.4U	9.4U	9.4U	9.4U	19U
BULB1	10/19/2010	.9U	4.7U	.9U	.9U	.6UJ	.9U	.9U	.9U	.9U	.9UJ	.9U	.9U	.9U	.9U	.9U	.9U	.9U	.9U	.9U	4.7UJ
	04/12/2011	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	NA	9.4U	9.4U	9.4U	9.4U	19U
BULB2	10/19/2010	1U	5U	1U	1U	1U	1U	1U	1U	1U	1UJ	1U	1U	1U	1U	1U	1U	1U	1U	1U	5UJ
	04/12/2011	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	NA	9.4U	9.4U	9.4U	9.4U	19U
CCC1	09/08/2010	.9UJ	4.7U	.9U	.9U	.9UJ	.9U	.9U	.9U	.9U	.9UJ	.9U	.9U	.9U	.9U	.9U	.9U	.9U	.9U	.9U	4.7U
	04/14/2011	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	NA	9.4U	9.4U	9.4U	9.4U	19U
CCC2	09/08/2010	1UJ	4.8U	1U	1U	.6J	1U	1U	1U	1U	1UJ	1U	1U	1U	1U	1U	1U	1U	1U	1U	4.8U
	04/14/2011	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	NA	9.4U	9.4U	9.4U	9.4U	19U
CCC3	09/03/2010	.9UJ	4.7U	.9U	.9U	.9U	.9U	.9U	.9U	.9U	.9UJ	.9U	.9U	.9U	.9U	.9U	.9U	.9U	.9U	.9U	4.7U
	09/03/2010	.9UJ	4.7U	.9U	.9U	1UJ	.9U	.9U	.9U	.9U	.9UJ	.9U	.9U	.9U	.9U	.9U	.9U	.9U	.9U	.9U	4.7U
	04/12/2011	9.4U	9.4U	9.4U	9.4U	9.4UJ	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	NA	9.4U	9.4U	9.4U	9.4U	19U
CTP	09/30/2010	1U	5U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	5UJ
	09/30/2010	1U	5U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	5UJ
	04/14/2011	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	NA	9.4U	9.4U	9.4U	9.4U	19U
CTPS	09/30/2010	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	.5U	NA
	10/01/2010	1.2U	6U	1.2U	1.2U	1.2U	1.2U	1.2U	1.2U	1.2U	1.2U	1.2U	1.2U	1.2U	1.2U	1.2U	1.2U	1.2U	1.2U	1.2U	6UJ
	04/19/2011	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	NA	9.4U	9.4U	9.4U	9.4U	19U
DH	09/30/2010	1U	5U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	5UJ
	04/14/2011	9.4U	9.4U	9.4U	9.4U	9.4UJ	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	NA	9.4U	9.4U	9.4U	9.4U	19U
EERC	10/01/2010	1U	5U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	.6J	1U	1U	1U	1U	1U	1U	5UJ
	04/20/2011	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	NA	9.4U	9.4U	9.4U	9.4U	19U
EPA	09/16/2010	1U	5U	1U	1U	1UJ	1UJ	1U	1U	1U	1UJ	1U	1U	1U	1U	1U	1U	1U	1U	1U	5UJ
	04/19/2011	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	NA	9.4U	9.4U	9.4U	9.4U	19U

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SEMIVOLATILE ORGANIC COMPOUNDS (ug/L)

Location ID	Date Collected	Benzo(K)Fluoranthene	Benzyl Alcohol	Bis(2-Chloroethoxy)Methane	Bis(2-Chloroethyl)Ether	Bis(2-Ethylhexyl)Phthalate	Butylbenzylphthalate	Carbazole	Chrysene	Di-N-Butylphthalate	Di-N-Octylphthalate	Dibenz(A,H)Anthracene	Dibenzofuran	Diethylphthalate	Dimethylphthalate	Diphenyl Amine	Fluoranthene	Fluorene	Hexachlorobenzene	Hexachlorobutadiene	Hexachlorocyclopentadiene
ETA	09/24/2010	.9U	4.7U	.9U	.9U	1.1	.9UJ	.9U	.9U	.9U	.9UJ	.9U	.9U	.9U	.9U	.9U	.9U	.9U	.9U	.9U	4.7UJ
	09/24/2010	1U	5U	1U	1U	.5J	1UJ	1U	1U	1U	1UJ	1U	1U	1U	1U	1U	1U	1U	1U	1U	5UJ
	04/12/2011	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	NA	9.4U	9.4U	9.4U	9.4U	19U
FG	09/23/2010	1U	5U	1U	1U	1U	1UJ	1U	1U	1U	1UJ	1U	1U	1U	1U	1U	1U	1U	1U	1U	5UJ
	04/19/2011	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	NA	9.4U	9.4U	9.4U	9.4U	19U
GEO	09/03/2010	.9UJ	4.7U	.9U	.9U	.9U	.9U	.9U	.9U	.9U	.9UJ	.9U	.9U	.9U	.9U	.9U	.9U	.9U	.9U	.9U	4.7U
	04/20/2011	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	NA	9.4U	9.4U	9.4U	9.4U	19U
MFA	09/24/2010	1U	5U	1U	1U	27	1UJ	1U	1U	1U	1UJ	1U	1U	1U	1U	1U	1U	1U	1U	1U	5UJ
	04/12/2011	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	NA	9.4U	9.4U	9.4U	9.4U	19U
NRLF	09/16/2010	1U	4.8U	1U	1U	1UJ	1UJ	1U	1U	1U	1UJ	1U	1U	1U	1U	1U	1U	1U	1U	1U	4.8UJ
	04/20/2011	9.4U	9.4U	9.4U	9.4U	9.4UJ	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	NA	9.4U	9.4U	9.4U	9.4U	19U
PZ11	10/01/2010	1U	5U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	5UJ
	04/20/2011	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	NA	9.4U	9.4U	9.4U	9.4U	19U
PZ8	10/15/2010	1U	5U	1U	1U	1U	1U	1U	1U	1U	1UJ	1U	1U	1U	1U	1U	1U	1U	1U	1U	5UJ
	04/18/2011	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	NA	9.4U	9.4U	9.4U	9.4U	19U
PZ9	09/24/2010	1U	5U	1U	1U	1U	1UJ	1U	1U	1U	1UJ	1U	1U	1U	1U	1U	1U	1U	1U	1U	5UJ
	04/20/2011	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	NA	9.4U	9.4U	9.4U	9.4U	19U
RWF	09/15/2010	1U	5U	1U	1U	1UJ	1UJ	1U	1U	1U	1UJ	1U	1U	1U	1U	1U	1U	1U	1U	1U	5UJ
	04/18/2011	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	NA	9.4U	9.4U	9.4U	9.4U	19U
TP1	09/29/2010	1U	5U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	5UJ
	04/18/2011	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	NA	9.4U	9.4U	9.4U	9.4U	19U
TP2	09/29/2010	1U	5U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	5UJ
	04/18/2011	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	NA	9.4U	9.4U	9.4U	9.4U	19U
WTA	09/30/2010	1U	5U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	5UJ
	04/14/2011	9.4U	9.4U	9.4U	9.4U	9.4UJ	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	NA	9.4U	9.4U	9.4U	9.4U	19U

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		SEMIVOLATILE ORGANIC COMPOUNDS (ug/L)									
Location ID	Date Collected	Hexachloroethane	Indeno(1,2,3-Cd)Pyrene	Isophorone	N-Nitroso-Di-N-Propylamine	Naphthalene	Nitrobenzene	Pentachlorophenol	Phenanthrene	Phenol	Pyrene
CCCT	09/03/2010	.9U	.9U	.9U	.9UJ	.9U	.9U	4.7U	.9U	4.7U	.9U
	04/18/2011	9.5U	9.5U	9.5U	9.5U	9.5U	9.5U	19U	9.5U	9.5U	9.5U
B120	09/09/2010	.9U	.9U	.9U	.9U	.9U	.9U	4.7U	.9U	4.7U	.9U
	04/15/2011	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	19U	9.4U	9.4U	9.4U
B121	09/08/2010	.9U	.9U	.9U	.9U	.9U	.9UJ	4.7U	.9U	4.7U	.9U
	04/13/2011	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	19U	9.4U	9.4U	9.4U
B128	09/23/2010	1U	1U	1U	1U	1U	1U	5U	1U	5U	1U
	09/23/2010	1U	1U	1U	1U	1U	1U	5U	1U	5U	1U
	04/18/2011	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	19U	9.4U	9.4U	9.4U
B150	09/08/2010	1U	1U	1U	1U	1U	1U	4.8U	1U	4.8U	1U
	04/13/2011	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	19U	9.4U	9.4U	9.4U
B158	09/08/2010	1U	1U	1U	1U	1U	1U	5U	1U	5U	1U
	04/15/2011	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	19U	9.4U	9.4U	9.4U
B163	09/02/2010	1U	1U	1U	1UJ	1U	1U	5U	1U	5U	1U
	04/12/2011	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	19U	9.4U	9.4U	9.4U
B175S	09/03/2010	.9U	.9U	.9U	.9UJ	.9U	.9U	4.7U	.9U	4.7U	.9U
	04/13/2011	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	19U	9.4U	9.4U	9.4U
B175W	09/08/2010	1U	1U	1U	1U	1U	1U	5U	1U	5U	1U
	04/13/2011	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	19U	9.4U	9.4U	9.4U
B177	09/23/2010	.9U	.9U	.9U	.9U	.9U	.9U	4.7U	.9U	4.7U	.9U
	04/18/2011	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	19U	9.4U	9.4U	9.4U
B178	09/02/2010	1U	1U	1U	1UJ	1U	1U	5U	1U	5U	1U
	04/15/2011	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	19U	9.4U	9.4U	9.4U
B180	09/15/2010	1U	1U	1U	1U	1U	1U	4.8U	1U	4.8U	1U
	04/13/2011	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	19U	9.4U	9.4U	9.4U
B185	09/02/2010	.9U	.9U	.9U	.9UJ	.9U	.9U	4.7U	.9U	4.7U	.9U
	04/15/2011	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	19U	9.4U	9.4U	9.4U

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SEMIVOLATILE ORGANIC COMPOUNDS (ug/L)

Location ID	Date Collected	Hexachloroethane	Indeno(1,2,3-Cd)Pyrene	Isophorone	N-Nitroso-Di-N-Propylamine	Naphthalene	Nitrobenzene	Pentachlorophenol	Phenanthrene	Phenol	Pyrene
B194	09/09/2010	.9U	.9U	.9U	.9U	.9U	.9U	4.7U	.9U	4.7U	.9U
	04/13/2011	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	19U	9.4U	9.4U	9.4U
B195	09/09/2010	.9U	.9U	.9U	.9U	.9U	.9U	4.7U	.9U	4.7U	.9U
	04/13/2011	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	19U	9.4U	9.4U	9.4U
B197	09/09/2010	.9U	.9U	.9U	.9U	.9U	.9U	4.7U	.9U	4.7U	.9U
	09/09/2010	1U	1U	1U	1U	1U	1U	4.8U	1U	4.8U	1U
	04/13/2011	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	19U	9.4U	9.4U	9.4U
B277	09/15/2010	1U	1U	1U	1U	1U	1U	5U	1U	5U	1U
	04/18/2011	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	19U	9.4U	9.4U	9.4U
B278	09/16/2010	1U	1U	1U	1U	1U	1UJ	5U	1U	5U	1U
	04/19/2011	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	19U	9.4U	9.4U	9.4U
B280A	09/16/2010	1U	1U	1U	1U	1U	1U	5U	1U	5U	1U
	04/14/2011	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	19U	9.4U	9.4U	9.4U
B280B	10/01/2010	1U	1U	1U	1U	1U	1U	5U	1U	5U	1U
	04/14/2011	10U	10U	10U	10U	10U	10U	20U	10U	10U	10U
B300	09/09/2010	.9U	.9U	.9U	.9U	.9U	.9U	4.7U	.9U	4.7U	.9U
	04/15/2011	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	19U	9.4U	9.4U	9.4U
B38	09/15/2010	1U	1U	1U	1U	1U	1U	5U	1U	5U	1U
	04/19/2011	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	19U	9.4U	9.4U	9.4U
B450	04/19/2011	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	19U	9.4U	9.4U	9.4U
B460	09/15/2010	1U	1U	1U	1U	1U	1U	5U	1U	5U	1U
	04/20/2011	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	19U	9.4U	9.4U	9.4U
B473	09/24/2010	1U	1U	1U	1U	1U	1U	5U	1U	5U	1U
	04/20/2011	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	19U	9.4U	9.4U	9.4U
B474	09/23/2010	1U	1U	1U	1U	1U	1U	5U	1U	5U	1U
	04/20/2011	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	19U	9.4U	9.4U	9.4U

ATTACHMENT 8: SUMMARY OF COMPLETE ANALYTICAL RESULTS FOR GROUNDWATER SAMPLES

Technical Memorandum: Sampling Results for Phase I Groundwater Sampling, Field Sampling Workplan
University of California, Berkeley, Richmond Field Station, Richmond, California

SEMIVOLATILE ORGANIC COMPOUNDS (ug/L)

Location ID	Date Collected	Hexachloroethane	Indeno(1,2,3-Cd)Pyrene	Isophorone	N-Nitroso-Di-N-Propylamine	Naphthalene	Nitrobenzene	Pentachlorophenol	Phenanthrene	Phenol	Pyrene
B480	09/24/2010	1U	1U	1U	1U	1U	1U	5U	1U	5U	1U
	04/19/2011	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	19U	9.4U	9.4U	9.4U
B490	09/16/2010	1U	1U	1U	1U	1U	1U	5U	1U	5U	1U
	04/20/2011	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	19U	9.4U	9.4U	9.4U
BULB1	10/19/2010	.9U	.9U	.9U	.9U	.9U	.9U	4.7U	.9U	4.7U	.9U
	04/12/2011	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	19U	9.4U	9.4U	9.4U
BULB2	10/19/2010	1U	1U	1U	1U	1U	1U	5U	1U	5U	1U
	04/12/2011	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	19U	9.4U	9.4U	9.4U
CCC1	09/08/2010	.9U	.9U	.9U	.9U	.9U	.9U	4.7U	.9U	4.7U	.9U
	04/14/2011	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	19U	9.4U	9.4U	9.4U
CCC2	09/08/2010	1U	1U	1U	1U	1U	1U	4.8U	1U	4.8U	1U
	04/14/2011	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	19U	9.4U	9.4U	9.4U
CCC3	09/03/2010	.9U	.9U	.9U	.9UJ	.9U	.9U	4.7U	.9U	4.7U	.9U
	09/03/2010	.9U	.9U	.9U	.9UJ	.9U	.9U	4.7U	.9U	4.7U	.9U
	04/12/2011	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	19U	9.4U	9.4U	9.4U
CTP	09/30/2010	1U	1U	1U	1U	1U	1U	5U	1U	5U	1U
	09/30/2010	1U	1U	1U	1U	1U	1U	5U	1U	5U	1U
	04/14/2011	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	19U	9.4U	9.4U	9.4U
CTPS	09/30/2010	NA	NA	NA	NA	.5U	NA	NA	NA	NA	NA
	10/01/2010	1.2U	1.2U	1.2U	1.2U	1.2U	1.2U	6U	1.2U	6U	1.2U
	04/19/2011	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	19U	9.4U	9.4U	9.4U
DH	09/30/2010	1U	1U	1U	1U	1U	1U	5U	1U	5U	1U
	04/14/2011	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	19U	9.4U	9.4U	9.4U
EERC	10/01/2010	1U	1U	1U	1U	1U	1U	5U	1U	5U	1U
	04/20/2011	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	19U	9.4U	9.4U	9.4U
EPA	09/16/2010	1U	1U	1U	1U	1U	1U	5U	1U	5U	1U
	04/19/2011	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	19U	9.4U	9.4U	9.4U

ATTACHMENT 8: SUMMARY OF COMPLETE ANALYTICAL RESULTS FOR GROUNDWATER SAMPLES

Technical Memorandum: Sampling Results for Phase I Groundwater Sampling, Field Sampling Workplan
University of California, Berkeley, Richmond Field Station, Richmond, California

SEMIVOLATILE ORGANIC COMPOUNDS (ug/L)

Location ID	Date Collected	Hexachloroethane	Indeno(1,2,3-Cd)Pyrene	Isophorone	N-Nitroso-Di-N-Propylamine	Naphthalene	Nitrobenzene	Pentachlorophenol	Phenanthrene	Phenol	Pyrene
ETA	09/24/2010	.9U	.9U	.9U	.9U	.9U	.9U	4.7U	.9U	4.7U	.9U
	09/24/2010	1U	1U	1U	1U	1U	1U	5U	1U	5U	1U
	04/12/2011	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	19U	9.4U	9.4U	9.4U
FG	09/23/2010	1U	1U	1U	1U	1U	1U	5U	1U	5U	1U
	04/19/2011	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	19U	9.4U	9.4U	9.4U
GEO	09/03/2010	.9U	.9U	.9U	.9UJ	.9U	.9U	4.7U	.9U	4.7U	.9U
	04/20/2011	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	19U	9.4U	9.4U	9.4U
MFA	09/24/2010	1U	1U	1U	1U	1U	1U	5U	1U	5U	1U
	04/12/2011	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	19U	9.4U	9.4U	9.4U
NRLF	09/16/2010	1U	1U	1U	1U	1U	1U	4.8U	1U	4.8U	1U
	04/20/2011	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	19U	9.4U	9.4U	9.4U
PZ11	10/01/2010	1U	1U	1U	1U	1U	1U	5U	1U	5U	1U
	04/20/2011	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	19U	9.4U	9.4U	9.4U
PZ8	10/15/2010	1U	1U	1U	1U	1UJ	1U	5U	1U	5U	1U
	04/18/2011	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	19U	9.4U	9.4U	9.4U
PZ9	09/24/2010	1U	1U	1U	1U	1U	1U	5U	1U	5U	1U
	04/20/2011	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	19U	9.4U	9.4U	9.4U
RWF	09/15/2010	1U	1U	1U	1U	1U	1U	5U	1U	5U	1U
	04/18/2011	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	19U	9.4U	9.4U	9.4U
TP1	09/29/2010	1U	1U	1U	1U	1U	1U	5U	1U	5U	1U
	04/18/2011	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	19U	9.4U	9.4U	9.4U
TP2	09/29/2010	1U	1U	1U	1U	1U	1U	5U	1U	5U	1U
	04/18/2011	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	19U	9.4U	9.4U	9.4U
WTA	09/30/2010	1U	1U	1U	1U	1U	1UJ	5U	1U	5U	1U
	04/14/2011	9.4U	9.4U	9.4U	9.4U	9.4U	9.4U	19U	9.4U	9.4U	9.4U

ATTACHMENT 2: SUMMARY OF COMPLETE ANALYTICAL RESULTS FOR GROUNDWATER SAMPLES

Technical Memorandum: Sampling Results for Phase I Groundwater Sampling, Field Sampling Workplan
University of California, Berkeley, Richmond Field Station, Richmond, California

		POLYNUCLEI AROMATIC HYDROCARBONS (ug/L)																	
Location ID	Date Collected	1-Methylnaphthalene	2-Methylnaphthalene	Acenaphthene	Acenaphthylene	Anthracene	Benzo(A)Anthracene	Benzo(A)Pyrene	Benzo(B)Fluoranthene	Benzo(G,H,I)Perylene	Benzo(K)Fluoranthene	Chrysene	Dibenz(A,H)Anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-Cd)Pyrene	Naphthalene	Phenanthrene	Pyrene
CCCT	09/03/2010	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U
	04/18/2011	.1U	.1U	.1U	.1U	.1U	.1U	.1U	.1U	.1U	.1U	.1U	.1U	.1U	.1U	.1U	.1U	.1U	.1U
B120	09/09/2010	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U
	04/15/2011	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U
B121	09/08/2010	.048U	.048U	.048U	.048U	.048U	.048U	.048U	.048U	.048U	.048U	.048U	.048U	.048U	.048U	.048U	.048U	.048U	.048U
	04/13/2011	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U
B128	09/23/2010	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U
	09/23/2010	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U
	04/18/2011	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U
B150	09/08/2010	.048U	.048U	.048U	.048U	.048U	.048U	.048U	.048U	.048U	.048U	.048U	.048U	.048U	.048U	.048U	.048U	.048U	.048U
	04/13/2011	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U
B158	09/08/2010	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U
	04/15/2011	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U
B163	09/02/2010	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U
	04/12/2011	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U
B175S	09/03/2010	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U
	04/13/2011	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U
B175W	09/08/2010	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U
	04/13/2011	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U
B177	09/23/2010	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U
	04/18/2011	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U
B178	09/02/2010	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U
	04/15/2011	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U
B180	09/15/2010	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U
	04/13/2011	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U
B185	09/02/2010	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U

ATTACHMENT 2: SUMMARY OF COMPLETE ANALYTICAL RESULTS FOR GROUNDWATER SAMPLES

Technical Memorandum: Sampling Results for Phase I Groundwater Sampling, Field Sampling Workplan
University of California, Berkeley, Richmond Field Station, Richmond, California

POLYNUCLEI AROMATIC HYDROCARBONS (ug/L)

Location ID	Date Collected	1-Methylnaphthalene	2-Methylnaphthalene	Acenaphthene	Acenaphthylene	Anthracene	Benzo(A)Anthracene	Benzo(A)Pyrene	Benzo(B)Fluoranthene	Benzo(G,H,I)Perylene	Benzo(K)Fluoranthene	Chrysene	Dibenz(A,H)Anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-Cd)Pyrene	Naphthalene	Phenanthrene	Pyrene
B185	04/15/2011	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.02J
B194	09/09/2010	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U
	04/13/2011	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U
B195	09/09/2010	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U
	04/13/2011	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U
B197	09/09/2010	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U
	09/09/2010	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U
	04/13/2011	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U
B277	09/15/2010	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U
	04/18/2011	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U
B278	09/16/2010	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U
	04/19/2011	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U
B280A	09/16/2010	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.035J	.05U	.05U
	04/14/2011	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U
B280B	10/01/2010	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U
	04/14/2011	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U
B300	09/09/2010	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U
	04/15/2011	.09U	.09U	.09U	.08J	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U
B38	09/15/2010	.05UJ	.05UJ	.05UJ	.05UJ	.05UJ	.05UJ	.05UJ	.05UJ	.05UJ	.05UJ	.05UJ	.05UJ	.05UJ	.05UJ	.05UJ	.05UJ	.05UJ	.05UJ
	04/19/2011	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U
B450	04/19/2011	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U
B460	09/15/2010	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U
	04/20/2011	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09UJ
B473	09/24/2010	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U
	04/20/2011	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U

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University of California, Berkeley, Richmond Field Station, Richmond, California

		POLYNUCLEI AROMATIC HYDROCARBONS (ug/L)																	
Location ID	Date Collected	1-Methylnaphthalene	2-Methylnaphthalene	Acenaphthene	Acenaphthylene	Anthracene	Benzo(A)Anthracene	Benzo(A)Pyrene	Benzo(B)Fluoranthene	Benzo(G,H,I)Perylene	Benzo(K)Fluoranthene	Chrysene	Dibenz(A,H)Anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-Cd)Pyrene	Naphthalene	Phenanthrene	Pyrene
B474	09/23/2010	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U
	04/20/2011	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U
B480	09/24/2010	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U
	04/19/2011	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U
B490	09/16/2010	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U
	04/20/2011	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U
BULB1	10/19/2010	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U
	04/12/2011	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U
BULB2	10/19/2010	.033J	.05U	.062	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.19	.05U	.05U
	04/12/2011	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U
CCC1	09/08/2010	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U
	04/14/2011	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U
CCC2	09/08/2010	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U
	04/14/2011	.1U	.1U	.1U	.1U	.1U	.1U	.1U	.1U	.1U	.1U	.1U	.1U	.1U	.1U	.1U	.1U	.1U	.1U
CCC3	09/03/2010	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U
	09/03/2010	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U
	04/12/2011	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U
CTP	09/30/2010	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U
	09/30/2010	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U
	04/14/2011	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U
CTPS	10/18/2010	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U
	04/19/2011	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U
DH	09/30/2010	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U
	04/14/2011	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U
EERC	10/15/2010	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U
	04/20/2011	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U

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		POLYNUCLEI AROMATIC HYDROCARBONS (ug/L)																	
Location ID	Date Collected	1-Methylnaphthalene	2-Methylnaphthalene	Acenaphthene	Acenaphthylene	Anthracene	Benzo(A)Anthracene	Benzo(A)Pyrene	Benzo(B)Fluoranthene	Benzo(G,H,I)Perylene	Benzo(K)Fluoranthene	Chrysene	Dibenz(A,H)Anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-Cd)Pyrene	Naphthalene	Phenanthrene	Pyrene
EPA	09/16/2010	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.042J	.05U	.05U
	04/19/2011	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U
ETA	09/24/2010	.033J	.05U	.11	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.041J	.17	.05U	.05U	.05U	.088
	09/24/2010	.032J	.05U	.11	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.035J	.16	.05U	.05U	.05U	.074
	04/12/2011	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U
FG	09/23/2010	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U
	04/19/2011	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U
GEO	09/03/2010	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U	.047U
	04/20/2011	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09UJ
MFA	09/24/2010	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U
	04/12/2011	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U
NRLF	09/16/2010	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.029J	.05U	.05U
	04/20/2011	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09UJ
PZ11	10/01/2010	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U
	04/20/2011	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U
PZ8	10/15/2010	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U
	04/18/2011	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U
PZ9	09/24/2010	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U
	04/20/2011	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09UJ
RWF	09/15/2010	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U
	04/18/2011	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U
TP1	09/29/2010	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.036UJ
	04/18/2011	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U
TP2	09/29/2010	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U
	04/18/2011	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U

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Location ID	Date Collected	1-Methylnaphthalene	2-Methylnaphthalene	Acenaphthene	Acenaphthylene	Anthracene	Benzo(A)Anthracene	Benzo(A)Pyrene	Benzo(B)Fluoranthene	Benzo(G,H,I)Perylene	Benzo(K)Fluoranthene	Chrysene	Dibenz(A,H)Anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-Cd)Pyrene	Naphthalene	Phenanthrene	Pyrene
WTA	09/30/2010	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U	.05U
	04/14/2011	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U	.09U

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		PESTICIDES (ug/L)																	
Location ID	Date Collected	4,4'-DDD	4,4'-DDE	4,4'-DDT	Aldrin	Alpha-BHC	Alpha-Chlordane	Beta-BHC	Chlordane	Delta-BHC	Dieldrin	Endosulfan I	Endosulfan II	Endosulfan Sulfate	Endrin	Endrin Aldehyde	Endrin Ketone	Gamma-BHC (Lindane)	Gamma-Chlordane	Heptachlor
CCCT	09/03/2010	.09U	.09U	.09U	.05U	.05U	.05U	.05U	4.7U	.05U	.09U	.05U	.09U	.09U	.09U	.09U	.09U	.05U	.05U	.05U
B120	09/09/2010	.09U	.09U	.09U	.05UJ	.05U	.05U	.05U	4.7U	.05U	.09U	.05U	.09U	.09U	.09U	.09U	.09U	.05U	.05U	.05U
B121	09/08/2010	.1U	.1U	.1U	.05U	.05U	.05U	.05U	4.8U	.05U	.1U	.05U	.1U	.1U	.1U	.1U	.1U	.05U	.05U	.05U
B128	09/23/2010	.1U	.1U	.1U	.05U	.05U	.05U	.05U	5U	.05U	.1U	.05U	.1U	.1U	.1U	.1U	.1U	.05U	.05U	.05U
	09/23/2010	.1U	.1U	.1U	.05U	.05U	.05U	.05U	5U	.05U	.1U	.05U	.1U	.1U	.1U	.1U	.1U	.05U	.05U	.05U
B150	09/08/2010	.1U	.1U	.1U	.05U	.05U	.05U	.05U	4.8U	.05U	.1U	.05U	.1U	.1U	.1U	.1U	.1U	.05U	.05U	.05U
B158	09/08/2010	.09U	.09U	.09U	.05U	.05U	.05U	.05U	4.7U	.05U	.09U	.05U	.09U	.09U	.09U	.09U	.09U	.05U	.05U	.05U
B163	09/02/2010	.1U	.1U	.1U	.05U	.05U	.05U	.05U	5U	.05U	.1U	.05U	.1U	.1U	.1U	.1U	.1U	.05U	.05U	.05U
B175S	09/03/2010	.1U	.1U	.1U	.05U	.05U	.05U	.05U	4.8U	.05U	.1U	.05U	.1U	.1U	.1U	.1U	.1U	.05U	.05U	.05U
B175W	09/08/2010	.1U	.1U	.1U	.05U	.05U	.05U	.05U	4.8U	.05U	.1U	.05U	.1U	.1U	.1U	.1U	.1U	.05U	.05U	.05U
B177	09/23/2010	.09U	.09U	.09U	.05U	.05U	.05U	.05U	4.7U	.05U	.09U	.05U	.09U	.09U	.09U	.09U	.09U	.05U	.05U	.05U
B178	09/02/2010	.1U	.1U	.1U	.05U	.05U	.05U	.05U	5U	.05U	.1U	.05U	.1U	.1U	.1U	.1U	.1U	.05U	.05U	.05U
B180	09/15/2010	.1U	.1U	.1U	.05U	.05U	.05U	.05U	5U	.05U	.1U	.05U	.1U	.1U	.1U	.1U	.1U	.05U	.05U	.05U
B185	09/02/2010	.1U	.1U	.1U	.05U	.05U	.05U	.05U	5U	.05U	.1U	.05U	.1U	.1U	.1U	.1U	.1U	.05U	.05U	.05U
B194	09/09/2010	.09U	.09U	.09U	.05UJ	.05U	.05U	.05U	NA	.05U	.09U	.05U	.09U	.09U	.09U	.09U	.09U	.05U	.05U	.05U
B195	09/09/2010	.1U	.1U	.1U	.05UJ	.05U	.05U	.05U	5U	.05U	.1U	.05U	.1U	.1U	.1U	.1U	.1U	.05U	.05U	.05U
B197	09/09/2010	.1U	.1U	.1U	.05UJ	.05U	.05U	.05U	4.8U	.05U	.1U	.05U	.1U	.1U	.1U	.1U	.1U	.05U	.05U	.05U
	09/09/2010	.09U	.09U	.09U	.05UJ	.05U	.05U	.05U	4.7U	.05U	.09U	.05U	.09U	.09U	.09U	.09U	.09U	.05U	.05U	.05U
B277	09/15/2010	.1U	.1U	.1U	.05U	.05U	.05U	.05U	5U	.05U	.1U	.05U	.1U	.1U	.1U	.1U	.1U	.05U	.05U	.05U
B278	09/16/2010	.1U	.1U	.1U	.05U	.05U	.05U	.05U	5U	.05U	.1U	.05U	.1U	.1U	.1U	.1U	.1U	.05U	.05U	.05U
B280A	09/16/2010	.1U	.1U	.1U	.05U	.05U	.05U	.05U	5U	.05U	.1U	.05U	.1U	.1U	.1U	.1U	.1U	.05U	.05U	.05U
B280B	10/01/2010	.1U	.1U	.1U	.05U	.05U	.05U	.05U	5U	.05U	.1U	.05U	.1U	.1U	.1U	.1U	.1U	.05U	.05U	.05U
B300	09/09/2010	.1U	.1U	.1U	.05UJ	.05U	.05U	.05U	NA	.05U	.1U	.05U	.1U	.1U	.1U	.1U	.1U	.05U	.05U	.05U
B38	09/15/2010	.1U	.1U	.1U	.05U	.05U	.05U	.05U	5U	.05U	.1U	.05U	.1U	.1U	.1U	.1U	.1U	.05U	.05U	.05U
B460	09/15/2010	.1U	.1U	.1U	.05U	.05U	.05U	.05U	5U	.05U	.1U	.05U	.1U	.1U	.1U	.1U	.1U	.05U	.05U	.05U
B473	09/24/2010	.1U	.1U	.1U	.05U	.05U	.05U	.05U	5U	.05U	.1U	.05U	.1U	.1U	.1U	.1U	.1U	.05U	.05U	.05U

ATTACHMENT 2: SUMMARY OF COMPLETE ANALYTICAL RESULTS FOR GROUNDWATER SAMPLES

Technical Memorandum: Sampling Results for Phase I Groundwater Sampling, Field Sampling Workplan
University of California, Berkeley, Richmond Field Station, Richmond, California

		PESTICIDES (ug/L)																		
Location ID	Date Collected	4,4'-DDD	4,4'-DDE	4,4'-DDT	Aldrin	Alpha-BHC	Alpha-Chlordane	Beta-BHC	Chlordane	Delta-BHC	Dieldrin	Endosulfan I	Endosulfan II	Endosulfan Sulfate	Endrin	Endrin Aldehyde	Endrin Ketone	Gamma-BHC (Lindane)	Gamma-Chlordane	Heptachlor
B474	09/23/2010	.1U	.1U	.1U	.05U	.05U	.05U	.05U	5U	.05U	.1U	.05U	.1U	.1U	.1U	.1U	.1U	.05U	.05U	.05U
B480	09/24/2010	.1U	.1U	.1U	.05U	.05U	.05U	.05U	5U	.05U	.1U	.05U	.1U	.1U	.1U	.1U	.1U	.05U	.05U	.05U
B490	09/16/2010	.1U	.1U	.1U	.05U	.05U	.05U	.05U	5U	.05U	.1U	.05U	.1U	.1U	.1U	.1U	.1U	.05U	.05U	.05U
BULB1	10/19/2010	.09U	.09U	.09U	.05U	.05U	.05U	.05U	4.7U	.05U	.09U	.05U	.09U	.09U	.09U	.09U	.09U	.05U	.05U	.05U
BULB2	10/19/2010	.09U	.09U	.09U	.05U	.05U	.05U	.05U	4.7U	.05U	.09U	.05U	.09U	.09U	.09U	.09U	.09U	.05U	.05U	.05U
CCC1	09/08/2010	.1U	.1U	.1U	.05U	.05U	.05U	.05U	4.8U	.05U	.1U	.05U	.1U	.1U	.1U	.1U	.1U	.05U	.05U	.05U
CCC2	09/08/2010	.1U	.1U	.1U	.05U	.05U	.05U	.05U	4.8U	.05U	.1U	.05U	.1U	.1U	.1U	.1U	.1U	.05U	.05U	.05U
CCC3	09/03/2010	.09U	.09U	.09U	.05U	.05U	.05U	.05U	4.7U	.05U	.09U	.05U	.09U	.09U	.09U	.09U	.09U	.05U	.05U	.05U
	09/03/2010	.09U	.09U	.09U	.05U	.05U	.05U	.05U	4.7U	.05U	.09U	.05U	.09U	.09U	.09U	.09U	.09U	.05U	.05U	.05U
CTP	09/30/2010	.1U	.1U	.1U	.05U	.05U	.05U	.05U	5U	.05U	.1U	.05U	.1U	.1U	.1U	.1U	.1U	.05U	.05U	.05U
	09/30/2010	.1U	.1U	.1U	.05U	.05U	.05U	.05U	5U	.05U	.1U	.05U	.1U	.1U	.1U	.1U	.1U	.05U	.05U	.05U
CTPS	10/18/2010	.11U	.11U	.11U	.05U	.05U	.05U	.05U	5.5U	.05U	.11U	.05U	.11U	.11U	.11U	.11U	.11U	.05U	.05U	.05U
DH	09/30/2010	.1U	.1U	.1U	.05U	.05U	.05U	.05U	4.8U	.05U	.1U	.05U	.1U	.1U	.1U	.1U	.1U	.05U	.05U	.05U
EERC	10/15/2010	.1U	.1U	.1U	.05U	.05U	.05U	.05U	5U	.05U	.1U	.05U	.1U	.1U	.1U	.1U	.1U	.05U	.05U	.05U
EPA	09/16/2010	.09U	.09U	.09U	.05U	.05U	.05U	.05U	4.7U	.05U	.09U	.05U	.09U	.09U	.09U	.09U	.09U	.05U	.05U	.05U
ETA	09/24/2010	.1U	.1U	.1U	.05U	.05U	.05U	.05U	5U	.05U	.1U	.05U	.1U	.1U	.1U	.1U	.1U	.05U	.05U	.05U
	09/24/2010	.1U	.1U	.1U	.05U	.05U	.05U	.05U	5U	.05U	.1U	.05U	.1U	.1U	.1U	.1U	.1U	.05U	.05U	.05U
FG	09/23/2010	.1U	.1U	.1U	.05U	.05U	.05U	.05U	5U	.05U	.1U	.05U	.1U	.1U	.1U	.1U	.1U	.05U	.05U	.05U
GEO	09/03/2010	.09U	.09U	.09U	.05U	.05U	.05U	.05U	4.7U	.05U	.09U	.05U	.09U	.09U	.09U	.09U	.09U	.05U	.05U	.05U
MFA	09/24/2010	.1U	.1U	.1U	.05U	.05U	.05U	.05U	5U	.05U	.1U	.05U	.1U	.1U	.1U	.1U	.1U	.05U	.05U	.05U
NRLF	09/16/2010	.1U	.1U	.1U	.05U	.05U	.05U	.05U	5U	.05U	.1U	.05U	.1U	.1U	.1U	.1U	.1U	.05U	.05U	.05U
PZ11	10/01/2010	.1U	.1U	.1U	.05U	.05U	.05U	.05U	5U	.05U	.1U	.05U	.1U	.1U	.1U	.1U	.1U	.05U	.05U	.05U
PZ8	10/15/2010	.1U	.1U	.1U	.05U	.05U	.05U	.05U	5U	.05U	.1U	.05U	.1U	.1U	.1U	.1U	.1U	.05U	.05U	.05U
PZ9	09/24/2010	.1U	.1U	.1U	.05U	.05U	.05U	.05U	5U	.05U	.1U	.05U	.1U	.1U	.1U	.1U	.1U	.05U	.05U	.05U
RWF	09/15/2010	.1U	.1U	.1U	.05U	.05U	.05U	.05U	5U	.05U	.1U	.05U	.1U	.1U	.1U	.1U	.1U	.05U	.05U	.05U
TP1	09/29/2010	.09U	.09U	.09U	.05U	.05U	.05U	.05U	4.7U	.05U	.09U	.05U	.09U	.09U	.09U	.09U	.09U	.05U	.05U	.05U

ATTACHMENT 2: SUMMARY OF COMPLETE ANALYTICAL RESULTS FOR GROUNDWATER SAMPLES

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University of California, Berkeley, Richmond Field Station, Richmond, California

		PESTICIDES (ug/L)																		
Location ID	Date Collected	4,4'-DDD	4,4'-DDE	4,4'-DDT	Aldrin	Alpha-BHC	Alpha-Chlordane	Beta-BHC	Chlordane	Delta-BHC	Dieldrin	Endosulfan I	Endosulfan II	Endosulfan Sulfate	Endrin	Endrin Aldehyde	Endrin Ketone	Gamma-BHC (Lindane)	Gamma-Chlordane	Heptachlor
TP2	09/29/2010	.1U	.1U	.1U	.05U	.05U	.05U	.05U	5U	.05U	.1U	.05U	.1U	.1U	.1U	.1U	.1U	.05U	.05U	.05U
WTA	09/30/2010	.1U	.1U	.1U	.05U	.05U	.05U	.05U	5U	.05U	.1U	.05U	.1U	.1U	.1U	.1U	.1U	.05U	.05U	.05U

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		PEST (ug/L)			PCBS (ug/L)							TPH (mg/L)			MISCELLANEOUS		
Location ID	Date Collected	Heptachlor Epoxide	Methoxychlor	Toxaphene	Aroclor-1016	Aroclor-1221	Aroclor-1232	Aroclor-1242	Aroclor-1248	Aroclor-1254	Aroclor-1260	Diesel	Motor Oil	Gasoline	Perchlorate (ug/L)	Hardness (mg/L)	Total Dissolved Solids (mg/L)
CCCT	09/03/2010	.05U	.47U	4.7U	.19U	.38U	.19U	.19U	.19U	.19U	.19U	.24U	.94U	.038ZJ	1.6J	590	1100
	04/18/2011	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	.05U	.3U	.055UJ	NA	NA	1110
B120	09/09/2010	.05U	.47U	4.7U	.19U	.38U	.19U	.19U	.09J	.19U	.19U	.24U	.95U	.07Z	2U	1000	1900
	04/15/2011	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	.05U	.3U	.086	NA	NA	2510
B121	09/08/2010	.05U	.48U	4.8U	.19U	.38U	.19U	.19U	.19U	.19U	.19U	.25U	1U	.05U	2U	280	520
	04/13/2011	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	.05UJ	.3U	.05UJ	NA	NA	520
B128	09/23/2010	.05U	.5U	5U	.2U	.4U	.2U	.2U	.2U	.2U	.2U	.25U	1U	.05U	2U	360	800
	09/23/2010	.05U	.5U	5U	.19U	.38U	.19U	.19U	.19U	.19U	.19U	.25U	1U	.05U	2U	320	970
	04/18/2011	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	.05U	.3U	.05UJ	NA	NA	500
B128DEEP	10/15/2010	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2U	NA	440
B150	09/08/2010	.05U	.48U	4.8U	.19U	.38U	.19U	.19U	.19U	.19U	.19U	.24U	.95U	.05U	2U	150	290
	04/13/2011	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	.05UJ	.3U	.05UJ	NA	NA	220
B158	09/08/2010	.05U	.47U	4.7U	.19U	.38U	.19U	.19U	.19U	.19U	.19U	.24U	.95U	.05U	2U	21	200
	04/15/2011	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	.05U	.3U	.05U	NA	NA	180
B163	09/02/2010	.05U	.5U	5U	.2U	.4U	.2U	.2U	.2U	.2U	.2U	.2ZJ	1U	.046ZJ	2U	1500	2900
	04/12/2011	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	.05U	.3U	.064Y	NA	NA	2820
B175S	09/03/2010	.05U	.48U	4.8U	.19U	.38U	.19U	.19U	.19U	.19U	.19U	.24U	.95U	.05U	2U	310	590
	04/13/2011	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	.053UJ	.3U	.05UJ	NA	NA	580
B175W	09/08/2010	.05U	.48U	4.8U	.2U	.4U	.2U	.2U	.2U	.2U	.2U	.25U	1U	.05U	2U	92	270
	04/13/2011	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	.052UJ	.3U	.012UJ	NA	NA	270
B177	09/23/2010	.05U	.47U	4.7U	.19U	.38U	.19U	.19U	.19U	.19U	.19U	.24U	.95U	.05U	2U	71	190
	04/18/2011	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	.05U	.3U	.05UJ	NA	NA	250
B178	09/02/2010	.05U	.5U	5U	.2U	.4U	.2U	.2U	.2U	.2U	.2U	.25U	1U	.063Z	1.9J	990	1800
	04/15/2011	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	.05U	.3U	.073UJ	NA	NA	2050

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		PEST (ug/L)			PCBS (ug/L)							TPH (mg/L)			MISCELLANEOUS		
Location ID	Date Collected	Heptachlor Epoxide	Methoxychlor	Toxaphene	Aroclor-1016	Aroclor-1221	Aroclor-1232	Aroclor-1242	Aroclor-1248	Aroclor-1254	Aroclor-1260	Diesel	Motor Oil	Gasoline	Perchlorate (ug/L)	Hardness (mg/L)	Total Dissolved Solids (mg/L)
B180	09/15/2010	.05U	.5U	5U	.2U	.4U	.2U	.2U	.2U	.2U	.2U	.25U	1U	.05U	2U	35	360
	04/13/2011	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	.05UJ	.3U	.05UJ	NA	NA	330
B185	09/02/2010	.05U	.5U	5U	.19U	.38U	.19U	.19U	.19U	.19U	.19U	.12ZJ	.95U	.036ZJ	3.1	920	1700
	04/15/2011	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	.05U	.3U	.05UJ	NA	NA	1630
B194	09/09/2010	.05U	.47U	NA	.19U	.38U	.19U	.19U	.19U	.19U	.19U	.24U	.95U	.05U	2U	300	670
	04/13/2011	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	.05UJ	.3U	.05UJ	NA	NA	660
B195	09/09/2010	.05U	.5U	5U	.19U	.38U	.19U	.19U	.19U	.19U	.19U	.24U	.95U	.059ZJ	2U	830	1600
	04/13/2011	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	.05UJ	.3U	.05UJ	NA	NA	570
B197	09/09/2010	.05U	.48U	4.8U	.19U	.38U	.19U	.19U	.19U	.19U	.19U	.25U	1U	.073Z	2U	830	1500
	09/09/2010	.05U	.47U	4.7U	.19U	.38U	.19U	.19U	.19U	.19U	.19U	.24U	.95U	.074Z	2U	830	1500
	04/13/2011	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	.05UJ	.3U	.1YZ	NA	NA	2170
B277	09/15/2010	.05U	.5U	5U	.2U	.4U	.2U	.2U	.2U	.2U	.2U	.25U	1U	.05U	2U	230	400
	04/18/2011	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	.05U	.3U	.05UJ	NA	NA	450
B278	09/16/2010	.05U	.5U	5U	.2U	.4U	.2U	.2U	.2U	.2U	.2U	.25U	1U	.05U	2U	1300	2300
	04/19/2011	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	.05U	.3U	.019J	NA	NA	2050J
B280A	09/16/2010	.05U	.5U	5U	.2U	.4U	.2U	.2U	.2U	.2U	.2U	.25U	1U	.05U	2U	290	510
	04/14/2011	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	.05U	.3U	.05UJ	NA	NA	430
B280B	10/01/2010	.05U	.5U	5U	.2U	.4U	.2U	.2U	.2U	.2U	.2U	.25U	1U	.05U	2U	230	650
	04/14/2011	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	.05U	.3U	.05U	NA	NA	580
B300	09/09/2010	.05U	.5U	NA	.2U	.4U	.2U	.2U	.2U	.2U	.2U	.24U	.95U	.05U	2U	720	1100
	04/15/2011	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	.05U	.3U	.05U	NA	NA	2480
B38	09/15/2010	.05U	.5U	5U	.2U	.4U	.2U	.2U	.2U	.2U	.2U	.25U	1U	.05U	2U	170	310
	04/19/2011	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	.05U	.3U	.05U	NA	NA	350
B38DEEP	10/18/2010	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2U	NA	350
B450	04/19/2011	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	.013J	.3U	.018J	NA	NA	610

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		PEST (ug/L)			PCBS (ug/L)							TPH (mg/L)			MISCELLANEOUS		
Location ID	Date Collected	Heptachlor Epoxide	Methoxychlor	Toxaphene	Aroclor-1016	Aroclor-1221	Aroclor-1232	Aroclor-1242	Aroclor-1248	Aroclor-1254	Aroclor-1260	Diesel	Motor Oil	Gasoline	Perchlorate (ug/L)	Hardness (mg/L)	Total Dissolved Solids (mg/L)
B460	09/15/2010	.05U	.5U	5U	.2UJ	.4UJ	.2UJ	.2UJ	.2UJ	.2UJ	.2UJ	.25U	1U	.05U	2U	150	290
	04/20/2011	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	.05U	.3U	.05UJ	NA	NA	320
B473	09/24/2010	.05U	.5U	5U	.2U	.4U	.2U	.2U	.2U	.2U	.2U	.25U	1U	.05U	2U	170	460
	04/20/2011	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	.05U	.3U	.05UJ	NA	NA	590
B474	09/23/2010	.05U	.5U	5U	.2U	.4U	.2U	.2U	.2U	.2U	.2U	.37ZJ	1U	.049ZJ	2U	160	430
	04/20/2011	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	.05U	.3U	.05U	NA	NA	420
B480	09/24/2010	.05U	.5U	5U	.2U	.4U	.2U	.2U	.2U	.2U	.2U	.25U	1U	.05U	2U	320	670
	04/19/2011	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	.014J	.3U	.019J	NA	NA	620
B480DEEP	10/15/2010	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2U	NA	360
B490	09/16/2010	.05U	.5U	5U	.2U	.4U	.2U	.2U	.2U	.2U	.2U	.25U	1U	.05U	2U	350	540
	04/20/2011	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	.05U	.3U	.05U	NA	NA	560
BULB1	10/19/2010	.05U	.47U	4.7U	.19U	.38U	.19U	.19U	.19U	.19U	.19U	.24U	.94U	.038J	40U	4400	25000
	04/12/2011	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	.05U	.3U	.05UJ	NA	NA	22800
BULB2	10/19/2010	.05U	.47U	4.7U	.19UJ	.38UJ	.19UJ	.19UJ	.19UJ	.19UJ	.19UJ	.17ZJ	1U	.077	10U	1100	5900
	04/12/2011	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	.0078J	.3U	.05UJ	NA	NA	1530
CCC1	09/08/2010	.05U	.48U	4.8U	.19U	.38U	.19U	.19U	.19U	.19U	.19U	.24U	.95U	.05U	2U	140	440
	04/14/2011	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	.05UJ	.3U	.05U	NA	NA	520
CCC2	09/08/2010	.05U	.48U	4.8U	.19U	.38U	.19U	.19U	.19U	.19U	.19U	.25U	1U	.05U	2U	250	630
	04/14/2011	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	.05UJ	.3U	.05U	NA	NA	1990
CCC3	09/03/2010	.05U	.47U	4.7U	.19U	.38U	.19U	.19U	.19U	.19U	.19U	.24U	.95U	.05U	2U	360	730
	09/03/2010	.05U	.47U	4.7U	.19U	.38U	.19U	.19U	.19U	.19U	.19U	.25U	1U	.05U	2U	350	710
	04/12/2011	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	.05U	.3U	.05UJ	NA	NA	720
CTP	09/30/2010	.05U	.5U	5U	.2U	.4U	.2U	.2U	.2U	.2U	.2U	.25U	1U	.05U	2U	240	490
	09/30/2010	.05U	.5U	5U	.2U	.4U	.2U	.2U	.2U	.2U	.2U	.25U	1U	.05U	2U	240	500
	04/14/2011	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	.05U	.3U	.05UJ	NA	NA	480

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University of California, Berkeley, Richmond Field Station, Richmond, California

		PEST (ug/L)			PCBS (ug/L)							TPH (mg/L)			MISCELLANEOUS		
Location ID	Date Collected	Heptachlor Epoxide	Methoxychlor	Toxaphene	Aroclor-1016	Aroclor-1221	Aroclor-1232	Aroclor-1242	Aroclor-1248	Aroclor-1254	Aroclor-1260	Diesel	Motor Oil	Gasoline	Perchlorate (ug/L)	Hardness (mg/L)	Total Dissolved Solids (mg/L)
CTPDEEP	10/15/2010	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2U	NA	370
CTPS	09/30/2010	NA	NA	NA	.22UJ	.44UJ	.22UJ	.22UJ	.22UJ	.22UJ	.22UJ	NA	NA	.05U	NA	610	NA
	10/18/2010	.05U	.55U	5.5U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	04/19/2011	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	.05U	.3U	.013J	NA	NA	520
DH	09/30/2010	.05U	.48U	4.8U	.2UJ	.4UJ	.2UJ	.2UJ	.2UJ	.2UJ	.2UJ	.25U	1U	.05U	4U	2700	5500
	04/14/2011	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	.05UJ	.3U	.05UJ	NA	NA	5350
EERC	10/01/2010	NA	NA	NA	.2UJ	.4UJ	.2UJ	.2UJ	.2UJ	.2UJ	.2UJ	.16J	1U	.05U	NA	2500	NA
	10/15/2010	.05U	.5U	5U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4U	NA	4800
	04/20/2011	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	.05U	.3U	.05UJ	NA	NA	4260
EPA	09/16/2010	.05U	.47U	4.7U	.2U	.4U	.2U	.2U	.2U	.2U	.2U	.25U	1U	.05U	2U	380	710
	04/19/2011	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	.05U	.3U	.013J	NA	NA	950
ETA	09/24/2010	.05U	.5U	5U	.2UJ	.4UJ	.2UJ	.2UJ	.2UJ	.2UJ	.2UJ	.12J	1U	.05U	2U	630	1300
	09/24/2010	.05U	.5U	5U	.2UJ	.4UJ	.2UJ	.2UJ	.2UJ	.2UJ	.2UJ	.12J	1U	.05U	2U	620	1300
	04/12/2011	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	.014J	.3U	.05UJ	NA	NA	1410
FG	09/23/2010	.05U	.5U	5U	.2UJ	.4UJ	.2UJ	.2UJ	.2UJ	.2UJ	.2UJ	.25U	1U	.05U	2U	820	1300
	04/19/2011	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	.05U	.3U	.021J	NA	NA	590
GEO	09/03/2010	.05U	.47U	4.7U	.19U	.38U	.19U	.19U	.19U	.19U	.19U	.24U	.95U	.05U	2U	270	510
	04/20/2011	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	.05U	.3U	.05UJ	NA	NA	560
MFA	09/24/2010	.05U	.5U	5U	.2U	.4U	.2U	.2U	.2U	.2U	.2U	.25U	1U	.05U	2U	440	900
	04/12/2011	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	.05U	.3U	.05UJ	NA	NA	640
NRLF	09/16/2010	.05U	.5U	5U	.2U	.4U	.2U	.2U	.2U	.2U	.2U	.12ZJ	1U	.041ZJ	2U	230	400
	04/20/2011	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	.05U	.3U	.05UJ	NA	NA	560
PZ11	10/01/2010	.05U	.5U	5U	.19UJ	.38UJ	.19UJ	.19UJ	.19UJ	.19UJ	.19UJ	.25U	1U	.31ZJ	2U	1400	2500
	04/20/2011	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	.05U	.3U	.05UJ	NA	NA	2930

ATTACHMENT 2: SUMMARY OF COMPLETE ANALYTICAL RESULTS FOR GROUNDWATER SAMPLES

Technical Memorandum: Sampling Results for Phase I Groundwater Sampling, Field Sampling Workplan
University of California, Berkeley, Richmond Field Station, Richmond, California

		PEST (ug/L)			PCBS (ug/L)							TPH (mg/L)			MISCELLANEOUS		
Location ID	Date Collected	Heptachlor Epoxide	Methoxychlor	Toxaphene	Aroclor-1016	Aroclor-1221	Aroclor-1232	Aroclor-1242	Aroclor-1248	Aroclor-1254	Aroclor-1260	Diesel	Motor Oil	Gasoline	Perchlorate (ug/L)	Hardness (mg/L)	Total Dissolved Solids (mg/L)
PZ8	10/15/2010	.05U	.5U	5U	.2U	.4U	.2U	.2U	.2U	.2U	.2U	.25U	1U	.05U	2UJ	270	510
	04/18/2011	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	.05U	.3U	.05UJ	NA	NA	480
PZ9	09/24/2010	.05U	.5U	5U	.2U	.4U	.2U	.2U	.2U	.2U	.2U	.25U	1U	.05U	2U	240	400
	04/20/2011	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	.05U	.3U	.05UJ	NA	NA	370
RWF	09/15/2010	.05U	.5U	5U	.2U	.4U	.2U	.2U	.2U	.2U	.2U	.24U	.95U	.05U	2U	430	720
	04/18/2011	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	.05U	.3U	.05UJ	NA	NA	780
TP1	09/29/2010	.05U	.47U	4.7U	.2U	.4U	.2U	.2U	.2U	.2U	.2U	.24U	.95U	.05U	2U	410	720
	04/18/2011	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	.05U	.3U	.05UJ	NA	NA	1770
TP2	09/29/2010	.05U	.5U	5U	.2U	.4U	.2U	.2U	.2U	.2U	.2U	.25U	1U	.05U	2U	510	830
	04/18/2011	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	.05U	.3U	.05UJ	NA	NA	810
WTA	09/30/2010	.05U	.5U	5U	.2U	.4U	.2U	.2U	.2U	.2U	.2U	.25U	1U	.05U	2U	550	1000
	04/14/2011	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	.05UJ	.3U	.05U	NA	NA	1020

Notes:

BHC	Hexachlorocyclohexane	J	Estimated value	TPH	Total Petroleum Hydrocarbons
DDD	Dichlorodiphenyldichloroethane	mg/L	Milligrams per liter	U	Nondetect
DDE	Dichlorodiphenyldichloroethene	NA	Not analyzed	VOC	Volatile Organic Compounds
DDT	Dichlorodiphenyltrichloroethane	PCB	Polychlorinated biphenyl	Z	Chromatographic pattern does not resemble TPH fuel pattern (individual peaks)
		PEST	Pesticides	ug/L	Micrograms per liter

APPENDIX A

RESPONSE TO COMMENTS

Department of Toxic Substances Control

Matthew Rodriquez
Secretary for
Environmental Protection

Deborah O. Raphael, Director
700 Heinz Avenue
Berkeley, California 94710-2721

Edmund G. Brown Jr.
Governor

November 18, 2011

Mr. Greg Haet
EH&S Associate Director, Environmental Protection
317 University Hall, No 1150
Berkeley, California 94720

Dear Mr. Haet:

The Department of Toxic Substances Control (DTSC) received the *Phase I Groundwater April 2011 Sampling Results Technical Memorandum* (Tech Memo) for the University of California, Berkeley, Richmond Field Station, located in Richmond, California. The Tech Memo, dated August 19, 2011 provides the groundwater sampling data that was collected in April 2011, and represents the second round of sampling. We have reviewed the document and have the following comments:

1. After four rounds of sampling have been completed, a report should be prepared that evaluates and describes any chemical trends observed. Maps depicting chemical contaminant concentrations and contours for compounds that exceed California maximum contaminant levels (MCLs) should be provided for each sampling round. Also, summary tables of analytical results should be prepared to present results from all four rounds of sampling in a manner similar to Table 2: Groundwater Elevation Data. No response is required for this comment.

2. Table 6, VOC Detected Results Summary: Concentrations exceeding California MCLs should be highlighted as well as those compounds exceeding Federal MCLs.

3. Footnotes explaining the qualifiers included each of the tables should be added at the end of each table. While the text describes some of the qualifiers, others such as "Y" and "Z" are not included in the discussion.

4. Location "RFSGWGEO02" is identified on the tables, but not included on figures 3 and 5. However, a location is identified as "GEO" on Figures 4 and 6. The sample location is identified as "GWF" on figures 3 and 5. Please correct this inconsistency.

Please submit a response to these comments within 21 days of the date of this letter. Replacement pages may be submitted rather than a new hard copy; however, please provide us with a CD containing the complete revised report.

If you have any questions regarding this letter, please contact Lynn Nakashima at (510) 540-3839 or email at lnakashi@dtsc.ca.gov.

Sincerely,

Lynn Nakashima, Project Manager
Senior Hazardous Substances Scientist
Brownfields and Environmental
Restoration Program
Berkeley Office - Cleanup Operations

Mark Vest, P.G.
Senior Engineering Geologist
Brownfields and Environmental
Restoration Program
Sacramento Office - Geologic Services

cc: Karl Hans
University of California, Berkeley
Environmental Health & Safety
317 University Hall, No 1150
Berkeley, California 94720

Jason Brodersen
Tetra Tech EM Inc.
1999 Harrison Street, Suite 500
Oakland, CA 94612

Response to Comments
Department of Toxic Substances Control, November 18, 2011

UC Berkeley Ref. No.	Page/ Sect No.	DTSC Comment	UC Berkeley Response
1		After four rounds of sampling have been completed, a report should be prepared that evaluates and describes any chemical trends observed. Maps depicting chemical contaminant concentrations and contours for compounds that exceed California maximum contaminant levels (MCLs) should be provided for each sampling round. Also, summary tables of analytical results should be prepared to present results from all four rounds of sampling in a manner similar to Table 2: Groundwater Elevation Data. No response is required for this comment.	After four round of sampling (to be completed in April 2012) UC Berkeley will prepare a report which will evaluate and describe any chemical trends observed. Maps depicting chemical contaminant concentrations and contours for compounds that exceed California maximum contaminant levels (MCLs) will be provided for each sampling round. Also, summary tables of analytical results will be prepared to present results from all four rounds of sampling.
2	Table 6 and Table 8	Table 6, VOC Detected Results Summary: Concentrations exceeding California MCLs should be highlighted as well as those compounds exceeding Federal MCLs.	The tables have been updated to highlight detected concentrations exceeding the MCL.
3	Section 4.2, page 7 and Table 9	Footnotes explaining the qualifiers included each of the tables should be added at the end of each table. While the text describes some of the qualifiers, others such as "Y" and "Z" are not included in the discussion.	Table 9 has been updated to include “Y” and “Z” in the footnotes. The text has been amended to state: Y – Indicates the sample chromatogram does not match the chromatogram for the TPH standard. This flag does not denote a quality issue or QC violation. Z – Indicates the sample contains a single peak or peaks, not a hydrocarbon pattern. This flag does not denote a quality issue or QC violation.
4		Location "RFSGWGEO02" is identified on the tables, but not included on Figures 3 and 5. However, a location is identified as "GEO" on Figures 4 and 6. The sample location is identified as "GWF" on figures 3 and 5. Please correct this inconsistency.	The tables, figures, and text have been updated to correctly refer to the location as “GEO” and the sample ID as “RFSGWGEO02”.

Department of Toxic Substances Control

Matthew Rodriquez
Secretary for
Environmental Protection

Deborah O. Raphael, Director
700 Heinz Avenue
Berkeley, California 94710-2721

Edmund G. Brown Jr.
Governor

January 11, 2012

Mr. Greg Haet
EH&S Associate Director, Environmental Protection
317 University Hall, No 1150
Berkeley, California 94720

Dear Mr. Haet:

The Department of Toxic Substances Control (DTSC) received your response to comments (RTC) on the document entitled *Phase I, April 2011 Groundwater Sampling Results Technical Memorandum* (Tech Memo) for the University of California, Berkeley, Richmond Field Station, located in Richmond, California. The Tech Memo and RTC were prepared and submitted by Tetra Tech EM Inc. for the University of California. The December 09, 2011 Tech Memo provides results of the second round of ground water sampling that was implemented in April 2011. The data represent wet season ground water conditions. The RTC responds to November 08 comments by DTSC on the August 19, 2011 version of the Tech Memo. We have reviewed the RTC and have the following comments.

DTSC Comments 2 and 3 requested amendments to tables in the Tech Memo including highlighting concentrations that exceed California and Federal maximum contaminant levels and providing footnotes to explain data qualifiers contained in the tables. Although the RTC says the tables have been updated, they haven't been. Please amend Tech Memo to correct this and check for additional discrepancies. Also please ensure that any other changes made to the Tech Memo are plainly identified.

Please amend the ground water sampling method as follows. For future ground water sampling and analysis for dissolved metals, amend the methods to include field filtering at the time of sample collection rather than lab filtering. Use an inline 0.45 micron filter and acidify to a pH less than 2.0 using dilute nitric acid.

Please submit a response to these comments within 21 days of the date of this letter. Replacement pages may be submitted rather than a new hard copy; however, please provide us with a CD containing the complete revised report.

If you have any questions regarding this letter, please contact Lynn Nakashima at (510) 540-3839 or email at lnakashi@dtsc.ca.gov.

Sincerely,

Lynn Nakashima, Project Manager
Senior Hazardous Substances Scientist
Brownfields and Environmental
Restoration Program
Berkeley Office - Cleanup Operations

Mark Vest, P.G.
Senior Engineering Geologist
Brownfields and Environmental
Restoration Program
Sacramento Office - Geologic Services

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Response to Comments
Department of Toxic Substances Control, January 11, 2012

UC Berkeley Ref. No.	Page/ Sect No.	DTSC Comment	UC Berkeley Response
1	Table 6, Table 8, and Table 9	DTSC Comments 2 and 3 requested amendments to tables in the Tech Memo including highlighting concentrations that exceed California and Federal maximum contaminant levels and providing footnotes to explain data qualifiers contained in the tables. Although the RTC says the tables have been updated, they haven't been. Please amend Tech Memo to correct this and check for additional discrepancies. Also please ensure that any other changes made to the Tech Memo are plainly identified. Comment 2: Table 6, VOC Detected Results Summary: Concentrations exceeding California MCLs should be highlighted as well as those compounds exceeding Federal MCLs. Comment 3: Footnotes explaining the qualifiers included each of the tables should be added at the end of each table. While the text describes some of the qualifiers, others such as "Y" and "Z" are not included in the discussion.	Tables 6 and 8 have been updated to highlight detected concentrations exceeding the MCL. Table 9 has been updated to include “Y” and “Z” in the footnotes. No other changes were made to the Tech Memo.
2		Please amend the ground water sampling method as follows. For future ground water sampling and analysis for dissolved metals, amend the methods to include field filtering at the time of sample collection rather than lab filtering. Use an Inline 0.45 micron filter and acidify to a pH less than 2.0 using dilute nitric acid.	UC Berkeley is working with DTSC to resolve this comment and identify the most appropriate groundwater sample collection methodology for the RFS.